"SENSORY PROCESSING DIFFICULTIES IN CHILDREN AND ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER AND QUALITY OF LIFE IN PRIMARY CAREGIVERS : CROSS SECTIONAL DESCRIPTIVE HOSPITAL BASED STUDY."

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With reference to the above, we wish to inform you that your proposed research project titled **"STUDY OF SENSORY PROCESSING DIFFICULTIES IN CHILDREN AND ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) AND QUALITY OF LIFE IN PRIMARY CAREGIVERS: CROSS SECTIONAL DESCRIPTIVE HOSPITAL BASED STUDY."** is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee.

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LIST OF ABBREVIATIONS

CBT – Cognitive Behavioural Therapy

CNS – Central Nervous System

SMD – Sensory modulation disorder

SPD – Sensory Processing difficulties

SPSC – Sensory Profile School Companion

SDD – Sensory discrimination disorder

ASD – Autism spectrum disorder

OCD – Obsessive compulsive disorder

ADHD – Attention Deficit Hyperactivity disorder

ODD – Oppositional defiant disorder

QOL – Quality of life

VADRS – Vanderbilt ADHD Diagnostic Rating Scale

SSP – Short sensory profile

CGAS – Children Global assessment scale

MINI kid – Mini International Neuropsychiatric Interview for children and adolescents

WHOQOL-BREF – World Health Organization Quality Of Life Brief Version

HRQOL – Health related Quality of life

CGI-S – Clinical Global Impression – severity scale

SKAMP – Swanson, Kotkin, Agler, M-Flynn and Pelham scale

TMS – Transcranial Magnetic Stimulation

tDCS – Transcranial Direct Current Stimulation

CD – Conduct disorder

SEP – Somatosensory evoked potential

EEG – Electroencephalography

SOR – Sensory Over-Responsivity

SUR – Sensory Under-Responsivity

SS – Sensory Seeking

ABSTRACT

Introduction – Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder which is common in children and adolescents. It is common to find SPD in children and adolescents with ADHD, which affects their normal functioning, behaviour and have adverse developmental consequences. Parenting a kid with comorbid ADHD and sensory difficulties can be challenging, and affects the quality of life in primary caregivers. Limited studies have been done to assess these sensory processing difficulties in children with ADHD.

Objective – The primary objective of this study was is to assess prevalence of Sensory Processing Difficulties (SPD) in children and adolescents having ADHD. We also examined the association between SPD and subtypes of ADHD, association between SPD and global functioning , and quality of life in primary caregivers of these subjects.

Method - This was a cross sectional descriptive study, where 100 children and adolescents, less than 18 years of age, diagnosed with ADHD as per DSM 5 criteria were recruited from outpatient department of psychiatry and child development centre. At the time of presentation a semi-structured questionnaire to determine socio-demographic details and patient characteristics, was used. Short Sensory Profile (SSP) was used to assess sensory processing difficulties, Children Global Assessment Scale (CGAS) was used to assess functioning in children, Vanderbilt scale was used to assess types of ADHD, WHOQOL-BREF to assess Quality of Life (QOL) in primary caregivers and MINI Kid was used to rule out co-morbidities and other severe psychiatric illnesses. The data was analysed with percentages for categorical variables, mean and standard deviation for continuous variables, and chi square test was applied to examine the association between SPD and types of ADHD, SPD and global functioning.

Results - The mean age of subjects was 9.5 years (± 2.49), majority (55%) of children belonged to age group of 6-9 years, 75% were male and majority belonged to lower socio economic

class. Inattentive type was the most common type of ADHD (38%) followed by hyperactive/impulsive type (32%) and combined type (30%). Eighty eight percent of the participants had definite differences in total score of short sensory profile and the mean score of short sensory profile was 129.88. There was no significant association between sensory processing difficulties and subtypes of ADHD. There was significant association between global functioning and sensory processing difficulties, wherein participants with more definite differences in sensory processing had more dysfunction. There was a significant impact on quality of life in primary caregivers with the most impact being on psychological domain of caregiver in the studied sample.

Conclusion – Eighty eight percent of participants with ADHD in our study had sensory processing difficulties and there was no significant association between sensory difficulties and subtypes of ADHD. There was significant association between sensory processing difficulties and functioning of children. The quality of life in primary caregivers was impacted in mostly all domains in which psychological domain being the most impacted .

Keywords – ADHD and SPD, Sensory problem in ADHD, QOL in ADHD .

TABLE OF CONTENTS

SR.NO.	CONTENTS	PAGE NO.
1	INTRODUCTION	1 - 2
2	OBJECTIVES	3
3	REVIEW OF LITERATURE	4 - 35
4	MATERIALS AND METHODOLOGY	36 - 40
5	RESULTS	41 - 50
6	DISCUSSION	51 - 55
7	CONCLUSION	56
8	SUMMARY	58 - 59
9	BIBLIOGRAPHY	60 - 75
10	ANNEXURES	
	Annexure I : Consent form	76 - 92
	Annexure II : Proforma	93 - 96
	Annexure III : Tools and master chart	96 - 155

LIST OF FIGURES

SR . NO	FIGURES	PAGE NO.
1	Sensory Processing Disorders	21
2	Types of ADHD in study participants	43
3	Tabular representation of CGAS scores	44

LIST OF TABLES

SR NO.	TABLE	PAGE NO.
1	Dunn's model of sensory processing	20
2	Characteristics of studies on SPD in ADHD	28 - 29
3	Socio-demographic and clinical profiles of study participants	41
4	Comorbidities amongst study participants	43
5	CGAS distribution table	44
6	Distribution of quality of life in various domains in primary caregivers	45
7	Distribution of sensory processing difficulties in study participants	45
8	Association of type of ADHD with tactile sensitivity	46
9	Association of type of ADHD with smell sensitivity	47
10	Association of type of ADHD with movement sensitivity	47
11	Association of type of ADHD with seeks sensation	48
12	Association of type of ADHD with auditory filtering	48
13	Association of type of ADHD with low energy	49
14	Association of type of ADHD with visual/auditory sensitivity	49
15	Association of type of ADHD with total sensitivity difficulties	50
16	Association of CGAS scores with Sensory difficulties (total score)	50

INTRODUCTION

Attention-Deficit Hyperactivity Disorder (ADHD), as behaviorally defined within the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM 5) system, is an early-onset developmental disorder characterized by impulsivity, inattention, and or hyperactivity. The disorder is currently divided into three subtypes, Inattentive, Impulsive / Hyperactive, and Combined. It is well accepted that ADHD is heterogeneous in its presentation. ADHD is one of the most common childhood-onset psychiatric disorders[1]. ADHD prevalence worldwide is estimated between 5.29% and 7.1%[2]. In the Indian scenario, the prevalence of ADHD falls in range of 5.76 %[3]. ADHD has other co morbidities also.

Difficulties in sensory processing are problems in responding to sensory stimuli like impairments in modulation, detection, or interpretation of stimuli[4]. Sensory processing difficulties impact the functioning of children in their daily life. There are three types of sensory processing problem i.e. sensory over responsivity, sensory under responsivity and sensory seeking[4]. Approximately 16% of the general population is estimated to have symptoms of SPD[5]. It is common to find SPD in children with other well-recognized DSM-based disorders like ADHD. The tactile and other sensory perceptual hypersensitivities and hypo sensitivities that are frequent features of SPD are also observed in ADHD population and also have impairment in their functioning[6].

Parenting a child with ADHD may confront parents with unique challenges, as children with ADHD are significantly impaired in social interactions and communication and show restricted and stereotyped patterns of behaviours. Previous literature suggests that sensory processing difficulties in children with ADHD can affect family functioning, routines, parent-child relationship patterns, and increase parenting stress and strain[7].

Need for study - This observational study is being undertaken as there are studies which suggest that there are wide variety of sensory difficulties in children and adolescents with ADHD but in our population, there are not many studies which have looked into various sensory processing difficulties and its correlation with ADHD in Indian population. Sensory processing difficulties in children with ADHD are also expected to influence their caregiver's mental health and at present, reports on the association between patterns of sensory processing and the quality of life of primary caregivers are scarce.

OBJECTIVES

Primary objective – To assess sensory processing difficulties in children and adolescents with ADHD.

Secondary objective

- To examine association between presence of SPD and subtypes of ADHD.
- To examine the association in between SPD and global functioning in children and adolescents with ADHD.
- To assess quality of life in primary caregivers.

REVIEW OF LITERATURE

Review of literature is described under following headings.

1. History and current perspectives of ADHD
2. Etiopathogenesis of ADHD
3. Assessment and treatment of ADHD
4. Understanding sensory processing and sensory processing disorder
5. Assessment of sensory processing disorder
6. Sensory processing disorder and ADHD
7. Quality of life in primary caregivers

History of ADHD

In the 18th century, mental health issues were not commonly viewed through a medical perspective. Crichton focused on attention-related disorders, similar to ADHD symptoms. Crichton observed attention challenges in children, possibly linked to ADHD. Hoffmann's "Fidgety Phil" depicted early signs of ADHD. Still's 1902 presentations explored moral regulation issues in children, potentially related to ADHD, outlining impulsiveness and attention deficits. Still's work contributed to understanding child psychopathology and brain-behaviour interplay [8]. Early brain damage can lead to behaviour problems like postencephalitic behaviour disorder, showing abnormal behaviour, cognitive deficits, and hyperactivity. Postencephalitic behaviour disorder was linked to intrinsic drive from the brain stem, causing hyperkinesis, impulsivity, and distractibility [9]. The hyperkinetic disease of infancy resembled ADHD symptoms, with signs like motor agitation, inattentiveness, and impulsiveness. Symptoms aligned with ADHD indicators and could persist into adulthood [10].

'Minimal brain damage' suggested that minor brain injuries could lead to behavioural challenges later in life. Discussions on brain damage variations led to the concept of cerebral impairments spectrum. Minimal brain damage was associated with increased activity levels, aligning with ADHD criteria [11]. 'Minimal brain damage' got replaced with 'minimal brain dysfunction' emphasizing functional disturbances. The Oxford International Study Group proposed a classification system for children with minimal brain dysfunction. Minimal brain dysfunction was linked to learning or behavioural challenges from central nervous system deviations [12].

The transition from 'Hyperkinetic Reaction of Childhood' to 'Attention Deficit Disorder (ADD)' in 1980 emphasized attention deficits over hyperactivity. The renaming in the DSM-III in 1980 highlighted attention and impulse management criteria [13]. The publication of DSM-III-R in 1987 consolidated symptoms under 'Attention Deficit-Hyperactivity Disorder (ADHD)' with a single diagnosis threshold [14]. The DSM-IV in 1994 identified three ADHD subtypes: predominantly inattentive, predominantly hyperactive-impulsive, and combined. The DSM-IV-TR in 2000 maintained DSM-IV content with minor adjustments, while critics called for ADHD validation in adults. Criteria for ADHD in DSM-IV and ICD-10 are similar but differ in number, emphasis on inattention, and comorbidity management approach [15].

Current perspective on ADHD

International classification systems embody a consensus regarding ADHD as a clinical construct characterized by symptoms such as hyperactivity, inattention, and impulsivity. Empirical evidence from longitudinal and genetic investigations provides substantial support for ADHD being a persistent, inheritable condition marked by dysregulation in brain networks governing attention and conduct [16]. Detractors posit that there is a potential

for ADHD to be excessively diagnosed, given symptom overlap with other disorders, absence of distinct genetic indicators, and dearth of neurological abnormalities. The focus of many research inquiries tends to be on severe instances, thus restricting the applicability of findings to the broader populace. Discrepancies in evaluations by caregivers and educators raise questions about the objective foundation for diagnosing ADHD [17].

Definition of ADHD

According to DSM 5 ADHD is defined in children upto 16 years of age as a constant pattern of inattention and / or hyperactivity present prior to 12 years of age, presenting in 2 or more settings (like home and school) and should negatively impact social and academic activities and should not be explained by any psychiatric disorder as characterized by 6 or more of inattention or hyperactivity / impulsivity symptoms persisting for atleast more than 6 months occurring either together or separately [18].

In adolescents 17 years or older and adult it is a persistent pattern of 5 or more symptom of inattentive or impulsive type either present separate of each other or present together, for a time period of atleast more than 6 months [18].

Phenomenology in ADHD

ADHD is a neurodevelopmental condition that is identified through behavioural manifestations, utilizing diagnostic criteria from DSM-5 and ICD-10/11. DSM-5 classifies ADHD symptoms into inattention and hyperactivity/impulsivity, replacing subtypes with presentations to enhance consistency . ICD-10 differentiates hyperkinetic disorder of childhood from hyperkinetic conduct disorder, whereas ICD-11 incorporates five distinct subcategories of ADHD corresponding to DSM-5 [19]. The diagnosis of ADHD necessitates that symptoms have an impact on social, academic, or professional performance, with

specific guidelines tailored to different age groups and endorsed assessment tools recommended for adults [20]. Even though there is a closer alignment between ICD-11 and DSM-5-TR, there are still subtle differences that have significant implications for research and clinical practice [21]. ADHD diagnosis criteria differ between DSM-5/DSM-5-TR and ICD-11, impacting clinical practice and research. ICD-11's lack of specific thresholds may result in varied diagnoses, prompting the need for detailed sample descriptions[22]. The current debate surrounds the two-factor model in DSM-5/DSM-5-TR, with suggestions for a three-factor or S-1 bifactor model. Research quality may be affected by the definitions in ICD-11 and DSM-5-TR, calling for more clarity on ICD-11's psychometric properties[23].

Epidemiology of ADHD

ADHD is prevalent on a global scale, exhibiting varying rates of occurrence. Research has identified a prevalence of 5.8% among children, with no significant change observed over a period of 30 years . Discrepancies in rates stem from the utilization of different diagnostic criteria. In the Indian scenario, the prevalence of ADHD falls in range of 5.76 % [3]. The prevalence of ADHD in the adult population stands at approximately 2.8%, showing higher figures in affluent nations [24]. Accurate prevalence data should be derived from population-based surveys rather than solely relying on clinical records. Reports of escalating ADHD rates often emanate from sources such as health insurance records, clinical referrals, and patterns of medication prescriptions, influenced by evolving diagnostic criteria and heightened awareness [25].

A survey conducted in the United States revealed a surge in ADHD diagnoses among children, escalating from 6.1% in 1997 to 10.2% in 2016 [26]. Conversely, a Danish study uncovered a twelve-fold rise in ADHD prevalence between 1995 and 2010, particularly noting an increase in diagnoses among females [27]. The global utilization of stimulants for

ADHD management has experienced a steady increase since the 1990, reaching its peak in the United States in 2012. In contrast, certain European nations have witnessed either stable or declining rates in recent times [28].

Comorbidity in ADHD

Common Comorbidities: A considerable number of children diagnosed with ADHD experience difficulties in areas such as reading (ranging from 15% to 50%) and mathematics (ranging from 5% to 30%). It has been reported that a significant proportion, between 70% to 85%, of children with ADHD also meet the criteria for ASD. Approximately 20% of individuals with ADHD exhibit symptoms of tics or Tourette's, while 5% present symptoms of OCD [29]. A substantial percentage, ranging from 30% to 50%, of individuals with ADHD struggle with deficiencies in motor skills. The prevalence of comorbid depression or anxiety in individuals with ADHD ranges from 0% to 45%. Between 27% to 55% of individuals diagnosed with ADHD also had features of Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) [29].

Increased Vulnerabilities: Children diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD) exhibit 1.5 times more susceptibility of engaging in substance misuse, and are also 2.4 times more prone to smoking tobacco products [30]. Moreover, they face a significantly elevated risk of encountering problematic media usage, with a staggering 9.3 times higher probability of experiencing challenges in this area [31]. In addition, adolescent females with ADHD demonstrate a 1.23 times greater inclination towards developing obesity and individuals with ADHD are known to have a correlation with various eating disorders [32]. Bedwetting, or enuresis, is a prevalent issue among 17 % children with ADHD [33]. Lastly, 25 - 70 percentage of individuals with ADHD, encounter difficulties with sleep, indicating a heightened prevalance of sleep disorder [34].

Neurological Comorbidities: Children with ADHD have a three times more chance of experiencing migraines and 2.3 to 3 times more chance of have having epilepsy [35].

Genetic and Non-Genetic Causes: Genetic factors can lead to both ADHD and other disorders. ADHD symptoms may manifest in specific genetic disorders such as neurofibromatosis, Turner's syndrome, and Noonan's syndrome. In addition to genetics, ADHD can be present in children who have experienced brain injuries, strokes, or fetal alcohol syndrome [36].

Preterm Birth: ADHD is three times more common in children born early and four times more common in those born extremely early [37].

Differential Diagnosis in ADHD

Medical conditions resembling ADHD must be ruled out during diagnosis, including epilepsy, thyroid issues, sleep disorders, drug interactions, anemia, and leukodystrophy. Psychiatric conditions like Learning disorders, anxiety, affective disorders, and environmental conditions like adverse home environments should also be excluded as they can imitate ADHD symptoms. ADHD diagnosis can be complicated by coexisting conditions like bipolar disorder and absence epilepsy [38]. Secondary ADHD can occur after events like head trauma or stroke, with many children displaying symptoms post-injury [39]. Shared genetic and neurobiological mechanisms may impact both primary and secondary ADHD, with conditions like Turner's syndrome often coexisting with ADHD [40].

Clinical diagnostic procedure in ADHD

Clinical assessment in children includes parent interviews on history, family, and school life, along with mental health checks and economic status. Child's mental state is assessed

through standardized interviews and observer reports on behaviour. Informant rating scales are useful but not the only diagnostic tool; child interviews and school feedback are also important [41].

Medical examination is necessary to rule out physical causes, while objective tests and neuroimaging are not routinely recommended. "Watchful waiting" period of up to 10 weeks is advised before diagnosing ADHD, with younger children in a class more likely to be diagnosed. ADHD diagnosis should be done by specialists like child psychiatrists or paediatricians with ADHD expertise [42].

Etiopathogenesis of ADHD

ADHD involves various neurobiological pathways and neuropsychological profiles, with early models focusing on inhibitory control and motivational pathways. Attempts to categorize ADHD into subgroups based on cognitive performance have not shown very conclusive results, with some studies suggesting ADHD-specific profiles and others showing shared profiles with typically developing children, indicating variability in findings [43].

Neuropsychology of ADHD

Approximately a quarter of a century ago, ADHD was primarily perceived as a challenge related to self-regulation. Researches indicated the association between ADHD and different neuropsychological (NP) profiles involves multiple brain pathways, indicating significant variations in brain functioning among individuals with ADHD [44]. The inhibitory/executive function pathway regulates impulses and plans actions. The motivational/delay aversion pathway deals with managing waiting periods and rewards. These pathways can interact and influence each other. Additional pathways like time

processing in individuals with ADHD have been suggested, but the exact number remains uncertain [44]. Researchers have identified six key cognitive functions in children having ADHD, inhibition, working memory, delay aversion, decision-making, response time variability and timing [45]. A 2005 study found that those with ADHD lack executive function skills, important for time management and attention. The impairments include response inhibition, vigilance, working memory and planning [46]. A meta-analysis of 34 studies up to 2016 showed that individuals without ADHD perform better in various cognitive areas. Additional cognitive functions affected in individuals having ADHD are selective attention, reaction time, fluency, decision making, Perception, emotional tasks, social tasks, and communication [47].

Etiologies of neuropsychological impairments in ADHD might involve issues in Top-down cognitive control, strategic deficits, and basic processing deficits [48]. The cognitive profile of individuals and the importance of cognitive assessment in clinical practice are significant study areas. ADHD has diverse cognitive profiles and varying severity levels, with one-third not showing impairments, another third having partial deficits, and the remaining third performing below average on cognitive tests. Behavioural evaluations and questionnaires focusing on ADHD symptoms have weak associations with Neuropsychological test outcomes and cannot replace comprehensive Neuropsychological evaluations [49]. ADHD can appear in individuals of all intelligence ranges, including profoundly gifted ones, highlighting the usefulness of intelligence assessments in diagnosis [50]. ADHD symptoms should be seen as initial indicators for further exploration, emphasizing a detailed analysis of cognitive functioning for personalized intervention strategies [51].

Neurophysiology of ADHD

ADHD involves multiple brain circuits and deficiencies. Symptoms vary among individuals, making neurophysiological measures challenging for diagnosis These methodologies are employed to investigate the functioning of the brain and are as follows :

1. Electroencephalography (EEG) – It is debated as a biomarker for ADHD despite its quantifiability for medical conditions. EEG assesses brain function in different frequency bands. Children with ADHD show distinctive EEG patterns, but recent research found varied patterns [52]. A comprehensive scrutiny of EEG data in children with ADHD has revealed distinct clusters. Age impacts EEG profiles, with factors like drowsiness in adolescents influencing outcomes [53].
2. Magnetoencephalography - It gauges brain function's magnetic fields [54].
3. Elevated response potentials (ERP) - ERPs are brain responses measured via EEG in response to tasks, aiding in understanding brain information processing over time, identifying strengths and weaknesses in individuals with ADHD. P3 Component and CNV in ERPs are affected in ADHD. Variability in testing methods across studies challenges result comparison [55].
4. High Temporal Resolution: These techniques enable the swift capture of brain activities, measured in milliseconds (ms), allowing for the observation of both rapid and gradual cerebral processes [56].

Cerebral Functioning in ADHD: These methodologies aid in comprehending the distinctions in brain operations among individuals with ADHD during periods of rest or cognitive engagements. They can reveal neuronal precursors, correlation and consequences that can give initial brain indications and forecast ADHD manifestation, can

reveal concurrent brain activities accompanying ADHD behaviours and can assess alterations in brain activities stemming from ADHD conduct respectively [57].

Relying solely on EEG or ERP markers is insufficient for ADHD diagnosis. Integrating various measurements and machine-learning algorithms can enhance diagnostic accuracy but need validation. Prioritizing EEG-based predictive capabilities can be more beneficial. Certain EEG activities show potential in predicting treatment responses, needing more evidence. Neurophysiological indicators reveal diverse ADHD-related impairments but lack reliability for diagnosis or treatment personalization[58].

Neuroimaging in ADHD

Techniques like MRI and fMRI offer insights into brain structures and activity in ADHD. Individuals with ADHD show delayed brain maturation particularly in frontal cortex, resulting in reduced volume, and abnormal connectivity. ADHD affects brain networks related to attention, cognitive control, and reward processing. Children with ADHD exhibit unusual brain activity during rest, impacting attention and cognitive control[59].

Decreased brain activity in attention and inhibition regions is seen in children with ADHD. Atypical reward processing in ADHD is linked to a hypoactive dopamine system. Treatments like medications and neurofeedback can normalize brain activity in ADHD. Some brain changes in ADHD persist while others may improve with age [60]. Neuroimaging studies consistently show brain function abnormalities in ADHD, affecting cognitive functions. Targeted interventions can enhance brain structure and function in managing ADHD symptoms effectively. ADHD presents diverse neurobiological changes that can potentially improve with appropriate interventions[61].

Genetics in ADHD

The heritability of ADHD is estimated at 75-90%, consistent across genders. Swedish twin studies show high heritability unaffected by shared environments. Heritable components in brain connectivity and ERPs are found in families with ADHD. Heritability is notable in ERPs related to response inhibition[62].

ADHD traits like attention-deficit symptoms show significant heritability. High-extreme traits are inheritable, while low-extreme traits are influenced by shared environments. ADHD shares genetic risk factors with bipolar disorder, schizophrenia, and other disorders. This suggests psychiatric disorders may have a continuous nature[63].

Genetic risk factors contributing to ADHD are not fully understood. Limited significant associations have been found in candidate gene studies and GWAS(genome-wide association studies) . A recent GWAS meta-analysis identified 12 loci linked to ADHD. Polygenic risk scores are being studied to predict ADHD, with potential rare genetic variants playing a role[64].

Assessment in ADHD

ADHD assessment involves evaluating attention and behavior challenges in children. Diagnostic interviews like K-SADS-P IVR are crucial, administered by professionals following research standards. Behavior rating scales, like Vanderbilt and Conners', are user-friendly and assess symptoms quantitatively. Global and specific impairment assessments, such as CGI-S and SKAMP, are used to evaluate ADHD-related difficulties. Assessment methods vary based on age groups, with pre-schoolers needing cautious interpretation and older children relying on self-reported scales. Multi-informant ratings

from parents and educators ensure a comprehensive understanding into the child's behaviour [65].

Challenges in ADHD assessment include limited content validity of behaviour scales and lack of normative benchmarks for global impairment measures. A holistic approach using diverse tools can enhance accuracy in diagnosis and treatment of ADHD in children and adolescents[66].

Treatment strategies in ADHD

The treatment of ADHD involves a multimodal strategy incorporating various approaches and psychoeducation for patients and families as recommended by clinical guidelines. Initially, psychological, behavioural, and educational needs of the child are considered through discussions with the child, parents, and caregivers. Child and parents' involvement in treatment steps is crucial, including discussions on treatment benefits, risks, and preferences [67]. Treatment is adaptive, combining modules like parent counselling, behavioural therapy, and medication based on the patient's requirements. Environment-centred interventions train parents and teachers to support the child better, improving parenting skills and reducing ADHD symptoms. School-based interventions focus on enhancing classroom conditions, teacher methods, and student skills to help children manage ADHD and overcome stigma [68].

Pharmacological treatment in ADHD

The start of ADHD medication should be done by healthcare professionals. A thorough assessment is crucial, including medical background, medications, physical measurements, and cardiac evaluation. Parental training for children under 5 years,

education and guidance for children 5 years and above before considering medication is must [69].

Europe prefers Methylphenidate, Canada favours prolonged-release psychostimulants or atomoxetine. Research shows effectiveness of methylphenidate, amphetamine, atomoxetine, and guanfacine. Regular medication adjustments and annual reassessment are important for optimal outcomes [70]. Dosage levels depend on medication and individual's weight. Methylphenidate, amphetamine, lisdexamfetamine, atomoxetine, and guanfacine have specific dosage guidelines [71]. Side effects like decreased appetite and sleep issues can be managed by adjusting dosage or timing, based on medication and weight. Common side effects include reduced appetite and sleep disturbances, manageable by adjusting medication timing or dosage [72].

Non Pharmacological treatment of ADHD

Various non-pharmacological approaches are available for managing ADHD symptoms. CBT combines positive actions for parents and educators, yielding better outcomes when paired with medication. Neuropsychological treatments involve cognitive tasks to enhance memory and self-regulation, showing success in alleviating ADHD symptoms[73]. Neurofeedback Training (NF) utilizes EEG technology to regulate brain function through specific brain wave frequencies, potentially enhancing self-regulation and positive reinforcement [74]. Non-invasive Brain Stimulation methods like TMS and tDCS aim to improve attention and memory, though not widely accepted in therapy guidelines despite promising results in studies [75].

Alternative Treatments such as mindfulness, exercise, and yoga may be beneficial for ADHD individuals, though further scientific validation is needed. Free fatty acid supplements have shown minor improvements in relieving ADHD symptoms [76].

Understanding Sensory processing

The perception process is how organisms, including humans, gather, comprehend, and make sense of information from their environment by using their sensory modalities like sight, hearing, and touch [77].

The initial stage of perception is Sensation, which encompasses the detection of stimuli through the senses, such as perceiving a circular object. Sensation can be categorized based on its Quality, which pertains to the type of sensory experience (e.g., visual, auditory), Intensity, which refers to the magnitude of the sensory input (e.g., intense light, loud noise), and Duration, which indicates the temporal extent of the sensory experience (e.g., fleeting glimpse, prolonged sound) [78].

Following the process of Sensation, the brain engages in information processing to make sense of the stimuli received. During this phase, the brain integrates the sensory inputs with existing knowledge in Sensory Perceptions and establishes connections with familiar concepts in Cognitive Associations [79].

Example -

Stimulus: The object you see, like a ball.

Sensation: Your eyes detect a round shape and your brain notes it as "a spherical thing."

Interpretation (Percept): Your brain recognizes it as "a ball."

Comprehension: You understand that “I can play with it.”

Various factors influence Perception, including Learning, which involves acquiring knowledge and skills through exposure or education to enhance perceptual abilities. Maturation also plays a role as a child's cognitive and sensory faculties develop over time,

contributing to improved perception. Moreover, Interaction with the Environment plays a crucial role in shaping perception by facilitating better comprehension and conceptual formation through engagement with the surroundings [80].

Understanding perceptual development

In 1969 Gibson made us understood that an infant does not possess innate knowledge and techniques to comprehend the intricate environmental stimuli. This capability evolves over time. Following birth, the infant's engagement with the surroundings promptly serves as a means of acquiring knowledge. Babies gather insights about the world and consistently assess the accuracy of such insights; this process characterizes perception: deriving information from stimulation. [81].

Eleanor Gibson identified three mechanisms through children improve their perceptual acuity with age, discrimination specificity improves, as children can differentiate between stimuli better. As they grow old attention is optimized, children learn to focus on relevant stimuli and ignore irrelevant ones as they grow older and also their information Pickup becomes efficient, young individuals can identify objects quickly by focusing on key features like shape and color, making categorization more efficient [82].

Sensory Integration Theory

Jean Ayres was a pioneer in understanding how children process sensory information. She created the term sensory integrative dysfunction to describe problems children have with processing sensory and motor information, especially those with learning disabilities [83].

Three Major Ideas of Sensory Integration Theory [83]

1. Learning and Sensation: Learning depends on how well we can take in and understand sensations from our movements and surroundings. This helps us plan and organize our actions.
2. Problems with Sensation Processing: If someone has trouble understanding sensations, they might also struggle to act appropriately. This can make learning and behaving correctly harder.
3. Improving Sensation Processing: When we engage in meaningful activities that involve sensations, it can help us get better at processing these sensations, which in turn improves learning and behaviour.

Modulation - This is how the CNS controls its own activity. Ayres identified 4 different types of issues with modulation like overreacting to sensory inputs, like touch i.e. sensory defensiveness, Fear of movement or heights i.e. gravitational insecurity, Disliking certain movements i.e. aversive responses to movement, Not reacting enough to sensory inputs i.e. under responsiveness [84].

Patterns of Modulation - Ayres identified six main patterns (Degrees of Praxis) [84]

- Three subtypes of sensory integrative dysfunction like trouble coordinating both sides of body i.e. bilateral integration sequencing deficits, difficulty with motor planning and body awareness i.e. somatodyspraxia, problems with visual-motor tasks i.e. visuodyspraxia.
- Difficulty following verbal instructions to perform movements i.e. dyspraxia on verbal command.
- Low average sensory integration dysfunction i.e. Below-average ability to process sensory information and high average sensory integration function i.e. Above-average ability to process sensory information [84].

Scholars continued Ayres' research on sensory integration in areas like occupational therapy. Various professionals had different interpretations of sensory integration, causing ambiguity. The rise of sensory integration therapy led to a need for better understanding of sensory processing disorders. Miller et al. had discussions from 1998 to 2000 and published three important works. Despite some disagreement, most experts supported using specific terms for diagnosing and treating sensory processing issues [85].

