

***“PARENTS’ AND PROFESSIONALS’
UNDERSTANDING OF SCHOOL READINESS FOR
CHILDREN WITH AUTISM SPECTRUM DISORDER
- A QUALITATIVE ANALYSIS”***

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CERTIFICATE

This is to certify that the research work entitled “*PARENTS’ AND PROFESSIONALS’ UNDERSTANDING OF SCHOOL READINESS FOR CHILDREN WITH AUTISM SPECTRUM DISORDER - A QUALITATIVE ANALYSIS*” carried out by **Reg. No.411513002**, towards partial fulfillment of the requirements of Master of Occupational Therapy (Advanced OT in Pediatrics), at KMCH College of Occupational Therapy (2015-2017), under the Tamil Nadu Dr. M.G.R. Medical University, Chennai.

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ABBREVIATIONS

ASD	-	Autism Spectrum Disorder
UNICEF	-	United Nations International Children's Emergency Fund
RTE	-	Right To Education
DSM	-	Diagnostic Statistical Manual
CWSN	-	Children With Special Needs
TTK	-	Transition To Kindergarten
SSA	-	Sarva Shiksha Abhiyan
MR	-	Mental Retardation
CWA	-	Children with Autism Spectrum Disorder
ADL	-	Activities of Daily Living skills
IQ	-	Intelligence Quotient
KG	-	Kinder Garten
OT	-	Occupational Therapists
B. Ed	-	Bachelor of Education
Spl. Ed	-	Special Education
AFA	-	Action For Autism
CVI	-	Content Validity Index
CBSE	-	Central Board of Secondary Education
ICSE	-	Indian Certificate of Secondary

ABSTRACT

Background

Occupational therapists frequently assist children to make the transition from preschool to school. This involves a ‘significant ecological shift’, with children having to negotiate increased academic and social demands, as well as physical changes in their learning environments. School readiness should be well understood for the successful transition to school & academic performance for all children, including children with special needs and also children with ASD.

Objective

The objective of this study was to identify the perspectives regarding school readiness among professionals and parents of children with ASD.

Methodology

A qualitative research design was adopted for this study. A valid interview guide was prepared and was used to conduct the semi- structured interview with parents of children with Autism Spectrum Disorder (ASD) and professionals including occupational therapists, psychologists, special educators and primary school teachers. The participants (n= 100; 50 parents & 50 professionals) were selected on the basis of purposive sampling and interviewed. The data was analyzed using descriptive statistics as well as thematic analysis of the recorded interview.

Results

The major themes for school readiness that evolved from the present study were social skills, challenging behaviours, educational system, lack of training and knowledge by school teachers, functional communication and family support. 90% of parents reported that the challenging behaviours of the children was a barrier to school readiness. About 87.5% of the occupational therapists viewed the importance of the severity of the condition being a major component in determining the school readiness of children with autism. The physical development (87.5%) and fine motor development (75%) were rated as important for schooling of children with ASD in mainstream.

66.66% of the psychologists in this study view the importance of Government regulations, a crucial factor for sending a child with ASD to mainstream school.

Conclusion

The present study contributed to the existing ASD literature by including multiple perspectives on school readiness of children with ASD. The results fostered the need of stimulating the parents and stakeholders to emphasize the importance of child-centered focus on school readiness.

Key words: Autism Spectrum Disorder, school readiness, parents, professionals

INTRODUCTION

School readiness represents a kindergarten characteristic which ultimately contributes to academic and personal success. To enhance school success with the primary curriculum, children need to begin kindergarten on solid ground with essential precursors for reading, writing, and arithmetic

According to the UNICEF's School Readiness Conceptual Framework;³⁴

School readiness is defined by two characteristic features on three dimensions.

The characteristic features are 'transition' and 'gaining competencies', and the dimensions are children's readiness for school, schools' readiness for children, and families' and communities' readiness for school.

Studies have shown that some children may experience increased stress levels and somatic and psychological symptoms during the transition to school. This time is also stressful for parents as this is often the first time that a large part of their child's day is organized without their input (Pianta & Kraft-Sayre, 2003)³.

