What are the differences between adults and children in diagnosing and treating autism?

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Abstract:

This paper elucidates and exemplifies the distinctions in the diagnosis and treatment of autism between children and adults. Given that current autism diagnosis and treatment methods still require enhancement, in order to offer more efficacious assistance to autistic individuals, this thesis contemplates employing diverse strategies and approaches for the diagnosis and treatment of autistic children and adults. For diagnosis, it is recommended that children undergo a combination of contemporary mainstream diagnostic tools (DSM-5 and ICD-11) along with parental or relative questionnaires. In contrast, adults are advised to conduct self-tests prior to diagnosis and subsequently consult an experienced medical professional for a conclusive diagnosis. There are multiple available treatments for children, such as applied behavior therapy, family therapy, and medication, enabling parents to select appropriate treatments for their children. For adults, cognitive behavior therapy and family therapy can prove particularly beneficial.

Keywords: Autism, children, adults, diagnosis, treatment

1. Introduction

In the present day, millions of individuals are affected by autism, yet public awareness regarding this disorder remains insufficient. Autism, formally known as 'autism spectrum disorder' (ASD), is a developmental disorder with symptoms manifesting within the first three years of life (Autism Research Institute, 2024). People with autism typically encounter difficulties in speech, interpersonal relationships, emotions, and social referencing. According to estimates from the Canadian Development Corporation (CDC)'s Autism and Developmental Disabilities Monitoring Network (2020), approximately 2.8 per-cent of children and 2.21 percent of adults have been diagnosed with autism.

Autism is a lifelong condition. Commonly, people describe autism using terms like 'cold-blooded', 'hard to communicate', 'violent', 'smart', etc. It is indeed true that autistic individuals often lack eye contact and struggle with communication. Additionally, some may exhibit exceptional IQ levels or display aggression, as they sometimes struggle to control their temper. However, the symptoms of autistic patients can vary widely, and different patients may present entirely distinct symptoms. Consequently, the diagnosis and treatment of autism can be more intricate

than commonly perceived. The objective of this thesis is to compare the diagnosis and treatment of autism in children and adults and identify more effective treatment modalities. The research methodology employed in this thesis encompasses both secondary and primary research.

2. Literature Review

Autism

The etiology of autism remains unknown, although several genetic and non-genetic risk factors are believed to contribute to its development. Multiple genetic factors have been associated with autism. For some individuals, autism may be linked to a genetic disorder, such as Rett syndrome or fragile X syndrome (Office of Communications, 2017). In other cases, genetic mutations may either trigger or heighten the risk of autism. Non-genetic causes predominantly involve environmental factors, including viral infections, medications or pregnancy complications, air pollutants, and so forth (Mayo, 2018).

Currently, the diagnosis of ASD is based on characteristic features such as repetitive behaviors, impaired social communication, and interaction (Ann, 2021). The primary aim of most biomedical research on autism is to uncover the underlying mechanisms that lead to or even cause pathological behaviors. For the majority, autism is typically conceptualized as a neurodevelopmental, behaviorally defined disorder (Kamp, 2024). However, philosophical and sociological literature suggest that autism can also be regarded as a 'social construct' and that autistic individuals can possess good mental health (Bervoets and Hens 2020). Similar to anyone else, autistic people can experience good mental health. Nevertheless, numerous autistic individuals do face mental health challenges (Youngminds, 2021). Autism is a lifelong neurodevelopmental condition that can influence an individual's perception and social interaction, giving rise to problems in social communication. The disorder also encompasses restricted and repetitive patterns of behavior. Some patients, especially children with autism spectrum disorder, display signs such as reduced eye contact, lack of response to their name, or indifference to caregivers (Mayo, 2018).