Dunn's Model of Sensory Processing

Dunn's conceptual framework draws upon insights from neuroscience and behavioural science. This model states that individuals can be categorized based on their neural responses to stimuli and subsequent behaviours. Hypothesis of Dunn's model advances the proposition that there exists an interplay between an individual's neurological sensitivity to sensory stimuli and their behavioural reactions [86].

Table 1 [86]. Dunn's model of sensory processing

	Behavioural response/ self regulation continuum	
Neurological threshold	Passive	Active
High threshold (habituation)	Registration	Seeking
Low threshold(sensitization)	Sensitivity	Avoiding

Further understanding of sensory modulation

Perceptual development relies on attention and integration of sensory inputs, engaging vision, hearing, and touch. Signals reach specific brain regions and merge for unified perception [87]. FMRI research shows distinct brain areas activated by different senses,

supporting multisensory processing. EEG studies indicate early interactions in the brain, with changes in sensory integration over time [88]. Certain neurons respond to multiple senses, adjusting activity based on input. Responses are influenced by factors like timing and location of stimuli. Watching a speaker's lips can activate auditory brain regions, aiding speech comprehension. Multisensory processing involves higher brain regions, feedback loops, and detailed mechanisms still under investigation [89].

Sensory processing disorders

Sensory processing dysfunction entails challenges in the organization of sensory input originating from both, body and surrounding environment. This condition impacts individuals across the lifespan, manifesting in modified sensory thresholds that result in either heightened or diminished responsiveness to stimuli [90].

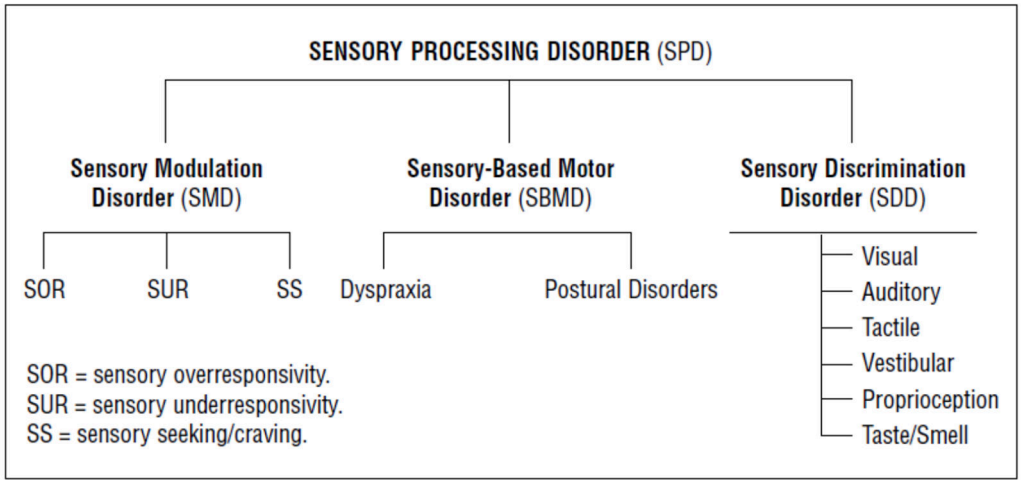


Figure 1 [90]. Sensory processing disorder

A group of researchers proposed Sensory Processing Disorder (SPD) as a separate clinical entity, evaluating its validity based on various factors. They suggested its inclusion in DSM-V, emphasizing subcategories like Sensory Modulation Disorder. The prevalence of sensory processing issues in disabled children ranges from 40% to 88%, suggesting

interventions when other diagnostic criteria are not fully met [90]. Sensory processing problems are often seen in individuals with autism and linked to conditions such as Tourette's syndrome, ADHD, trauma, and prenatal stress [91]. Dunn's framework on sensory processing describes four patterns based on neurological thresholds and self-regulatory mechanisms, aligning with manifestations of SMD [86]. Children with high neurological thresholds may show passive Registration or proactive Seeking behavior. Conversely, those with low thresholds might display passive Sensitivity or active Avoiding patterns [90].

SMD is a condition falling within the realm of SPD that involves challenges in regulating reactions to sensory stimuli. There are three distinct subcategories of SMD [90] :

Sensory Overresponsivity (SOR) – Individuals with Sensory Overresponsivity (SOR) have heightened responses to sensory stimuli, such as touch, sound, taste, or smell, reacting more intensely than typical. SOR is a common subtype in the field of SMD, attracting clinical referrals and sparking studies on SOR's relationship with ADHD. Behaviors in individuals with SOR include touch aversion, covering ears at sounds, avoiding certain movement activities, and limited diets due to sensitivities [90].

The link between SOR and anxiety can be explained through various theoretical frameworks, such as anxiety causing SOR or vice versa, possibly linked through factors like amygdala function . Research shows differences in cortisol levels and electrodermal responsivity in children having ADHD, a significant percentage also exhibiting SOR, anxiety, or both [92]. Dunn's research using the SPSC with ADHD children highlighted differences in Sensitivity and Avoiding behaviors, emphasizing the importance of tailored sensory interventions. Future research should include neurocognitive and neuroanatomical assessments to better understand the causes of SOR and its connections to anxiety and ADHD [93].

Sensory Underresponsivity (SUR) – Individuals with SUR have diminished reactions to sensory input, resulting in difficulties processing data efficiently, such as reduced responsiveness to touch, sound, taste, or smell. Offspring with SUR may exhibit behaviours like sluggishness, apathy, or clumsiness, appearing disinterested in stimulating sensory experiences, making engagement in activities challenging [94]. Dunn's (2006) research found a notable difference in sensory underresponsivity between children having ADHD and general population, emphasizing the need to recognize sensory processing difficulties in neurodevelopmental disorders. Children having ADHD can display varying levels of sensory underresponsivity compared to typically developing children, highlighting the importance of tailored interventions and support for individuals with ADHD to address these differences accurately [95].

Sensory Seeking/Craving (SS) – Individuals with SS seeks intense sensory experiences like touching, loud noises, and strong input for regulation. SS is sometimes confused with ADHD due to similar hyperactive behaviors found in both. Dunn (2006) noted slight differences in SS behaviours among children having ADHD and those without ADHD, with low agreement between parent-teacher observations[96]. Despite behavioural similarities, SS and ADHD have different neurological causes according to James et al. (2011) [97].

It is crucial to acknowledge that these subtypes do not exist in isolation, allowing for the possibility of individuals exhibiting traits from multiple subtypes concurrently. Research has indicated a strong association between different subtypes of SMD and ADHD, particularly noting that individuals categorized as sensory seekers often exhibit symptoms of ADHD characterized by elevated sensory thresholds, while many male individuals with ADHD demonstrate tactile defensiveness resembling Sensory Overresponsivity (SOR) [98].

SDD causes difficulty in interpreting sensory input, affecting motor skills. SDD can involve various sensory systems like visual, auditory, and tactile. Children with SDD struggle with tasks like distinguishing textures, judging force, and identifying sounds [90].

Sensory Based Motor Disorder includes postural disorder and sensory-based dyspraxia. Postural disorder affects core body positions and stability against gravity. Sensory-based dyspraxia leads to difficulties in motor planning and execution in children and therefore may appear clumsy and have trouble with complex motor skills [90].

Contributors of sensory processing difficulties

Research shows that stress and prenatal alcohol exposure can lead to sensory processing disorder, particularly through changes in dopamine system. Individuals having trauma or fetal alcohol spectrum disorder often face sensory challenges, which can be worsened by a lack of physical contact in early life of a child. Adverse environmental conditions, lack of physical contact, inadequate nutrition, and maltreatment can all exacerbate sensory processing issues[99]. Children with SMD exhibit differences in their sympathetic nervous system, responses to stimuli, as detected by the Sensory Challenge Protocol. There should be more research to validate these findings, especially with larger sample sizes and considering gender differences, as individuals with SMD may experience heightened pain sensitivity despite not necessarily having superior detection abilities [100].

Assessment of sensory processing difficulties

Sensory responsiveness in ADHD is measured using behavioural and electrophysiological methods. Electrophysiological methods includes P50 Suppression which evaluates sensory processing by means of EEG, illustrating the brain's mechanisms in adapting to

recurrent stimuli to avert overload. Pre-pulse Inhibition examines the brain's capacity to sift through extraneous data by utilizing paired stimuli and gauging the startle reflex. Electro-dermal Response monitors alterations in skin conductance to assess responsiveness or habituation to sensory inputs. Additional approaches encompass EEG assessments such as SEP, cardiac vagal tone to measure autonomic nervous system activity and salivary cortisol for monitoring stress responses [101].

Behavioural method include self and parent report questionnaires. Surveys are completed by individuals with sensory processing difficulties or their parents, inquiring about the frequency of certain behaviours related to sensory stimuli. The surveys aid in recognizing typical behaviour patterns including seeking or avoiding sensory experiences, high sensitivity, or lack of awareness [102].

Examples of Surveys:

Sensory Profile : It was given by Winnie Dunn explores how children process sensory information with a questionnaire containing 125 items and identifying 9 factors for children aged 3 to 10, an updated 2006 version of Sensory Profile offers new scoring methods and intervention suggestions based on children's sensory needs, as well[103].

Infant–Toddler Sensory Profile (Dunn and Daniels 2002) : It explores sensory responses in children aged from birth to 3 years, with different versions for two age groups. Caregivers use a 5-point scale to rate sensory. Scoring compares performance to typical levels for infants under 6 months, aligning with other sensory profiles for older children, supporting caregivers and professionals in understanding and meeting children's sensory needs effectively [104].

Adolescent–Adult Sensory Profile : The Adolescent/Adult Sensory Profile is utilized to examine sensory responses in individuals aged 11 and above, with self-completed questionnaires. The survey includes 60 questions on 5 point Likert scale[105].

Short Sensory profile - The Short Sensory Profile (BSP) is a condensed version of the Sensory Profile (SP) developed by McIntosh in 1999, using a similar scoring system. It aims to identify unusual sensory processing patterns in individuals for screening and academic purposes. BSP comprises 38 items which are rated on 5 point Likert scale by a caregiver. Items are divided into seven domains: Tactile, Taste/Smell, Movement Sensitivity, etc [106].

Sensory profile school companion (Dunn 2006) - Teachers utilize the Sensory Profile School Companion to comprehend sensory behavior of children at school aged 3 to almost 12. The tool comprises 62 questions on 5 point scale. It assesses Environmental Sensations, Body Sensations, and Classroom Behavior [107].

Other surveys and Questionnaires used to assess sensory processing are - Sensory Experiences Questionnaire (SEQ) ; Sensory Processing Measure (SPM) ; Sensory Over-Responsivity Scale (SensOR) ; Sensory Questionnaire ; DISCO (diagnostic interview for social and communication disorders) [108].

Neurodevelopmental disorders, ADHD and sensory difficulties

Neurodevelopmental Conditions impact children's growth and involve conditions like ASD and ADHD. Sensory Experiences refer to how children respond to stimuli they encounter. Children having ASD and ADHD react differently to sensory experiences when compared to normally developing children. Children having ASD and ADHD may find it challenging to engage in daily activities due to their unique sensory responses. ASD affects

about 1 in 68 children by age 8, making it common. ADHD is diagnosed in about 1 in 11 children aged 4-17, indicating its prevalence. Both ASD and ADHD share core symptoms such as attention and behavior difficulties [109].

Children having sensory differences in ASD are more common and included in DSM-5 criteria. ASD children often display heightened sensory sensitivities, avoidance, and seeking behaviours in comparison to typically developing children, while children having ADHD also show sensory sensitivities and avoidance, along with variations in sensory seeking, emotional reactivity, and inattention [110]. Sensory processing differences in ADHD are apparent across different sensory systems, showing increased variability in responses. The development of sensory features in neurodevelopmental conditions may change with age, necessitating further research. Early sensory sensitivity could potentially predict later ADHD diagnosis, and sensory processing challenges in ADHD, are also associated with anxiety, inattention, difficulties in socialization, aggressive behavior and somatic complaints which may worsen as individuals age, impacting daily activities, adaptive behaviour, school performance, and social participation [111]. Researchers are now exploring how the brains of children with ASD and ADHD function similarly. Studying the overlap between ASD and ADHD can enhance understanding and lead to improved treatments for these conditions and improve their daily life activities [109].

ADHD and Sensory processing disorders

Table 2 [91] Characteristics of studies on SPD in ADHD

Characteristics of studies on SPD in ADHD				
Authors	Year	Sample size (ADHD)	Mean of age (SD) or range	Measure
Parush et al.[112]	2007	67, only boys	5-11 years	Touch inventory for preschoolers, the sensory reactivity score, somatosensory evoked potential, sensory integration and praxis test
Bröring et al. [113]	2008	47	Mean age 9 years 8 months [SD 1 year 11 months]	Touch inventory for elementary-school-aged children
Yochman et al.[114]	2006	49	4 years 7 months [SD 7 months]	The sensory profile
Mangeot et al.[115]	2001	26	Mean age 8.3 years	Short sensory profile
Reynolds et al. [116]	2009	24	6-10	Sensory over-responsivity inventory
Ermer et al.[117]	2001	61	3-15	Sensory profile
Cheung et al.[118]	2009	114	4.8-12 years (M=7.9 years)	Sensory profile
Iwanaga [119]	2006	45, only boys	45 to 72 months	Miller assessment for preschoolers

Yochman et al. [120]	2004	48	4-6	Sensory profile questionnaire
Ghanizadeh [121]	2008	81, clinical	8.4 (1.9) years	Tactile sensory dysfunction including hypersensitivity, hyposensitivity, and poor tactile perception and discrimination (PTPD)
Ghanizadeh [122]	2009	104, clinical	8.5 (1.8) years	Auditory processing problem checklist including hypersensitivity to sounds (HES)(or auditory defensiveness) and hyposensitivity to sound (HOS)

Tactile sensory processing in children having ADHD

Children with ADHD have touch processing challenges. Girls with ADHD are more defensively tactile than boys. Boys with ADHD are similar to boys without ADHD. Tactile defensiveness is unique to children with ADHD, not hereditary. The brain's touch processing is called central somatosensory processing. Examples are not liking hair brushing or overreacting to cuts. Some children may be hypo-sensitive to touch. The Tactile Sensory Dysfunction Checklist evaluates touch responses. Different types of Tactile Dysfunction are explained. Hypersensitivity, Hyposensitivity, and Poor Tactile Perception are types [121]. Children having ADHD who are touch-sensitive often exhibit higher anxiety levels. The hypothalamic pituitary adrenal axis, responsible for stress response, is influenced by touch reactions in children having ADHD. ODD symptoms can predict heightened touch sensitivity in children having ADHD, unrelated to ADHD type or gender [123].

Balance control and vestibular system in children having ADHD

Balancing issues in children having ADHD, particularly the combined type, are less studied but show greater difficulty in balance and posture control. Vestibular system in the inner ear aids in balance, but children with combined-type ADHD may not benefit much from vestibular stimulation activities [124]. Over a third of children with ADHD experience challenges with balance and coordination, leading to instability and unsmooth movements. Children with ADHD's balance difficulties are connected to sensory information processing, where sensory inputs are received and integrated in the brain. ADHD children struggle with inhibiting excessive movements, impacting their ability to maintain balance. Further research is necessary to delve into these balance issues, considering covariant factors like age, gender, and health conditions [125].

Auditory sensory issues in children having ADHD

Children with auditory processing disorders hear well but may struggle to understand what they hear. Various types of auditory processing disorders include difficulties in discriminating between sounds, localizing sounds, and being easily distracted by them. Children may exhibit hyposensitivity to sounds by not noticing certain sounds and parents seeking help due to inattention, which may be mistaken for a learning disability. Hypersensitivity to sounds can manifest as being overly sensitive and noticing sounds that others may not, such as asking for quiet frequently. The Auditory Processing Problem Checklist evaluates children's response to sounds with tested reliability [126].

ADHD subtypes show similar auditory processing problems, with co-morbidities like Oppositional Defiant Disorder and anxiety impacting sound responsiveness. Classroom noise reduction can benefit these children, with auditory processing issues not being gender-specific. The relationship between auditory processing problems, ADHD, and

ODD is uncertain, whether they are distinct issues or part of a larger problem. Research gaps exist in understanding auditory processing issues in children having ADHD, where comparisons show better auditory processing in children without disabilities [127].

Visual sensory issues in children having ADHD

Stimulants are medications used for ADHD treatment, improving focus and attention, in children having ADHD. Visual oversensitivity is being sensitive to light or visual stimuli, causing discomfort. Photophobia is light sensitivity leading to eye pain. Stimulants can induce visual oversensitivity or photophobia in children having ADHD. They can affect visual fields, altering how children perceive light. Parents should be aware of potential visual issues from stimulant medications. Further research is necessary to understand the link between stimulants and visual problems for better ADHD treatment [128].

Olfactory sensory issues in children having ADHD

Only 3 studies focus on how children with ADHD perceive smells. One study shows that kids with ADHD detect smells at lower concentrations than those without ADHD. Stimulants improve odor sensitivity in children having ADHD without affecting their ability to distinguish or name different smells. One study shows no difference in smell discrimination and identification between children with and without ADHD. Another study suggests that children with ADHD struggle with identifying smells compared to those without. Issues in the prefrontal cortex may contribute to smell identification difficulties in children having ADHD. Stimulants helps to improve odour sensitivity in children having ADHD without affecting their ability to distinguish or name different smells [129].

Summary of Sensory processing difficulties and ADHD

Research shows that children with both SPD and ADHD exhibit traits like distractibility and impulsivity. Different underlying causes are suggested for these disorders. Children with SPD lack habituation to repetitive sensory stimuli, while those with ADHD struggle with inhibitory control. Both SPD and ADHD may result from difficulties in top-down regulatory processes, affecting attention and sensory processing. Brain regions like the basal ganglia and thalamus may contribute to these challenges in children having SMD. The connection between sensory processing and executive function involves neural structures like the thalamus, basal ganglia, and cortex, highlighting the link between sensory modulation and cognitive control. Distinguishing between ADHD and SPD based on behaviour alone is difficult due to shared neural substrates and high comorbidity rates [130].

Occupational therapy can assist with sensory challenges, influencing medication choices for ADHD. The impact of medication on sensory concerns remains uncertain. Future studies should utilize objective measures such as brain activity tests and genetic research to enhance comprehension of sensory issues in ADHD. Exploring various sensory types and ADHD variations, while considering age, gender, and surroundings, can improve ADHD classification. Current research heavily relies on parent feedback, potentially influenced by their own mental health issues. Further investigation is necessary to determine if sensory problems serve as indicators for ADHD and to examine the influence of both child and maternal risk factors [131].

Quality of life in primary caregivers of children with ADHD

Before the 1980s, medical success was evaluated based on physical health indicators. Later, experts recognized the importance of considering patients' emotions and daily activities. New health measurements now include various aspects like mobility, mood, and life satisfaction. QOL encompasses different areas of a person's life, offering a comprehensive health assessment [132].

QOL defined by the WHO relates to individuals' subjective perceptions influenced by cultural norms. This perception is connected to personal feelings, criteria, aspirations, and life expectations. Evaluating QOL in medical practice enhances doctor-patient relationships and treatment efficacy assessment. Assessments are crucial for healthcare evaluation, research, and policy-making. WHO's view of QOL emphasizes the link between personal attitudes and socio-cultural environment. Research shows lack in precise definitions for QOL in academic literature, highlighting its subjective nature [133].

HRQOL, or Health-related QOL, is subset of QOL focusing on health. It involves valuing life duration considering various factors like social opportunities, perceptions, and impairments. Evaluation of HRQOL covers physical, psychological, social, somatic, sexual, occupational, and financial functions. Professionals use HRQOL to assess health conditions' impact on individuals' lives and analyse medical costs and benefits [134]. The US Agency for Health Care Policy and Research examines medical care effects on patient outcomes, including HRQOL. The FDA promotes HRQOL data collection for new drugs in the US, while the UK considers patient and caregiver experiences in health outcome assessments [135].

Assessment of QOL

Generic Measures lack disease details but are widely used with specific measures. WHOQOL Instrument by WHO measures physical, mental, social well-being, and allows cross-cultural comparisons. Utility Measures reflect patient preferences for health states on a scale from 0 to 1, used in cost-utility studies. Disease-specific Measures focus on specific health areas and are used with generic measures. HRQOL measures focus on functional capacity, may not capture personal perspective, HRQOL is usually assessed through subjective, multidimensional questionnaires filled out by patients, as doctors' and patients' views often differ. Individual QOL Measures argue for personal opinions over standardized questionnaires. QOL as an Outcome Measure is now seen to influence disease progression. Future Trends call for models reflecting the dynamic nature of QOL [136].

Issues of caregiver in children having ADHD

The study in Hong Kong and Korea showed lower WHOQOL-BREF scores in caregivers of children with ADHD. According to one study conducted in Egypt caregivers with insufficient income had lower physical domain scores and urban parents had lower psychological domain scores, possibly due to urban stress, and older, insufficient income, and divorced parents had lower environmental domain scores. A Norwegian study using the Family Assessment Device (FAD) found 79.2% of families to be dysfunctional and dysfunctional families were more common among parents of children with ADHD. Caregivers of children with ADHD experience lower QOL compared to caregivers of neurotypical children due to increased stress, decreased contentment, and heightened apprehensions. Families with ADHD members face challenges in relationships,

communication, and managing ADHD-related issues. Dysfunctional families especially struggle with these aspects when dealing with ADHD [137].

Need for study – As seen in above sections, ADHD and SPD are significant problems in children and adolescents affecting individual development and the family as a whole. This observational study is being undertaken as there are studies which suggest that there are wide variety of sensory difficulties in children and adolescents with ADHD but in our population, there are not many studies which have looked into various sensory processing difficulties and its correlation with ADHD. Sensory processing difficulties in children with ADHD are also expected to influence their caregiver's mental health and at present, reports on the association between patterns of sensory processing and the quality of life of primary caregivers are scarce.

MATERIALS AND METHODS

The study was designed as a cross sectional observational study, to primarily assess SPD in children and adolescents having ADHD and also to examine association between sensory processing difficulties and type of ADHD. Additionally study examined association between sensory processing difficulties and global functioning in children and assess QOL in primary caregiver . It was conducted over a period of 1 year from 1st January 2023 to 31st December 2023. The source of samples were children and adolescents having age less than 18 years diagnosed with ADHD as per DSM 5, who attended the outpatient department of psychiatry and Child Development Centre (CDC).

Inclusion Criteria:

Children and Adolescents having age less than 18 years diagnosed with ADHD as per DSM 5 .

Exclusion Criteria:

1. Patients with intellectual developmental disorder
2. Patients with severe mental illness like Bipolar Affective Disorder, Schizophrenia, Severe Depression assessed through Mini-International Neuropsychiatric Interview for Children and Adolescents (MINI Kid)
3. Psychotic disorders secondary to general medical condition and neurological disorder
4. Autism spectrum disorder
5. Patients with sensory impairment

Ethical clearance

Prior to commencement, ethical clearance was obtained from institutional ethics committee, Jawaharlal Nehru Medical college, Belagavi with ethical clearance number MDC/JNMCIEC/104.

Informed consent and assent

Informed consent was taken from the parents of participants who fulfilled the inclusion criteria and assent was taken from children and adolescents participating in the study.

Sample Size - Formula used is ,

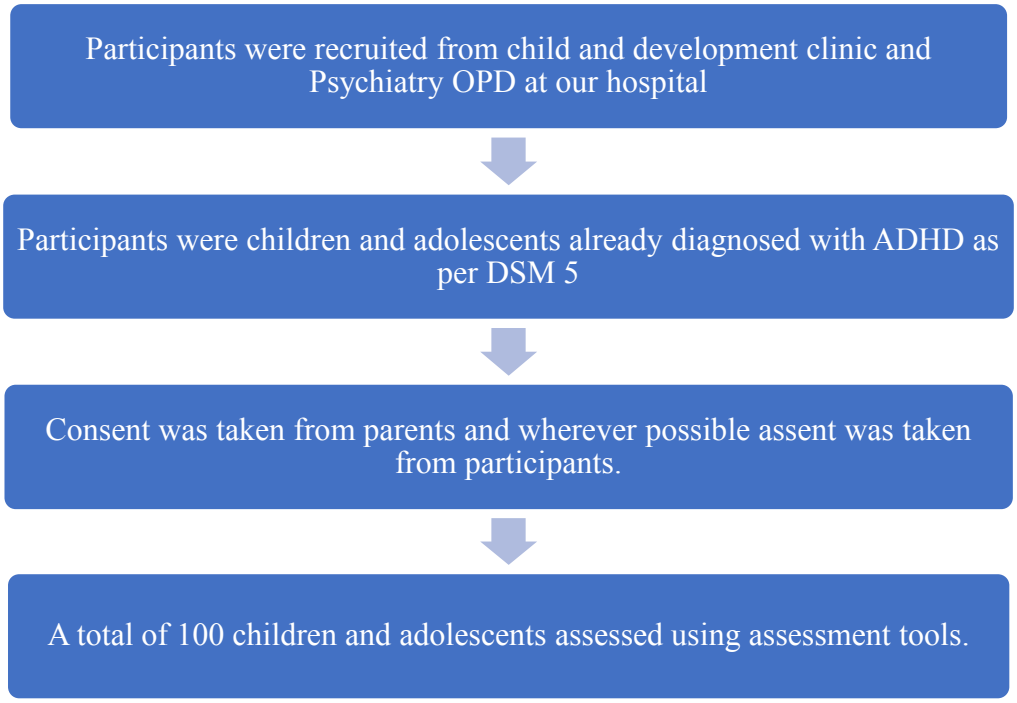
$n = (Z_{1-\alpha/2})^2(p)(q)/(d)^2$

where, n is desired sample size and $Z_{1-\alpha/2}$ is critical value and a standard value for the corresponding level of confidence. At 95% CI or 5% level of significance (type-I error) Z is 1.96, p is Expected prevalence based on previous research[118] is 85.2%, q i.e. 1-p is 14.8% and d i.e. Margin of error or precision is 7%

Therefore, sample size was obtained as 100

Sampling technique was consecutive sampling

Study Procedure



The parents of children having ADHD as per DSM 5 were interviewed by the Principal Investigator (PI). Consent was taken from parents and, assent wherever possible was taken from children and adolescents. Study participants meeting inclusion and exclusion criteria will be assessed using detailed proforma was be prepared based on Socio-demographic factors like income, family dynamics, and questionnaires such as Short sensory profile, to assess sensory processing difficulties, Mini-International Neuropsychiatric Interview for participants (MINI Kid) to assess co-morbidities, Children's Global Assessment Scale (CGAS), to assess functioning in children, Vanderbilt scale to assess types of ADHD, WHOQOL-BREF to assess quality of life in primary caregivers.

Materials (Assessment tools)

- Short sensory profile / Brief Sensory Profile (BSP) is a condensed version of Sensory Profile (SP) created by McIntosh in 1999. BSP uses a similar scoring system to the full Sensory Profile. BSP aims to identify unusual sensory processing patterns for

screening and academic purposes. It consists of 38 questions and employs 5 point Likert scale. The questionnaire is usually filled out by a caregiver. The items are divided into seven groups and based on sensory modalities, scores are categorized as Typical Performance or Probable Difference or Definite difference based on deviation from normal sensory processing [10].

- CGAS - An adaptation of the Global Assessment Scale for adults, it focuses on the rating of the overall functioning of children from ages 6-17 years. They are scored from 0 to 100, lower scores indicating poorer functioning and higher scores associated with good functioning. Scores above 70 indicate normal functioning. The scale is divided into 10-point intervals. The rating must be the lowest score that describes the psychosocial impact of the illness over the past month. This rating is independent of any psychiatric or medical diagnosis and is applicable for use in both situations [139].
- Vanderbilt scale - VADRS serves as a psychological evaluation instrument intended for educators or caregivers of individuals aged 6 to 12, with the specific purpose of assessment of intensity of symptoms associated with ADHD. A collaborative effort between the AAP and the National Initiative for Children's Healthcare Quality (NICHQ) resulted in the creation of a resource toolkit in 2002, aimed at guiding the evaluation and management of ADHD within primary healthcare settings. This assessment tool is readily available to general public [140].
- WHOQOL-BREF - The creation of the WHOQOL instrument by the World Health Organization aimed at assessing quality of life (QoL) in various societies, in alignment with their holistic view of health as complete well-being rather than mere absence of disease. QoL is construed as the subjective evaluation of one's life circumstances within a particular cultural milieu, taking into account personal

aspirations, anticipations, and worries, shaped by physical condition, psychological well-being, self-reliance, and surroundings. Notably, the WHOQOL encompasses dimensions such as spirituality, financial means, and living conditions, revealing a commonality in the fundamental determinants of QoL across diverse cultural settings [136].

- Mini-International Neuropsychiatric Interview for children and adolescents (MINI Kid) -It is a structured diagnostic interview as per DSM-IV and ICD-10 criteria designed for use in clinical and research settings. Used in a pediatric population, it examines the 30 most common and clinically relevant disorders or disorder subtypes. MINI Kid disorder subtyping has been shown to have validity and test-retest reliability, which renders it useful in diagnostic screening in paediatric psychiatry. It requires on average, 15 minutes to administer and is preferred to interview both parent and child. However, interviewing the parent either with the separate parent module or not interview is at the discretion of the interviewer. There are other versions of the MINI Kid used for a specific disorder, such as psychotic disorders, depressive disorders, eating disorders and suicidality. In our study, we have used English version 6.0 [138].

Data processing and analysis

The data obtained was tabulated. The socio-demographic and clinical details of patients was described, for categorical variables using percentage and for continuous variable as mean and standard deviation. To test for significant association, chi square tests were applied for categorical variables. Correlation coefficients for between two parameters was calculated using Pearson correlation coefficient. P value of less than 0.05 was considered significant. Data will be analysed using Microsoft Excel and chi square analysis was done along with Pearson coefficient.