In addition, children with autism spectrum disorder, in particular, face unique challenges when transitioning into the school system that are created by the nature of their disorder. The social deficits associated with autism spectrum disorder make it difficult for them to learn from their peers

A major step was taken forward when The Right of Children to free and Compulsory Education Act (RTE)²⁴ which came into effect from April 1, 2010. However, while implementing RTE Act in India, the policy makers left ECCE as an integral component where children below the age of 6 years could also have been benefitted. It is mandatory to provide compulsory & free education for All children between 6- 14 years. All children with disabilities too have the rights. Also all private schools should provide enrolment of 25% of their seats to children with special needs and treat them as like the other children

Based on a study conducted in India (Sujata Missal, 2012)²⁵ on about 100 pre- schoolers of age 3 to 5 years, it was found that even in typically developing children in the Indian community 57% were ready for school, 23% were vulnerable and 20% were at risk and 43% of the study population were not ready for school.

Understanding School Readiness in Children with ASD

The prevalence rate of autism spectrum disorder in India is 1 in 250 (figure may vary as many cases are not diagnosed) and currently 10 million people are suffering in India. This states the importance of schooling for children with autism.

Occupational therapists frequently assist children to make the transition from preschool to school. This involves a 'significant ecological shift', with children having to negotiate increased academic and social demands, as well as physical changes in their learning environments. This transition has been termed a 'critical period' for a child's academic and social development: a limited stage of a child's life in which certain environmental conditions or stimulation coupled with biological potential, will determine adaptation (Entwisle and Alexander, 1998)².

Therefore Occupational Therapist need to adopt therapeutic modalities at the community level in order to work on those domains in which the pre- schoolers have a lag.

School readiness should be well understood for the successful transition to school & academic performance for all children in including children with special needs and also children with ASD.

The previous studies on school readiness included perspectives or consideration from only the beliefs of parents (C.R. Kinlaw et al.,2001)¹, or parents and teachers where other group of professionals (Early intervention service providers) point of view on school readiness had not been discussed.

According to Forest et al.,(2004)⁶, coordination between service providers is especially relevant for children receiving special education given their more complex needs. Communication between all parties involved in a child's transition becomes imperative. It was also suggested by Cathy Mc Bryde et al.,(2004)⁸, that the consultation process between parents, teachers, and occupational therapists needs to commence prior to school entry to ensure the best possible fit between the child and the school environment.

Thus this study aims to include the service providers concerned with school readiness of children with ASD (Early intervention service providers) along with their parents.

RESEARCH QUESTION

What are the factors responsible for “school readiness of children with ASD” as understood / reported by parents and professionals?

AIM AND OBJECTIVE

Aim

- To study parents' and professionals' understanding of school readiness among children with Autism Spectrum Disorder

Objective

- To identify the perspectives regarding school readiness among professionals & parents of children with Autism Spectrum Disorder

RELATED LITERATURE

School readiness

School readiness is not an easy concept to define. The definition of school readiness varies among parents, teachers, schools and communities, which influences a child's ability to transition to school. Kagan, Moore, and Bredekamp (1995)²⁶ report for the National Association for the Education of Young Children (NAEYC) that because children's performance is multidimensional and varied, it may be misleading to define readiness. As well, school readiness is socially constructed as it relates to the information available to parents, relationships between parents and schools, and a child's experiences (Graue, 1992).

School readiness will be defined as skills needed for developmental success, which contributes to a child's ability to adjust to the social, emotional, and academic demands of beginning school.

Bronfenbrenner's (1986)²³ ecological systems theory encompasses the multiple groups of environmental factors such as families, schools, and communities that influence child development. In ecological systems theory, a "child develops within a complex system of relationships affected by various levels of the surrounding environment" (Berk, 2006, p.26). This theory is an organization of the environmental factors and relationships impacting child development. In this the bio ecological model, the individual is seen to be situated within multiple inter-related contexts, viewed as a dynamic nested system of relationships, the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The bioecological theory captures the complexity of the process of the interactions between the individual and their environment, such as in the child's transition to school. distinguished between normative (usual) and non-normative (unexpected) transitions. The child's diagnosis with ASD is considered to be a non-normative event.

The three dimensions of school readiness are:

1. Ready children, focusing on children's learning and development.
2. Ready schools, focusing on the school environment along with practices that foster and support a smooth transition for children into primary school and advance and promote the learning of all children.
3. Ready families, focusing on parental and caregiver attitudes and involvement in their children's early learning and development and transition to school.