Diagnosis

Presently, there are two principal diagnostic tools for autism. The Diagnostic and Statistical Manual of Mental Disorders (DSM) is the handbook utilized by healthcare professionals in the United States and many other parts of the world. In 2013, the American Psychiatric Association (APA) released the fifth edition, DSM-5. It stipulated that an autism diagnosis necessitates persistent deficits in social communication and social interaction across multiple contexts: deficits in social-emotional reciprocity, in nonverbal communicative behaviors used for social interaction, and in developing, maintaining, and understanding relationships, among others. In 2022, the APA published the DSM-5-TR, a text revision of DSM-5, which updated some of the diagnostic criteria to more accurately capture the experiences and symptoms of patients (Huma, 2023). This included a clarification of the autism diagnostic criteria: the phrase "manifested by the following" was revised to "as manifested by all of the following". Nevertheless, this implies that individuals who meet certain conditions in the criteria but whose symptoms do not otherwise fulfill the criteria for autism spectrum disorder should be evaluated for other disorders.

Another diagnostic test is the International Classification of Disorders (ICD), currently in its ICD-11 version. By guiding the user through the ICD-11 text, it is argued that, in contrast to DSM-5, ICD-11 allows for a greater variety of symptom combinations, resulting in an operationalization of ASD that presents a more diverse picture (Kamp, 2024). According to the current International Classification of Diseases 11th Revision (ICD-11) diagnostic requirements, for an individual to receive an autism classification, their behavior should be characterized by three essential features (Clin, 2022): "persistent deficits in the ability to initiate and sustain reciprocal social interaction and social communication"; "a range of restricted, repetitive, and inflexible patterns of behavior, interests or activities that are clearly atypical or excessive for the individual's age and sociocultural context"; and "symptoms should result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning" (World Health Organization, 2019).

Both DSM-5 and ICD-11 can be employed for diagnosing autism in both children and adults and are currently the most commonly used diagnostic tools. While both cover the main features of autism, each emphasizes different aspects.

Treatments

There is currently no means to prevent autism, but there are treatment options available. The type and amount of support required may vary over time. Several therapies are available for treating autism.

(1) Applied Behaviour Therapy (ABA)

Applied behavior therapy (ABA) aims to reinforce desired behaviors and diminish unwanted ones. It is a widely accepted approach for autistic patients (Office of Communications, 2021).

ABA is a method used to manage autism traits through the positive reinforcement of desired behaviors. It has been recognized as an evidence-based best practice treatment by esteemed organizations such as the US Surgeon General and the American Psychological Association. It can assist patients in learning new skills and generalizing these skills to multiple situations through a reward-based motivation system (Mayo, 2018). Multiple studies have demonstrated the effectiveness of ABA therapy in improving outcomes for both children and adults with autism (Yitz, 2024).

According to Autism Speaks (2021), over 20 studies have shown that intensive and long-term ABA therapy based on these principles can lead to significant improvements in intellectual functioning, language development, daily living skills, and social functioning for autistic children. Studies involving adults have also revealed similar benefits (Yitz, 2024). ABA therapy primarily focuses on reinforcing desired behaviors and teaching new skills while reducing interfering behaviors.

(2) Cognitive behavioural therapy (CBT)

Cognitive behavioural therapy (CBT) is a common form of talk therapy in psychotherapy. It is predicated on the notion that patients' thoughts, feelings, physical sensations, and actions are interconnected, and that negative thoughts and feelings can trap autistic individuals in a negative cycle (NHS, 2022). It is a short-term, problem-focused approach, typically lasting only 30 to 60 minutes per week. The goal of CBT is to equip autistic patients with a variety of coping skills to help them manage difficult situations.

CBT comprises two main components: the cognitive component and the behavioral component. The cognitive component helps autistic individuals change their perspective on a situation, while the behavioral component enables them to modify their response to it (NYU, 2024). During CBT treatment, autistic patients work with a mental health counselor or therapist in a structured manner, attending a limited number of sessions. In these sessions, the therapists encourage patients to share their feelings, thoughts, and challenges (NIH, 2022). As a result, CBT helps patients become aware of inaccurate or negative thinking, allowing them to view challenging situations more clearly and respond more effectively (Mayo, 2019).