RESULTS

Table 3. Socio-demographic and clinical profile of study participants

Variables		N=100 Frequency in %
Age	0 – 5	5
	6 – 9	50
	10 – 15	45
Sex	Male	75
	Female	25
Socioeconomic classification (as per modified kuppuswamy's scale)	Upper	5
	Upper middle	35
	Lower middle	25
	Upper lower	10
	Lower	25
Type of family	Nuclear	70
	Joint	30
Family History of neurological and psychiatric disorders	Yes	10
	No	90
Parenting style	Authoratative	70
	Permissive	20
	Neglect	5
	Uninvolved	5
Developmental delay	Yes	50
	No	50
SLD	Yes	30
	No	70
Birth history	Full term normal delivery	60
	Premature delivery caesarean section	20
	Full term caesarean section	16
	Premature Normal delivery	4
Temperament	Difficult	80
	Slow to warm up	15
	Easy	5

Class	Pre primary	5
	Primary	47
	Middle	28
	Secondary	15
Treatment taken	Methylphenidate	30
	Atomoxetine	5
	Clonidine	21
	Clonidine and atomoxetine	5
	Methylphenidate and clonidine	10
	No treatment	29

SLD – Specific learning disorder

Table 3 describes sociodemographic profile and patient characteristics of study participants. Mean age of study sample is 9.5 (± 2.49) years. Out of 100 participants, most of the patients were from age group of 6-9 years (55%), followed by 10-15 years (45%), and 0-5 years (5%). Out of total participants 75% were male and 25% were female. According to family's socioeconomic status, 35% were upper middle class, 25 % were lower, 25% were lower middle class, 10% were upper lower, and 5% were upper class as per modified Kuppuswamy's scale. In clinical profile of patients almost 50% patient had developmental delay and 30% of participants had specific learning disorder. The most common parenting style with caregivers of participants was Authoritative (70%), followed by permissive (20%), neglectful (5%), and uninvolved (5%). Most of the families were nuclear type (70%), followed by joint type (30%). 10% of study participants had family history of a neurological or psychiatric disorder. Most of the study participants were born by full term normal delivery (60%), followed by premature delivery by caesarean section (20%), full term delivery by caesarean section (16%), and premature normal delivery (4%). 80% of participants had difficult temperament, followed by 15% having slow to warm up temperament, and 5% having easy temperament. 47% of the study participants were

attending primary classes (1-4 standards), 28% were attending middle classes (5-7 standards), followed by 15% in secondary classes (8-10 standards), and 5% participants attending pre primary classes (LKG-UKG), and 5% participants not attending any school. 71 % participants were on treatment out of which 30% of them were on methylphenidate, 21% were on clonidine, and 5% were on atomoxetine as a single treatment, whereas 10% participants were on combination of methylphenidate and clonidine, 5% were on combination of clonidine and atomoxetine, and 29% of the participants were not on any treatment.

Figure 2 - Type of ADHD in study participants according to Vanderbilt scale

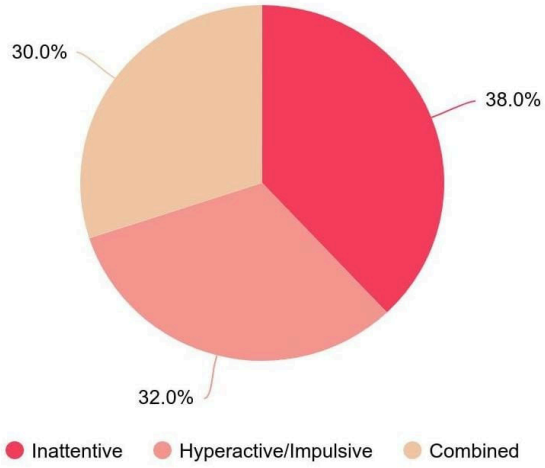


Figure 2 describes subtype of ADHD among study participants with Inattentive type (38%) being the most common type, followed by Impulsive type (32%), and combined type (30%).

Table 4 - Comorbidities amongst study participants

Comorbidity according to vanderbuilt scale	Frequency (%)
ODD	50
Anxiety or depression	50
Conduct disorder	22

ODD - Oppositional defiant disorder

Table 4 describes various comorbidities amongst study participants with anxiety or depression (50%) and ODD (50%) being the highest followed by conduct disorder (22%)

Table 5 CGAS distribution table

Frequency of CGAS values	Number of study participants
40 – 31	20
50 – 41	22
60 – 51	26
70 – 61	16
80 – 71	8
90 – 81	4
100 – 91	4
Total	100

Table 5 describes the CGAS values amongst various participants with mean value of 56.7 (± 21.3), which means that on average study participants had variable functioning with sporadic difficulties.

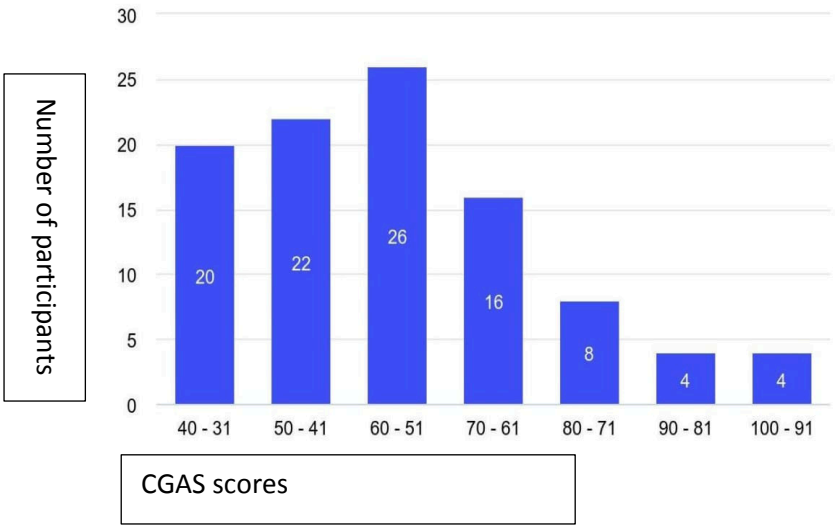


Figure 3 – Tabular representation of CGAS scores

Table 6 Distribution of quality of life according to WHOQOL-BREF scale in various domains of life in primary caregivers

Domains	Mean	Std. Deviation
Physical health domain final score	67.67	12.44
Psychological domain final score	66.25	18.95
Social domain final score	71.25	22.89
Environment domain final score	71.71	17.63

Table 6 describes mean score of various domains of life according to WHOQOL-BREF scale amongst which Psychological domain has least score i.e 66.25 (± 18.95) followed by physical domain which has a score of 67.67 (±12.44), followed by social domain score of 71.25 (±22.89), and at last environmental domain which has the highest score of 71.71 (±17.63) .

Table 7 Distribution of Sensory processing difficulties in study participants (N=100)

Short sensory profile	Typical performance (%)	Probable difference (%)	**Definite difference (%)**
Tactile sensitivity	7	21	**72**
Taste/smell sensitivity	39	6	**55**
Movement sensitivity	42	28	**30**
Seeks sensitivity	10	5	**85**
Auditory filtering	0	32	**68**
Low energy	92	2	**6**
Visual/Auditory Sensitivity	55	23	**22**
Total Sensitivity	4	8	**88**

Table 7 describes distribution of various types of sensory processing in study participants amongst which 88% of the participants showed definite difference in total sensitivity, followed by 85% participants which showed definite difference in seeking sensitivity, definite difference in tactile sensitivity was showed by 72% of participants, 68% of participants had definite difference in auditory filtering, 55% of participants showed definite difference in taste and smell sensitivity. 92% of participants showed typical performance in low energy, followed by 55% showing typical performance in Visual/auditory sensitivity, followed by 42% showing typical performance in movement sensitivity. Mean value of total score of Short Sensory profile was 129.88 (± 17.79).

Table 8 Association of type of ADHD with tactile sensitivity

TACTILE SENSITIVITY	TYPE of ADHD					
	Inattention	Hyperactive/Impulsive	Combined	Total	Pearson Chi Square value	P value
Typical performance	4	2	1	7	1.995[a]	0.737
Probable difference	7	6	8	21		
Definite difference	27	24	21	72		
Total	38	32	30	100		

As described in Table 8 there was no significant difference ($P > 0.05$) found between tactile sensitivity in subtypes of ADHD.

Table 9 Association of type of ADHD with Smell sensitivity

SMELL SENSITIVITY	TYPE of ADHD					
	Inattention	Hyperactive /Impulsive	Combined	Total	Pearson Chi-Square value	P value
Typical performance	14	15	10	39	2.295[a]	0.682
Probable difference	2	1	3	6		
Definite difference	22	16	17	55		
Total	38	32	30	100		

As described in Table 9 there was no significant difference (P > 0.05) found between smell sensitivity in subtypes of ADHD.

Table 10 Association of type of ADHD with movement sensitivity

MOVEMENT SENSITIVITY	TYPE of ADHD					
	Inattention	Hyperactive/Impulsive	Combined	Total	Pearson Chi-Square value	P value
Typical performance	18	11	13	42	4.202[a]	0.379
Probable difference	9	13	6	28		
Definite difference	11	8	11	30		
Total	38	32	30	100		

As described in Table 10 there was no significant difference (P > 0.05) found between movement sensitivity in subtypes of ADHD.

Table 11 Association of type of ADHD with Seeks sensation

SEEKS SENSATION	TYPE of ADHD					
	Inattention	Hyperactive/ Impulsive	Combined	Total	Pearson Chi-Square value	P value
Typical performance	3	3	4	10	4.487[a]	0.344
Probable difference	0	2	3	5		
Definite difference	35	27	23	85		
Total	38	32	30	100		

As described in Table 11 there was no significant difference ($p > 0.05$) found between seeking sensitivity in subtypes of ADHD.

Table 12. Association of type of ADHD with Auditory filtering

AUDITORY FILTERING	TYPE of ADHD					
	Inattention	Hyperactive/ Impulsive	Combined	Total	Pearson Chi-Square value	P value
Probable difference	14	8	10	32	1.155[a]	0.561
Definite difference	24	24	20	68		
Total	38	32	30	100		

As described in Table 12 there was no significant difference ($P > 0.05$) found between Auditory filtering in subtypes of ADHD.

Table 13 Association of type of ADHD with Low energy

LOW ENERGY / WEAK	TYPE of ADHD					
	Inattention	Hyperactive /Impulsive	Combined	Total	Pearson Chi-Square value	P value
Typical performance	34	30	28	92	7.810[a]	0.099
Probable difference	0	0	2	2		
Definite difference	4	2	0	6		
Total	38	32	30	100		

As described in Table 13 there was no significant difference (P > 0.05) found between low energy in subtypes of ADHD.

Table 14 Association of type of ADHD with Visual/Auditory sensitivity

VISUAL/AUDITORY SENSITIVITY	TYPE of ADHD					
	Inattention	Hyperactive/Impulsive	Combined	Total	Pearson Chi-Square value	P value
Typical performance	23	16	16	55	2.493[a]	0.646
Probable difference	6	8	9	23		
Definite difference	9	8	5	22		
Total	38	32	30	100		

As described in Table 14 there was no significant difference (P > 0.05) found between visual / auditory sensitivity in subtypes of ADHD.

Table 15 Association of type of Total Sensitivity difficulties with type of ADHD

TOTAL SENSITIVITY (Total score)	TYPE of ADHD					
	Inattention	Hyperactive/Impulsive	Combined	Total	Pearson Chi-Square value	P value
Typical performance	2	1	1	4	0.839[a]	0.933
Probable difference	4	2	2	8		
Definite difference	32	29	27	88		
Total	38	32	30	100		

As described in Table 15 there was no significant difference (P > 0.05) found between total sensitivity in subtypes of ADHD.

Table 16 Association of CGAS score with Sensory difficulties (total score)

Score range	SENSORY DIFFICULTIES (TOTAL SCORE)					
	Typical performance	Probable Difference	Definite Difference	Total	Pearson Chi-Square value	P value
40 – 31	0	5	15	20	27.924[a]	**0.006***
50 – 41	4	0	18	22		
60 – 51	0	2	24	26		
70 – 61	0	0	16	16		
80 – 71	0	0	8	8		
90 – 81	0	1	3	4		
100 – 91	0	0	4	4		
Total	4	8	88	100		

*p value is less than 0.05 which means the association is significant.

In table 16 p value is less than 0.05 and there is a significant association between CGAS scores and total sensitivity, and it can be observed that participants with low score range of CGAS have definite differences with total sensitivity are more in number, which proves the point that there is significant dysfunction in children having definite difference in total sensitivity.

DISCUSSION

Our study was an cross sectional observational study to assess sensory processing difficulties and functioning in children and adolescents with ADHD and also to assess quality of life in primary caregivers.

Sociodemographic profile

In our study the mean age of study participants was 9.5 (± 2.49) years. Findings were similar to Shimizu et al[6] and Pfeiffer et al[101], where mean age was 8.9 (± 1.49) years and 9.1 (± 1.3) years respectively. It can be suggested that most common age of children presenting with complaints of ADHD is around 8-10 years of age, as that is the time when child starts to go to school and also faces other academic and social issues. In our study there is a male predominance with 75% of study participants being male, and 25% being female. This was similar to Shimizu et al[6] in which 20% were females and 80% were males, and also to Pfeiffer et al[101] in which 25% were females and 75% were males. It can be concluded that in most of the studies, prevalence of ADHD in boys is more than girls and ratio is approximately 3:1. In our study about 35% of study participants belonged to upper middle class, 25% belonged to lower middle and lower class respectively, 10% belonged to upper lower class and 5% belonged to upper class. This result was comparable to a study conducted in urban area by Suthar et al[144] at a regional place in Rajasthan where lower middle class was 38.6 %, upper middle class was 31.6%, upper lower and lower class was 12.6%, upper class was 5.3%. On contrary in a study conducted in rural area by Sharma et al[143], 30.8% belonged to lower middle class and lower class respectively, 38.4% belonged to lower middle class and none of them belonged to upper or upper middle class.

Characteristics of study participants

In our study about 50% of participants had developmental delay, which was similar to Venkatesh et al[145] where language delay was found in 52.3% of study participants. This also suggests that there are high chances of children with ADHD having developmental delay earlier in their life. In our study 38% participants had inattention type of ADHD, 32% had Impulsive/hyperactive type, and 30% had combined type of ADHD which was similar to a meta-analysis done by salari et al[146] where the global prevalence was 33.2% for inattention type, 31.4% for combined type and 30.3% for hyperactive/impulsive type. On contrary in two Indian studies done in north and south India by Suthar et al[144] at a primary school and Venkatesh et al[145] at a tertiary care hospital respectively, had 52.3% of participants as inattentive type, 31.58% as combined type and 15.79% as hyperactive/impulsive type for north Indian study, and 40% as combined type, 31% as inattentive type and 25% as impulsive/hyperactive type for south Indian study. After comparing all the data it could be suggested that the most prevalent type of ADHD is inattentive type in general population but more of children having combined type of ADHD comes to hospital as they are more symptomatic in comparison to other two subtypes. Children and adolescents with ADHD also have various co morbidities, in our study 30% of the participants had specific learning disorder, 50% had oppositional defiant disorder (ODD) and anxiety or depression respectively and 22% had conduct disorder. This was similar to Venkatesh et al[145], where 56.9% of participants had some form of learning disability, 37.3% had ODD and conduct disorder respectively, 31.4% had anxiety disorder. It can be concluded that children with ADHD have significant amount of comorbidities which may vary according to socio economic status, family dynamics and other regional factor. In our study 71% of participants were on medication, which was similar to Pfeiffer et al[101] where 60% of participants were on medication.

Outcomes

In our study, mean value of total score of SSP was 129.88 (± 17.79). 88% of participants had definite differences, 8% had probable difference and 4% had typical performance in total score of short sensory profile. This was comparable to a study done in West Bengal by Bandyopadhyay et al[149] in which the mean value of total score of SSP was 130.4 (± 22.52). 65.38% of participants had definite difference, 15.38% had probable difference, and 19.23% had typical performance in total score of short sensory profile. In 2001, studies by Mangeot et al[115], found that 20 out of 26 ADHD children had some form of SPD. Dunn and Bennett[111] in 2002 and Yochman et al[114] in 2004 also found a significant difference in sensory processing in children with ADHD compared to their controls. This indicated that children with ADHD has definite difference in sensory processing. The findings of our study are similar to other mentioned studies, in that majority of children with ADHD have sensory difficulties.

In our study 72% of study participants had definite differences in tactile sensitivity, but there was no significant association found between tactile sensitivity and subtypes of ADHD, which was similar to results of study done by Ghanizadeh et al[121] in 2008. In our study 55% of participants had typical performance in auditory sensitivity and no significant association was found between auditory and visual sensitivity and subtypes of ADHD, which was comparable to study done by Tien et al[127], where both the ADHD group and typically development group had decreased sensory discrimination with increased in noise level. On contrary for visual sensitivity this difference was found significant in study done by Jung et al[151] in China, which can be due to regional difference. 55% of participants of participants in our study had definite difference in smell sensitivity, but no significant difference was found in between subtypes of ADHD. In a meta-analysis

done by crow et al[129] in 2020 it was found that children with ADHD have small to negligible olfactory dysfunction when compared to children having ASD and OCD. Further studies are required to understand the olfactory and taste dysfunction in children with ADHD.

In our study the mean value of CGAS score was 56.7 (± 21.3), which meant that on average in our study, the study participants had variable functioning with sporadic difficulties, and most of them had score below 70 which implied that there were some difficulties present in functioning in most of the participants. This was comparable to Al-Ansari et al[147] and Berek et al[148] where mean CGAS scores was 45.7 and 58.5 (± 14.5) respectively which suggests that on average ADHD have a moderate degree of interference in functioning with some sporadic difficulties.

In our study no significant association (p value > 0.05) was found between the subtypes of ADHD and various sensory categories in short sensory profile. This was similar to results found in study done in Brazil by Shimizu et al[6] and in north India by Panda et al[142] where no major difference was found between the subtypes of ADHD and sensory profile. In our study there was a significant association (p value < 0.05) found between sensory processing difficulties and impairment in functioning, which suggested that as score of CGAS decreases, the participants having definite differences in sensory processing increases. This finding was similar to rani et al[130] where similar results was found on Weiss functional impairment rating scale.

In our study mean value of physical, psychological, social relations, environmental domains on WHOQOL-BREF was 67.67 (± 12.44), 66.25 (± 18.95), 71.25 (± 22.89), 71.71 (± 17.63) respectively, this when compared study done in Brazil by Azazy et al[137] the mean value of physical (70.3 ± 17.1) and psychological (64.1 ± 16) domains were

comparable to our study, on contrary mean values of social relations (61.9 ± 21.3) and environmental (55.8 ± 13.6) domain was low in comparison to our study, this could be accounted due to social and regional differences. Overall, it is suggested that quality of life was affected in primary caregiver of children and adolescents with ADHD. Further research is required on how to treat these problems in sensory processing so that functioning of children with ADHD can be improved.

CONCLUSION

Our study assessed the sensory processing difficulties in the children and adolescents with ADHD in a tertiary care hospital. Study found that 88% of participants had definite differences in sensory processing and no significant association was found between sensory difficulties and subtypes of ADHD. There was significant association between sensory processing difficulties and functioning of children. The quality of life in primary caregivers was impacted in mostly all domains in which psychological domain being the most impacted.

STRENGTHS OF THE STUDY

- Use of structured assessment tools at presentation for more objective assessment of outcome.
- In detail assessment of SPD in subtypes of ADHD, which have not been studied previously in other studies.
- In detail assessment of dysfunction in ADHD because of SPD.
- Participants were screened for other diseases using MINI-kid.

LIMITATIONS OF THE STUDY

- Small sample size .
- No community representation being a hospital based study.
- Some children and adolescents were already on treatment, which may impact sensory scores.
- No control arm to compare the findings with the typically developing child or adolescents.

SUMMARY

It is common to find Sensory Processing Difficulties in children and adolescents with ADHD. It also hampers the functioning of children and adolescents having ADHD. Parenting a kid with these problems is a daunting task in itself, which affects the quality of life in primary caregiver. On the background of which we decided to assess sensory processing difficulties in children and adolescents having ADHD, to examine association between SPD and subtypes of ADHD, also to assess impairment in functioning due to sensory processing difficulties, and to assess quality of life in primary caregivers of these patients.

This was a cross sectional descriptive study conducted at KLES Prabhakar Kore Hospital and MRC from 1st January 2023, where children and adolescents were recruited from out patientDepartment Of Psychiatry and Child Development Centre (CDC). 100 children and adolescents, who were less than 18 years of age, and were already diagnosed with ADHD as per DSM 5, and willing, and did not have any severe mental illness or intellectual disability, with due consent and assent were taken up for study. At time of presentation a semi-structured questionnaire to determine socio-demographic details, patient characteristics, was used. Short sensory profile was used to assess SPD, MINI Kid was used to assess co-morbidities and other severe psychiatric illnesses, CGAS was used to assess functioning in children, Vanderbilt scale was used to assess types of ADHD, WHOQOL-BREF to assess QOL in primary caregivers. The data was analysed with percentages for categorical variables, mean and standard deviation for continuous variables, and chi square test was applied to examine the association between sensory processing difficulties and types of ADHD, and global functioning and SPD.

In our study mean age of sample was 9.5 years, 55% belonging to age group of 6-9 years, 75% were male and majority of cases belonged to lower socio economic class. Inattentive subtype was the most common amongst all subtypes in participants, 50% of them had ODD and anxiety or depression, 30% had SLD, and 22% had conduct disorder. Eighty eight percent of the participants had definite differences in total score of short sensory profile, in which 72% had definite differences in tactile sensitivity, 55% had definite differences in taste and smell sensitivity, 85% had definite differences in seeking sensitivity, 68% had definite differences in auditory filtering, but only 30% had definite differences in movement sensitivity, 22% had definite differences in visual and auditory sensitivity and 6% had definite differences in low energy, . The mean score of short sensory profile was 129.88. There was no significant association between sensory processing difficulties and subtypes of ADHD. There was significant association between global functioning and sensory processing difficulties where participants with more definite differences in sensory processing had more dysfunction. There was a significant impact on QOL in primary caregivers with the most impact being on psychological domain of caregiver.

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ANNEXURE I

INFORMED CONSENT

"STUDY OF SENSORY PROESSING DIFFICULTIES IN CHILDREN AND ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER AND QUALITY OF LIFE IN PRIMARY CAREGIVERS : CROSS SECTIONAL DESCRIPTIVE HOSPITAL BASED STUDY "

Principal Investigator (PI): REG. NO. BQ0121005

Name of the Participant:

Purpose of the study: Your child is being requested to be a subject in an observational study, the purpose of which is to assess the severity of sensory processing difficulties in children with Attention Deficit Hyperactivity Disorder**,** conducted between 1st January 2023 and 31st December 2023, by REG no. BQ0121005, a postgraduate student in the Department of Psychiatry at Jawaharlal Nehru Medical College, KLE University, Belgaum, Karnataka.

Your child has been requested to participate in this study as your child is suffering from a psychiatric disorder which needs intervention. Therefore, the above study helps provide better quality of care for effective integration of the patients back into the society.

Procedure involved: If you agree your child to be a part of the study, the PI will interview you/your child and take the details according to predesigned proforma and questionnaires

Risks and benefits involved: There are no risks involved. During the period of study, the existence or development of any significant findings in terms of psychiatric disorders will be informed by the PI to you as well as the parent consultant for the appropriate action.

Alternatives: Your/your child's participation in this study is a completely voluntary decision. If you/your child do/does not want to be a part of the study, you/your child may refuse for the same or if you/your child are/is already a part of the study and if you/your child want/wants to withdraw from the study for any reason, you/your child may do so without any hesitation. Discontinuation from the study for any reason will not affect your/your relative's current or future relationship with KLES Dr. Prabhakar Kore Hospital, Belgaum.

Privacy and confidentiality: The information provided by you/your child will be known to the PI and the members of the research team. This information will remain confidential and will be disclosed to others only with your written permission or if required by the law.

Financial incentives for participation: You/your child will not be paid/offered any gifts for participation in the research. There will not be any remuneration for participating in the research and you/your relative will not be reimbursed for any expenses, such as bus/train travelling /companion/assistant etc.

Voluntary Participation/Withdrawal from the study: Taking part in the study is voluntary. You may choose not to enroll your child in this study and may choose to leave the study anytime in between.

Authorization to publish results: When the results of the research are to be published or discussed in conferences by the PI, no information will be disclosed that will reveal your/your child's identity.

You/your relative will be given a copy of this consent form for your/your relative's information and records.

If you have any questions about this study, you may contact:

REG NO. BQ0121005

Postgraduate, Department of Psychiatry, Jawaharlal Nehru Medical College

KAHER, Belagavi – 590010

Karnataka

Signature/Thumb Impression of the Caretaker

STATEMENT OF CONSENT

PRIMARY INVESTIGATOR: REG no. BQ0121005

Dear Mr./Mrs./Dr. _____, you are kindly requested to enroll your child in a research study tilted, **"**STUDY OF SENSORY PROESSING DIFFICULTIES IN CHILDREN AND ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER AND QUALITY OF LIFE IN PRIMARY CAREGIVERS**"** being conducted by, a post graduate student in M.D. Psychiatry and the study will be carried out in Department of Psychiatry, Jawaharlal Nehru Medical College, Belagavi.

Your child has been requested to participate in this as they fit into the laid-out criteria for a study 'subject'/ participant.

You and your child's participation in study is voluntary. During the study you and your child will be undergoing an interview session. Your decision whether or not to participate in the study will not affect your treatment in any form. If you decide to participate you are free to withdraw at any time.

My signature/thumb impression below indicates that I have read or have been told about this entire consent form including the risks and benefits and have had all my questions answered. I will be given a copy of this consent form.

Participant details:
Signature/Thumb Impression of the authorized representative/parent:

_____

Name:
Relation to the subject:
Date:
Signature of the witness: _____
Name:
Date:
Signature of investigator: _____
Name:
Date:

ತಿಳಿವಳಿಕೆ ಒಪ್ಪಿಗೆ

"ಗಮನ ಕೊರತೆಯಿರುವ ಮಕ್ಕಳು ಮತ್ತು ಹದಿಹರೆಯದವರಲ್ಲಿ ಸಂವೇದನಾಶಾಸ್ತ್ರದ ತೊಂದರೆಗಳ ಅಧ್ಯಯನವು ಹೈಪರ್ಆಕ್ಟಿವಿಟಿ ಡಿಸಾರ್ಡರ್ ಮತ್ತು ಪ್ರಾಥಮಿಕ ಆರೈಕೆದಾರರಲ್ಲಿ ಜೀವನದ ಗುಣಮಟ್ಟ"
ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿ (ಪಿಐ): REG no. BQ0121005

ಭಾಗವಹಿಸುವವರ ಹೆಸರು:
ಅಧ್ಯಯನದ ಉದ್ದೇಶ: 1ನೇ ಜನವರಿ 2023 ಮತ್ತು 31ನೇ ಡಿಸೆಂಬರ್ 2023 ರ ನಡುವೆ ನಡೆಸಲಾದ ಅಟೆನ್ಶನ್ ಡೆಫಿಸಿಟ್ ಹೈಪರ್ಆಕ್ಟಿವಿಟಿ ಡಿಸಾರ್ಡರ್ ಹೊಂದಿರುವ ಮಕ್ಕಳಲ್ಲಿ ಸಂವೇದನಾ ಪ್ರಕ್ರಿಯೆಯ ತೊಂದರೆಗಳ ತೀವ್ರತೆಯನ್ನು ನಿರ್ಣಯಿಸುವುದು ಇದರ ಉದ್ದೇಶವಾಗಿದೆ. ಕರ್ನಾಟಕದ ಬೆಳಗಾವಿಯ ಕೆಎಲ್ಇ ವಿಶ್ವವಿದ್ಯಾಲಯದ ಜವಾಹರಲಾಲ್ ನೆಹರು ವೈದ್ಯಕೀಯ ಕಾಲೇಜಿನಲ್ಲಿ ಮನೋವೈದ್ಯಶಾಸ್ತ್ರ ವಿಭಾಗದ ಸ್ನಾತಕೋತ್ತರ ವಿದ್ಯಾರ್ಥಿ ಅವರಿಂದ. ಅವರ ಮೇಲ್ವಿಚಾರಣೆಯಲ್ಲಿ ಈ ಸಂಶೋಧನೆಯನ್ನು ನಡೆಸಲಾಗುತ್ತಿದೆ ನಿಮ್ಮ ಮಗುವು ಮನೋವೈದ್ಯಕೀಯ ಅಸ್ವಸ್ಥತೆಯಿಂದ ಬಳಲುತ್ತಿರುವ ಕಾರಣ ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನಿಮ್ಮ ಮಗುವನ್ನು ವಿನಂತಿಸಲಾಗಿದೆ ಮತ್ತು ಇದಕ್ಕೆ ಮಧ್ಯಸ್ಥಿಕೆಯ ಅಗತ್ಯವಿದೆ. ಆದ್ದರಿಂದ, ಮೇಲಿನ ಅಧ್ಯಯನವು ರೋಗಿಗಳನ್ನು ಸಮಾಜಕ್ಕೆ ಮರಳಿ ಪರಿಣಾಮಕಾರಿ ಏಕೀಕರಣಕ್ಕಾಗಿ ಉತ್ತಮ ಗುಣಮಟ್ಟದ ಆರೈಕೆಯನ್ನು ಒದಗಿಸಲು ಸಹಾಯ ಮಾಡುತ್ತದೆ.

ಒಳಗೊಂಡಿರುವ ಕಾರ್ಯವಿಧಾನ: ನಿಮ್ಮ ಮಗುವು ಅಧ್ಯಯನದ ಭಾಗವಾಗಲು ನೀವು ಒಪ್ಪಿಕೊಂಡರೆ, PI ನಿಮ್ಮನ್ನು/ನಿಮ್ಮ ಮಗುವನ್ನು ಸಂದರ್ಶಿಸುತ್ತದೆ ಮತ್ತು ಪೂರ್ವನಿರ್ಧರಿತ ಪ್ರೊಫಾರ್ಮಾ ಮತ್ತು ಪ್ರಶ್ನಾವಳಿಗಳ ಪ್ರಕಾರ ವಿವರಗಳನ್ನು ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ.

ಅಪಾಯಗಳು ಮತ್ತು ಪ್ರಯೋಜನಗಳು ಒಳಗೊಂಡಿವೆ: ಇದರಲ್ಲಿ ಯಾವುದೇ ಅಪಾಯಗಳಿಲ್ಲ. ಅಧ್ಯಯನದ ಅವಧಿಯಲ್ಲಿ, ಮನೋವೈದ್ಯಕೀಯ ಅಸ್ವಸ್ಥತೆಗಳ ವಿಷಯದಲ್ಲಿ ಯಾವುದೇ ಮಹತ್ವದ ಸಂಶೋಧನೆಗಳ ಅಸ್ತಿತ್ವ ಅಥವಾ ಬೆಳವಣಿಗೆಯನ್ನು ಸೂಕ್ತ ಕ್ರಮಕ್ಕಾಗಿ PI ನಿಮಗೆ ಹಾಗೂ ಪೋಷಕ ಸಲಹೆಗಾರರಿಗೆ ತಿಳಿಸಲಾಗುತ್ತದೆ.

ಪರ್ಯಾಯಗಳು: ಈ ಅಧ್ಯಯನದಲ್ಲಿ ನಿಮ್ಮ/ನಿಮ್ಮ ಮಗುವಿನ ಭಾಗವಹಿಸುವಿಕೆಯು ಸಂಪೂರ್ಣವಾಗಿ ಸ್ವಯಂಪ್ರೇರಿತ ನಿರ್ಧಾರವಾಗಿದೆ.