Understanding School Readiness in Children with ASD

Readiness in the child, defined by:

- Physical well-being and motor development, including health status, growth, and disability;
- Social and emotional development, including turn-taking, cooperation, empathy, and the ability to express one's own emotions;
- Approaches to learning, including enthusiasm, curiosity, temperament, culture, and values;
- Language development, including listening, speaking, and vocabulary, as well as literacy skills, including print awareness, story sense, and writing and drawing processes; and
- General knowledge and cognition, including sound-letter association, spatial relations, and number concepts

School's readiness for children, ensured by:

- Facilitating smooth transition between home and school, including cultural sensitivity;
- Striving for continuity between early care and education programs and elementary school;
- Using high-quality instruction, appropriate pacing, and understanding that learning occurs in the context of relationships;
- Demonstrating commitment to the success of every child through awareness of the needs of individual
- children, including the effects of poverty and race, and trying to meet special needs within the regular classroom;
- Demonstrating commitment to the success of every teacher;
- Introducing approaches that raise achievement, such as parent involvement and early intervention for children falling behind;
- Altering practices and programs if they do not benefit children;
- Serving children in their communities;
- Taking responsibility for results; and
- Having strong leadership.

Family and community supports contributing to child readiness:

- Mothers should receive excellent prenatal care and children should receive comprehensive health care,
- optimal nutrition, and daily physical activity, so that children arrive at school with healthy minds and bodies;
- All children should have access to high-quality pre- school; and
- As their child's first teacher, every parent should devote time daily to helping their child learn and should have access to education and support to be an effective teacher.

Autism spectrum disorder (DSM V- Diagnostic criteria for autism)³¹

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history

- Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
- Deficits in nonverbal communicative behaviours used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures: to a total lack of facial expressions and nonverbal communication.
- Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behaviour to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

B. Restricted, repetitive patterns of behaviour, interests, or activities, as manifested by at least two of the following, currently or by history

- Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).
- Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behaviour (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day).

Understanding School Readiness in Children with ASD

- Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or preservative interests).
 - Hyper- or hypo reactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).
- C. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life).
- D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.
- E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make co - morbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level

Severity levels for autism spectrum disorder (DSM V)³¹

Severity	Social communication	Restricted, repetitive behaviours
<p>Level 3 Requiring very substantial support</p>	<p>Severe deficits in verbal and non-verbal social communication skills cause severe impairments in functioning, very limited initiation of social interactions and minimal response to social overtures from others</p>	<p>Inflexibility of behaviour, extreme difficulty coping with change, or other restricted/ repetitive behaviours markedly interfere with functioning in all spheres. Great distress/ difficulty changing focus or action</p>
<p>Level 2 Requiring substantial support</p>	<p>Marked deficits in verbal and non-verbal social communication skills, social impairments apparent even with supports in place, limited initiation of social interactions; and reduced or abnormal responses to social overtures from others.</p>	<p>Inflexibility of behaviour, difficulty coping with change, or other restricted/repetitive behaviours appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus or action.</p>
<p>Level 3 Requiring support</p>	<p>Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful responses to social overtures of others. May appear to have decreased interest in social interactions.</p>	<p>Inflexibility of behaviour causes significant interference with functioning in one or more context. Difficulty switching between activities. Problems of organisation and planning hamper independence.</p>

Autism Spectrum Disorder and school performance²⁸

All children with an ASD experience difficulty with social interaction and communication, so they find it hard to learn how to play and get on with others. As they find it hard to 'fit in', often not understanding how other people feel, they can have problems in the classroom and in the playground, and in coping with the unexpected. They may not fully understand gestures, facial expressions or tone of voice. Understanding teachers and other school staff, the reactions of other children and participating in class can be challenging for them as a result. Because of this lack of understanding, children with an ASD can be very vulnerable to bullying.

Children with an autism spectrum disorder (ASD) can find school difficult for a number of reasons, generally related to difficulties with communication, social skills and sensory sensitivity

Some of the main difficulties that children with an ASD can face in the classroom include:

- communicating with teachers, support staff or other pupils
- following instructions
- following classroom rules
- knowing how to behave
- concentrating on a task

Children with an ASD may have difficulty explaining their needs or answering a verbal question.

Because of difficulties with communication, processing language and 'generalising' skills, children with an ASD might have problems understanding and following instructions.

Due to their difficulties with social skills, children with an ASD may find it hard to follow classroom rules or understand how they should behave.

Children with an ASD may find it difficult to attend to a task (for example, they may find the classroom environment distracting and be unable to concentrate). Equally, children may find it hard to quickly switch between tasks.