(3) Family therapy

Since individuals with autism may experience difficulties in communication and daily routines, they often rely on family members, including parents and siblings, well into adulthood (Cochrane, 2017). Therefore, families of autistic patients can endure stress at each stage of their child or family member's life. Their journey commences with challenges in accessing necessary services when they first notice their child's developmental delays and then involves a scramble to obtain accurate diagnoses and treatments (Abigail, 2023). Additionally, in a family with an autistic patient, family members can learn how to engage and interact with their children in ways that promote social interaction skills, manage problem behaviors, and teach daily living skills and communication (Mayo, 2021).

(4) Medications

Ideally, medications serve as a complement to other treatment strategies (Autism Speaks, 2024). For autistic patients, medication can be an option for controlling certain autism traits or co-occurring conditions frequently observed in autistic individuals (Lisa, 2023).

The medications commonly used to treat autistic patients include alpha agonists, stimulants, SSRIs, antidepressants, neuroleptics, and antiepileptics (Joshua, 2022). Alpha agonists may be prescribed if an autistic patient is hyperactive or inattentive. Additionally, they can sometimes alleviate the patient's anxiety or tics; stimulants can also assist autistic individuals in focusing and reducing impulsive behavior, thereby facilitating their social integration; antidepressants and SSRIs can be beneficial in treating depressive symptoms, particularly suicidal ideation or anxiety, in some autistic individuals, while neuroleptics and antiepileptics (AEDs) are typically required to manage patients' irritability (Mayo, 2021).

However, these medications do not work for everyone, and all medications have side effects. Each individual may respond differently to medications. Moreover, a patient's response to a medication can change over time, even without a change in dosage. Over time, some individuals may develop tolerance or sensitization to medications (Autism Speak 2024), or, worse still, certain medications may have adverse effects on specific populations. Therefore, relatives of autistic patients should collaborate closely with healthcare providers to monitor the effects of medications (Lisa, 2023).

Summary and gap

Secondary research was undertaken to gain a comprehensive and in-depth understanding of the current developments in the diagnosis and treatment of autistic children and adults. The research involved an extensive review of existing studies and resources. The review covered both the diagnostic methods and treatment approaches, focusing on their pros and cons and the differences between children and adults. All the results were sourced from Google Scholar, CNKI, and X-mol. Additionally, the evaluation of the literature involved applying the CRAAP criteria (Currency, Relevance, Authority, Accuracy, and Purpose) to ensure the quality and reliability of the sources.

3. Methodology

Primary research

Interviews

Two interviews were designed to gain a more profound understanding of the methods for diagnosing and treating autistic adults and children. The interviews consisted of 6 questions, focusing on the differences and similarities in the diagnosis and treatment of autistic children and adults. One interview was conducted face-to-face to ensure formality and accuracy, while the other was carried out via video call. Given that all the questions were answered by hospital doctors, the results are authoritative. Notes were taken during both interviews to record the information.

Dr. Chen (Chen guoliang) participated in the face-to-face interview. He is a psychiatrist at the 967 Hospital of the Chinese Liberation Army Joint Logistic Support Force, specializing in the diagnosis and treatment of anxiety disorders, depression, sleep disorders, schizophrenia, etc. Dr. Chen graduated from the Second Military Medical Liberation University in 2007 and obtained his doctorate in 2018.

Dr. Mao (Mao xueqin) took part in the video call. She is a psychologist at Qilu Hospital of Shandong University, specializing in the diagnosis and treatment of anxiety disorders, sleeping disorders, personality disorders, and depression. She holds a doctorate in the medical field and established the psychology department at Shandong University, where she continues to work.

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4. Results and Discussion

Diagnosis for children and adults

Based on previous research, there are two main tools for diagnosing autism - DSM-5 and ICD-11. They are the tools most widely used by doctors globally and are applicable to both adults and children. However, after gathering diverse information from various reliable sources, such as those from Mayo (2021), Huma (2023), and Lisa (2024), it is evident that these tools still have limitations, despite being the most advanced for autism diagnosis at present.