ನೀವು/ನಿಮ್ಮ ಮಗು ಅಧ್ಯಯನದ ಭಾಗವಾಗಲು ಬಯಸದಿದ್ದರೆ/ನೀವು/ನಿಮ್ಮ ಮಗು ಅದನ್ನು ನಿರಾಕರಿಸಬಹುದು ಅಥವಾ ನೀವು/ನಿಮ್ಮ ಮಗು/ಈಗಾಗಲೇ ಅಧ್ಯಯನದ ಭಾಗವಾಗಿದ್ದರೆ ಮತ್ತು ನೀವು/ನಿಮ್ಮ ಮಗು ಬಯಸಿದರೆ/ ಯಾವುದೇ ಕಾರಣಕ್ಕಾಗಿ ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯಲು ಬಯಸುತ್ತಾರೆ, ನೀವು/ನಿಮ್ಮ ಮಗು ಯಾವುದೇ ಹಿಂಜರಿಕೆಯಿಲ್ಲದೆ ಹಾಗೆ ಮಾಡಬಹುದು. ಯಾವುದೇ ಕಾರಣಕ್ಕೂ ಅಧ್ಯಯನವನ್ನು ಸ್ಥಗಿತಗೊಳಿಸುವುದರಿಂದ ನಿಮ್ಮ/ನಿಮ್ಮ ಸಂಬಂಧಿಯ ಪ್ರಸ್ತುತ ಅಥವಾ ಭವಿಷ್ಯದ KLES ಡಾ. ಪ್ರಭಾಕರ ಕೋರೆ ಆಸ್ಪತ್ರೆ, ಬೆಳಗಾವಿಯ ಸಂಬಂಧದ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುವುದಿಲ್ಲ.

ಗೌಪ್ಯತೆ ಮತ್ತು ಗೌಪ್ಯತೆ: ನೀವು/ನಿಮ್ಮ ಮಗು ಒದಗಿಸಿದ ಮಾಹಿತಿಯು PI ಮತ್ತು cfಸಂಶೋಧನಾ ತಂಡದ ಸದಸ್ಯರಿಗೆ ತಿಳಿಯುತ್ತದೆ. ಈ ಮಾಹಿತಿಯು ಗೌಪ್ಯವಾಗಿರುತ್ತದೆ ಮತ್ತು ನಿಮ್ಮ ಲಿಖಿತ ಅನುಮತಿಯೊಂದಿಗೆ ಅಥವಾ ಕಾನೂನಿನ ಅಗತ್ಯವಿದ್ದಲ್ಲಿ ಮಾತ್ರ ಇತರರಿಗೆ ಬಹಿರಂಗಪಡಿಸಲಾಗುತ್ತದೆ.

ಸಾಂಸ್ಥಿಕ/ಪ್ರಾಯೋಜಕರ ನೀತಿ: ಈ ಸಂಶೋಧನೆಗೆ ಅನ್ವಯಿಸುವುದಿಲ್ಲ

ಭಾಗವಹಿಸುವಿಕೆಗಾಗಿ ಹಣಕಾಸಿನ ಪ್ರೋತ್ಸಾಹಗಳು: ಸಂಶೋಧನೆಯಲ್ಲಿ ಭಾಗವಹಿಸಲು ನಿಮಗೆ/ನಿಮ್ಮ ಮಗುವಿಗೆ ಯಾವುದೇ ಉಡುಗೊರೆಗಳನ್ನು ಪಾವತಿಸಲಾಗುವುದಿಲ್ಲ/ನೀಡುವುದಿಲ್ಲ. ಸಂಶೋಧನೆಯಲ್ಲಿ ಭಾಗವಹಿಸಲು ಯಾವುದೇ ಸಂಭಾವನೆ ಇರುವುದಿಲ್ಲ ಮತ್ತು ನೀವು/ನಿಮ್ಮ ಸಂಬಂಧಿ ಬಸ್/ರೈಲು ಪ್ರಯಾಣ/ಸಂಗಾತಿ/ಸಹಾಯಕ ಮುಂತಾದ ಯಾವುದೇ ವೆಚ್ಚಗಳಿಗೆ ಮರುಪಾವcfತಿ ಮಾಡಲಾಗುವುದಿಲ್ಲ.

ಸ್ವಯಂಪ್ರೇರಿತ ಭಾಗವಹಿಸುವಿಕೆ/ಅಧ್ಯಯನದಿಂದ ಹಿಂತೆಗೆದುಕೊಳ್ಳುವಿಕೆ: ಅಧ್ಯಯನದಲ್ಲಿ ಪಾಲ್ಗೊಳ್ಳುವುದು ಸ್ವಯಂಪ್ರೇರಿತವಾಗಿದೆ. ನಿಮ್ಮ ಮಗುವನ್ನು ಈ ಅಧ್ಯಯನಕ್ಕೆ ಸೇರಿಸದಿರಲು ನೀವು ಆಯ್ಕೆ ಮಾಡಬಹುದು ಮತ್ತು ನಡುವೆ ಯಾವಾಗ ಬೇಕಾದರೂ ಅಧ್ಯಯನವನ್ನು ತೊರೆಯಲು ಆಯ್ಕೆ ಮಾಡಬಹುದು.

ಫಲಿತಾಂಶಗಳನ್ನು ಪ್ರಕಟಿಸಲು ಅಧಿಕಾರ: ಸಂಶೋಧನೆಯ ಫಲಿತಾಂಶಗಳನ್ನು PI ನಿಂದ ಪ್ರಕಟಿಸಲು ಅಥವಾ ಸಮ್ಮೇಳನಗಳಲ್ಲಿ ಚರ್ಚಿಸಲು, ನಿಮ್ಮ/ನಿಮ್ಮ ಮಗುವಿನ ಗುರುತನ್ನು ಬಹಿರಂಗಪಡಿಸುವ ಯಾವುದೇ ಮಾಹಿತಿಯನ್ನು ಬಹಿರಂಗಪಡಿಸಲಾಗುವುದಿಲ್ಲ.

ಈ ಅಧ್ಯಯನದ ಕುರಿತು ನೀವು ಯಾವುದೇ ಪ್ರಶ್ನೆಗಳನ್ನು ಹೊಂದಿದ್ದರೆ, ನೀವು ಸಂಪರ್ಕಿಸಬಹುದು: REG No. BQ0121005 ಮನೋವೈದ್ಯಶಾಸ್ತ್ರ ವಿಭಾಗ, J.N.M.C, ಬೆಳಗಾವಿ

ನಿಮ್ಮ/ನಿಮ್ಮ ಸಂಬಂಧಿಕರ ಮಾಹಿತಿ ಮತ್ತು ದಾಖಲೆಗಳಿಗಾಗಿ ನೀವು/ನಿಮ್ಮ ಸಂಬಂಧಿಗೆ ಈ ಸಮ್ಮತಿಯ ನಮೂನೆಯ ಪ್ರತಿಯನ್ನು ನೀಡಲಾಗುತ್ತದೆ.

ಕೇರ್‌ಟೇಕರ್‌ನ ಸಹಿ/ಹೆಬ್ಬೆರಳಿನ ಅನಿಸಿಕೆ

ಒಪ್ಪಿಗೆಯ ಹೇಳಿಕೆ

ಪ್ರಾಥಮಿಕ ತನಿಖಾಧಿಕಾರಿ: REG no. BQ0121005
ಮಾರ್ಗದರ್ಶಿ:
ಆತ್ಮೀಯ ಶ್ರೀ/ಶ್ರೀಮತಿ/ಡಾ. _____ M.D. ಮನೋವೈದ್ಯಶಾಸ್ತ್ರದ ವಿದ್ಯಾರ್ಥಿ ಮತ್ತು ಅಧ್ಯಯನವನ್ನು ನೇರ ಮೇಲ್ವಿಚಾರಣೆ ಮತ್ತು ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ಡಾ. ವಿನಾಯಕ ಕೋಪರ್ಡೆ, ಸಹಾಯಕ ಪ್ರಾಧ್ಯಾಪಕರು, ಮನೋವೈದ್ಯಶಾಸ್ತ್ರ ವಿಭಾಗ, ಜವಾಹರಲಾಲ್ ನೆಹರು ವೈದ್ಯಕೀಯ ಕಾಲೇಜು, ಬೆಳಗಾವಿ.
ನಿಮ್ಮ ಮಗುವಿಗೆ ಇದರಲ್ಲಿ ಭಾಗವಹಿಸಲು ವಿನಂತಿಸಲಾಗಿದೆ ಏಕೆಂದರೆ ಅವರು ಅಧ್ಯಯನದ 'ವಿಷಯ'/ ಭಾಗವಹಿಸುವವರಿಗೆ ನಿಗದಿಪಡಿಸಿದ ಮಾನದಂಡಗಳಿಗೆ ಹೊಂದಿಕೊಳ್ಳುತ್ತಾರೆ.
ನೀವು ಮತ್ತು ನಿಮ್ಮ ಮಗುವಿನ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವುದು ಸ್ವಯಂಪ್ರೇರಿತವಾಗಿದೆ. ಅಧ್ಯಯನದ ಸಮಯದಲ್ಲಿ ನೀವು ಮತ್ತು ನಿಮ್ಮ ಮಗು ಸಂದರ್ಶನದ ಅವಧಿಗೆ ಒಳಗಾಗುತ್ತೀರಿ. ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಬೇಕೆ ಅಥವಾ ಬೇಡವೇ ಎಂಬ ನಿಮ್ಮ ನಿರ್ಧಾರವು ಯಾವುದೇ ರೂಪದಲ್ಲಿ ನಿಮ್ಮ ಚಿಕಿತ್ಸೆಯ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುವುದಿಲ್ಲ. ನೀವು ಭಾಗವಹಿಸಲು ನಿರ್ಧರಿಸಿದರೆ ನೀವು ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಹಿಂಪಡೆಯಲು ಮುಕ್ತರಾಗಿದ್ದೀರಿ.
ಕೆಳಗಿನ ನನ್ನ ಸಹಿ/ಹೆಬ್ಬೆರಳಿನ ಗುರುತು, ಅಪಾಯಗಳು ಮತ್ತು ಪ್ರಯೋಜನಗಳನ್ನು ಒಳಗೊಂಡಂತೆ ನಾನು ಈ ಸಂಪೂರ್ಣ ಸಮ್ಮತಿ ನಮೂನೆಯನ್ನು ಓದಿದ್ದೇನೆ ಅಥವಾ ಹೇಳಿದ್ದೇನೆ ಮತ್ತು ನನ್ನ ಎಲ್ಲಾ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿದ್ದೇನೆ ಎಂದು ಸೂಚಿಸುತ್ತದೆ. ಈ ಸಮ್ಮತಿ ನಮೂನೆಯ ಪ್ರತಿಯನ್ನು ನನಗೆ ನೀಡಲಾಗುವುದು.
ಭಾಗವಹಿಸುವವರ ವಿವರಗಳು:
ಅಧಿಕೃತ ಪ್ರತಿನಿಧಿ/ಪೋಷಕರ ಸಹಿ/ಹೆಬ್ಬೆರಳಿನ ಅನಿಸಿಕೆ:

_____
ಹೆಸರು:
ವಿಷಯಕ್ಕೆ ಸಂಬಂಧ:
ದಿನಾಂಕ:
ಸಾಕ್ಷಿಯ ಸಹಿ: _____
ಹೆಸರು:
ದಿನಾಂಕ:
ತನಿಖಾಧಿಕಾರಿಯ ಸಹಿ: _____
ಹೆಸರು:
ದಿನಾಂಕ:

सूचित सहमति

"ध्यान की कमी अतिसक्रियता विकार और प्राथमिक देखभालकर्ताओं में जीवन की गुणवत्ता के साथ बच्चों और किशोरों में संवेदी प्रसंस्करण कठिनाइयों का अध्ययन"

प्रधान अन्वेषक (पीआई): REG no. BQ0121005

प्रतिभागी का नाम:

अध्ययन का उद्देश्य: आपके बच्चे से एक अवलोकन अध्ययन में एक विषय बनने का अनुरोध किया जा रहा है, जिसका उद्देश्य 1 जनवरी 2023 और 31 दिसम्बर 2023 के बी□ आयोजित अटेंशन डेफिसिट हाइपरएक्टिविटी डिसऑर्डर वाले बच्चो□में सं□वेदी प्रसं□करण कठिनाइयो□की गं□भीरता का आकलन करना है। डॉ सं□ित सोगनी द्वारा, जवाहरलाल नेहरू मेडिकल कॉलेज, केएलई विश्वविद्यालय, बेलगाम, कर्नाटक में मनो□िकित्सा विभाग में स्नातकोत्तर छात्र। आपके बच्चे से इस अध्ययन में भाग लेने का अनुरोध किया गया है क्यो□कि आपका बच्चा एक मानसिक विकार से पीड़ित है जिसमें हस्तक्षेप की आवश्यकता है। इसलिए, उपरोक्त अध्ययन रोगियो□के समाज में प्रभावी एकीकरण के लिए बेहतर गुणवत्ता की देखभाल प्रदान करने में मदद करता है।

शामिल प्रक्रिया: यदि आप अपने बच्चे को अध्ययन का हिस्सा बनने के लिए सहमत हैं, तो पीआई आपका/आपके बच्चे का साक्षात्कार करेगा और पूर्वनिर्धारित प्रोफार्मा और प्रश्नावली के अनुसार विवरण लेगा।

शामिल जोखिम और लाभ: इसमें कोई जोखिम शामिल नही□है। अध्ययन की अवधि के दौरान, मनोवैज्ञानिक विकारो□के सं□र्भ में किसी भी महत्वपूर्ण निष्कर्ष के अस्तित्व या विकास के बारे में पीआई द्वारा आपको और साथ ही माता-पिता के सलाहकार द्वारा उ□ित कार्रवाई के लिए सू□ित किया जाएगा।

विकल्प: इस अध्ययन में आपके/आपके बच्चे की भागीदारी पूरी तरह से स्वैच्छिक निर्णय है। यदि आप/आपका बच्चा अध्ययन का हिस्सा नही□बनना □ाहता/□ाहती है, तो आप/आपका बच्चा इसके लिए मना कर सकता है या यदि आप/आपका बच्चा पहले से ही अध्ययन का हिस्सा है/हैं और यदि आप/आपका बच्चा □ाहता है/ किसी भी कारण से अध्ययन से हटना □ाहते हैं, आप/आपका बच्चा बिना किसी झिझक के ऐसा कर सकता है। किसी भी कारण से अध्ययन बं□ करने से केएलईएस

डॉ. प्रभाकर कोरे अस्पताल, बेलगाम के साथ आपके/आपके रिश्तेदार के वर्तमान या भविष्य के सम्बन्धों पर कोई प्रभाव नहीं पड़ेगा।

गोपनीयता और गोपनीयता: आपके/आपके बच्चे द्वारा प्रदान की गई जानकारी पीआई और शोध दल के सदस्यों को ज्ञात होगी। यह जानकारी गोपनीय रहेगी और आपकी लिखित अनुमति से या कानून द्वारा आवश्यक होने पर ही दूसरों के सामने प्रकट की जाएगी।

भागीदारी के लिए वित्तीय प्रोत्साहन: आपको/आपके बच्चे को शोध में भाग लेने के लिए किसी भी उपहार का भुगतान/प्रस्ताव नहीं किया जाएगा। शोध में भाग लेने के लिए कोई पारिश्रमिक नहीं दिया जाएगा और आपको/आपके रिश्तेदार को बस/ट्रेन यात्रा/साथी/सहायक आदि जैसे किसी भी खर्च के लिए प्रतिपूर्ति नहीं की जाएगी।

स्वच्छिक भागीदारी/अध्ययन से वापसी: अध्ययन में भाग लेना स्वैच्छिक है। आप इस अध्ययन में अपने बच्चे का नामांकन न करने का विकल्प चुन सकते हैं और बीच में कभी भी अध्ययन छोड़ने का विकल्प चुन सकते हैं।

परिणाम प्रकाशित करने के लिए प्राधिकरण: जब शोध के परिणाम पीआई द्वारा सम्मेलनों में प्रकाशित या चर्चा की जानी है, तो कोई भी जानकारी प्रकट नहीं की जाएगी जो आपके/आपके बच्चे की पहचान प्रकट करेगी।

यदि इस अध्ययन के बारे में आपके कोई प्रश्न हैं, तो आप संपर्क कर सकते हैं: REG no. BQ0121005

आपको/आपके रिश्तेदार को आपकी/आपके रिश्तेदार की जानकारी और रिकॉर्ड के लिए इस सहमति फॉर्म की एक प्रति दी जाएगी।

कार्यवाहक के हस्ताक्षर/अंगूठे का निशान

सहमति का विवरण

प्राथमिक अन्वेषक: REG NO.BQ0121005

प्रिय श्रीमान/श्रीमती/डॉ. _____, आपसे अनुरोध है कि आप अपने बच्चे को एक शोध अध्ययन में नामांकित करें, "बच्चों और किशोरों में संवेदी प्रसंस्करण कठिनाइयों का अध्ययन, ध्यान घाटे अति सक्रियता विकार और प्राथमिक देखभालकर्ताओं द्वारा संचालित प्राथमिक जीवन की गुणवत्ता के साथ"। मनोचिकित्सा विभाग, जवाहरलाल नेहरू मेडिकल कॉलेज, बेलगावी के प्रत्यक्ष पर्यवेक्षण और मार्गदर्शन में किया जाएगा।

आपके बच्चे से इसमें भाग लेने का अनुरोध किया गया है क्योंकि वे अध्ययन 'विषय'/प्रतिभागी के लिए निर्धारित मानदंडों में फिट होते हैं।

अध्ययन में आपकी और आपके बच्चे की भागीदारी स्वैच्छिक है। अध्ययन के दौरान आप और आपके बच्चे का साक्षात्कार सत्र चल रहा होगा। अध्ययन में भाग लेने या न लेने के आपके निर्णय से किसी भी रूप में आपके उपचार पर कोई प्रभाव नहीं पड़ेगा। यदि आप भाग लेने का निर्णय लेते हैं तो आप किसी भी समय वापस लेने के लिए स्वतंत्र हैं।

नीचे दिए गए मेरे हस्ताक्षर/अंगूठे का निशान यह दर्शाता है कि मैंने जोखिम और लाभों सहित इस संपूर्ण सहमति फॉर्म के बारे में पढ़ा है या बताया गया है और मेरे सभी प्रश्नों का उत्तर दिया गया है। मुझे इस सहमति फॉर्म की एक प्रति दी जाएगी।

प्रतिभागी विवरण:

अधिकृत प्रतिनिधि/माता-पिता के हस्ताक्षर/अंगूठे का निशान: _____

नाम:

विषय से संबंध:

दिनांक:

गवाह के हस्ताक्षर: _____

नाम:

दिनांक:

अन्वेषक के हस्ताक्षर: _____

नाम:

दिनांक:

माहितीपूर्ण संमती

"लहान मुलांमध्ये आणि किशोरवयीन मुलांमध्ये संवेदनात्मक प्रक्रियेच्या अडचणींचा अभ्यास, प्राथमिक काळजी घेणाऱ्यांमध्ये हायपरॅक्टिव्हिटी डिसऑर्डर आणि जीवनाची गुणवत्ता"

मुख्य अन्वेषक (पीआय): REG no. BQ0121005

सहभागीचे नाव:

अभ्यासाचा उद्देश: तुमच्या मुलाला एका निरीक्षणात्मक अभ्यासात एक विषय म्हणून ठेवण्याची विनंती केली जात आहे, ज्याचा उद्देश 1 जानेवारी 2023 ते 31 डिसेंबर 2023 या कालावधीत अटेन्शन डेफिसिट हायपरएक्टिव्हिटी डिसऑर्डर असलेल्या मुलांमध्ये संवेदी प्रक्रियेच्या अडचणींच्या तीव्रतेचे मूल्यांकन करणे हा आहे. डॉ. सचित सोगानी, जवाहरलाल नेहरू वैद्यकीय महाविद्यालय, केएलई विद्यापीठ, बेळगाव, कर्नाटक येथील मानसोपचार विभागातील पदव्युत्तर विद्यार्थी. हे संशोधन डॉ. विनायक कोपर्डे यांच्या देखरेखीखाली केले जात आहे. तुमच्या मुलाला या अभ्यासात सहभागी होण्याची विनंती करण्यात आली आहे कारण तुमचे मूल एका मानसिक विकाराने ग्रस्त आहे ज्याला हस्तक्षेपाची गरज आहे. त्यामुळे, वरील अभ्यासामुळे रुग्णांना समाजात प्रभावीपणे एकात्मता आणण्यासाठी उत्तम दर्जाची काळजी प्रदान करण्यात मदत होते.

कार्यपद्धतीचा समावेश आहे: जर तुम्ही तुमच्या मुलाला अभ्यासाचा भाग होण्यास सहमती दिली तर, PI तुमची/तुमच्या मुलाची मुलाखत घेईल आणि पूर्वडिझाइन केलेल्या प्रोफॉर्मा आणि प्रश्नावलीनुसार तपशील घेईल.

जोखीम आणि फायदे गुंतलेले आहेत: यात कोणतेही धोके नाहीत. अभ्यासाच्या कालावधीत, मानसोपचार विकारांच्या संदर्भात कोणत्याही महत्त्वपूर्ण निष्कर्षांचे अस्तित्व किंवा विकास PI द्वारे तुम्हाला तसेच पालक सल्लागार यांना योग्य कारवाईसाठी सूचित केले जाईल.

पर्याय: या अभ्यासात तुमचा/तुमच्या मुलाचा सहभाग हा पूर्णपणे ऐच्छिक निर्णय आहे. जर तुम्ही/तुमचे मुल या अभ्यासाचा भाग बनू इच्छित नसेल, तर तुम्ही/तुमचे मूल त्यासाठी नकार देऊ शकता किंवा तुम्ही/तुमचे मूल आधीच अभ्यासाचा भाग असल्यास/असेल आणि तुम्हाला/तुमच्या मुलाला हवे असल्यास/ कोणत्याही कारणास्तव अभ्यासातून माघार घ्यायची असेल, तर तुम्ही/तुमचे मूल ते कोणत्याही संकोच न करता करू शकता. कोणत्याही कारणास्तव अभ्यास बंद केल्याने

तुमच्या/तुमच्या नातेवाईकाच्या KLES डॉ. प्रभाकर कोरे हॉस्पिटल, बेळगाव याच्याशी सध्याच्या किंवा भविष्यातील संबंधावर परिणाम होणार नाही.

गोपनीयता आणि गोपनीयता: तुम्ही/तुमच्या मुलाने दिलेली माहिती PI आणि संशोधन कार्यसंघाच्या सदस्यांना माहीत असेल. ही माहिती गोपनीय राहील आणि फक्त तुमच्या लेखी परवानगीने किंवा कायद्यानुसार आवश्यक असल्यास इतरांना उघड केली जाईल.

संस्थात्मक/प्रायोजक धोरण: या संशोधनासाठी लागू नाही

सहभागासाठी आर्थिक प्रोत्साहन: संशोधनात सहभागी होण्यासाठी तुम्हाला/तुमच्या मुलाला पैसे दिले जाणार नाहीत/भेटवस्तू दिल्या जाणार नाहीत. संशोधनात सहभागी होण्यासाठी कोणताही मोबदला दिला जाणार नाही आणि तुम्हाला/तुमच्या नातेवाईकांना बस/रेल्वे प्रवास/सहकारी/सहाय्यक इत्यादी कोणत्याही खर्चाची परतफेड केली जाणार नाही.

ऐच्छिक सहभाग/अभ्यासातून पैसे काढणे: अभ्यासात भाग घेणे ऐच्छिक आहे. तुम्ही तुमच्या मुलाची या अभ्यासात नावनोंदणी न करण्याचे निवडू शकता आणि या दरम्यान कधीही अभ्यास सोडणे निवडू शकता.

परिणाम प्रकाशित करण्यासाठी अधिकृतता: जेव्हा संशोधनाचे परिणाम प्रकाशित केले जातील किंवा PI द्वारे परिषदांमध्ये सादर केली जाईल, तेव्हा कोणतीही माहिती उघड केली जाणार नाही ज्यामुळे तुमची/तुमच्या मुलाची ओळख उघड होईल. या अभ्यासाविषयी तुम्हाला काही प्रश्न असल्यास, तुम्ही संपर्क करू शकता: REG no. BQ0121005

तुम्हाला/तुमच्या नातेवाईकांना तुमच्या/तुमच्या नातेवाईकाची माहिती आणि रेकॉर्डसाठी या संमती फॉर्मची एक प्रत दिली जाईल.

काळजीवाहू व्यक्तीची स्वाक्षरी/अंगठ्याचा ठसा

संमतीचे विधान

प्राथमिक तपासनीस: REG no. BQ0121005

प्रिय श्री/श्रीमती/डॉ. _____, आपणास विनंती आहे की, "मुले आणि पौगंडावस्थेतील संवेदनक्षम अभ्यासातील अडचणी याकडे लक्ष वेधून घेत असलेल्या संवेदनक्षमतेच्या अभ्यासात आपल्या मुलाचे नाव नोंदवावे. M.D. मानसोपचार शास्त्रातील विद्यार्थी आणि हा अभ्यास मानसोपचार विभाग, जवाहरलाल नेहरू वैद्यकीय महाविद्यालय, बेळगावी यांच्या प्रत्यक्ष देखरेखीखाली व मार्गदर्शनाखाली केला जाईल.

तुमच्या मुलाला यात सहभागी होण्यासाठी विनंती करण्यात आली आहे कारण ते अभ्यासाच्या 'विषय'/ सहभागीसाठी दिलेल्या निकषांमध्ये बसतात.

तुम्ही आणि तुमच्या मुलाचा अभ्यासात सहभाग ऐच्छिक आहे. अभ्यासादरम्यान तुम्ही आणि तुमच्या मुलाची मुलाखत सत्र सुरू होईल. अभ्यासात भाग घ्यायचा की नाही याचा तुमचा निर्णय कोणत्याही स्वरूपात तुमच्या उपचारांवर परिणाम करणार नाही. तुम्ही सहभागी होण्याचे ठरवल्यास तुम्ही कधीही माघार घेण्यास मोकळे आहात.

खाली दिलेली माझी स्वाक्षरी/अंगठ्याचा ठसा सूचित करतो की मी जोखीम आणि फायद्यांसह या संपूर्ण संमती फॉर्मबद्दल वाचले आहे किंवा मला सांगितले गेले आहे आणि माझ्या सर्व प्रश्नांची उत्तरे मिळाली आहेत. मला या संमती फॉर्मची एक प्रत दिली जाईल.

सहभागी तपशील:

अधिकृत प्रतिनिधी/पालकाची स्वाक्षरी/अंगठ्याचा ठसा: _____

नाव:

विषयाशी संबंधित:

तारीख:

साक्षीदाराची स्वाक्षरी: _____

नाव:

तारीख:

तपासकर्त्याची स्वाक्षरी: _____

नाव:

तारीख:

VERBAL ASSENT

[FOR AGES less than 18 years]

Title of Research Study: STUDY OF SENSORY PROESSING DIFFICULTIES IN CHILDREN AND ADOLESCENTS WITH ADHD AND QUALITY OF LIFE IN CAREGIVERS

Principal Investigator: REG no. BQ0121005

Why are we meeting with you?

We want to tell you about something we are doing called a research study. A research study is when doctors collect a lot of information to learn more about something. We are doing a study to learn more about children with a condition called ATTENTION DEFICIT HYPERACTIVITY DISORDER. After we tell you about it, we will ask if you'd like to be in this study or not.

Why are we doing this study?

We want to find out correlation between sensory processing difficulties in children and adolescents with ADHD. So, we are getting information from lots of boys and girls like you.

In the whole study, there will be about 100 children who have the same condition as you.

What will happen to you if you are in this study?

Only if you agree, I will be asking you and your parents some questions about yourself and your family.

Will this study hurt?

No, I will not be doing anything that will hurt you.

Will you get better if you are in this study?

No, this study won't make you feel better or get well. But the doctors might find out something that will help other children like you later.

Do you have to be in this study?

No, you don't. If you don't want to be in this study, just tell us. Or if you do want to be in the study, tell us that. And, remember, you can say yes now and change your mind later. It's up to you.

Some of the things that I will ask might make you uncomfortable. Some of the questions or tests might be hard to answer. If you get too tired or uncomfortable, just let me know. If you want to stop at any time, just tell me and we will stop.

Your parents say it is okay for you to be in this study. If you have questions for me or for your parents you can ask them now or later.

Do you have any questions? Are you willing to take part in this?
Child's/Participant's response**:** ☐Yes ☐No

Check which applies below:

☐ The child is capable of understanding the study

☐ The child is not capable of understanding the study

☐ The child's parent or guardian has already signed a consent document.

_____

Name of Child Participant

Principal Investigator's Signature
I have fully explained the research study described by this form. I have answered the participant and/or parent/guardians' questions and will answer any future questions to the best of my ability. I will tell the family and/or the person taking part in this research of any changes in the procedures or in the possible harms/possible benefits of the study that may affect their health or their willingness to stay in the study.

_____

Name of Investigator Obtaining Assent

_____

Signature of Investigator Date Time

ADOLESCENT ASSENT FORM

[FOR AGES 13-18]

Your parent has given permission for you to be in a project called a research study. But first, we want to tell you all about it so you can decide if you want to be in it. If you don't understand, please ask questions. You can choose to be in the study, not be in the study or take more time to decide.

What is the name of the study?
STUDY OF SENSORY PROCESSING DIFFICULTIES IN CHILDREN AND ADOLESCENTS WITH ADHD AND QUALITY OF LIFE IN PRIMARY CAREGIVERS

Who is in charge of the study?
The doctor in charge of the study is REG no. BQ0121005

What is the study about?
We would like to assess the sensory processing difficulties in children and adolescents with adhd and quality of life in primary care givers

Why are you asking me to be in this study?
You are being asked to be in the study because you are less than age of 18, and have this condition we are studying about.

What will happen to me in the study?
If you decide to be in the study, I will be asking you and your parents/guardian some questions regarding your family and yourself.

Will I be paid to be in this study?
You/your family will not be paid for being in this study.

Do I have to be in the study?
You don't have to do the study if you don't want to. If you are in the study, you can stop being in it at any time. Nobody will be upset with you if you don't want to be in the study or if you want to stop being in the study. The doctors and nurses will take care of you as they have in the past. If you have any questions or don't like what is happening, please tell the doctor or nurse. You have had the study explained to you. You have been given a chance to ask questions. By writing your name below, you are saying that you want to be in the study.