Some children also find it difficult to concentrate on more than one piece of information at a time. So a situation where they have to listen to what someone is saying, as well as reading non-verbal information such as body language, could be very difficult for them.

People with ASD have:

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- Difficulties with reciprocal social interactions (they may have difficulties interacting with other people following the usual social customs)
- Difficulties developing communication skills
- Stereotyped and repetitive behaviour or interests (an intense interest in limited topics or patterns of behaviour such as lining up objects).

Many people with ASD have different sensory processing patterns (such as finding some noises painful) and this can affect how they access and participate in school and the community. Each person with ASD is a unique individual with their own interests, strengths and personality even though they share the characteristics listed above.

Occupational therapy in school readiness of children with ASD³⁰

Occupational therapists support families and teachers to incorporate appropriate exercises and strategies in daily routines to help develop good school readiness skills. This is to help children to have an easy transition into the school environment. In some situations occupational therapists also support the school to make adaptations in the school environment to allow children equity with their peers.

Occupational therapists are trained to identify if a child has deficits in one or more of the following areas and to help a child develop and improve those skills.

- fine / gross motor skills
- overall body strength/ motor planning/ coordination skills
- prewriting, drawing and writing skills and grasp pattern
- pretend play/ social play and narrative skills
- cognitive skills / visual perceptual skills,
- organizational skills,
- independence in self-care,
- self-regulation /concentration /sensory processing skills
- ability to access and participate in all areas of learning

These are some tasks that are in general required from children when starting kindergarten which occupational therapists can help to develop:

- writing name/ recognizing numbers/ counting/ number value up to 10
- ability to draw people/family
- cutting along lines and cutting out shapes

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- knowledge of concepts e.g. prepositions, shapes, opposites, colors
- independent self-help skills for dressing, eating, managing lunchbox, toileting, personal hygiene
- ability to concentrate and complete tasks independently
- ability to communicate with other children and the teacher
- problem solving skills for tasks and social interactions
- copy and plan motor movements, follow instructions
- manage own emotions including frustration/ anger
- follow instructions in a structured environment and understand rules
- ability to play and interact with cooperatively with other children

The therapist also may conduct a workshop for educators for professional development on sensory processing, conduct handwriting screenings for all kindergarten students, make recommendations associated with classroom management, or provide new teachers with support when developing their classrooms' routines.

The therapist may recommend sensory strategies for a specific child as needed or make recommendations related to organizational strategies to a team that is concerned with a student's ability to complete and turn homework assignments in on time.

Autism Spectrum Disorder (ASD) and schools in India³²

Many children with autism in India attend regular schools. From accounts from such children, the children with autism often face difficulties in regular educational settings because of their very distinct learning needs. These needs may arise from their uneven profiles of skills and deficits, difficulties in processing of information, difficulties in generalization, and their unusual behaviours. All of these have important implications for educational practices.

Teaching methods have to take into account these different learning styles. Children with autism without cognitive impairment have been successfully included into mainstream classrooms but at later may encounter difficulties and have to drop out, often after Grade 4 or Grade 5. Regular schools vary in their willingness to accept children with autism and work with them to meet their needs. Some parents choose not to convey this information to the school, for fear of being asked to leave. Often, it seems that a school is more willing to take a child with global developmental delay who is slower in learning but otherwise 'fits' into the class, but has reservations about a child with autism who displays 'odd' mannerisms and behaviours despite high intellectual ability.

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When an appropriate arrangement can be negotiated, and with the help of a supportive teacher or school staff, the child with autism can have a very positive experience in a mainstream school and gain much both academically and socially. More importantly, the non-autistic children gain as much if not more in terms of developing more sensitive and all rounded personalities with a greater awareness of human diversity.

Thematic analysis in qualitative study (Barren.V& Clarke .V. 2006)¹¹

The thematic analysis in a qualitative study follows six phases

Phases	Description of the process
1. Familiarising self with collected data	Transcribing data, reading and reading the data, noting down initial ideas.
2. Generating Initial Codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
4. Reviewing themes	Checking in themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generate a thematic 'map' of the analysis.
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme and the overall story and the analysis tell; generating clear definitions and names for each theme.
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

REVIEW OF LITERATURE

Epidemiological Studies On School Readiness Among Children With Autism Spectrum Disorder