Although the same tools are used, children and adults exhibit different traits and behaviors, and different individuals are involved in their diagnosis. Most people believe that it is easier to diagnose children. Many clinical psychologists, developmental pediatricians, and pediatric neurologists are initially trained to administer tests to children (American Psychiatric Association, 2022). According to Dr. Chen, the diagnosis of autism in children may involve observing them in a structured environment and recording their behavior.

However, a diagnosis of adult autism can only be made by a qualified healthcare professional, such as a psychiatrist or psychologist (Lisa, 2023). Many adults have relatively mild autistic traits, typically related to social communication and sensory responses. Dr. Chen also noted that adult autistic patients can conceal their traits effectively. Thus, it is often not until people become more aware of autism that they consider the possibility for themselves. Additionally, Dr. Mao suggests that adults who suspect they have severe autistic traits that are uncontrollable should seek a diagnosis as soon as possible to prevent their traits from adversely affecting their normal lives.

Both DSM-5 and ICD-11 have their limitations. Specifically, DSM-5's diagnostic methods for autism can sometimes be disorganized and oversimplified. It only provides a few simple rules and traits for experts and doctors to look for when making a diagnosis. As a result, there was little central guidance from the DSM-5 work groups and insufficient quality control. Consequently, experts' criteria for diagnosing autism can be overly restrictive. Some doctors may be too strict in seeking all the traits (communication disabilities, social-emotional reciprocity disabilities, relationship-understanding disabilities, repetitive behaviors, disabilities in non-verbal behaviors) listed in DSM-5 for an autism diagnosis. In such cases, only patients with severe autism who display all the traits described in DSM-5 can be diagnosed. In contrast, certain patients with mild autistic traits may not be diagnosed with autism (Verhaltenstherapie, 2013). In this situation, using DSM-5 may increase the risk of misdiagnosis or over-diagnosis (Lisa, 2023). Furthermore, DSM-5 has numerous unrealistic goals. Its goals included diagnosing using symptom severity or other dimensional measures, separating impairment evaluation from diagnosis, incorporating biomarkers into diagnosis, etc. However, these goals were largely abandoned or inconsistently pursued. Many of the goals were ill-conceived, leading to diverse and uncoordinated responses (Jerome, 2016). As a result, the goals of DSM-5 cannot be achieved in the near future.

On the other hand, the clinical utility of ICD-11 is questionable. It remains to be seen how clinicians unfamiliar with autism will respond to its conception, which is shifting further away from an observable, behavioral, and neurodevelopmental disorder to a disorder of inner experience in the sense of "diversity" and "identity" (Kamp, 2024). ICD-11 contains many vague and subjective concepts, leading to non-falsifiable diagnoses - the ICD-11 conceptualization of autism moves further away from an observable, behavioral, and neurodevelopmental disorder (medical model) to a disorder of inner experience in the sense of "identity" (social model) that is difficult to measure objectively (Mol, 2024): ICD-11 diagnoses autism based on three essential traits (performing repetitive behaviors, having narrow interests, hard to communicate) in patients' communication and behavior, but it also defines autism as a large number of possible, but not mandatory features, some of which may not be directly observable. However, ICD-11 does not provide any guidance regarding the number of symptoms necessary for a diagnosis (Mol, 2024). This means that doctors or experts can make a diagnosis based solely on the three common traits of autism provided by ICD-11. In such cases, doctors and experts can make diagnoses based on their personal opinions. Therefore, although it can be helpful or easier to diagnose people with mild autistic traits, it also carries a significant risk of false positive diagnoses, further increasing prevalence rates, limiting access to ASD-specific services, and increasing the non-specificity of treatments. Additionally, for research, the hypothesis is that the specificity of autism will be reduced, and this will further increase the already high heterogeneity, making it difficult to replicate studies. This could limit people's understanding of the etiology and biological pathways of autism. Thus, it would decrease the accuracy of diagnosis. (Kamp, 2024).