Signature of Adolescent: _____

Name of Adolescent:

Signature of Investigator: _____

Name of Investigator:

Annexure II

PROFORMA

DEMOGRAPHIC DETAILS

PATIENT NUMBER					
NAME					
DATE OF BIRTH & AGE					
SEX					
ADDRESS					
RELIGION					
FATHER'S NAME					
FATHER EDUCATION LEVEL	UNEDUCATED	HIGH SCHOOL	BACHELORS	MASTERS	OTHER
FATHER OCCUPATION					
MOTHERS NAME					
MOTHERS EDUCATION LEVEL	UNEDUCATED	HIGH SCHOOL	BACHELORS	MASTERS	OTHER
MOTHERS OCCUPATION					
SOCIO-ECONOMIC STATUS	UPPER CLASS	UPPER MIDDLE	LOWER MIDDLE	UPPER LOWER	LOWER
TYPE OF FAMILY	NUCLEAR	JOINT	SINGLE PARENT		
NUMBER OF MEMBERS IN FAMILY					
PRESENTING COMPLAINTS					

TEMPERAMENT

(CHECK WHICH APPLICABLE)		EASY CHILD	DIFFICULT CHILD	SLOW TO WARM UP CHILD
ACTIVITY LEVEL			HIGH	LOW
BIOLOGICAL REGULARITY		REGULAR	IRREGULAR	
	SLEEP WAKE CYCLE			
	HUNGER			
	BOWEL AND BLADDER MOVEMENTS			
ADAPTIBILITY		QUICKLY	SLOWLY	SLOWLY
APPROACH/WITHDRAWAL		POSITIVE	NEGATIVE	NEGATIVE
SENSITIVITY THRESHOLD		LOW	HIGH	
INTENSITY OF EMOTIONAL RESPONSE		LOW TO MODERATE	HIGH	LOW
DISTRACTIBILITY		LOW	HIGH	
QUALITY OF MOOD		POSITIVE	NEGATIVE/SERIOUS	
PERSISTENCE/ATTENTION SPAN		LOW	HIGH	

PARENTING STYLE

AUTHORITARIAN	
PERMISSIVE/INDULGENT	
UNINVOLVED	
AUTHORITATIVE	

FAMILY HISTORY

PSYCHIATRIC ILLNESS	YES		NO	
DEGREE RELATION	1ST	2ND	3RD	4TH
CURRENTLY SYMPTOMATIC	YES		NO	
NEUROLOGICAL ILLNESS				
PERSONAL HISTORY				
BIRTH				BIRTH WT
DEVELOPMENT HISTORY				
TREATMENT HISTORY				
SCHOOLING				
MEDICATIONS				
THERAPY				
MEDICAL ILLNESS				

DIAGNOSIS

AXIS I – CLINICAL DIAGNOSIS	
AXIS II – SPECIFIC DELAYS IN DEVELOPMENT	
AXIS III – INTELLECTUAL LEVEL	
AXIS IV – MEDICAL CONDITIONS	
AXIS V – ABNORMAL PSYCHOSOCIAL SITUATION	

Annexure III (Tools and master chart)

1. Short Sensory Profile
2. VADRS (Vanderbilt ADHD rating scale)
3. WHOQOL-BREF
4. CGAS (Children Global Assessment Scale)
5. MINI kid (Mini – International Neuropsychiatric Interviews for Children and Adolescents)
6. Key to master chart
7. Master chart

Short Sensory Profile

SENSORY PROFILE
Winnie Dunn, Ph.D., OTR, FAOTA

Child's Name: _____ Birth Date: _____ Date: _____

Completed by: _____ Relationship to Child: _____

Service Provider's Name: _____ Discipline: _____

INSTRUCTIONS

Please check the box that **best** describes the frequency with which your child does the following behaviors. Please answer all of the statements. If you are unable to comment because you have not observed the behavior or believe that it does not apply to your child, please draw an X through the number for that item. Please do not write in the Section Raw Score Total row.

Use the following key to mark your responses:

ALWAYS	When presented with the opportunity, you child always responds in this manner, 100% of the time.
FREQUENTLY	When presented with the opportunity, your child frequently responds in this manner, about 75% of the time.
OCCASIONALLY	When presented with the opportunity, your child occasionally responds in this manner, about 50% of the time.
SELDOM	When presented with the opportunity, your child seldom responds in this manner, about 25% of the time.
NEVER	When presented with the opportunity, your child never responds in this manner, 0% of the time.

Item	Tactile Sensitivity	ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	NEVER
1	Expresses distress during grooming (for example, fights or cries during haircutting, face washing, fingernail cutting)					
2	Prefers long-sleeved clothing when it is warm or short sleeves when it is cold					
3	Avoids going barefoot, especially in sand or grass					
4	Reacts emotionally or aggressively to touch					
5	Withdraws from splashing water					
6	Has difficulty standing in line or close to other people					
7	Rubs or scratches out a spot that has been touched					
	Section Raw Score Total					

Item	Taste/Smell Sensitivity					
8	Avoids certain tastes or food smells that are typically part of children's diets					
9	Will only eat certain tastes (list: _____)					
10	Limits self to particular food textures/temperatures (list: _____)					
11	Picky eater, especially regarding food textures					
	Section Raw Score Total					

Item	Movement Sensitivity					
12	Becomes anxious or distressed when feet leave the ground					
13	Fears falling or heights					
14	Dislikes activities where head is upside down (for example, somersaults, roughhousing)					
	Section Raw Score Total					

Item	Underresponsive/Seeks Sensation					
15	Enjoys strange noises/seeks to make noise for noise's sake					
16	Seeks all kinds of movement and this interferes with daily routines (for example, can't sit still, fidgets)					
17	Becomes overly excitable during movement activity					
18	Touches people and objects					
19	Doesn't seem to notice when face or hands are messy					
20	Jumps from one activity to another so that it interferes with play					
21	Leaves clothing twisted on body					
	Section Raw Score Total					

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Item	Auditory Filtering	ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	NEVER
22	Is distracted or has trouble functioning if there is a lot of noise around					
23	Appears to not hear what you say (for example, does not "tune-in" to what you say, appears to ignore you)					
24	Can't work with background noise (for example, fan, refrigerator)					
25	Has trouble completing tasks when the radio is on					
26	Doesn't respond when name is called but you know the child's hearing is OK					
27	Has difficulty paying attention					
	Section Raw Score Total					

Item	Low Energy/Weak					
28	Seems to have weak muscles					
29	Tires easily, especially when standing or holding particular body position					
30	Has a weak grasp					
31	Can't lift heavy objects (for example, weak in comparison to same age children)					
32	Props to support self (even during activity)					
33	Poor endurance/tires easily					
	Section Raw Score Total					

Item	Visual/Auditory Sensitivity					
34	Responds negatively to unexpected or loud noises (for example, cries or hides at noise from vacuum cleaner, dog barking, hair dryer)					
35	Holds hands over ears to protect ears from sound					
36	Is bothered by bright lights after others have adapted to the light					
37	Watches everyone when they move around the room					
38	Covers eyes or squints to protect eyes from light					
	Section Raw Score Total					

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Summary

Instructions: Transfer the score for each section to the Section Raw Score Total column. Plot these totals by marking an X in the appropriate classification column (Typical Performance, Probable Difference, Definite Difference).*

SCORE KEY

1 = Always	4 = Seldom
2 = Frequently	5 = Never
3 = Occasionally	

Section	Section Raw Score Total	Typical Performance	Probable Difference	Definite Difference
Tactile Sensitivity	/35	35 ····· 30	29 ····· 27	26 ····· 7
Taste/Smell Sensitivity	/20	20 ····· 15	14 ····· 12	11 ····· 4
Movement Sensitivity	/15	15 ····· 13	12 ····· 11	10 ····· 3
Underresponsive/Seeks Sensation	/35	35 ····· 27	26 ····· 24	23 ····· 7
Auditory Filtering	/30	30 ····· 23	22 ····· 20	19 ····· 6
Low Energy/Weak	/30	30 ····· 26	25 ····· 24	23 ····· 6
Visual/Auditory Sensitivity	/25	25 ····· 19	18 ····· 16	15 ····· 5
Total	/190	190 ·····155	154 ·····142	141 ·····38

*Classifications are based on the performance of children without disabilities (n = 1,037).

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VANDERBILT ADHD DIAGNOSTIC PARENT RATING SCALE

Child's Name: _____ Today's Date: _____

Date of Birth: _____ Age: _____

Grade: _____

Each rating should be considered in the context of what is appropriate for the age of your child.

Frequency Code: 0 = Never 1 = Occasionally 2 = Often 3 = Very Often

1. Does not pay attention to details or makes careless mistakes, for example homework 0 1 2 3
2. Has difficulty sustaining attention to tasks or activities 0 1 2 3
3. Does not seem to listen when spoken to directly 0 1 2 3
4. Does not follow through on instructions and fails to finish schoolwork (not due to oppositional behavior or failure to understand) 0 1 2 3
5. Has difficulty organizing tasks and activities 0 1 2 3
6. Avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort 0 1 2 3
7. Loses things necessary for tasks or activities (school assignments, pencils or books) 0 1 2 3
8. Is easily distracted by extraneous stimuli 0 1 2 3
9. Is forgetful in daily activities 0 1 2 3
10. Fidgets with hands or feet or squirms in seat 0 1 2 3
11. Leaves seat when remaining seated is expected 0 1 2 3
12. Runs about or climbs excessively in situations when remaining seated is expected 0 1 2 3
13. Has difficulty playing or engaging in leisure/play activities quietly 0 1 2 3
14. Is "on the go" or often acts as if "drive by a motor" 0 1 2 3
15. Talks too much 0 1 2 3
16. Blurts out answers before questions have been completed 0 1 2 3
17. Has difficulty waiting his/her turn 0 1 2 3
18. Interrupts or intrudes on others (e.g., butts into conversations or games) 0 1 2 3
19. Argues with adults 0 1 2 3
20. Loses temper 0 1 2 3
21. Actively defies or refuses to comply with adults' requests or rules 0 1 2 3
22. Deliberately annoys people 0 1 2 3
23. Blames others for his or her mistakes or misbehaviors 0 1 2 3
24. Is touchy or easily annoyed by others 0 1 2 3

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25. Is angry or resentful 0 1 2 3
26. Is spiteful and vindictive 0 1 2 3
27. Bullies, threatens, or intimidates others 0 1 2 3
28. Initiates physical fights 0 1 2 3
29. Lies to obtain goods for favors or to avoid obligations (i.e., "cons" others) 0 1 2 3
30. Is truant from school (skips school) without permission 0 1 2 3
31. Is physically cruel to people 0 1 2 3
32. Has stolen items of nontrivial value 0 1 2 3
33. Deliberately destroys others' property 0 1 2 3
34. Has used a weapon that can cause serious harm (bat, knife, brick, gun) 0 1 2 3
35. Is physically cruel to animals 0 1 2 3
36. Has deliberately set fires to cause damage 0 1 2 3
37. Has broken into someone else's home, business, or car 0 1 2 3
38. Has stayed out at night without permission 0 1 2 3
39. Has run away from home overnight 0 1 2 3
40. Has forced someone into sexual activity 0 1 2 3
41. Is fearful, anxious, or worried 0 1 2 3
42. Is afraid to try new things for fear of making mistakes 0 1 2 3
43. Feels worthless or inferior 0 1 2 3
44. Blames self for problems, feels guilty 0 1 2 3
45. Feels lonely, unwanted, or unloved: complains that "no one loves him/her" 0 1 2 3
46. Is sad, unhappy, or depressed 0 1 2 3
47. Is self-conscious or easily embarrassed 0 1 2 3

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PERFORMANCE

	Problematic		Average	Above Average	
1. Overall Academic Performance	1	2	3	4	5
a. Reading	1	2	3	4	5
b. Mathematics	1	2	3	4	5
c. Written Expression	1	2	3	4	5

PERFORMANCE

	Problematic		Average	Above Average	
2. Overall Classroom Behavior	1	2	3	4	5
a. Relationship with peers	1	2	3	4	5
b. Following Directions/Rules	1	2	3	4	5
c. Disrupting Class	1	2	3	4	5
d. Assignment Completion	1	2	3	4	5
e. Organizational Skills	1	2	3	4	5

Scoring Instructions for the ADTRS

***Predominately inattentive subtype** requires 6 or 9 behaviors, (scores of 2 or 3 are positive) on items 1 through 9, and a performance problem (scores of 1 or 2) in any of the items on the performance section.

***Predominately hyperactive/Impulsive subtype** requires 6 or 9 behaviors (scores of 2 or 3 are positive) on items 10 through 18 and a problem (scores of 1 or 2) in any of the items on the performance section.

***The Combined Subtype** requires the above criteria on both inattention and hyperactivity/impulsivity.

***Oppositional-defiant disorder** is screened by 4 of 8 behaviors, (scores of 2 or 3 are positive) (19 through 26).

***Conduct disorder** is screened by 3 of 15 behaviors, (scores of 2 or 3 are positive) (27 through 40).

***Anxiety or depression** are screened by behaviors 41 through 47, scores of 3 of 7 are required, (scores of 2 or 3 are positive).

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WHOQOL-BREF

Please read the question, assess your feelings, for the last two weeks, and circle the number on the scale for each question that gives the best answer for you.

		Very poor	Poor	Neither poor nor good	Good	Very good
1	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Fairly Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about how much you have experienced certain things in the **last two weeks**.

		Not at all	A Small amount	A Moderate amount	A great deal	An Extreme amount
3	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5	How much do you enjoy life?	1	2	3	4	5
6	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	Slightly	Moderately	Very	Extremely
7	How well are you able to concentrate?	1	2	3	4	5
8	How safe do you feel in your daily life?	1	2	3	4	5
9	How healthy is your physical environment?	1	2	3	4	5

		Not at all	Slightly	Somewhat	To a great extent	Completely
10	Do you have enough energy for everyday life?	1	2	3	4	5
11	Are you able to accept your bodily appearance?	1	2	3	4	5
12	Have you enough money to meet your needs?	1	2	3	4	5
13	How available to you is the information you need in your daily life?	1	2	3	4	5
14	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Not at all	Slightly	Moderately	Very	Extremely
15	How well are you able to get around physically?	1	2	3	4	5

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the **last two weeks**.

		Very Dissatisfied	Fairly Dissatisfied	Neither Satified nor Dissatisfied	Satisfied	Very satisfied
16	How satisfied are you with your sleep?	1	2	3	4	5
17	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18	How satisfied are you with your capacity for work	1	2	3	4	5
19	How satisfied are you with yourself?	1	2	3	4	5
20	How satisfied are you with your personal relationships?	1	2	3	4	5

21	How satisfied are you with your sex life?	1	2	3	4	5
22	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24	How satisfied are you with your access to health services?	1	2	3	4	5
25	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

		Never	Infrequently	Sometimes	Frequently	Always
26	How often do you have negative feelings such as blue mood, despair, anxiety or depression?	1	2	3	4	5

THE END

This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. In the event of any inconsistency between the English and the translated version, the original English version shall be the binding and authentic version.

CHILDREN'S GLOBAL ASSESSMEN

Children's Global Assessment Scale

David Shaffer, F.R.C.P., F.R.C.Psych.; Madelyn Gould, Ph.D., M.P.H.; Hector Bird, M.D.; Prudence Fisher, Ph.D.
Adaptation of the Adult Global Assessment Scale (Robert L. Spitzer, M.D.; Miriam Gibbon, M.S.W.; Jean Endicott, Ph.D.)

Specified time period: 1 month

100-91	**DOING VERY WELL**
	Superior functioning in all areas (at home, at school and with peers), involved in a range of activities and his many interests (e.g., has hobbies or participates in extracurricular activities or belongs to an organised group such as Scouts, etc.). Likeable, confident, everyday worries never get out of hand. Doing well in school. No symptoms.
90-81	**DOING WELL**
	Good functioning in all areas. Secure in family, school, and with peers. There may be transient difficulties and "everyday" worries that occasionally get out of hand (e.g. mild anxiety associated with an important exam, occasionally "blow-ups" with siblings, parents or peers).
80-71	**DOING ALL RIGHT**– MINOR IMPAIRMENT
	No more than slight impairment in functioning at home, at school, or with peers. Some disturbance of behaviour or emotional distress may be present in response to life stresses (e.g., parental separations, deaths, birth of a sib) but these are brief and interference with functioning is transient, such children are only minimally disturbing to others and are not considered deviant by those who know them.
70-61	**SOME PROBLEMS**– IN ONE AREA ONLY
	Some difficulty in a single area, but generally functioning pretty well, (e.g., sporadic or isolated antisocial acts, such as occasionally playing hooky petty theft; consistent minor difficulties with school work, mood changes of brief duration, fears and anxieties which do not lead to gross avoidance behaviour; self-doubts). Has some meaningful interpersonal relationships. Most people who do not know the child well would not consider him/her deviant but those who do know him/her well might express concern.
60-51	**SOME NOTICEABLE PROBLEMS**– IN MORE THAN ONE AREA
	Variable functioning with sporadic difficulties or symptoms in several but not all social areas. Disturbance would be apparent to those who encounter the child in a dysfunctional setting or time but not to those who see the child in other settings.
50-41	**OBVIOUS PROBLEMS**– MODERATE IMPAIRMENT IN MOST AREAS OR SEVERE IN ONE AREA.
	Moderate degree of interference in functioning in most social areas or severe impairment functioning in one area, such as might result from for example , suicidal preoccupations and ruminations, school refusal and other forms of anxiety, obsessive rituals major conversion symptoms, frequent anxiety attacks, frequent episodes of aggressive or other antisocial behaviour with some preservation of meaningful social relationships.
40-31	**SERIOUS PROBLEMS**– MAJOR IMPAIRMENT IN SEVERAL AREAS AND UNABLE TO FUNCTION IN ONE AREA
	Major impairment in functioning in several areas and unable to function in one of these areas, i.e., disturbed at home, at school, with peers, or in the society at large, e.g., persistent aggression without clear instigation; markedly withdrawn and isolated behaviour due to either mood or though disturbance, suicidal attempts with clear lethal intent. Such children are likely to require special schooling and/or hospitalisation or withdrawal from school (but this is not a sufficient criterion for inclusion in this category).

30-21	**SEVERE PROBLEMS**– UNABLE TO FUNCTION IN ALMOST ALL SITUATIONS.
	Unable to function in almost all areas, e.g., stays at home, in ward or in bed all day without taking part in social activities OR severe impairment in reality testing OR serious impairment in communication (e.g., sometimes incoherent or inappropriate).
20-11	**VERY SEVERELY IMPAIRED**– CONSIDERABLE SUPERVISION IS REQUIRED FOR SAFETY.
	Needs considerable supervision to prevent hurting others or self, e.g., frequently violent, repeated suicide attempts OR to maintain personal hygiene! OR gross impairment in all forms of communication, e.g., severe abnormalities in verbal and gestural communication, marked social aloofness, stupor, etc.
10-1	**EXTREMELY IMPAIRED**– CONSTANT SUPERVISION IS REQUIRED FOR SAFETY.
	Needs constant supervision (24-hour care) due to severely aggressive or self-destructive behaviour or gross impairment in reality testing, communication, cognition, affect, or personal hygiene.

	SUMMARY DECILE DESCRIPTIONS FOR CGAS:
100-91	DOING VERY WELL
90-81	DOING WELL
80-71	DOING ALL RIGHT– MINOR IMPAIRMENT
70-61	SOME PROBLEMS– IN ONE AREA ONLY
60-51	SOME NOTICEABLE PROBLEMS– IN MORE THAN ONE AREA
50-41	OBVIOUS PROBLEMS– MODERATE IMPAIRMENT IN MOST AREAS OR SEVERE IN ONE AREA
40-31	SERIOUS PROBLEMS– MAJOR IMPAIRMENT IN SEVERAL AREAS AND UNABLE TO FUNCTION IN ONE AREA
30-21	SEVERE PROBLEMS– UNABLE TO FUNCTION IN ALMOST ALL SITUATIONS
20-11	VERY SEVERELY IMPAIRED– SO IMPAIRED THAT CONSIDERABLE SUPERVISION IS REQUIRED FOR SAFETY
10-1	EXTREMELY IMPAIRED– SO IMPAIRED THAT CONSTANT SUPERVISION IS REQUIRED FOR SAFETY

MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW

For Children and Adolescents

English Version 6.0

Patient Name:		***Patient Number:***	
Date of Birth:		***Time Interview Began:***	
Interviewer's Name:		***Time Interview Ended:***	
Date of Interview:		***Total Time:***	

	MODULES	TIME FRAME	MEETS CRITERIA	DSM-IV	ICD-10	
A	MAJOR DEPRESSIVE EPISODE	Current (Past 2 weeks)	☐			
		Past	☐			
		Recurrent	☐			
	MAJOR DEPRESSIVE DISORDER	Current (Past 2 weeks)	☐	296.20-296.26 Single	F32.x	☐
		Past	☐	296.20-296.26 Single	F33.x	☐
		Recurrent	☐	296.30-296.36 Recurrent	F33.x	☐
B	SUICIDALITY	Current (Past Month) ☐ Low ☐ Moderate ☐ High	☐	N/A	N/A	
C	DYSTHYMIA	Current (Past 1 year)	☐	300.4	F34.1	☐
D	MANIC EPISODE	Current	☐			
		Past	☐			
	HYPOMANIC EPISODE	Current	☐			
		Past	☐	☐ Not Explored		
	BIPOLAR I DISORDER	Current	☐	296.0x-296.6x	F30.x- F31.9	☐
		Past	☐	296.0x-296.6x	F30.x- F31.9	☐
	BIPOLAR II DISORDER	Current	☐	296.89	F31.8	☐
		Past	☐	296.89	F31.8	☐
	BIPOLAR DISORDER NOS	Current	☐	296.80	F31.9	☐
		Past	☐	296.80	F31.9	☐
E	PANIC DISORDER	Current (Past Month)	☐	300.01/300.21	F40.01-F41.0	☐
		Lifetime	☐	300.01/300.21	F40.01-F41.0	☐
F	AGORAPHOBIA	Current	☐	300.22	F40.00	☐
G	SEPARATION ANXIETY DISORDER	Current (Past Month)	☐	309.21	F93.0	☐

H	SOCIAL PHOBIA (Social Anxiety Disorder)	Current (Past Month)			
		Generalized	300.23	F40.1	
		Non-Generalized	300.23	F40.1	
I	SPECIFIC PHOBIA	Current (Past Month)	300.29	N/A	
J	OBSESSIVE COMPULSIVE DISORDER	Current (Past Month)	300.3	F42.8	
K	POST TRAUMATIC STRESS DISORDER	Current (Past Month)	309.81	F43.1	
L	ALCOHOL DEPENDENCE	Past 12 Months	303.9	F10.2x	
L	ALCOHOL ABUSE	Past 12 Months	305.00	F10.1	
M	SUBSTANCE DEPENDENCE (Non-alcohol)	Past 12 Months	304.00-.90/305.20-.90	F11.2X-F19.2X	
M	SUBSTANCE ABUSE (Non-alcohol)	Past 12 Months	304.00-.90/305.20-.90	F11.1-F19.1	
N	TOURETTE'S DISORDER	Current	307.23	F95.2	
	MOTOR TIC DISORDER	Current	307.22	F95.1	
	VOCAL TIC DISORDER	Current	307.22	F95.1	
	TRANSIENT TIC DISORDER	Current	307.21	F95.0	
O	ADHD COMBINED	Past 6 Months	314.01	F90.0	
	ADHD INATTENTIVE	Past 6 Months	314.00	F98.8	
	ADHD HYPERACTIVE/IMPULSIVE	Past 6 Months	314.01	F90.0	
P	CONDUCT DISORDER	Past 12 Months	312.8	F91.x	
Q	OPPOSITIONAL DEFIANT DISORDER	Past 6 Months	313.81	F91.3	
R	PSYCHOTIC DISORDERS	Lifetime	295.10-295.90/297.1/	F20.xx-F29	
		Current	297.3/293.81/293.82/ 293.89/298.8/298.9	F20.xx-F29	
	MOOD DISORDER WITH PSYCHOTIC FEATURES	Lifetime	296.24/296.04-296.94	F32.3/F33.3/	
		Current	296.24/296.04-296.94	F30.2/F31.2/F31.5/ F31.8/F31.9/F39	
S	ANOREXIA NERVOSA	Current (Past 3 Months)	307.1	F50.0	
T	BULIMIA NERVOSA	Current (Past 3 Months)	307.51	F50.2	
	ANOREXIA NERVOSA, BINGE EATING/PURGING TYPE	Current	307.1	F50.0	
U	GENERALIZED ANXIETY DISORDER	Current (Past 6 Months)	300.02	F41.1	
V	ADJUSTMENT DISORDERS	Current	309.24/309.28 309.3/309.4	F43.xx	

W	MEDICAL, ORGANIC, DRUG CAUSE RULED OUT		☐ No ☐ Yes ☐ Uncertain		
X	PERVASIVE DEVELOPMENTAL DISORDER	Current	☐	299.00/299.10/299.80	F84.0/.2/.3/.5/.9 ☐

PRIMARY DISORDER

IDENTIFY THE PRIMARY DIAGNOSIS BY CHECKING THE APPROPRIATE CHECK BOX.
Which problem troubles him/her the most or dominates the others or came first in the natural history?

DISCLAIMER

Our aim is to assist in the assessment and tracking of patients with greater efficiency and accuracy. Before action is taken on any data collected and processed by this program, it should be reviewed and interpreted by a licensed clinician.

This program is not designed or intended to be used in the place of a full medical and psychiatric evaluation by a qualified licensed physician – psychiatrist. It is intended only as a tool to facilitate accurate data collection and processing of symptoms elicited by trained personnel.

INTERVIEWER INSTRUCTIONS

INTRODUCING THE INTERVIEW

The nature and purpose of the interview should be explained to the child or adolescent prior to the interview. A sample introduction is provided below:

"I'm going to ask you a lot of questions about yourself. This is so that I can get to know more about you and figure out how to help you. Most of the questions can be answered either 'yes' or 'no'. If you don't understand a word or a question, ask me, and I'll explain it. If you are not sure how to answer a question, don't guess - just tell me you are not sure. Some of the questions may seem weird to you, but try to answer them anyway. It is important that you answer the questions as honestly as you can so that I can help you. Do you have any questions before we start?"

For children under 13, we recommend interviewing the parent and the child together. Questions should be directed to the child, but the parent should be encouraged to interject if s/he feels that the child's answers are unclear or inaccurate. The interviewer makes the final decision based on his/her best clinical judgment, whether the child's answers meet the diagnostic criterion in question. With children you will need to use more examples than with adolescents and adults.

GENERAL FORMAT:

The MINI Kid is divided into **modules** identified by letters, each corresponding to a diagnostic category.
•At the beginning of each diagnostic module (except for psychotic disorders module), screening question(s) corresponding to the main criteria of the disorder are presented in a **gray box**.
•At the end of each module, diagnostic box(es) permit the clinician to indicate whether diagnostic criteria are met.

CONVENTIONS:

Sentences written in «normal font» should be read exactly as written to the patient in order to standardize the assessment of diagnostic criteria.

Sentences written in «CAPITALS» should not be read to the patient. They are instructions for the interviewer to assist in the scoring of the diagnostic algorithms.

Sentences written in «**bold**» indicate the time frame being investigated. The interviewer should read them as often as necessary. Only symptoms occurring during the time frame indicated should be considered in scoring the responses.

Answers with an arrow above them (↑) indicate that one of the criteria necessary for the diagnosis(es) is not met. In this case, the interviewer should go to the end of the module and circle «**NO**» in all the diagnostic boxes and move to the next module.

When terms are separated by a *slash (/)* the interviewer should read only those symptoms known to be present in the patient.

Phrases in (parentheses) are clinical examples of the symptom. These may be read to the patient to clarify the question.

FORMAT OF THE INTERVIEW

The interview questions are designed to elicit specific diagnostic criteria. The questions should be read verbatim. If the child or adolescent does not understand a particular word or concept, you may explain what it means or give examples that capture its essence. If a child or adolescent is unsure if s/he has a particular symptom, you may ask him/her provide an explanation or example to determine if it matches the criterion being investigated. If an interview item has more than 1 question, the interviewer should pause between questions to allow the child or adolescent time to respond.

Questions about the duration of symptoms are included for diagnoses when the time frame of symptoms is a critical element. Because children may have difficulty estimating time, you may assist them by helping them connect times to significant events in their lives. For example, the starting point for "past year" might relate to a birthday, the end or beginning of a school year, a particular holiday or another annual event.

RATING INSTRUCTIONS:

All questions must be rated. The rating is done at the right of each question by circling either Yes or No. Clinical judgment by the rater should be used in coding the responses. The rater should ask for examples when necessary, to ensure accurate coding. The child or adolescent should be encouraged to ask for clarification on any question that is not absolutely clear.

The clinician should take each dimension of the question into account (for example, time frame, frequency, severity, and/or alternatives).

Symptoms better accounted for by an organic cause or by the use of alcohol or drugs should not be coded positive in the MINI KID.

For any questions, suggestions, training, or information about updates of the M.I.N.I. KID, please contact:

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A. MAJOR DEPRESSIVE EPISODE

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

		At any time in your life:		
A1	a	Did you feel sad or depressed? Felt down or empty? Felt grouchy or annoyed? Did you feel this way most of the time, for at least 2 weeks? IF **YES** TO ANY, CONTINUE. IF **NO** TO ALL, CODE **NO TO A1a AND A1b**.	NO	YES
	b	For the past 2 weeks, did you feel this way, most of the day, nearly every day?	NO	YES
		At any time in your life:		
A2	a	Were you bored a lot or much less interested in things (Like playing your favorite games)? Have you felt that you couldn't enjoy things? Did you feel this way most of the time, for at least 2 weeks? IF **YES** TO ANY, CONTINUE. IF **NO** TO ALL, CODE **NO TO A2a AND A2b**.	NO	YES
	b	For the past 2 weeks, did you feel this way, most of the day, nearly every day?	NO	YES
		IS **A1** OR **A2** CODED **YES?** \	NO	YES

A3 IF **A1b** OR **A2b** = **YES**: EXPLORE THE **CURRENT** AND THE MOST SYMPTOMATIC **PAST** EPISODE, OTHERWISE
IF **A1b** AND **A2b** = **NO**: EXPLORE ONLY THE MOST SYMPTOMATIC **PAST** EPISODE

	In the past two weeks, when you felt depressed / grouchy / uninterested:	Past 2 Weeks		Past Episode	
a	Were you less hungry or more hungry most days? Did you lose or gain weight without trying? [i.e., by ± 5% of body weight in the past month]? IF **YES** TO EITHER, CODE **YES**	NO	YES	NO	YES
b	Did you have trouble sleeping almost every night ("trouble sleeping" means trouble falling asleep, waking up in the middle of the night, waking up too early or sleeping too much)?	NO	YES	NO	YES
c	Did you talk or move slower than usual? Were you fidgety, restless or couldn't sit still almost every day? IF **YES** TO EITHER, CODE **YES**	NO	YES	NO	YES
d	Did you feel tired most of the time?	NO	YES	NO	YES
e	Did you feel bad about yourself most of the time? Did you feel guilty most of the time? IF **YES** TO EITHER, CODE **YES** IF **YES**, ASK FOR EXAMPLES. THE EXAMPLES ARE CONSISTENT WITH A DELUSIONAL IDEA. Current Episode ☐ No ☐☐Yes Past Episode ☐ No ☐ Yes	NO	YES	NO	YES
f	Did you have trouble concentrating or did you have trouble making up your mind? IF **YES** TO EITHER, CODE **YES**	NO	YES	NO	YES

	g	Did you feel so bad that you wished that you were dead? Did you think about hurting yourself? Did you have thoughts of death? Did you think about killing yourself? IF **YES** TO ANY, CODE **YES**	NO	YES	NO	YES
A4		Did these sad, depressed feelings cause a lot of problems at home? At school? With friends? With other people? Or in some other important way?	NO	YES	NO	YES
A5		In between your times of depression, were you free of depression for of at least 2 months?			NO	YES

ARE **5** OR MORE ANSWERS (**A1-A3**) CODED **YES** AND IS **A4** CODED YES FOR THAT TIME FRAME?