- 1) Masoud Amiri, PhD et al..(2013), in his study, described the Main characteristics and high inequality and distribution of school readiness and autism among Iranian 6-year-old children before entering school in national health assessment survey. Along with Overall health assessment, primary assessment, school readiness assessment is also included to state current problems with potential reasons and autism's expert evaluation (diagnosed or suspected) and refer to normal/special and other mental illnesses were taken into account by general practitioner. The observed burden of these distributions among young children needs a comprehensive national policy with evidence-based province programs to identify the reason for different inequality among provinces.
- 2) From a study conducted on school readiness assessment in 3 Indian states in 2012, it was found that there were low scores by the children in the School readiness inventory. About 12,000 children drawn from three major Indian states Rajasthan, Andhra Pradesh and Assam. The most sampled children were in the age group 3.5 to 4.5 years at the time of test administration. Across the sample, from the base line data the mean total score was 11.1 out of 40, or 27.8%. The score distribution is positively skewed with a large proportion of children scoring 0 and high proportions scoring in the lower score ranges. By the end line data after a year, the score distribution becomes more even, with fewer children scoring 0 and more children scoring in the higher ranges of the point scale. However, even in the end line there is greater clustering of scores below the mean of the score range (20.5). This suggests that while there was an improvement in performance, for a majority of children school readiness as measured by the School Readiness Inventory remains low
- 3) Ring E. MhicMhathuna et al, 2016, conducted a qualitative study on finding the concepts of school readiness among the parents and educators in Ireland. This study examined the contextual factors related to school readiness. The perspective of parents, pre- primary educators including occupational therapists and early intervention providers. This uses the purposive sampling conducting face to face and telephone interviews. The skills related to the child like cognitive skills, social skills and parent

involvement been discussed. Also this study concern with language, syllabus, schools and other potential barriers like class strength been detailed in relation to children with special needs.

The National And International Policies For School Readiness Programs For Children With Autism Spectrum Disorder

- 4) S.Vidhyanathan, &Dr. K. Devan in 2012, conducted a study to analyse the the inclusion of children with special needs in general schools in Puducherry (UT). For the inclusive education conferences/workshops disabled children have been organized through Early Childhood Care and Education (ECCE) and Non-Governmental organizations and through SSA, 8 resource teachers were appointed and a total of 1900 aids and appliances have been provided to CWSN(Children with Special needs). Under SSA in 2009-10, 2859 CWSN enrolled in the main stream schools and 110 CWSN covered through Home based education in the union territory of Puducherry. It was concluded that Mainstreaming of the disabled is must as countries cannot afford to waste the talents of a vast section of children just because they have some disability On the whole SarvaShikshaAbhiyan (SSA) in Puducherry UT has enhanced the condition of Children with special needs, in particular the disabled children, it has provided barrier free infrastructure, aids and appliances and special teachers to understand the learning needs of disabled children in a diversified classroom.
- 5) Action for Autism [AFA] is the primary organization in South Asia specializing in Autism Spectrum Disorders, established in the year 1991, Smile Foundation has joined hands with Action for Autism for this novel Mission Education project in Delhi, focusing on special children suffering from Autism. The project focuses on reaching out to the vast number of children suffering from Autism across India and building an integrated approach of development for them with prime attention on Diagnosis and Assessments, Early Interventions & Counselling, Education, Family & Parent Skill Building and Life Skills Training.

Why Understanding School Readiness For Children With Autism Spectrum Disorder Is Important?

- 6) Veronica P. Fleury, Julie L. Thompson & Connie Wong in 2015, conducted a study where they reviewed the instructional practices targeting school readiness skills for pre-schoolers with autism spectrum disorder. a disproportionate number of children with ASD are educated in more restrictive environments, perhaps due to the complex needs of children with ASD that result from deficits in social communication and social interaction, and restrictive, repetitive patterns of behaviour. This place them at a distinct disadvantage for naturally developing some facets of school readiness skills. This study used the NPDC database of articles to identify 67 studies that targeted school readiness as an outcome measure. The researchers classified preschoolers by their age at the time of study. After screening the participants section of each article, it was found 26 studies that included at least 1 child with ASD who was preschool age (between the ages of 3 years 0 months and 5 years 11 months). The reviewers selected outcome categories that best described child outcomes in each study from 12 outcome categories including social, communication, challenging/interfering behaviors, joint attention, play, cognitive, school readiness skills, pre-academic/academic, motor, adaptive/self-help, vocational, and mental health
- 7) In a study of Cassandra McCumber(2011), he aimed to identify the current use and perceived importance of best kindergarten transition practices for students with ASD, identify barriers of implementing kindergarten transition practices for students with ASD, identify predictors of use of transition practices for kindergarteners with ASD and identify differences on the reported use of transition practices between professional groups and educational settings. It was found that current use of best transition practices far from optimal despite the high degree of perceived importance. Predictors of the use of transition practices differed somewhat across professional subgroups and settings although regression analyses were limited by low statistical power. But No significant differences in the reported use of best transition practices were found across professional subgroups and settings.
- 8) In a study, the authors Elizabeth M. Starr, Tanya S. Martini and Ben C. H. Kuo in 2014, focused the importance of a successful kindergarten transition (TTK) for future school success in culturally/ethnically diverse families having children with autism spectrum disorders (ASD). They conducted six focus groups (three with ethnically diverse