Dr. Chen has mentioned that there is always a lack of objective indicators in diagnosing autism, and all the results depend on the doctor's observations. Therefore, the diagnostic methods for children and adults with autism should still be different. Adults have greater self-control ability, making their autistic traits harder to detect. As a result, relying solely on DSM-5 or ICD-11 might lead to either missed diagnoses or misdiagnoses.

Based on this concept, an effective diagnosis for children should involve observing the child in a structured environment, assessing their behavior using DSM-5 or ICD-11, and asking caregivers a series of questions (Lisa, 2023), such as whether their children often repeat certain actions at home. Finally, doctors should consider their observations of the children and the parents' responses to make a diagnosis. This is because children may not be able to express their feelings or ideas clearly to doctors through their behaviors within a short time due to nervousness, boredom, or anger during hospital observations. Such emotions can cause doctors to misunderstand the children's behaviors. Since parents spend the most time with their children, they are more likely to have a better understanding of their children's behaviors compared to short doctor observations. Thus, with the assistance of parents, the diagnosis of children can be more accurate, reducing the risk of misdiagnosis.

Unlike diagnosing children, the diagnosis of adults may not require questions directed at their relatives. Adults generally have a better understanding of themselves than their relatives, as they can conceal their behaviors in social situations. Adults should first search for autism self-assessments online to check if they exhibit autistic traits and then consider whether they need a formal diagnosis in a hospital. Common autism self-tests include the AQ-10, RBQ-2A, and ASBQ. These self-tests for autism typically consist of 10 to 20 questions and screen for common autistic symptoms such as repetitive behaviors, focused interests, or repetitive actions (Lisa, 2024). However, if an adult decides to seek a formal diagnosis in a hospital, medical professionals trained to identify masking behaviors are best suited to assess them. Professionals may administer formal tests such as the ADOS-2, 3Di-Adult, SRS, and ADI-R to adults instead of simply assessing their behaviors using DSM-5 or ICD-11. These formal tests usually contain 60 to 100 questions. The Autism Diagnostic Observation Schedule, 2nd Edition (ADOS-2) identifies autistic traits by observing how adults respond to specific prompts and evaluates both their verbal and non-verbal behaviors. The other three tests focus on diagnosing autism by assessing the patient's abilities in areas such as language and communication. In certain cases, healthcare providers may also consider additional tests, such as IQ tests, depending on the suspected comorbid disorders (Epsychiatry, 2021).

Treatments for children and adults

Apart from diagnosis, there are several approaches to treating autism. In addition to various therapies, treatments may also involve the use of medications to alleviate specific symptoms in autistic patients, such as anxiety, irritability, or depression. There are both similarities and differences between the treatments for autistic children and adults.

Generally, healthcare providers tend to pay more attention to the treatment of autistic children than adults. The symptoms of autistic children are often more prominent, and they usually require a highly structured routine for treatment. However, due to the greater focus on treating

autistic children, a significant number of autistic adults across the entire autism spectrum experience severe social and economic exclusion. Their conditions are frequently overlooked, creating barriers to accessing support. Such situations can lead some autistic adults with comorbid physical or mental disorders to become victims of crime or perpetrators, highlighting the importance of recognizing their needs (NICE, 2021). This dissertation will analyze the differences in treatments between children and adults in terms of applied behavior, cognitive behavior, family, and medication therapies.

(1) Applied Behaviour Therapy (ABA)

ABA therapy is most effective when initiated early in childhood. Its aim is to enhance children's communication skills, social skills, self-care skills, and learning abilities (APEX, 2024). During treatment, therapists develop individualized treatment plans for each child to build on their strengths and address their weaknesses. They break down complex behaviors into smaller steps, guide the child through each step, and reward them for successful completion. This method promotes progress and positive behaviors (Abby, 2024). However, some experts have raised concerns that ABA therapy may involve punishments that could increase stress and anxiety in autistic children (Abby, 2024). In fact, in ABA therapy, punishments do not involve physical or harmful means. Instead, they can help children reduce the frequency of unwanted behaviors. For example, a child may be required to complete a chore before being allowed to play video games. If the child fails to finish the chore, the punishment in ABA could be reducing their video game time (Rainbow, 2024) until the task is completed. Overall, for most children, ABA therapy can be beneficial.