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

IF **A5** IS CODED **YES** AND MAJOR DEPRESSIVE EPISODE PAST IS CODED **YES,** CODE **YES** FOR RECURRENT.

NO	YES
MAJOR DEPRESSIVE EPISODE	
CURRENT	☐☐
PAST	☐
RECURRENT	☐
	☐

A6 a How many episodes of depression did you have in your lifetime? _____

Between each episode there must be at least 2 months without any significant depression.

B. SUICIDALITY

				Points
	In the past month did you:			
B1	Have any accident? This includes taking too much of your medication accidentally. IF NO TO B1, SKIP TO B2; IF YES, ASK B1a:	NO	YES	0
B1a	Plan or intend to hurt yourself in any accident either actively or passively (e.g. by not avoiding a risk)? IF NO TO B1a, SKIP TO B2: IF YES, ASK B1b:	NO	YES	0
B1b	Intend to die as a result of any accident?	NO	YES	0
B2	Feel hopeless?	NO	YES	1
B3	Think that you would be better off dead or wish you were dead?	NO	YES	1
B4	Think about hurting or injuring yourself or have mental images of harming yourself, with at least a slight intent to die?	NO	YES	4
B5	Think about killing yourself?	NO	YES	6
	IF NO TO B5, SKIP TO B7. OTHERWISE ASK:			
	Frequency Intensity Occasionally Mild Often Moderate Very often Severe			
B6	Have difficulty restraining yourself or holding back from acting on these impulses?	NO	YES	8
B7	Have a method or a way to kill yourself in your mind (e.g. how)?	NO	YES	8
B8	Have plan to kill yourself in your mind (e.g. when or where)?	NO	YES	8
B9	Intend to act on thoughts of killing yourself?	NO	YES	8
B10	Intend to die as a result of trying to kill yourself?	NO	YES	8
B11	Do things to prepare or to get ready to kill yourself? This includes times when you were going to kill yourself, but were interrupted or stopped yourself, before hurting yourself.	NO	YES	9
	IF NO TO B11, SKIP TO B12.			
B11a	Do things to **get ready** to kill yourself, but did not start to kill yourself?	NO	YES	
B11b	Start to try to kill yourself, but then **stop yourself** before you hurt yourself (aborted attempt)?	NO	YES	
B11c	Start to try to kill yourself, but then **someone or something stopped you** before you hurt yourself (interrupted attempt)?	NO	YES	
B12	Injure yourself on purpose without intending to kill yourself?	NO	YES	4

B13	Attempt suicide (try to kill yourself)? A suicide attempt means you did something where you could possibly be injured, with at least at least a slight intent to die.	NO	YES	10

IF NO, SKIP TO B14:

Hope to be rescued / survive ☐
Expected / intended to die ☐

In your lifetime:

B14	a) Did you ever feel so bad that you wished you were dead or felt like killing yourself?	NO	YES	4
	b) Did you ever do things to prepare or to get ready to kill yourself?	NO	YES	4
	c) Did you ever try to kill yourself? How many times? _____	NO	YES	4

"A suicide attempt is any self-injurious behavior, with at least some intent (> 0) to die as a result or if intent can be inferred, e.g. if it is clearly not an accident or the individual thinks the act could be lethal, even though denying intent."
(C-CASA definition). Posner K et al. Am J Psychiatry 164:7, July 2007.

IS AT LEAST **1** OF THE ABOVE (EXCEPT B1) CODED **YES**?

IF YES, ADD THE TOTAL POINTS FOR THE ANSWERS (B1-B14)
CHECKED 'YES' AND SPECIFY THE SUICIDALITY SCORE AS INDICATED IN THE BOX:

MAKE ADDITIONAL COMMENTS ABOUT YOUR ASSESSMENT OF THIS PATIENT'S CURRENT AND NEAR FUTURE SUICIDALITY IN THE SPACE BELOW:

NO	**YES**

SUICIDALITY CURRENT

1-8 points	Low	☐
9-16 points	Moderate	☐
≥ 17 points	High	☐

C. DYSTHYMIA

(\ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE **NO**, AND MOVE TO THE NEXT MODULE)

IF PATIENT'S SYMPTOMS MEET CRITERIA FOR MAJOR DEPRESSIVE EPISODE IN THE PAST YEAR, DO NOT EXPLORE THIS MODULE.

C1	Have you felt sad or depressed, or felt down or empty, or felt grouchy or annoyed, most of the time, for the past year?	\ NO	YES
C2	**In the past year**, have you felt OK for two months or more in a row? OK MEANS NOT ALWAYS BEING GROUCHY OR FREE OF DEPRESSION.	NO	\ YES
C3	**During the past year**, most of the time:		
a	Were you less hungry than you used to be? Were you more hungry than you used to be? IF **YES** TO EITHER, CODE **YES**	NO	YES
b	Did you have trouble sleeping ("trouble sleeping" means trouble falling asleep, waking up in the middle of the night, waking up too early or sleeping too much)?	NO	YES
c	Did you feel more tired than you used to?	NO	YES
d	Did you feel less confident of yourself? Did you feel bad about yourself? IF **YES** TO EITHER, CODE **YES**	NO	YES
e	Did you have trouble paying attention? Did you have trouble making up your mind? IF **YES** TO EITHER, CODE **YES**	NO	YES
f	Did you feel that things would never get better?	NO	YES
	ARE **2** OR **MORE C3** ITEMS CODED **YES?**	\ NO	YES

C4 Did these feelings of being depressed / grouchy / uninterested upset you a lot? Did they cause you problems at home? At school? With friends?

IF **YES** TO ANY, CODE **YES**

C4 **NO** **YES**

DYSTHYMIA
CURRENT

D. (HYPO) MANIC EPISODE

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** TO THE RELEVANT TIME FRAME IN THE DIAGNOSTIC BOXES AND THEN MOVE TO THE NEXT MODULE)

Do you have anyone in your family who had manic depressive illness or bipolar disorder or a family member who had mood swings treated with a medication like lithium, sodium valproate (Depakote or Valproate), lamotrigine (Lamictal)? NO YES
THIS QUESTION IS NOT A CRITERION FOR BIPOLAR DISORDER BUT IS ASKED TO INCREASE THE CLINICIAN'S VIGILANCE ABOUT RISK FOR BIPOLAR DISORDER.

IF YES, PLEASE SPECIFY WHO:_____

D1	a	Has there **ever** been a time when you were so happy that you felt 'up' or 'high' or 'hyper'? By 'up' or 'high' or 'hyper' I mean feeling really good; full of energy; needing less sleep; having racing thoughts or being full of ideas. DO NOT CONSIDER TIMES WHEN THE PATIENT WAS INTOXICATED ON DRUGS OR ALCOHOL OR DURING SITUATIONS THAT NORMALLY OVER STIMULATE AND MAKE CHILDREN VERY EXCITED LIKE CHRISTMAS, BIRTHDAYS, ETC. IF PATIENT IS PUZZLED OR UNCLEAR ABOUT WHAT YOU MEAN BY 'UP' OR 'HIGH' OR 'HYPER' CLARIFY AS FOLLOWS: By 'up' or 'high' or 'hyper' I mean: having elated mood; increased energy; needing less sleep; having rapid thoughts; being full of ideas; having an increase in productivity, motivation, creativity or impulsive behavior; phoning or working excessively or spending more money. IF NO TO ALL, CODE NO TO **D1b**: IF YES **TO ANY,** ASK:	NO	YES
	b	Are you currently feeling 'up' or 'high' or 'hyper' or full of energy?	NO	YES
D2	a	Has there **ever** been a time when you were so grouchy or annoyed for several days, that you yelled or started fights with people outside your family? Have you or others noticed that you have been more grouchy than other kids, even when you thought you were right to act this way? DO NOT CONSIDER TIMES WHEN THE PATIENT WAS INTOXICATED ON DRUGS OR ALCOHOL. IF NO TO ALL, CODE NO TO **D2b**: IF **YES** TO ANY, ASK:	NO	YES
	b	Are you currently feeling grouchy or annoyed most of the time?	NO	YES
		IS **D1a** or **D2a** CODED **YES?**	\ NO	YES

D3 IF **D1b** OR **D2b** = **YES**: EXPLORE THE **CURRENT** AND THE MOST SYMPTOMATIC **PAST** EPISODE, OTHERWISE
IF **D1b** AND **D2b** = **NO**: EXPLORE ONLY THE MOST SYMPTOMATIC **PAST** EPISODE

During the times when you felt high, full of energy, or irritable did you:

		Current Episode		Past Episode	
a	Feel that you could do things others couldn't do? Feel that you are a very important person? IF **YES** TO EITHER, CODE **YES**. IF **YES**, ASK FOR EXAMPLES. THE EXAMPLES ARE CONSISTENT WITH A DELUSIONAL IDEA Current Episode ☐ No ☐☐Yes	NO	YES	NO	YES

Past Episode ☐ No ☐ Yes

		Current Episode		Past Episode	
b	Need less sleep (Did you feel rested after only a few hours of sleep)?	NO	YES	NO	YES
c	Talk too much without stopping? Talk so fast that people couldn't understand or follow what you were saying?	NO	YES	NO	YES
d	Have racing thoughts or too many thoughts switching quickly?	NO	YES	NO	YES
e	Get distracted very easily by little things?	NO	YES	NO	YES
f	Get much more involved in things than others or much more fidgety or restless?	NO	YES	NO	YES
g	Want to do fun things even if you could get hurt doing them? Want to do things even though it could get you into trouble? (Like staying out late, skipping school, driving dangerously or spending too much money)? IF **YES** TO ANY, CODE **YES**	NO	YES	NO	YES
D3 SUMMARY:	WHEN RATING CURRENT EPISODE: IF D1b IS NO, ARE 4 OR MORE D3 ANSWERS CODED YES? IF D 1b IS YES, ARE 3 OR MORE D3 ANSWERS CODED YES? WHEN RATING PAST EPISODE: IF D1a IS NO, ARE 4 OR MORE D3 ANSWERS CODED YES? IF D1a IS YES, ARE 3 OR MORE D3 ANSWERS CODED YES? CODE YES ONLY IF THE ABOVE 3 OR 4 SYMPTOMS OCCURRED DURING THE SAME TIME PERIOD. RULE: ELATION/EXPANSIVENESS REQUIRES ONLY THREE D3 SYMPTOMS, WHILE IRRITABLE MOOD ALONE REQUIRES 4 OF THE D3 SYMPTOMS.	NO	YES	NO	YES
D4	What is the longest time these symptoms lasted?				
	a) 3 days or less		☐		☐
	b) 4 to 6 days		☐		☐
	c) 7 days or more		☐		☐
D5	Were you put in the hospital for these problems? IF YES, CIRCLE YES IN MANIC EPISODE FOR THAT TIME FRAME AND GO TO C7.	NO	YES	NO	YES
D6	Did these symptoms cause a lot of problems at home? At school? With friends? With other people? Or in some other important way? IF **YES** TO ANY, CODE **YES**	NO	YES	NO	YES

ARE **D3** SUMMARY AND **D5** AND **D6** CODED **YES**?

OR

ARE **D3** SUMMARY AND **D4c** AND **D6** CODED **YES** AND IS **D5** CODED **NO**?

OR

ARE **D3** SUMMARY AND **D5** CODED **YES** AND IS **D6** CODED **NO**?

OR

ARE **D3** SUMMARY AND A DELUSIONAL IDEA IN D3a AND D4c CODED **YES** AND IS **D5 AND D6** CODED **NO**?

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

NO **YES**

MANIC EPISODE

CURRENT ☐☐

PAST ☐☐

Is D3 summary and D4b coded YES and are D5 and D6 and a delusional idea in D3a coded no?

OR

ARE **D3** SUMMARY AND **D4b** AND **D6** CODED **YES** AND IS **D5** CODED **NO?**

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

IF **YES** TO CURRENT MANIC EPISODE, THEN CODE CURRENT HYPOMANIC EPISODE AS **NO.**

IF **YES** TO PAST MANIC EPISODE, THEN CODE PAST HYPOMANIC EPISODE AS **NOT EXPLORED.**

HYPOMANIC EPISODE

CURRENT ☐☐ **NO**
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐**YES**
☐

PAST ☐☐ **NO**
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ **YES**
☐☐☐**NOT EXPLORED**☐☐

ARE **D3** SUMMARY AND **D4a** CODED **YES** AND ARE **D5 AND A DELUSIONAL IDEA IN D3A CODED NO**?

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

IF **YES** TO CURRENT MANIC EPISODE OR HYPOMANIC EPISODE, THEN CODE CURRENT HYPOMANIC SYMPTOMS AS **NO.**

IF **YES** TO PAST MANIC EPISODE OR YES TO PAST HYPOMANIC EPISODE, THEN CODE PAST HYPOMANIC SYMPTOMS AS **NOT EXPLORED.**

HYPOMANIC SYMPTOMS

CURRENT ☐☐ **NO**
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐**YES**

PAST ☐☐ **NO**
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐**YES**
☐
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐**NOT EXPLORED**☐

D7 a) IF MANIC EPISODE IS POSITIVE FOR EITHER CURRENT OR PAST ASK:
Did you have 2 or more of these (manic) episodes lasting 7 days or more (**D4c**) in your lifetime (including the current episode if present) or did you have two or more hospitalizations

for Manic Episodes like this in your lifetime. NO YES

b) IF MANIC OR HYPOMANIC EPISODE IS POSITIVE FOR EITHER CURRENT OR PAST ASK:
Did you have 2 or more of these (hypomanic) episodes lasting just 4 to 6 days (**D4b**) in your lifetime (including the current episode)? NO YES

c) IF THE PAST "HYPOMANIC SYMPTOMS" CATEGORY IS CODED POSITIVE ASK:
Did you have (hypomanic) symptoms like these lasting only 1 to 3 days (**D4a**), 2 or more times in your lifetime, (including the current episode if present)? NO YES

E. PANIC DISORDER

(\ MEANS : CIRCLE **NO** IN **E5, E6** AND **E7** SUMMARY AND SKIP TO **F1**)

E1	a	Have you ever been really frightened or nervous for no reason; or have you ever been really frightened or nervous in a situation where most kids would not feel that way? IF **YES** TO EITHER, CODE **YES**. IF NO TO ALL CODE **NO.**	\ NO	YES
	b	Did this happen more than one time?	\ NO	YES
	c	Did this nervous feeling increase quickly over the first few minutes?	\ NO	YES
E2		Has this ever happened when you didn't expect it?	\ NO	YES
E3	a	After this happened, were you afraid it would happen again or that something bad would happen as a result of these attacks? Did you change what you did because of these attacks? (e.g., going out only with someone, not wanting to leave your house, going to the doctor more frequently)?	NO	YES
	b	Did you have these worries for a month or more?	NO	YES
		E3 SUMMARY: IF **YES** TO BOTH E3a AND E3b QUESTIONS, CODE **YES**	NO	YES
E4		**Think about the time you were the most frightened or nervous for no good reason:**		
	a	Did your heart beat fast or loud?	NO	YES
	b	Did you sweat? Did your hands sweat a lot? IF **YES** TO EITHER, CODE **YES**	NO	YES
	c	Did your hands or body shake?	NO	YES
	d	Did you have trouble breathing?	NO	YES
	e	Did you feel like you were choking? Did you feel you couldn't swallow? IF **YES** TO EITHER, CODE **YES**	NO	YES

	f Did you have pain or pressure in your chest?	NO	YES
	g Did you feel like throwing up? Did you have an upset stomach? Did you have diarrhea? IF **YES** TO ANY, CODE **YES**	NO	YES
	h Did you feel dizzy or faint?	NO	YES
	i Did things around you feel strange or like they weren't real? Did you feel or see things as if they were far away? Did you feel outside of or cut off from your body? IF **YES** TO ANY, CODE **YES**	NO	YES
	j Were you afraid that you were losing control of yourself? Were you afraid that you were going crazy? IF **YES** TO EITHER, CODE **YES**	NO	YES
	k Were you afraid that you were dying?	NO	YES
	l Did parts of your body tingle or go numb?	NO	YES
	m Did you feel hot or cold?	NO	YES
E5	ARE **BOTH E3 SUMMARY,** AND **4** OR MORE **E4** ANSWERS, CODED YES?	NO	YES *PANIC DISORDER LIFETIME*
	IF YES TO E5, SKIP TO E7		
E6	IF **E5**=NO, ARE ANY E4 QUESTIONS CODED YES?	NO	YES *LIMITED SYMPTOM ATTACKS LIFETIME*
	THEN SKIP TO **F1.**		
E7	a. **In the past month**, did you have these problems more than one time?	NO	YES
	IF NO, CIRCLE NO TO E7 SUMMARY AND MOVE TO F1.		
	For the past month:		
	b. Did you worry that it would happen again?	NO	YES
	c. Did you worry that something bad would happen because of the attack?	NO	YES
	d. Did anything change for you because of the attack? (e.g., going out only with someone, not wanting to leave your house, going to the doctor more frequently)?	NO	YES
	E7 SUMMARY: IF **YES** TO E7b.or E7c.or E7d., CODE **YES**	NO	YES *PANIC DISORDER CURRENT*

F. AGORAPHOBIA

F1	Do you feel anxious, scared, or uneasy in places or situations where you might become really frightened; like being in a crowd, standing in a line (queue), when you are all alone, or when crossing a bridge, or traveling in a bus, train or car? IF **YES** TO ANY, CODE **YES**	NO YES

IF **F1** = **NO**, CIRCLE **NO** IN **F2**.

F2	Are you so afraid of these things that you try to stay away from them? Or you can only do them if someone is with you? Or you do them, but it's really hard for you? IF **YES** TO ANY, CODE **YES**	**NO YES** ***AGORAPHOBIA CURRENT***

IS **F2** (CURRENT AGORAPHOBIA) CODED **NO**

AND

IS **E7** (CURRENT PANIC DISORDER) CODED **YES**?

NO YES

PANIC DISORDER without Agoraphobia CURRENT

IS **F2** (CURRENT AGORAPHOBIA) CODED **YES**

AND

IS **E7** (CURRENT PANIC DISORDER) CODED **YES**?

NO YES

PANIC DISORDER with Agoraphobia CURRENT

IS **F2** (CURRENT AGORAPHOBIA) CODED **YES**

AND

IS **E5** (PANIC DISORDER LIFETIME) CODED **NO**?

NO **YES**

AGORAPHOBIA, CURRENT without history of Panic Disorder

G. SEPARATION ANXIETY DISORDER

(\ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE **NO** AND MOVE TO THE NEXT MODULE)

G1	a	**In the past month,** have you been really afraid about being away from someone close to you; or have you been really afraid that you would lose somebody you are close to ? (Like getting lost from your parents or having something bad happen to them) IF **YES** TO EITHER, CODE **YES**	\ NO	YES
	b	Who are you afraid of losing or being away from _____ ?		
G2	a	Did you get upset a lot when you were away from _____ ? Did you get upset a lot when you thought you would be away from _____ ? IF **YES** TO EITHER, CODE **YES**	NO	YES
	b	Did you get really worried that you would lose _____ ? Did you get really worried that something bad would happen to _____ ? (like having a car accident or dying). IF **YES** TO EITHER, CODE **YES**	NO	YES
	c	Did you get really worried that you would be separated from _____ ? (Like getting lost or being kidnapped?)	NO	YES
	d	Did you refuse to go to school or other places because you were afraid to be away from _____ ?	NO	YES
	e	Did you get really afraid being at home if _____ wasn't there?	NO	YES
	f	Did you not want to go to sleep unless _____ was there?	NO	YES
	g	Did you have nightmares about being away from _____ ? Did this happen more than once? IF **NO** TO EITHER, CODE **NO**	NO	YES
	h	Did you feel sick a lot (like headaches, stomach aches, nausea or vomiting, heart beating fast or feeling dizzy) when you were away from _____ ? Did you feel sick a lot when you thought you were going to be away from _____ ? IF **YES** TO EITHER, CODE **YES**	NO	YES
		G2 SUMMARY: ARE AT LEAST **3** OF **G2a-h** CODED **YES**?	\ NO	YES
G3		Did this last for at least 4 weeks?	\ NO	YES
G4		Did your fears of being away from _____ really bother you a lot? Cause you a lot of problems at home? At school? With friends? In any other way? IF **YES** TO EITHER, CODE **YES**	\ NO	YES
		ARE **G1**, **G2 SUMMARY**, **G3** AND **G4** CODED **YES**?	**NO** / **YES** ***SEPARATION ANXIETY DISORDER***	

H. SOCIAL PHOBIA (Social Anxiety Disorder)

(\ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE **NO** AND MOVE TO THE NEXT MODULE)

H1	**In the past month**, were you afraid or embarrassed when others your age were watching you? Were you afraid of being teased? Like talking in front of the class? Or eating or writing in front of others? IF **YES** TO ANY, CODE **YES**	\ NO	YES
H2	Are you more afraid of these things than other kids your age?	\ NO	YES
H3	Are you so afraid of these things that you try to stay away from them? Or you can only do them if someone is with you? Or you do them but it's really hard for you?	\ NO	YES
H4	Do these social fears have a big effect on your life? Do they cause problems when you interact with others or in your relationships? Do they cause a lot of problems at school or at work? Do they cause you to feel upset and want to be alone? IF **YES** TO ANY, CODE **YES**	\ NO	YES
H5	Did this social fear / social anxiety last at least 6 months?		

SUBTYPES

Do you fear and avoid 4 or more social situations?

If YES Generalized social phobia (social anxiety disorder)

If NO Non-generalized social phobia (social anxiety disorder)

NOTE TO INTERVIEWER: PLEASE ASSESS WHETHER THE SUBJECT'S FEARS ARE RESTRICTED TO NON-GENERALIZED ("ONLY 1 OR SEVERAL") SOCIAL SITUATIONS OR EXTEND TO GENERALIZED ("MOST") SOCIAL SITUATIONS. "MOST" SOCIAL SITUATIONS IS USUALLY OPERATIONALIZED TO MEAN 4 OR MORE SOCIAL SITUATIONS, ALTHOUGH THE DSM-IV DOES NOT EXPLICITLY STATE THIS.

EXAMPLES OF SUCH SOCIAL SITUATIONSTYPICALLY INCLUDE INITIATING OR MAINTAINING A CONVERSATION, PARTICIPATING IN SMALL GROUPS, DATING, SPEAKING TO AUTHORITY FIGURES, ATTENDING PARTIES, PUBLIC SPEAKING, EATING IN FRONT OF OTHERS, URINATING IN A PUBLIC WASHROOM,
ETC.

NO	YES

SOCIAL PHOBIA
(Social Anxiety Disorder)
CURRENT

GENERALIZED ☐
NON-GENERALIZED ☐

I. SPECIFIC PHOBIA

(\ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE **NO** AND MOVE TO THE NEXT MODULE)

I1	**In the past month,** have you been really afraid of something like: snakes or bugs? Dogs or other animals? High places? Storms? The dark? Or seeing blood or needles?	\ NO	YES
I2	List any specific phobia(s): _____		
I3	Are you more afraid of _____ than other kids your age are?	\ NO	YES
I4	Are you so afraid of _____ that you try to stay away from it / them? Or you can only be around it / them if someone is with you? Or can you be around it / them but it's really hard for you? IF **YES** TO ANY, CODE **YES**	\ NO	YES
I5	Does this fear really bother you a lot? Does it cause you problems at home or at school? Does it keep you from doing things you want to do? IF **YES** TO ANY, CODE **YES**	NO	YES

IS **I5** CODED **YES?**

NO **YES**

SPECIFIC PHOBIA CURRENT

J. OBSESSIVE COMPULSIVE DISORDER

(⌊ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE **NO** AND MOVE TO THE NEXT MODULE)

J1	**In the past month**, have you been bothered by bad things that come into your mind that you couldn't get rid of? Like bad thoughts or urges? Or nasty pictures? For example, did you think about hurting somebody even though it disturbs or distresses you? Were you afraid you or someone would get hurt because of some little thing you did or didn't do? Did you worry a lot about having dirt or germs on you? Did you worry a lot that you would give someone else germs or make them sick somehow? Or were you afraid that you would do something really shocking? IF **YES** TO ANY, CODE **YES** DO NOT INCLUDE SIMPLY EXCESSIVE WORRIES ABOUT REAL LIFE PROBLEMS. DO NOT INCLUDE OBSESSIONS DIRECTLY RELATED TO EATING DISORDERS, SEXUAL BEHAVIOR, OR ALCOHOL OR DRUG ABUSE BECAUSE THE PATIENT MAY DERIVE PLEASURE FROM THE ACTIVITY AND MAY WANT TO RESIST IT ONLY BECAUSE OF ITS NEGATIVE CONSEQUENCES	NO YES ↓ SKIP TO **J4**
J2	Did they keep coming back into your mind even when you tried to ignore or get rid of them?	NO YES ↓ SKIP TO **J4**
J3	Do you think that these things come from your own mind and that they are not from outside of your head?	NO YES
J4	**In the past month,** did you do something over and over without being able to stop doing it, like washing over and over? Straightening things up over and over? Counting something or checking on something over and over? Saying or doing something over and over? IF **YES** TO ANY, CODE **YES**	NO YES
	IS **J3** OR **J4** CODED **YES**?	⌊ NO YES
J5	Did you have these thoughts or rituals we just spoke about, more than other kids your age?	⌊ NO YES
J6	Did these thoughts or actions cause you to miss out on things at home? At school? With friends? Did they cause a lot of problems with other people? Did these things take more than one hour a day? IF **YES** TO ANY, CODE **YES**	**NO** **YES** ***O.C.D. CURRENT***

K. POSTTRAUMATIC STRESS DISORDER

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

K1		Has anything really awful ever happened to you? Like being in a flood, tornado or earthquake? Like being in a fire or a really bad accident? Like seeing someone being killed or badly hurt. Have you ever been attacked by someone?	\ NO	YES
K2		Did you respond with intense fear, or feel helpless or upset?	\ NO	YES
K3		**In the past month**, has this awful thing come back to you in some way? Like dreaming about it or having a strong memory of it or feeling it in your body?	\ NO	YES
K4		**In the past month**:		
	a	Have you tried not to think about or talk about this awful thing?	NO	YES
	b	Have you tried to stay away from things that might remind you of it?	NO	YES
	c	Have you had trouble remembering some important part of what happened?	NO	YES
	d	Have you been much less interested in your hobbies or your friends?	NO	YES
	e	Have you felt cut off from other people?	NO	YES
	f	Have you noticed that your feelings are less than before?	NO	YES
	g	Have you felt that your life will be shortened or that you will die sooner than other people?	NO	YES
		SUMMARY OF K4: ARE **3** OR MORE **K4** ANSWERS CODED **YES**?	\ NO	YES
K5		**In the past month**:		
	a	Have you had trouble sleeping?	NO	YES
	b	Have you been moody or angry for no reason?	NO	YES
	c	Have you had trouble paying attention?	NO	YES
	d	Were you nervous or watching out in case something bad might happen?	NO	YES
	e	Would you jump when you heard noises? Or when you saw something out of the corner of your eye? IF YES TO EITHER, CODE **YES**	NO	YES
		SUMMARY OF K5: ARE **2** OR MORE **K5** ANSWERS CODED **YES**?	\ NO	YES

K6 **In the past month,** have these problems upset you a lot? Have they caused you to have problems at school? At home? With your friends?

IF **YES** TO ANY, CODE **YES**

NO	YES
P T S D **CURRENT**	

L. ALCOHOL DEPENDENCE / ABUSE

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

L1		**In the past year**, have you had 3 or more drinks of alcohol in a day? At those times, did you have 3 or more drinks in 3 hours? Did you do this 3 or more times in the past year? IF **NO** TO ANY, CODE **NO**	\ NO	YES
L2		**In the past year**:		
	a	Did you need to drink a lot more alcohol to get the same feeling you got when you first started drinking?	NO	YES
	b	Whenever you cut down on drinking or stopped drinking, did your hands shake? Did you sweat? Did you feel nervous or like you couldn't sit still? Did you ever drink to keep from getting those problems? Did you drink again to keep from getting a hangover? IF **YES** TO ANY, CODE **YES**	NO	YES
	c	When you drank alcohol, did you end up drinking more than you had planned to?	NO	YES
	d	Have you tried to cut down or stop drinking alcohol but were not able to?	NO	YES
	e	On days when you drank, did you spend more than three hours doing it? Count the time it took you to get the alcohol, drink it, and get over it.	NO	YES
	f	Did you spend less time on other things because of your drinking (Like school, hobbies, or being with friends)?	NO	YES
	g	Did your drinking cause problems with your health or your mind? Did you keep on drinking even though you knew that it caused these problems?	NO	YES

ARE **3** OR MORE L2 ANSWERS CODED **YES**?

NO	YES*

* IF YES, SKIP L3 QUESTIONS, CIRCLE N/A IN THE ABUSE BOX AND MOVE TO THE NEXT DISORDER. DEPENDENCE PREEMPTS ABUSE.

ALCOHOL DEPENDENCE
CURRENT

		In the past year:		
L3	a	Were you drunk or hung-over more than once when you had something important to do, like schoolwork or responsibilities at home? Did this cause any problems? CODE **YES** ONLY IF THIS CAUSED PROBLEMS	NO	YES
	b	Were you drunk more than once while doing something risky (Like riding a bike, driving a car or boat, or using machines)?	NO	YES
	c	Did you have legal problems more than once because of your drinking (Like getting arrested or stopped by the police)?	NO	YES
	d	Did you kept drinking even if your drinking caused problems with your family or with other people?	NO	YES

IF **YES** TO EITHER, CODE **YES**

ARE **1** OR MORE OF **L3** ANSWERS CODED **YES**?

NO	N/A	YES
	ALCOHOL ABUSE **CURRENT**	

M. SUBSTANCE DEPENDENCE / ABUSE (NON-ALCOHOL)

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

			\ NO	YES
M1	a	Now I am going to read you a list of street drugs or medicines. Stop me if, **in the past year,** you have taken any of them more than one time to get high? To feel better or to change your mood?		