parents, one with kindergarten teachers, and one each with early childhood resource teachers and early intervention providers) were conducted to elicit the experiences of these stakeholders regarding TTK for children with ASD generally, and the TTK experience for ethnically diverse families specifically. Four major themes relating to TTK emerged from the focus groups: Relationship Building, Communication, Knowledge, and Support. While these themes were relevant for all groups, parents who were relatively recent immigrants and for whom English was not a first language identified unique difficulties. Recommendations to improve the experience for ethnically diverse families are explored

Perspectives About School Readiness Among Children With ASD

- 9) A study is conducted by Wendi Beamish, Fiona Bryer, Helen Klieve, (2014) from Griffith University in Australia to identify, through social validation, important practices from the perspective of teachers sending these young autistic children from intervention programs to Preparatory (Prep) classes in government schools throughout the state of Queensland, Australia. The previous researches were reviewed, analysed and edited for about major 36 transition practices under 6 categories. A protocol was developed in regarding the transition of children to schooling which followed by the pilot survey among the teachers (n= 123) where 71 teachers completed the survey in concerning on the 6 categories which being the importance. This research on specialist teachers' professional practice extends earlier work on strategies that enable children to make a successful transition and other work on teacher and parent perceptions about transition.
- 10) Nicole Quintero, Laura Lee McIntyre, (2011) conducted a study investigating the teacher concerns regarding the transition to kindergarten as well as teacher and parent-reported transition preparation practices and involvement for a sample of children with autism spectrum disorders (n = 19) and children with other developmental disabilities (n = 76). Teachers reported significantly more concerns for children in the ASD group than for children in the DD group, although there was no difference in total involvement in transition practices between groups. Interestingly, both groups indicated that they wished to work more with kindergarten and elementary school staff during transition, suggesting the need for cross system partnership and collaboration
- 11) Janette Pelletier and Carl Corter, conducted a longitudinal study capitalized on and contributed to a pilot initiative in one school board by examining the effects of an

innovative classroom-based preschool program for 4-year-olds and their families on school readiness. The participants were parents, teachers, grandparents or caregivers of the children. Results on implementation showed that parents' goals differed according to whether families spoke English as a first or second language and that, teachers' goals evolved overtime to emphasize partnership rather than direct instruction. Results also suggested that directly assessed outcomes were tied to the quality of interactions among teachers, parents, and children, as well as to other aspects of program quality that varied across sites

Assessment Of School Readiness In Typically Developing Children And In Children With Autism Spectrum Disorder

12) In a study by Linda S. Pagani and Sylvie Messier, concurrent links between motor skills and other indicators of school readiness is examined in typically developing children attending regular kindergarten classrooms in disadvantaged environments. Participants include a sample of 522 children from the Montreal Longitudinal Preschool Study with individual assessments of receptive vocabulary and number knowledge and teacher ratings of gross, fine, and perceptual-motor skills and classroom behaviors. It was concluded that generally, kindergarten entry motor skills are independently related with a number of important psychosocial characteristics. Both are expected to have an impact on later learning . Self-regulation of effortful control (measured by attention in this study), regulated by executive functions, overlaps with learning fine motor skills, and together provide the prerequisites for later learning. Because impaired gross motor skills are often accompanied by emotional distress, it likely affects one's overall learning

13) Christian M. Connell, Ronald J. Prinz in their study examined the roles of childcare involvement and parent-child interaction quality on the development of school readiness and social skills among a low income minority sample of kindergarten children. Findings provide mixed evidence on the role of childcare exposure, with early entry into childcare predicting higher levels of social skills ratings and increased time per week in such settings predicting lower levels of social skills development. Parent-child interactions characterized as structured and responsive to the child's needs and emotions were positively related to school readiness, social skills, and receptive communication skills development after accounting for demographic characteristics

and childcare exposure. Implications for preventive intervention program development and the role of school psychologists in the areas intervention are also discussed