Since adults are already integrated into society, the goals of ABA therapy for autistic adults differ from those for children. The focus is on improving their independent living skills, vocational skills, social skills, and relationship-building skills (Chicago ABA Therapy, 2024). Although ABA therapy may enhance the quality of life for adults, it may not be the most suitable option. ABA therapy typically requires 10 to 40 hours per week (Mayo, 2018), which means adults need to allocate a significant amount of their time. Unlike children who do not have to earn a living, autistic adults often have less free time as they need to balance treatment with work. Therefore, ABA therapy may be too time-consuming for adults. Additionally, the effectiveness of ABA therapy in later stages can be influenced by various factors, including an individual's motivation, cognitive abilities, and support system (AdinaABA,2024). Since adults have established long-term habits, they may be less responsive to the rewards and punishments of ABA therapy. Consequently, ABA therapy

may not be well-received by adults.

(2) Cognitive behavioral therapy (CBT)

For children with autism, CBT can be a valuable therapeutic approach, particularly for addressing specific issues such as anxiety, social skills, and emotional regulation. The goal of CBT is to improve problem-solving abilities and equip autistic children with the skills to handle future challenges (Riley Children's Health, 2024). Through CBT, therapists engage in conversations with autistic children to help them identify unhelpful thought patterns and develop more effective ways of thinking. However, according to Dr. Chen, due to children's limited tolerance, CBT can sometimes lead them to explore painful emotions (Mayo, 2019), causing them to cry or feel emotionally drained. This is because, in certain situations, CBT may require children to face situations they would rather avoid, such as asking a child afraid of flying to board an airplane. This can induce stress in children, and in such cases, CBT therapy may have a negative impact (Mayo, 2019).

For adults, compared to ABA, CBT requires less time for treatment. Patients typically need only 30 to 60 minutes per week for CBT sessions. This makes CBT more convenient and time-efficient for autistic adults. Moreover, while CBT is commonly associated with helping individuals with anxiety, depression, and other mental health concerns, its principles and techniques can also be effectively applied to address the specific challenges faced by autistic adults (Oxford CBT, 2024). CBT involves learning and enhancing one's ability to respond effectively to various life situations, including social interactions, transitions, and highly stressful learning environments. These scenarios often trigger anxiety and stress in autistic adults, leading to difficulties in managing strong emotions such as fear, worry, anger, and depression (Tony, et al, 2022). Thus, CBT therapists communicate with patients, listen to their perspectives, and guide them to view their problems from different angles. As a result, CBT can assist adults in resolving current issues at work or within the family, modifying their thought patterns, and reducing their autistic behaviors.

(3) Family Therapy

There are no significant differences between using family therapy for autistic children and adults. This therapy can be beneficial for both, as all patients require family support. Dr. Mao pointed out that autistic children may struggle to control their symptoms during daily life when not undergoing other treatments with their therapists. At such times, family therapy becomes crucial. For treating autistic children, a family therapy program employs various techniques to help families understand and manage their children's challenging behaviors. Typically, it uses parent-child play to enhance social skills and emotional

regulation. Families and children can also work together to find ways to address key challenges, such as controlling impulsive behaviors like running or spitting (EMIT, 2024). For autistic adults, although they may rely less on their families than children and have better self-control, family therapy focuses on strengthening family bonds. This means the therapist needs to teach family members effective communication and empathetic listening skills when interacting with the autistic patient (Opendoorstherapy, 2024). Additionally, the therapist may educate family members on stress management techniques related to the autistic patient and promote their overall mental well-being (EMIT, 2024). Thus, family therapy can help reduce conflicts between autistic adults and their families.