CIRCLE EACH DRUG TAKEN:
Stimulants: amphetamines, "speed", crystal meth, "crank", "rush", Dexadrine, Ritalin, diet pills.
Cocaine: snorting, IV, freebase, crack, "speedball".
Narcotics: heroin, morphine, Dilaudid, opium, Demerol, methadone, Darvon, codeine, Percodan, Vicodin, OxyContin.
Hallucinogens: LSD ("acid"), mescaline, peyote, PCP ("angel dust", "Peace Pill"), psilocybin, STP, "mushrooms", "ecstasy", MDA, MDMA or ketamine, ("Special K").
Inhalants: "glue", ethyl chloride, "rush", nitrous oxide ("laughing gas"), amyl or butyl nitrate ("poppers").
Marijuana: hashish ("hash"), THC, "pot", "grass", "weed", "reefer".
Tranquilizers: Quaalude, Seconal ("reds"), Valium, Xanax, Librium, Ativan, Dalmane, Halcion, barbiturates, Miltown, GHB, Roofinol, "Roofies".
Miscellaneous: Steroids, non-prescription sleep or diet pills. Cough medicine? Any others?
Specify MOST USED Drug(s): _____
WHICH DRUG(S) CAUSE THE BIGGEST PROBLEMS?: _____
FIRST EXPLORE THE DRUG CAUSING THE BIGGEST PROBLEMS AND THE ONE MOST LIKELY TO MEET DEPENDENCE / ABUSE CRITERIA.
IF PATIENT'S SYMPTOMS MEET CRITERIA FOR ABUSE /DEPENDENCE, SKIP TO NEXT MODULE. IF NOT, EXPLORE THE NEXT MOST PROBLEMATIC DRUG.

M2		Think about your use of (NAME OF DRUG/DRUG CLASS SELECTED) **over the past year:**		
	a	Did you need to take a lot more of the drug to get the same feeling you got when you first started taking it?	NO	YES
	b	Whenever you cut down or stopped using the drug(s), did your body feel bad or did you go into withdrawal? ("Withdrawal" might mean feeling sick, achy, shaking, running a temperature, feeling weak, having an upset stomach or diarrhea, sweating, feeling your heart pounding, trouble sleeping, feeling nervous, moody or like you can't sit still.) Did you use the drug(s) again to keep from getting sick or to feel better? IF **YES** TO EITHER, CODE **YES**	NO	YES
	c	When you used (NAME THE DRUG/DRUG CLASS SELECTED), did you end up taking more than you had planned to?	NO	YES
	d	Have you tried to cut down or stop taking (NAME THE DRUG/DRUG CLASS SELECTED)? Did you find out that you couldn't do it? IF **NO** TO EITHER, CODE **NO**	NO	YES
	e	On days when you took (NAME THE DRUG/DRUG CLASS SELECTED), did you spend more than three hours doing it? Count the time it took you to get (NAME THE DRUG/DRUG CLASS SELECTED), use it and get over it.	NO	YES
	f	Did you spend less time on other things because of your use of (NAME THE DRUG/DRUG CLASS SELECTED)? Like school, hobbies or being with friends?	NO	YES

g Did your use of (NAME OF DRUG/DRUG CLASS SELECTED) cause problems with your health or your mind? Did you keep on using (NAME THE DRUG) even though you knew it caused problems? NO YES

ARE **3** OR MORE **M2** ANSWERS CODED YES?

SPECIFY DRUG(S): _____

NO **YES***

SUBSTANCE DEPENDENCE
CURRENT

* IF YES, SKIP M3 QUESTIONS, CIRCLE N/A IN ABUSE BOX AND MOVE TO THE NEXT DISORDER. DEPENDENCE PREEMPTS ABUSE.

Think about your use of (NAME THE DRUG/DRUG CLASS SELECTED) over the past year:

In the past year:

M3 a Were you high or hung-over from the drug(s) more than once, when you had something important to do? Like schoolwork or responsibilities at home? Did this happen more than one time? Did this cause any problems? NO YES
CODE **YES** ONLY IF THIS CAUSED PROBLEMS

b Have you been high from the drug(s) more than once while doing something risky (Like riding a bike, driving a car or boat, or using machines)? NO YES

c Did you have legal problems because of your use of the (NAME THE DRUG/DRUG CLASS SELECTED) more than once? (Like getting arrested or stopped by the police)? NO YES

d Did you kept using the (NAME THE DRUG/DRUG CLASS SELECTED) even though it caused problems with your family or with other people? NO YES
IF **YES** TO EITHER, CODE **YES**

ARE **1** OR MORE **M3** ANSWERS CODED **YES?**

SPECIFY DRUG(S): _____

NO **N/A** **YES**

SUBSTANCE ABUSE
CURRENT

N. TIC DISORDERS

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

N1	a	In the past month did you have movements of your body called "Tics"? "Tics" are quick movements of some part of your body that are hard to control. A tic might be blinking your eyes over and over, twitches of your face, jerking your head, making a movement with your hand over and over, or squatting, or shrugging your shoulders over and over.	NO	YES
	b	Have you ever had a tic that made you say something or make a sound over and over and was hard to stop? Like coughing or sniffling or clearing your throat over and over when you did not have a cold; or grunting or snorting or barking; having to say certain words over and over, having to say bad words, or having to repeat sounds you hear or words that other people say? IF BOTH **N1A** AND **N1B** ARE CODED **NO**, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES AND SKIP TO **O1**	NO	YES
N2	a	Did these "tics" happen many times a day?	NO	YES
	b	Did they happen nearly every day for at least 4 weeks?	NO	YES
	c	Did they happen for a year or more?	NO	YES
	d	Did they ever go away completely for 3 months in a row during this time?	NO	YES
N3		Did these "tics" upset you a lot? Did they get in the way of school? Did they cause you problems at home? Did they cause you problems with friends? Did other kids pick on you because of your tics? IF **YES** TO ANY, CODE **YES**	NO	YES
N4		Did the tics only occur when you are taking Ritalin, Adderal, Cylert, Dexedrine, Provigil, Concerta or other medications for ADHD ?	NO	YES

N5 a ARE **N1a**+ **N1b** + **N2a** + **N2c** AND **N3** CODED **YES**?

NO	YES

TOURETTE'S DISORDER, CURRENT

N5 b ARE **N1a** + **N2a** + **N2c** + **N3** CODED **YES** AND IS **N1b** CODED **NO?**

NO **YES**

MOTOR TIC DISORDER, CURRENT

N5 c ARE **N1b** + **N2a** + **N2c** + **N3** CODED YES and is **N1a** coded **NO**?

NO **YES**

VOCAL TIC DISORDER, CURRENT

N5 d ARE **N1 (a or b)** AND **N2a** AND **N2b** AND **N3** CODED **YES,** AND **N2c** CODED **NO**?

NO **YES**

TRANSIENT TIC DISORDER, CURRENT

O. ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

		SCREENING QUESTION FOR 3 DISORDERS (ADHD, CD, ODD)		
O1		Has anyone (teacher, baby sitter, friend or parent) ever complained about your behavior or performance in school? IF NO TO THIS QUESTION, ALSO CODE NO TO CONDUCT DISORDER AND OPPOSITIONAL DEFIANT DISORDER	\ NO	YES
		In the past six months:		
O2	a	Have you often not paid enough attention to details? Made careless mistakes in school?	NO	YES
	b	Have you often had trouble keeping your attention focused when playing or doing schoolwork?	NO	YES
	c	Have you often been told that you do not listen when others talk directly to you?	NO	YES
	d	Have you often had trouble following through with what you were told to do (Like not following through on schoolwork or chores)? Did this happen even though you understood what you were supposed to do? Did this happen even though you weren't trying to be difficult? IF **NO** TO ANY, CODE **NO**	NO	YES
	e	Have you often had a hard time getting organized?	NO	YES
	f	Have you often tried to avoid things that make you concentrate or think hard (like schoolwork)? Do you hate or dislike things that make you concentrate or think hard? IF **YES** TO EITHER, CODE **YES**	NO	YES
	g	Have you often lost or forgotten things you needed? Like homework assignments, pencils, or toys?	NO	YES
	h	Do you often get distracted easily by little things (Like sounds or things outside the room)?	NO	YES
	i	Do you often forget to do things you need to do every day (Like forget to comb your hair or brush your teeth)?	NO	YES
		O2 SUMMARY: ARE **6** OR MORE **O2** ANSWERS CODED **YES?**	NO	YES
		In the past six months:		
O3	a	Did you often fidget with your hands or feet? Or did you squirm in your seat? IF **YES** TO EITHER, CODE **YES**	NO	YES
	b	Did you often get out of your seat in class when you were	NO	YES

not supposed to?

c	Have you often run around or climbed on things when you weren't supposed to? Did you want to run around or climb on things even though you didn't? IF **YES** TO EITHER, CODE **YES**	NO	YES
d	Have you often had a hard time playing quietly?	NO	YES
e	Were you always "on the go"?	NO	YES
f	Have you often talked too much?	NO	YES
g	Have you often blurted out answers before the person or teacher has finished the question?	NO	YES
h	Have you often had trouble waiting your turn?	NO	YES
i	Have you often interrupted other people? Like butting in when other people are talking or busy or when they are on the phone?	NO	YES
	O3 SUMMARY: ARE **6** OR MORE **O3** ANSWERS CODED **YES?**	NO	YES

O4	Did you have problems paying attention, being hyper, or impulsive before you were 7 years old?	NO	YES
O5	Did these things cause problems at school? At home? With your family? With your friends? CODE **YES** IF T**WO** OR MORE ARE ENDORSED YES.	NO	YES

IS **O2** SUMMARY & **O3** SUMMARY CODED **YES**?

NO YES
Attention-Deficit/ Hyperactivity Disorder
COMBINED

IS **O2** SUMMARY CODED YES AND **O3** SUMMARY CODED **NO**?

NO YES
Attention-Deficit/ Hyperactivity Disorder
INATTENTIVE

IS **O2** SUMMARY CODED **NO** AND **O3** SUMMARY CODED **YES?**

NO YES
Attention-Deficit/ Hyperactivity Disorder
HYPERACTIVE /IMPULSIVE

P. CONDUCT DISORDER

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

	SCREENING QUESTION		
P1	IF QUESTION O1 IN ADHD IS ANSWERED NO, CODE NO TO CONDUCT DISORDER IF O1 WAS NOT ASKED ALREADY, ASK THE QUESTION BELOW (Has anyone (teacher, baby sitter, friend, parent) ever complained about your behavior or performance in school?)	\ NO	YES
P2	**In the past year**:		
a	Have you bullied or threatened other people (excluding siblings)?	NO	YES
b	Have you started fights with others (excluding siblings)?	NO	YES
c	Have you used a weapon to hurt someone? Like a knife, gun, bat, or other object?	NO	YES
d	Have you hurt someone (physically) on purpose (excluding siblings)?	NO	YES
e	Have you hurt animals on purpose?	NO	YES
f	Have you stolen things using force? Like robbing someone using a weapon or grabbing something from someone like purse snatching?	NO	YES
g	Have you forced anyone to have sex with you?	NO	YES
h	Have you started fires on purpose in order to cause damage?	NO	YES
i	Have you destroyed things that belonged to other people on purpose?	NO	YES
j	Have you broken into someone's house or car?	NO	YES
k	Have you lied many times in order to get things from people or to get out of things? Tricked other people into doing what you wanted? IF **YES** TO EITHER, CODE **YES**	NO	YES
l	Have you stolen things that were worth money (Like shoplifting or forging a check)?	NO	YES
m	Have you often stayed out a lot later than your parents let you? Did this start before you were 13 years old? IF **NO** TO EITHER, CODE **NO**	NO	YES
n	Have you run away from home two times or more?	NO	YES
o	Have you skipped school often? Did this start before you were 13 years old? IF **NO** TO EITHER, CODE **NO**	NO	YES
	P2 SUMMARY: ARE 3 OR MORE **P2** ANSWERS CODED **YES** WITH AT LEAST ONE PRESENT IN THE PAST 6 MONTHS?	\ NO	YES

P3 Did these behaviors cause big problems at school? At home? With your family? Or with your friends?

IF YES TO ANY, CODE YES

NO	YES
CONDUCT DISORDER CURRENT	

Q. OPPOSITIONAL DEFIANT DISORDER

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

ATTENTION: IF CODED POSITIVE FOR CONDUCT DISORDER, CIRCLE NO IN DIAGNOSITIC BOX AND MOVE TO THE NEXT MODULE.

SCREENING QUESTION

Q1	IF QUESTION O1 IN ADHD IS ANSWERED NO, CODE NO TO OPPOSITIONAL DEFIANT DISORDER IF O1 WAS NOT ASKED ALREADY, ASK THE QUESTION BELOW		
	(Has anyone (teacher, baby sitter, friend, parent) ever complained about your behavior or performance in school?)	\ NO	YES

Q2	**In the past six months**:		
a	Have you often lost your temper?	NO	YES
b	Have you often argued with adults?	NO	YES
c	Have you often refused to do what adults tell you to do? Refused to follow rules? IF **YES** TO EITHER, CODE **YES**	NO	YES
d	Have you often annoyed people on purpose?	NO	YES
e	Have you often blamed other people for your mistakes or for your bad behavior?	NO	YES
f	Have you often been "touchy" or easily annoyed by other people?	NO	YES
g	Have you often been angry and resentful toward others?	NO	YES
h	Have you often been "spiteful" or quick to "pay back" somebody who treats you wrong?	NO	YES
	Q2 SUMMARY: ARE **4** OR MORE OF **Q2** ANSWERS CODED **YES**?	\ NO	YES
Q3	Did these behaviors cause problems at school? At home? With your family? Or with your friends? IF **YES** TO ANY, CODE **YES**	\ NO	YES

ARE **Q2** SUMMARY & **Q3** CODED **YES**?

NO	**YES**
OPPOSITIONAL DEFIANT DISORDER **CURRENT**	

R. PSYCHOTIC DISORDERS AND MOOD DISORDERS WITH PSYCHOTIC FEATURES

ASK FOR AN EXAMPLE OF EACH QUESTION ANSWERED POSITIVELY. CODE YES ONLY IF THE EXAMPLES CLEARLY SHOW A DISTORTION OF THOUGHT OR OF PERCEPTION OR IF THEY ARE NOT CULTURALLY APPROPRIATE. BEFORE CODING, INVESTIGATE WHETHER DELUSIONS QUALIFY AS "BIZARRE".

DELUSIONS ARE "BIZARRE" IF: CLEARLY IMPLAUSIBLE, ABSURD, NOT UNDERSTANDABLE, AND CANNOT DERIVE FROM ORDINARY LIFE EXPERIENCE.

HALLUCINATIONS ARE SCORED "BIZARRE" IF: A VOICE COMMENTS ON THE PERSON'S THOUGHTS OR BEHAVIOR, OR WHEN TWO OR MORE VOICES ARE CONVERSING WITH EACH OTHER.

					BIZARRE
		Now I am going to ask you about unusual experiences that some people have.			
R1	a	Have you ever believed that people were secretly watching you? Have you believed that someone was trying to get you, or hurt you? IF **YES** TO ANY, CODE **YES** **NOTE**: ASK FOR EXAMPLES TO RULE OUT ACTUAL STALKING	NO	YES	YES
	b	**IF YES OR YES BIZARRE**: Do you believe this now?	NO	YES	YES ← **R6**
R2	a	Have you ever believed that someone was reading your mind or that someone could hear your thoughts? Or that you could actually read someone else's mind or hear what they were thinking? IF **YES** TO ANY, CODE **YES**	NO	YES	YES
	b	**IF YES OR YES BIZARRE**: Do you believe this now?	NO	YES	YES ← **R6**
R3	a	Have you ever believed that someone or something put thoughts in your mind that were not your own? Have you believed that someone or something made you act in a way that was not your usual self? Have you ever felt that you were possessed? IF **YES** TO ANY, CODE **YES** **NOTE**: ASK FOR EXAMPLES AND DISCOUNT ANY THAT ARE NOT PSYCHOTIC	NO	YES	YES
	b	**IF YES OR YES BIZARRE**: Do you believe this now?	NO	YES	YES ← **R6**
R4	a	Have you ever believed that you were being sent special messages through the TV, radio, internet, newspapers, books, magazines, or through your games or toys? Have you ever believed that a person you did not personally know was especially interested in you? IF **YES** TO ANY, CODE **YES**	NO	YES	YES
	b	**IF YES OR YES BIZARRE**: Do you believe this now?	NO	YES	YES ← **R6**

R5	a	Have your family or friends ever thought that any of your beliefs were strange or weird? Please give me an example. INTERVIEWER:. ONLY CODE **YES** IF THE EXAMPLES ARE **CLEARLY** DELUSIONAL AND ARE	NO	YES	YES
		NOT EXPLORED IN QUESTIONS R1 TO R4, FOR EXAMPLE, SOMATIC OR RELIGIOUS DELUSIONS OR DELUSIONS OF GRANDIOSITY, JEALOUSY GUILT, RUIN OR DESTITIUTION, ETC.	NO	YES	YES
	b	**IF YES OR YES BIZARRE**: Do they still think that your beliefs are strange?			
R6	a	Have you ever heard things other people couldn't hear, such as voices? [HALLUCINATIONS ARE SCORED "BIZARRE" ONLY IF PATIENT ANSWERS YES TO THE FOLLOWING]:	NO	YES	
		IF YES: Did you hear a voice talking about you? Did you hear more than one voice talking back and forth?	NO		YES
	b	**IF YES OR YES BIZARRE TO R6**: Have you heard these things in the past month? HALLUCINATIONS ARE SCORED "BIZARRE" ONLY IF PATIENT ANSWERS **YES** TO THE FOLLOWING:	NO	YES	YES ← **R8b**
		è**L8b** Did you hear a voice talking about you? Did you hear more than one voice talking back and forth?			
R7	a	Have you ever had visions or have you ever seen things other people couldn't see? NOTE:CHECK TO SEE IF THESE ARE CULTURALLY INAPPROPRIATE.	NO		YES
	b	**IF YES**: Have you seen these things in the past month?	NO		YES
		CLINICIAN'S JUDGMENT			
R8	b	IS THE PATIENT CURRENTLY EXHIBITING INCOHERENCE, DISORGANIZED SPEECH, OR MARKED LOOSENING OF ASSOCIATIONS?	NO		YES
R9	b	IS THE PATIENT CURRENTLY EXHIBITING DISORGANIZED OR CATATONIC BEHAVIOR?	NO		YES

R10 b ARE NEGATIVE SYMPTOMS OF SCHIZOPHRENIA, E.G. SIGNIFICANT AFFECTIVE FLATTENING, POVERTY OF SPEECH (ALOGIA) OR AN INABILITY TO INITIATE OR PERSIST IN GOAL DIRECTED ACTIVITIES (AVOLITION), PROMINENT DURING THE INTERVIEW? NO YES

R11 a ARE 1 OR MORE « a » QUESTIONS FROM R1a TO R7a CODED **YES OR YES BIZARRE** AND IS EITHER:

MAJOR DEPRESSIVE EPISODE, (CURRENT OR RECURRENT)
OR
MANIC OR HYPOMANIC EPISODE, (CURRENT OR PAST) CODED **YES**? NO YES
R13

IF NO TO R11 a, CIRCLE NO IN BOTH 'MOOD DISORDER WITH PSYCHOTIC FEATURES' DIAGNOSTIC BOXES AND MOVE TO R13.

b You told me earlier that you had period(s) when you felt (depressed/high/persistently irritable).

Did you have the beliefs and experiences you just described [GIVE EXAMPLES TO PATIENT FROM SYMPTOMS CODED YES FROM R1a TO R7a] only when you were feeling depressed? high? very moody? very irritable?

IF THE PATIENT EVER HAD A PERIOD OF AT LEAST 2 WEEKS OF HAVING THESE BELIEFS OR EXPERIENCES (PSYCHOTIC SYMPTOMS) WHEN THEY WERE NOT DEPRESSED/HIGH/IRRITABLE, CODE NO TO THIS DISORDER.

IF THE ANSWER IS NO TO THIS DISORDER, ALSO CIRCLE NO TO R12 AND MOVE TO R13

NO YES

MOOD DISORDER WITH PSYCHOTIC FEATURES

LIFETIME

R12a ARE 1 OR MORE « b » QUESTIONS FROM R1b TO R7b CODED **YES OR YES BIZARRE** AND IS EITHER:

MAJOR DEPRESSIVE EPISODE, (CURRENT)
OR

MANIC OR HYPOMANIC EPISODE, (CURRENT) CODED **YES**?

IF THE ANSWER IS YES TO THIS DISORDER (CURRENT), CIRCLE NO TO R13 AND MOVE TO R14.

NO YES

MOOD DISORDER WITH PSYCHOTIC FEATURES

CURRENT

R13 ARE 1 OR MORE « b » QUESTIONS FROM R1b TO R6b, CODED **YES BIZARRE**?

OR

ARE 2 OR MORE « b » QUESTIONS FROM R1b TO R10b, CODED **YES** (RATHER THAN **YES BIZARRE**)?

AND DID AT LEAST TWO OF THE PSYCHOTIC SYMPTOMS OCCUR DURING THE SAME 1 MONTH PERIOD?

NO **YES**

PSYCHOTIC DISORDER
CURRENT

R14 IS **R13** CODED **YES**

OR

ARE 1 OR MORE « a » QUESTIONS FROM R1a TO R6a, CODED **YES BIZARRE**?

OR

ARE 2 OR MORE « a » QUESTIONS FROM R1a TO R7a, CODED **YES** (RATHER THAN **YES BIZARRE**)?

AND DID AT LEAST TWO OF THE PSYCHOTIC SYMPTOMS OCCUR DURING THE SAME 1 MONTH PERIOD?

NO **YES**

PSYCHOTIC DISORDER

LIFETIME

S. ANOREXIA NERVOSA

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

S1	a	How tall are you?	☐☐ft ☐☐in. ☐☐☐cm	
	b.	What was your lowest weight in the past 3 months?	☐☐☐lb ☐☐☐kg	
	c	IS PATIENT'S WEIGHT EQUAL TO OR BELOW THE THRESHOLD CORRESPONDING TO HIS / HER HEIGHT? (SEE TABLE BELOW) (THIS IS = A BMI OF ≤ 17.5 KG/M²)	NO	YES
	d	Have you lost 5 lb or more (2.3 kg or more) in the last 3 months?	NO	YES
	e	If you are less than age 14, have you failed to gain any weight in the last 3 months? IF PATIENT IS 14 OR OLDER, CODE NO.	NO	YES
	f	Has anyone thought that you lost too much weight in the last 3 months?	NO	YES
		IF YES TO S1c OR d OR e OR f, CODE YES, OTHERWISE CODE NO.	\ NO	YES

In the past 3 months:

S2		Have you been trying to keep yourself from gaining any weight?	\ NO	YES
S3		Have you been very afraid of gaining weight? Have you been very afraid of getting too fat / big? IF **YES** TO EITHER, CODE **YES**	\ NO	YES
S4	a	Have you seen yourself as being too big / fat or that part of your body was too big / fat? IF **YES** TO EITHER, CODE **YES**	NO	YES
	b	Has your weight strongly affected how you feel about yourself? Has your body shape strongly affected how you feel about yourself? IF **YES** TO EITHER, CODE **YES**	NO	YES
	c	Did you think that your low weight was normal or overweight ?	NO	YES
S5		ARE **1** OR **MORE S4** ANSWERS CODED **YES**?	\ NO	YES
S6		FOR POST PUBERTAL **FEMALES** ONLY: During the last 3 months, did you miss all your menstrual periods when they were expected to occur (when you were not pregnant)?	\ NO	YES

FOR GIRLS : ARE **S5** AND **S6** CODED YES?

FOR BOYS : IS **S5** CODED YES?

NO **YES**

ANOREXIA NERVOSA
CURRENT

HEIGHT / WEIGHT TABLE CORRESPONDING TO A **BMI THRESHOLD** OF **17.5** KG/M^2

Height/Weight

ft/in	3'0	3'1	3'2	3'3	3'4	3'5	3'6	3'7	3'8	3'9	3'10	3'11	4'0	4'1
lb	32	34	36	38	40	42	44	46	48	50	53	55	57	60
cm	91	94	97	99	102	104	107	109	112	114	117	119	122	125
kg	15	15	16	17	18	19	20	21	22	23	24	25	26	27
ft/in	4'2	4'3	4'4	4'5	4'6	4'7	4'8	4'9	4'10	4'11	5'0	5'1	5'2	5'3
lb	62	65	67	70	72	75	78	81	84	87	89	92	96	99
cm	127	130	132	135	137	140	142	145	147	150	152	155	158	160
kg	28	29	31	32	33	34	35	37	38	39	41	42	43	45
ft/in	5'4	5'5	5'6	5'7	5'8	5'9	5'10	5'11	6'0	6'1	6'2	6'3		
lb	102	105	108	112	115	118	122	125	129	132	136	140		
cm	163	165	168	170	173	175	178	180	183	185	188	191		
kg	46	48	49	51	52	54	55	57	59	60	62	64		

The weight thresholds above are calculated using a body mass index (BMI) equal to or below 17.5 kg/m^2 for the patient's height. This is the threshold guideline below which a person is deemed underweight by the DSM-IV and the ICD-10 Diagnostic Criteria for Research for Anorexia Nervosa.

T. BULIMIA NERVOSA

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

	In the past 3 months:	
T1	Did you have eating binges? An "eating binge" is when you eat a very large amount of food within two hours.	\ NO YES
T2	Did you have eating binges two times a week or more?	\ NO YES
T3	During an eating binge, did you feel that you couldn't control yourself?	\ NO YES
T4	Did you do anything to keep from gaining weight? Like making yourself throw up or exercising very hard? Trying not to eat for the next day or more? Taking pills to make you have to go to the bathroom more? Or taking any other kinds of pills to try to keep from gaining weight? IF **YES** TO ANY, CODE **YES**	\ NO YES
T5	Does your weight strongly affect how you feel about yourself? Does your body shape strongly affect how you feel about yourself? IF **YES** TO EITHER, CODE **YES**	\ NO YES
T6	DO THE PATIENT'S SYMPTOMS MEET CRITERIA FOR ANOREXIA NERVOSA?	NO YES \ SKIP to T8
T7	Do these binges occur only when you are under (_____lb/kg)? INTERVIEWER: WRITE IN THE ABOVE ( ), THE THRESHOLD WEIGHT FOR THIS PATIENT'S HEIGHT FROM THE HEIGHT/WEIGHT TABLE IN THE ANOREXIA NERVOSA MODULE	NO YES
T8	IS **T5** CODED **YES** AND IS EITHER **T6** OR **T7** CODED **NO**?	**NO** **YES** ***BULIMIA NERVOSA*** **CURRENT**
T9	IS **T7** CODED **YES**?	**NO** **YES** ***ANOREXIA NERVOSA*** *Binge Eating Type* **CURRENT**

U. GENERALIZED ANXIETY DISORDER

(\ MEANS : GO TO END OF DISORDER, CIRCLE NO AND MOVE TO NEXT DISORDER)

U1	a	**For the past six months**, have you worried a lot or been nervous? Have you been worried or nervous about several things, (like school, your health, or something bad happening)? Have you been more worried than other kids your age? IF **YES** TO ANY, CODE **YES**	\ NO	YES
	b	Do you worry most days?	\ NO	YES
		IS THE PATIENT'S ANXIETY RESTRICTED EXCLUSIVELY TO, OR BETTER EXPLAINED BY, ANY DISORDER PRIOR TO THIS POINT?	NO	\ YES
U2		Do you find it hard to stop worrying? Do the worries make it hard for you to pay attention to what you are doing? IF **YES** TO EITHER, CODE **YES**	\ NO	YES
U3		FOR THE FOLLOWING, CODE **NO** IF THE SYMPTOMS ARE CONFINED TO FEATURES OF ANY DISORDER EXPLORED PRIOR TO THIS POINT. **When you are worried, do you, most of the time:**		
	a	Feel like you can't sit still?	NO	YES
	b	Feel tense in your muscles?	NO	YES
	c	Feel tired, weak or exhausted easily?	NO	YES
	d	Have a hard time paying attention to what you are doing? Does your mind go blank?	NO	YES
	e	Feel grouchy or annoyed?	NO	YES
	f	Have trouble sleeping ("trouble sleeping" means trouble falling asleep, waking up in the middle of the night, wakening up too early or sleeping too much)?	NO	YES
		ARE **1** OR MORE **U3** ANSWERS CODED **YES**?	\ NO	YES
U4		Do these worries or anxieties cause a lot of problems at school or with your friends or at home or at work or with other people?		

NO	YES
GENERALIZED ANXIETY DISORDER	
CURRENT	

V. ADJUSTMENT DISORDERS

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

ONLY ASK THESE QUESTIONS IF THE PATIENT CODES **NO** TO ALL OTHER DISORDERS.

EVEN IF A LIFE STRESS IS PRESENT OR A STRESS PRECIPITATED THE PATIENT'S DISORDER, DO NOT USE AN ADJUSTMENT DISORDER DIAGNOSIS IF ANY OTHER PSYCHIATRIC DISORDER IS PRESENT. CIRCLE N/A IN DIAGNOSTIC BOX AND SKIP THE ADJUSTMENT DISORDER MODULE IF THE PATIENT'S SYMPTOMS MEET CRITERIA FOR ANOTHER SPECIFIC AXIS I DISORDER OR ARE MERELY AN EXACERBATION OF A PREEXISTING AXIS I OR II DISORDER.