Occupational Therapists' Role In School Readiness For Children With Autism Spectrum Disorder

14) In a study by Cathy McBryde, Jenny Ziviani, Monica Cuskelly (2004), they investigated the factors that influence decision making of parents and teachers regarding school readiness. The home environments and developmental status of 215 preschool children were assessed. Parents and teachers completed questionnaires about each child's behavior, temperament and readiness for school. Results showed that chronological age and the presence of adaptability, well developed social skills and the ability to persist with an activity until completed influenced parents' as well as teachers' perception of school readiness. The results indicated that factors other than a child's developmental status influenced decision making, challenging Occupational Therapist to adopt a broader focus when consulting with parents and teachers about school readiness

15) The authors Bazyk S, Michaud P, Goodman G, Papp P, Hawkins E. Welch MA.(2009) Conducted a study which described the integration of Occupational therapy services in an emergent literacy kindergarten curriculum. A one-group pretest- posttest descriptive design was used to measure occupational therapy and emergent literacy outcomes in a convenience sample of 37 kindergarten-age children with and without disabilities and Most occupational therapy services focused on planning and teacher consultation versus direct intervention The results showed that Children without disabilities made statistically significant changes in all areas. Children with disabilities made significant changes in two of the fine motor and three of the emergent literacy assessments. This demonstrated how integrated Occupational Therapy can concurrently address the Occupational performance needs of children with disabilities and those at risk for delay in early schooling.

16) The study conducted by Susan Clift, Karen Stagnitti and Lesley DeMello(2000), aimed to compare the accuracy of the ToPP as a screening test of kinder or school readiness,

Understanding School Readiness in Children with ASD

with a traditional test, the First STEP. The participants for this study were drawn from a population of 3 to 5 year old children enrolled in 3 kindergartens in a regional city in Victoria. As predicted, the ToPP compared favourably with the FirstSTEP (cognitive or language variable), performing slightly better than the traditional screening test

CONCEPTUAL FRAMEWORK

For the purpose of the study, the relevant theory for exploration of parents' and professionals' experiences of their children relating to school readiness was considered to be the bio-ecological theory developed by Bronfenbrenner (Bronfenbrenner & Moris, 2006)⁶. In the bioecological model, the individual is seen to be situated within multiple inter-related contexts, viewed as a dynamic systems of relationships, the microsystem, mesosystem, exosystem, macrosystem and chronosystem (Bronfenbrenner, 1986). The bioecological theory captures the complexity of the process of the interactions between the individual and their environment, such as in the child's readiness to school.

Based on this concept the process of interactions between the child and their environment has been explained as, Individual characteristics –characteristics of children with autism (behavior, social responsiveness, temperament, skills). Ecological context – include the school and the educational system, attitude of parent and family members, values and beliefs from professionals including occupational therapist, special educators, psychologist, teachers knowledge on children with ASD. The direct and indirect influences on the children with autism spectrum disorder in school readiness is being explored in this study. Bronfenbrenner (1986) distinguished between normative (usual) and non-normative (unexpected) transitions. The child's diagnosis with ASD is considered to be a non-normative event which makes their parent face the number of challenges including understanding and accepting their child's diagnosis, dealing with emotion and life changes that a diagnosis brings in them and in their family, searching for the appropriate support services and intervening from occupational therapist, special educators and psychologist and choosing optimal educational placement in mainstream schools for their child (Michaela Connolly and Irvine Gersch, 2016)⁴.