(4) Medication

Healthcare providers often use medications to target specific behaviors, such as reducing self-injury or aggression in autistic patients (Office of Communications,2021). Therefore, medications are more commonly prescribed for children than adults, as children generally have lower self-control abilities. Dr. Mao noted that adults have greater tolerance, and their autistic traits may not significantly disrupt their daily lives. In such cases, medication treatment may not be necessary for autistic adults, as they can

manage their behaviors. Since many children have more severe autism with more pronounced symptoms, medication treatment can sometimes be crucial.

However, medications can have adverse effects on both children and adults. For example, SSRIs may increase the risk of suicidal thoughts in patients (Raisingchildren, 2024). Thus, medication should not be the primary treatment for autistic patients. Instead, it can be recommended as an adjunct treatment alongside other therapies for autistic children. For adults, medications should only be considered if their symptoms significantly impact their daily lives.

Summary and comparison

(1) Diagnose for children and adults.

Children are better suited to a combination of DSM-5 or ICD-11 criteria and questionnaires for their relatives. In contrast, adults can use self-assessments to preliminarily determine if they have autism. If the self-assessment results suggest a likelihood of autism, adults should seek a formal diagnosis from trained medical professionals.

(2) Treatments for children and adults

l Adults

Figure 1. the comparison between treatments in adults

	Communication and behavior therapy (ABA)	Cognitive Behaviour therapy (CBT)	Family therapy	medication
Acceptability	Low	High	High	moderate
Time required	long	short	/	/
Effectiveness	moderate	High	moderate	Low

Children

Figure 2. the comparison between treatments in children

	Communication and behavior therapy (ABA)	Cognitive Behaviour therapy (CBT)	Family therapy	medication
Acceptability	High	Low	High	moderate
Time required	Long	Short	/	/
Effectiveness	Very High	High	moderate	moderate

Treatments for autistic children may use Applied Behavior Analysis (ABA) as the main therapy, with family therapy and medication as supportive measures. The acceptability of ABA among children is higher than that of Cognitive Behavioral Therapy (CBT). Thus, it can be more effective in treating children without causing them harm. Moreover, children's parents should still cooperate during the treatment process, and in some cases, children may need medication to manage their autistic symptoms.

For adults, given that they have less free time and have

established their own thought patterns over many years, the acceptability of CBT can be relatively high, making it a preferable primary treatment option. Besides, adults require their families to communicate with them effectively and avoid conflicts. Since they generally have better control over their symptoms, adults typically do not need medication.

5. Evaluation and Conclusion

This research has several notable strengths. The utilization of both primary and secondary sources allows this dissertation to formulate more compelling suggestions for the diagnosis and treatment of autism. Interviews can offer valuable information regarding real clinical cases of autism diagnosis and treatment, as well as insights from seasoned experts. With numerous individuals researching autism diagnosis and treatment, a vast array of online articles is accessible. Incorporating articles from diverse authors can enhance the precision of this research. Additionally, this dissertation is comprehensive as it examines both the diagnosis and treatment aspects of autism.

Nevertheless, certain limitations are also evident. Only two doctors were available for interviews since other doctors declined to respond. Consequently, the interview findings are based solely on the personal viewpoints of these two doctors. Furthermore, the research lacks input from actual autistic patients. Hence, the clinical practicality of its recommendations remains to be validated.

In conclusion, the aim of this research is to discern the differences in diagnosing and treating autistic children and adults and to ascertain appropriate strategies for each group. The key findings of this research suggest that for autistic children, a combination of DSM - 5, ICD - 11, and information from questions posed to their relatives may be necessary for diagnosis. In contrast, the diagnosis of adults may rely on self - assessments and evaluations by experienced medical professionals. Potential treatments for children encompass applied behavior analysis, family therapy, and medication. For adults, the most efficacious treatments might involve cognitive behavioral therapy and family therapy. In future autism studies, researchers should persist in exploring effective methods for the diagnosis and treatment of autism, as accurate diagnosis and appropriate treatment are crucial for patients to overcome their disabilities.