V1		Are you stressed out about something? Is this making you upset or making your behavior worse? IF **NO** TO EITHER, CODE **NO** [Examples include anxiety/depression/physical complaints; misbehavior such as fighting, driving recklessly, skipping school, vandalism, violating the rights of others, or illegal activity]. IDENTIFIED STRESSOR: _____ DATE OF ONSET OF STRESSOR: _____	\ NO	YES
V2		Did your upset/behavior problems start soon after the stress began? [Within 3 months of the onset of the stressor]	\ NO	YES
V3	a	Are you more upset by this stress than other kids your age would be?	\ NO	YES
	b	Do these stresses or upsets cause you problems in school? Problems at home? Problems with your family or with your friends? IF **YES** TO ANY, CODE **YES**	\ NO	YES
V4		BEREAVEMENT IS PRESENT IF THESE EMOTIONAL/BEHAVIORAL SYMPTOMS ARE DUE ENTIRELY TO THE LOSS OF A LOVED ONE AND ARE SIMILAR IN SEVERITY, LEVEL OF IMPAIRMENT AND DURATION TO WHAT MOST OTHERS WOULD SUFFER UNDER SIMILAR CIRCUMSTANCES HAS BEREAVEMENT BEEN RULED OUT?	\ NO	YES
V5		Have these problems gone on for 6 months or more after the stress stopped?	NO	\ YES

		WHICH OF THESE EMOTIONAL / BEHAVIORAL SUBTYPES ARE PRESENT?	**Mark all that apply**
	A	Depression, tearfulness or hopelessness.	☐
	B	Anxiety, nervousness, jitteriness, worry.	☐
	C	Misbehavior (Like fighting, driving recklessly, skipping school, vandalism, violating other's rights, doing illegal things).	☐
	D	School problems, physical complaints or social withdrawal.	☐

IF MARKED:

- A only, then code as Adjustment disorder with depressed mood. 309.0
- B only, then code as Adjustment disorder with anxious mood. 309.24
- C only, then code as Adjustment disorder of conduct. 309.3
- A and B only, then code as Adjustment disorder with mixed anxiety and depressed mood. 309.28
- C and (A or B), then code as Adjustment disorder of emotions and of conduct. 309.4
- D only, then code as Adjustment Disorder unspecified. 309.9
- C and D, then code as Adjustment disorder of conduct. 309.3
- B and D, then code as Adjustment disorder with anxious mood. 309.24
- B, C and D, then code as Adjustment disorder with anxious mood and of conduct. 309.24 / 309.3
- A and D, then code as Adjustment disorder with depressed mood. 309.0
- A, C and D, then code as Adjustment disorder with depressed mood and of conduct. 309.0 / 309.3
- A, B and D, then code as Adjustment disorder with mixed anxiety and depressed mood. 309.28
- A, B and C, then code as Adjustment disorder with mixed anxiety and depressed mood, and of conduct. 309.28 / 309.3
- A, B, C and D, then code as Adjustment disorder with mixed anxiety and depressed mood, and of conduct. 309.28 / 309.3

IF **V1** AND **V2** AND **(V3a or V3b)** ARE CODED **YES,** AND **V5 I**S CODED **NO,** THEN CODE THE DISORDER **YES** WITH **SUBTYPES.**

IF **NO,** CODE **NO** TO ADJUSTMENT DISORDER.

NO	**N/A**	**YES**
		Adjustment Disorder with_____
		(see above for subtypes)

W. RULE OUT MEDICAL, ORGANIC OR DRUG CAUSES FOR ALL DISORDERS

IF THE PATIENT CODES POSITIVE FOR ANY CURRENT DISORDER ASK:

Just before these symptoms began:

W1a	Were you taking any drugs or medicines?	☐ No	☐ Yes	☐ Uncertain
W1b	Did you have any medical illness?	☐☐No	☐ Yes	☐☐Uncertain

IN THE CLINICIAN'S JUDGMENT: ARE EITHER OF THESE LIKELY TO BE DIRECT CAUSES OF THE PATIENT'S DISORDER?
IF NECESSARY ASK ADDITIONAL OPEN-ENDED QUESTIONS.

W2	**SUMMARY**: HAS AN ORGANIC CAUSE BEEN RULED OUT?	☐☐No	☐ Yes	☐ Uncertain

X. PERVASIVE DEVELOPMENT DISORDER

X1	Since the age of 4, have you had difficulty making friends? Do you have problems because you keep to yourself? Is it because you are shy or because you don't fit in? IF **YES** TO ANY, CODE **YES**	NO	YES	UNSURE
X2	Are you fixated on routines and rituals or do you have interests that are special and interfere with other activities?	NO	YES	UNSURE
X3	Do other kids think you are weird or strange or awkward?	NO	YES	UNSURE
X4	Do you play mostly alone, rather than with other children?	NO	YES	UNSURE

X5 ARE ALL **X ANSWERS** CODED **YES**? IF SO, CODE YES.

IF ANY X ANSWERS ARE CODED UNSURE, CODE UNSURE.

OTHERWISE CODE NO.

NO	UNSURE	YES *

PERVASIVE DEVELOPMENT DISORDER

CURRENT

* Pervasive Developmental Disorder is possible, but needs to be more thoroughly investigated by a board certified child psychiatrist. Based on the above responses, the diagnosis of PDD cannot be ruled out. The above screening is to rule out the diagnosis, rather than to rule it in.

THIS CONCLUDES THE INTERVIEW

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MOOD DISORDERS: DIAGNOSTIC ALGORITHM

Consult Modules:

A	Major Depressive Episode
D	(Hypo)manic Episode
R	Psychotic Disorders

MODULE R:

1a	IS **R11b** CODED YES?	NO	YES
1b	IS **R12a** CODED YES?	NO	YES

MODULES A and D:		Current	Past
2 a	CIRCLE YES IF A DELUSIONAL IDEA IS IDENTIFIED IN **A3e**	YES	YES
b	CIRCLE YES IF A DELUSIONAL IDEA IS IDENTIFIED IN **D3a**	YES	YES

c Is a Major Depressive Episode coded YES (current or past)?
and
is Manic Episode coded NO (current and past)?
and
is Hypomanic Episode coded NO (current and past)?
and
is "Hypomanic Symptoms" coded NO (current and past)?

Specify:

- If the depressive episode is **current** or **past** or both
- **With Psychotic Features** Current: If 1b or 2a (current) = YES
  With Psychotic Features Past: If 1a or 2a (past) = YES

MAJOR DEPRESSIVE DISORDER

	current	past
MDD	☐	☐

With Psychotic Features

Current	☐
Past	☐

d Is a Manic Episode coded YES (current or past)?

Specify:

- If the Bipolar I Disorder is **current** or **past** or both
- With **Single Manic Episode**: If Manic episode (current or past) = YES and MDE (current and past) = NO
- **With Psychotic Features** Current: If 1b or 2a (current) or 2b (current)= YES With Psychotic Features Past: If 1a or 2a (past) or 2b (past) = YES
- If the **most recent mood** episode is manic, depressed, mixed or hypomanic or unspecified (all mutually exclusive)
- **Unspecified** if the Past Manic Episode is coded YES AND Current (D3 Summary AND D4a AND D6 AND W2) are coded YES

BIPOLAR I DISORDER

	current	past
Bipolar I Disorder	☐☐☐☐☐☐	
Single Manic Episode	☐☐☐☐☐☐	
With Psychotic Features		
Current	☐	
Past	☐	
Most Recent Episode		
Manic	☐	
Depressed	☐	
Mixed	☐	
Hypomanic	☐	
Unspecified	☐	

e Is Major Depressive Episode coded YES (current or past)
and
Is Hypomanic Episode coded YES (current or past)
and
Is Manic Episode coded NO (current and past)?

Specify:

- If the Bipolar Disorder is **current** or **past** or both
- If the most recent mood episode is **hypomanic** or **depressed** (mutually exclusive)

BIPOLAR II DISORDER

	current	past
Bipolar II Disorder	☐☐☐☐☐☐	
Most Recent Episode		
Hypomanic	☐	
Depressed	☐	

f Is MDE coded NO (current and past)
and
Is Manic Episode coded NO (current and past)
and
Is D4b coded YES for the appropriate time frame
and
Is D7b coded YES?

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or

Is Manic Episode coded NO (current and past)
and
Is Hypomanic Episode coded NO (current and past)
and
Is D4a coded YES for the appropriate time frame
and
Is D7c coded YES?

Specify if the Bipolar Disorder NOS is **current** or **past** or both.

BIPOLAR DISORDER NOS

	current	past
Bipolar Disorder NOS		

Key to master chart

- Short Sensory Profile : –

  1 = Typical performance

  2 = Probable difference

  3 = Definite Difference

- VADRS :-

  1 = No

  2 = Yes

Sr. no.	Age	Sex	RELIGION	Fathers education	Fathers occupation	Mothers education	Mothers occupation	socio economic status	Type of family	Number of Family members	Temperament	parenting style	Family history	BIRTH HISTORY	DEVELOPMENTAL HISTORY	Diagnosis	TREATMENT	class
1	10	F	MUSLIM	BACHELORS	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	SEIZURE DISORDER IN MOTHER	FTND	NIL SIGNICANT	ADHD	NIL	5
2	9	F	MUSLIM	HIGH SCHOOL	DRIVER	HIGH SCHOOL	LABOURER	UPPER LOWER	JOINT	6	DIFFICULT	AUTHORITATIVE	BRAIN CANCER IN LATE FATHER	FTND	NIL SIGNIFICANT	ADHD	NIL	4
3	10	M	CHRISTIAN	MASTERS	TEACHER	MASTERS	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	PPERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	NIL	5
4	6	M	MUSLIM	UNEDUCATED	TAILOR	HIGH SCHOOL	HOUSEWIFE	LOWER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD WITH SLD	CLONIDINE	1
5	8	M	HINDU	BACHELORS	CASHIER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	NIL	3
6	5	F	HINDU	HIGH SCHOOL	SHOPKEEPPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	NIL	U kg
7	12	M	HINDU	BACHELORS	LAB TECHNICIAN	HIGH SCHOOL	MASSEUSE	LOWER CLASS	NUCLEAR	4	DIFFICULT	UNINVOLVED	NIL SIGNIFICANT	PREMATURE DEL , CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	7
8	15	M	hindu	MASTERS	TEACHER	MASTERS	TEACHER	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	10
9	8	M	HINDU	MASTERS	BUSINESSMAN	UNEDUCATED	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	SLOW TO WARM	PERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	CLONIDINE	3
10	8	M	HINDU	MASTERS	ENGINEER	MASTERS	HOUSEWIFE	UPPPER MIDDLE CLASS	NUCLEAR	4	EASY	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE AND CLONIDINE	3
11	13	M	HINDU	HIGH SCHOOL	SHOPKEEPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	8
12	7	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER CLASS	JOINT	10	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	NIL	2
13	9	M	MUSLIM	UNEDUCATED	LABOURER	UNEDUCATED	LABOURER	LOWER CLASS	JOINT	15	DIFFICULT	NEGLECT	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD	CLONIDINE	4
14	8	F	HINDU	MASTERS	TEACHER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	METHYLPHENIDATE	3
15	10	M	HINDU	BACHELORS	SALESMAN	BACHELORS	HOUSEWIFE	UPPPER LOWER CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	CLONIDINE	5
16	11	M	HINDU	MASTERS	ENGINEER	HIGH SCHOOL	HOUSEWIFE	UPPER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE	6
17	14	M	HINDU	UNEDUCATED	FARMER	UNEDUCATED	FARMER	LOWER CLASS	JOINT	20	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE AND CLONIDINE	9
18	8	M	HINDU	BACHELORS	SALESMAN	HIGH SCHOOL	TAILOR	UPPER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	ATOMOXETINE	nil
19	9	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	9	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	METHYLPHENIDATE	4
20	10	F	MUSLIM	BACHELORS	SALESMAN	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	15	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD	CLONIDINE AND ATOMOXETINE	5
21	10	F	MUSLIM	BACHELORS	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	SEIZURE DISORDER IN MOTHER	FTND	NIL SIGNICANT	ADHD	NIL	5
22	9	F	MUSLIM	HIGH SCHOOL	DRIVER	HIGH SCHOOL	LABOURER	UPPER LOWER	JOINT	6	DIFFICULT	AUTHORITATIVE	BRAIN CANCER IN LATE FATHER	FTND	NIL SIGNIFICANT	ADHD	NIL	4
23	10	M	CHRISTIAN	MASTERS	TEACHER	MASTERS	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	PPERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	NIL	5
24	6	M	MUSLIM	UNEDUCATED	TAILOR	HIGH SCHOOL	HOUSEWIFE	LOWER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD WITH SLD	CLONIDINE	1
25	8	M	HINDU	BACHELORS	CASHIER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	NIL	3
26	5	F	HINDU	HIGH SCHOOL	SHOPKEEPPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	NIL	U kg
27	12	M	HINDU	BACHELORS	LAB TECHNICIAN	HIGH SCHOOL	MASSEUSE	LOWER CLASS	NUCLEAR	4	DIFFICULT	UNINVOLVED	NIL SIGNIFICANT	PREMATURE DEL , CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	7
28	15	M	hindu	MASTERS	TEACHER	MASTERS	TEACHER	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	10
29	8	M	HINDU	MASTERS	BUSINESSMAN	UNEDUCATED	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	SLOW TO WARM	PERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	CLONIDINE	3
30	8	M	HINDU	MASTERS	ENGINEER	MASTERS	HOUSEWIFE	UPPPER MIDDLE CLASS	NUCLEAR	4	EASY	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE AND CLONIDINE	3
31	13	M	HINDU	HIGH SCHOOL	SHOPKEEPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	8
32	7	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER CLASS	JOINT	10	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	NIL	2
33	9	M	MUSLIM	UNEDUCATED	LABOURER	UNEDUCATED	LABOURER	LOWER CLASS	JOINT	15	DIFFICULT	NEGLECT	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD	CLONIDINE	4
34	8	F	HINDU	MASTERS	TEACHER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	METHYLPHENIDATE	3
35	10	M	HINDU	BACHELORS	SALESMAN	BACHELORS	HOUSEWIFE	UPPPER LOWER CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	CLONIDINE	5
36	11	M	HINDU	MASTERS	ENGINEER	HIGH SCHOOL	HOUSEWIFE	UPPER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE	6
37	14	M	HINDU	UNEDUCATED	FARMER	UNEDUCATED	FARMER	LOWER CLASS	JOINT	20	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE AND CLONIDINE	9
38	8	M	HINDU	BACHELORS	SALESMAN	HIGH SCHOOL	TAILOR	UPPER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	ATOMOXETINE	3
39	9	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	9	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	METHYLPHENIDATE	4
40	10	F	MUSLIM	BACHELORS	SALESMAN	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	15	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD	CLONIDINE AND ATOMOXETINE	5
41	13	M	HINDU	HIGH SCHOOL	SHOPKEEPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	5
42	7	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER CLASS	JOINT	10	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	NIL	4
43	9	M	MUSLIM	UNEDUCATED	LABOURER	UNEDUCATED	LABOURER	LOWER CLASS	JOINT	15	DIFFICULT	NEGLECT	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD	CLONIDINE	5
44	8	F	HINDU	MASTERS	TEACHER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	METHYLPHENIDATE	1
45	10	M	HINDU	BACHELORS	SALESMAN	BACHELORS	HOUSEWIFE	UPPPER LOWER CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	CLONIDINE	nil
46	11	M	HINDU	MASTERS	ENGINEER	HIGH SCHOOL	HOUSEWIFE	UPPER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE	L kg
47	14	M	HINDU	UNEDUCATED	FARMER	UNEDUCATED	FARMER	LOWER CLASS	JOINT	20	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE AND CLONIDINE	7
48	8	M	HINDU	BACHELORS	SALESMAN	HIGH SCHOOL	TAILOR	UPPER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	ATOMOXETINE	10
49	9	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	9	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	METHYLPHENIDATE	3
50	10	F	MUSLIM	BACHELORS	SALESMAN	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	15	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD	CLONIDINE AND ATOMOXETINE	3
51	10	F	MUSLIM	BACHELORS	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	SEIZURE DISORDER IN MOTHER	FTND	NIL SIGNICANT	ADHD	NIL	8
52	9	F	MUSLIM	HIGH SCHOOL	DRIVER	HIGH SCHOOL	LABOURER	UPPER LOWER	JOINT	6	DIFFICULT	AUTHORITATIVE	BRAIN CANCER IN LATE FATHER	FTND	NIL SIGNIFICANT	ADHD	NIL	2
53	10	M	CHRISTIAN	MASTERS	TEACHER	MASTERS	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	PPERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	NIL	4
54	6	M	MUSLIM	UNEDUCATED	TAILOR	HIGH SCHOOL	HOUSEWIFE	LOWER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD	CLONIDINE	3
55	8	M	HINDU	BACHELORS	CASHIER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	NIL	5
56	5	F	HINDU	HIGH SCHOOL	SHOPKEEPPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	NIL	6
57	12	M	HINDU	BACHELORS	LAB TECHNICIAN	HIGH SCHOOL	MASSEUSE	LOWER CLASS	NUCLEAR	4	DIFFICULT	UNINVOLVED	NIL SIGNIFICANT	PREMATURE DEL , CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	9
58	15	M	hindu	MASTERS	TEACHER	MASTERS	TEACHER	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE	3
59	8	M	HINDU	MASTERS	BUSINESSMAN	UNEDUCATED	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	SLOW TO WARM	PERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	CLONIDINE	4
60	8	M	HINDU	MASTERS	ENGINEER	MASTERS	HOUSEWIFE	UPPPER MIDDLE CLASS	NUCLEAR	4	EASY	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE AND CLONIDINE	5
61	10	F	MUSLIM	BACHELORS	SALESMAN	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	15	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	CLONIDINE AND ATOMOXETINE	5
62	13	M	HINDU	HIGH SCHOOL	SHOPKEEPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD	METHYLPHENIDATE	4
63	7	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER CLASS	JOINT	10	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	NIL	5
64	9	M	MUSLIM	UNEDUCATED	LABOURER	UNEDUCATED	LABOURER	LOWER CLASS	JOINT	15	DIFFICULT	NEGLECT	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD	CLONIDINE	1
65	8	F	HINDU	MASTERS	TEACHER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	METHYLPHENIDATE	3
66	10	M	HINDU	BACHELORS	SALESMAN	BACHELORS	HOUSEWIFE	UPPPER LOWER CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	CLONIDINE	U kg
67	11	M	HINDU	MASTERS	ENGINEER	HIGH SCHOOL	HOUSEWIFE	UPPER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	7
68	14	M	HINDU	UNEDUCATED	FARMER	UNEDUCATED	FARMER	LOWER CLASS	JOINT	20	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD	METHYLPHENIDATE AND CLONIDINE	10
69	8	M	HINDU	BACHELORS	SALESMAN	HIGH SCHOOL	TAILOR	UPPER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	ATOMOXETINE	3
70	9	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	9	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	METHYLPHENIDATE	3
71	10	F	MUSLIM	BACHELORS	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	SEIZURE DISORDER IN MOTHER	FTND	NIL SIGNICANT	ADHD	NIL	8
72	9	F	MUSLIM	HIGH SCHOOL	DRIVER	HIGH SCHOOL	LABOURER	UPPER LOWER	JOINT	6	DIFFICULT	AUTHORITATIVE	BRAIN CANCER IN LATE FATHER	FTND	NIL SIGNIFICANT	ADHD	NIL	2
73	10	M	CHRISTIAN	MASTERS	TEACHER	MASTERS	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	PPERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	CLONIDINE	4
74	6	M	MUSLIM	UNEDUCATED	TAILOR	HIGH SCHOOL	HOUSEWIFE	LOWER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD	CLONIDINE	3
75	8	M	HINDU	BACHELORS	CASHIER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	NIL	5
76	5	F	HINDU	HIGH SCHOOL	SHOPKEEPPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	NIL	nil
77	12	M	HINDU	BACHELORS	LAB TECHNICIAN	HIGH SCHOOL	MASSEUSE	LOWER CLASS	NUCLEAR	4	DIFFICULT	UNINVOLVED	NIL SIGNIFICANT	PREMATURE DEL , CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	9
78	15	M	hindu	MASTERS	TEACHER	MASTERS	TEACHER	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE	3
79	8	M	HINDU	MASTERS	BUSINESSMAN	UNEDUCATED	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	SLOW TO WARM	PERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	CLONIDINE	4
80	8	M	HINDU	MASTERS	ENGINEER	MASTERS	HOUSEWIFE	UPPPER MIDDLE CLASS	NUCLEAR	4	EASY	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE AND CLONIDINE	5
81	8	M	HINDU	MASTERS	ENGINEER	MASTERS	HOUSEWIFE	UPPPER MIDDLE CLASS	NUCLEAR	4	EASY	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE AND CLONIDINE	5
82	10	F	MUSLIM	BACHELORS	SALESMAN	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	15	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	CLONIDINE AND ATOMOXETINE	4
83	13	M	HINDU	HIGH SCHOOL	SHOPKEEPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD	METHYLPHENIDATE	5
84	7	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER CLASS	JOINT	10	SLOW TO WARM	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	NIL	1
85	9	M	MUSLIM	UNEDUCATED	LABOURER	UNEDUCATED	LABOURER	LOWER CLASS	JOINT	15	DIFFICULT	NEGLECT	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD	CLONIDINE	3
86	8	F	HINDU	MASTERS	TEACHER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	METHYLPHENIDATE	L kg
87	10	M	HINDU	BACHELORS	SALESMAN	BACHELORS	HOUSEWIFE	UPPPER LOWER CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	CLONIDINE	7
88	11	M	HINDU	MASTERS	ENGINEER	HIGH SCHOOL	HOUSEWIFE	UPPER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	PREMATURE DEL, CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	10
89	14	M	HINDU	UNEDUCATED	FARMER	UNEDUCATED	FARMER	LOWER CLASS	JOINT	20	DIFFICULT	AUTHORITARIAN	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD	METHYLPHENIDATE AND CLONIDINE	nil
90	8	M	HINDU	BACHELORS	SALESMAN	HIGH SCHOOL	TAILOR	UPPER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	ATOMOXETINE	3
91	9	M	HINDU	HIGH SCHOOL	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	JOINT	9	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL	ADHD	METHYLPHENIDATE	8
92	10	F	MUSLIM	BACHELORS	DRIVER	UNEDUCATED	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	5	DIFFICULT	AUTHORITATIVE	SEIZURE DISORDER IN MOTHER	FTND	NIL SIGNICANT	ADHD	NIL	2
93	9	F	MUSLIM	HIGH SCHOOL	DRIVER	HIGH SCHOOL	LABOURER	UPPER LOWER	JOINT	6	DIFFICULT	AUTHORITATIVE	BRAIN CANCER IN LATE FATHER	FTND	NIL SIGNIFICANT	ADHD	NIL	4
94	10	M	CHRISTIAN	MASTERS	TEACHER	MASTERS	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	PPERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	NIL	3
95	6	M	MUSLIM	UNEDUCATED	TAILOR	HIGH SCHOOL	HOUSEWIFE	LOWER CLASS	NUCLEAR	3	DIFFICULT	PERMISSIVE	NIL SIGNIFICANT	FTND	SPEECH DELAY	ADHD	CLONIDINE	nil
96	8	M	HINDU	BACHELORS	CASHIER	HIGH SCHOOL	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	PREMATURE, CESAREAN SECTION	SPEECH DELAY	ADHD	NIL	6
97	5	F	HINDU	HIGH SCHOOL	SHOPKEEPPER	HIGH SCHOOL	HOUSEWIFE	LOWER MIDDLE CLASS	NUCLEAR	4	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD WITH SLD	NIL	9
98	12	M	HINDU	BACHELORS	LAB TECHNICIAN	HIGH SCHOOL	MASSEUSE	LOWER CLASS	NUCLEAR	4	DIFFICULT	UNINVOLVED	NIL SIGNIFICANT	PREMATURE DEL , CESAREAN SECTION	SPEECH DELAY	ADHD WITH SLD	METHYLPHENIDATE	3
99	15	M	hindu	MASTERS	TEACHER	MASTERS	TEACHER	UPPER MIDDLE CLASS	NUCLEAR	3	DIFFICULT	AUTHORITATIVE	NIL SIGNIFICANT	FT, CESAREAN SECTION	SPEECH DELAY	ADHD	METHYLPHENIDATE	4
100	8	M	HINDU	MASTERS	BUSINESSMAN	UNEDUCATED	HOUSEWIFE	UPPER MIDDLE CLASS	NUCLEAR	4	SLOW TO WARM	PERMISSIVE	NIL SIGNIFICANT	FTND	NIL SIGNIFICANT	ADHD	CLONIDINE	5

TACTILE SENSITIVITY	SMELL SENSITIVITY	MOVEMENT SENSITIVITY	SEEKS SENSATION	AUDITOY FILTERING	LOW ENERGY / WEAK	VISUAL/AUDITORY SENSITIVITY	SUB TOTAL (SSP)	SUB TOTAL scores (SSP)	INATTENTIVE TYPE (VADRS)	IMPULSIVE TYPE (VADRS)	COMBINED TYPE (VADRS)	ODD (VADRS)	CONDUCT D/O (VADRS)	ANXIETY OR DEPRESSION (VADRS)	CGAS score range	scores	Physical domain score (WHOQOL-BREF)	Psychological domain score	Social domain score	Environmental domain score
3	1	3	2	3	2	1	3	129	1	1	2	2	2	1	40 - 31	35	78.57142857	95.83333333	100	84.375
3	3	3	1	2	1	1	3	137	1	1	2	2	2	1	40 - 31	35	82.14285714	95.83333333	100	100
3	3	3	3	3	3	3	3	87	1	2	1	1	1	2	60 - 51	55	75	50	50	62.5
2	3	3	3	3	1	1	3	126	1	1	2	2	1	1	90 - 81	85	82.14285714	83.33333333	100	84.375
2	1	3	1	3	1	1	1	183	1	1	2	1	1	2	50 - 41	45	57.14285714	75	66.66666667	65.625
3	1	1	3	3	1	2	3	137	2	1	1	1	1	1	70 - 61	65	78.57142857	58.33333333	83.33333333	78.125
3	3	2	3	3	1	1	3	91	2	1	1	2	2	1	80 - 71	75	42.85714286	29.16666667	16.66666667	31.25
1	3	2	3	2	1	1	2	147	2	1	1	1	1	1	40 - 31	35	75	50	50	53.125
2	3	2	3	3	1	2	3	127	1	2	1	1	1	1	100 - 91	95	85.71428571	79.16666667	100	96.875
3	3	1	3	3	1	2	3	124	1	2	1	1	1	2	70 - 61	65	60.71428571	58.33333333	50	81.25
3	1	1	3	2	1	1	3	141	1	2	1	2	1	1	80 - 71	75	82.14285714	100	100	100
2	2	2	3	3	1	2	3	131	1	1	2	1	1	1	60 - 51	55	64.28571429	62.5	75	71.875
3	3	1	3	3	1	1	3	131	1	1	2	2	1	2	70 - 61	65	64.28571429	54.16666667	83.33333333	71.875
3	2	1	3	3	1	2	3	126	1	1	2	2	1	2	60 - 51	55	71.42857143	79.16666667	83.33333333	84.375
3	1	1	3	3	1	3	3	129	1	2	1	1	1	2	50 - 41	45	67.85714286	62.5	75	71.875
3	1	2	3	3	1	1	3	131	2	1	1	1	1	2	50 - 41	45	67.85714286	66.66666667	75	75
3	1	3	3	2	1	1	3	140	1	1	2	2	2	1	60 - 51	55	42.85714286	29.16666667	58.33333333	56.25
3	3	1	3	2	1	2	3	123	1	1	2	2	2	2	40 - 31	35	50	62.5	41.66666667	43.75
3	3	1	3	2	1	1	3	135	2	1	1	1	1	2	50 - 41	45	60.71428571	66.66666667	66.66666667	59.375
3	3	1	3	3	1	1	3	128	1	2	1	1	1	2	60 - 51	55	64.28571429	66.66666667	50	62.5
3	1	3	2	3	1	1	3	129	1	2	1	1	1	1	70 - 61	65	78.57142857	95.83333333	100	84.375
3	3	3	1	2	1	1	3	137	2	1	1	2	2	1	60 - 51	55	82.14285714	95.83333333	100	100
3	3	3	3	3	3	3	3	87	2	1	1	2	1	2	40 - 31	35	75	50	50	62.5
2	3	3	3	3	1	1	3	126	2	1	1	2	2	1	50 - 41	45	82.14285714	83.33333333	100	84.375
2	1	3	1	3	1	1	1	183	1	2	1	1	1	2	50 - 41	45	57.14285714	75	66.66666667	65.625
3	1	1	3	3	1	3	3	137	1	1	2	2	2	1	40 - 31	35	78.57142857	58.33333333	83.33333333	78.125
3	3	2	3	3	1	3	3	91	1	1	2	2	2	1	40 - 31	35	42.85714286	29.16666667	16.66666667	31.25
1	3	2	3	2	1	1	2	147	1	1	2	2	2	1	40 - 31	35	42.85714286	29.16666667	16.66666667	31.25
2	3	2	3	3	1	2	3	127	1	2	1	1	1	1	60 - 51	55	75	50	50	53.125
3	1	1	3	3	1	2	3	142	1	1	2	2	1	1	90 - 81	85	85.71428571	79.16666667	100	96.875
2	2	2	3	3	3	3	3	107	2	1	1	1	1	2	50 - 41	45	60.71428571	58.33333333	50	81.25
3	3	1	3	3	1	1	3	128	2	1	1	1	1	1	70 - 61	65	82.14285714	100	100	100
3	1	1	3	3	1	2	3	129	2	1	1	2	2	1	80 - 71	75	64.28571429	62.5	75	71.875
3	1	1	3	3	1	1	3	138	2	1	1	1	1	2	40 - 31	35	64.28571429	54.16666667	83.33333333	71.875
3	1	2	3	3	1	2	3	124	1	2	1	1	1	2	100 - 91	95	71.42857143	79.16666667	83.33333333	84.375
3	1	3	3	2	1	3	3	131	1	2	1	1	1	2	70 - 61	65	67.85714286	62.5	75	71.875
3	3	1	3	2	1	1	3	130	1	2	1	2	1	2	80 - 71	75	67.85714286	66.66666667	75	75
3	3	1	3	2	1	1	3	136	2	1	1	1	1	1	60 - 51	55	42.85714286	29.16666667	58.33333333	56.25
3	3	1	3	3	1	2	3	123	1	1	2	2	1	2	70 - 61	65	50	62.5	41.66666667	43.75
3	1	3	2	3	1	1	3	129	1	1	2	2	1	2	60 - 51	55	60.71428571	66.66666667	66.66666667	59.375
3	3	3	1	2	1	1	3	133	1	2	1	1	1	2	50 - 41	45	64.28571429	66.66666667	50	62.5
3	3	3	3	3	3	3	3	94	2	1	1	1	1	1	50 - 41	45	78.57142857	95.83333333	100	84.375
2	3	3	3	3	1	1	3	125	1	1	2	2	2	1	60 - 51	55	82.14285714	95.83333333	100	100
2	1	3	1	3	2	3	3	125	1	1	2	2	2	2	40 - 31	35	75	50	50	62.5
3	1	1	3	3	1	1	2	148	2	1	1	1	1	1	40 - 31	35	82.14285714	83.33333333	100	84.375
3	3	2	3	3	1	1	2	146	1	2	1	1	1	2	60 - 51	55	57.14285714	75	66.66666667	65.625
1	3	2	3	2	1	3	3	136	1	2	1	1	1	1	70 - 61	65	78.57142857	58.33333333	83.33333333	78.125
2	3	2	3	3	1	3	3	115	2	1	1	2	1	1	60 - 51	55	42.85714286	29.16666667	16.66666667	31.25
1	3	2	3	2	1	1	2	147	2	1	1	2	1	1	40 - 31	35	75	50	50	53.125
1	3	2	3	2	1	3	3	136	2	1	1	2	1	1	50 - 41	45	85.71428571	79.16666667	100	96.875
2	3	2	3	3	1	3	3	115	1	2	1	1	1	2	50 - 41	45	60.71428571	58.33333333	50	81.25