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Appendix

Interviews

1. Which method do you use for diagnosing autism? How successful do you think that this method is?

Dr. Chen: Check the patient's brain development- Usually use doctor's consultation and parents' description. However, those ways are all lack of objective indicators. In addition, a scale is used to judge the symptoms of autism.

EX: Intelligence/Attention Scale - Attention and intelligence values may be different in autistic people, comparing to normal people.

Dr. Mao: Common diagnostic standards in the medical community

2. What treatments do you recommend for autistic people?

Are the treatments recommended for adults and children different, and if so in what way?

Dr. Chen: Developmental disorders – normally discovered early in children.

However, some people with slight autistic disorders may not be diagnosed as autistic patients when they were children. There are no medicines for autism, but there are therapies for certain symptoms.

EX: medicines for patients to calm down –if they bite others.

Anti-anxiety medicines – if patients are bad-tempered and easy to get angry.

Adults – being diagnosed late - because in childhood they may just be reluctant to socialize with others.

Children – being diagnosed early – because they can't live normally.

Dr. Mao: There are similarities and differences between the solutions of children and adults.

Similarities: When you encounter symptoms of autism, the first thing to know is whether it has always been the same, or whether it has developed after a certain point in time - to determine whether it is a developmental problem or an acquired environment.

Development - autism - is left to a specialist team of doctors for intervention.

Acquired environment - clinical manifestations - Clear diagnosis of specific disease - advice on treatment based on diagnosis (symptomatic treatment/causal treatment)

Severe - affect life function - take medication.

Differences:

Children and adolescents - with autistic symptoms - cannot be solved by themselves - and parents need to be involved.

--Parents – need to understand their children's Difficulties (Family Psychotherapy) -- Classmates/teachers -- accompanying/ guiding and encourage patients effectively – help strengthen children's open behavior.

Adults-most use cognitive behavioral therapy—understand the patient's feelings and lead them to see their problems in other ways (belonged to individual psychotherapy)

—because these adults may have issues in judging and dealing with difficulties in their lives.

—requires specialists/ the adults' friends, relatives and collogues/online resources can also help them.

3. Are there any differences between the traits of autistic adults and children?

Dr. Chen:No difference in symptoms. The severity may be lower in adults than in children.

Dr. Mao: Adults' self-control ability/tolerance is stronger, and they are more rational—if their autistic traits are mild—their traits may not be found easily—and that

would not influence their lives a lot.

However, if their traits are severe—they may influence adults normal lives (sleeping qualities, moods, eating habits)—in these times, adults may not be able to control the traits by themselves. Children's ages are small—they have developing physiological and psychological characteristics—and these traits can be unique (not active, no communications with others, lack of movements, do not answer questions during class times).

4. Is it more difficult to diagnose autistic adults than children? If yes, why?

Dr. Chen: Not more difficult - but traits in adults are not easy to detect - because they may be mild - so the adults' parents do not consider them as autistic patients/ do not pay attention to the autistic traits in their children.

Dr. Mao: It depends on the doctors' observation and judgment.

5. What benefits can treatments provide for autistic people?

Dr. Chen: If they have been treated quickly—it may re-store their social functioning as much as possible - learning/socializing.

Dr. Mao: It is meaningful for autistic patients—it may eliminate certain symptoms—and make the patients able to live normal lives.

In addition, it can help the autistic patients to perfect their character.

However, if patients do not want treatments from doctors—family and friends' accompniments and help can also help them a lot.

6. For diagnosing autistic people, do you also need their relatives to do the tests too? And is it true that some autistic traits run in families.

Dr. Chen: Yes – have gene sequencing at present – but it is not widely used- because it is probably still in development -thus it's not in the clinic. Also, doctors may ask the patients' family members about whether they have similar symptoms - but mostly, family members of the patients do not have these symptoms.