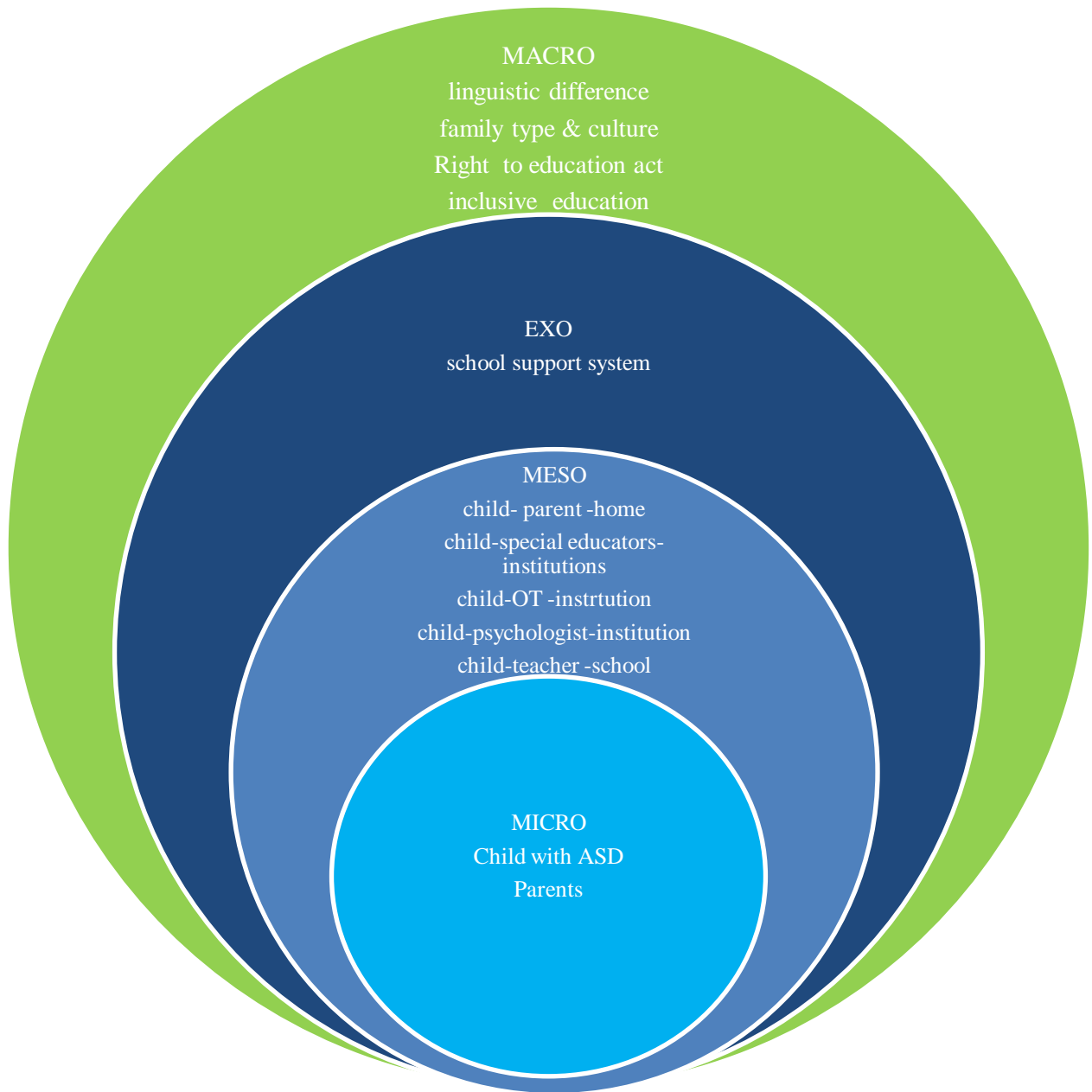
Models which were developed to conceptualise the readiness to school of children with special needs place emphasis on the role of the family as a unit rather than on the individual parental role in the process.

The bioecological model was used to position the parents and the child with ASD at the centre of the family microsystem to highlight their position.

Phenomenological framework was used for the study. Phenomenology has its roots in the philosophical inquiry into the nature of the individual's understanding of reality;

specifically their perceptions of phenomena (experiences, objects, events). Phenomenological approaches focus on the individual's meaning- making and interpretation of events in their own lives(Mertens, 2009)⁶.

DYNAMIC SYSTEMS IN BONFENBENNER MODEL



Micro- level

The child's characteristics and Parents expectations from children with autism spectrum disorder towards schooling

Meso- level

Professionals values & belief in regard to school readiness factors in children with autism. Children with inter relationship micro- system at different environmental context. Children with ASD- parent- community. Children with ASD- teacher-school administration. Children with ASD –school- community/neighbourhood/family

Exo-level

Children with ASD are indirectly influenced by the inter- relationship of other two micro level personnel like interaction with parent and teacher affecting child at home/school. Children with ASD is directly influenced by school systems and curriculum. There is different schools like Govt & private schools, medium of instructions, curriculum like CBSE (Central Board of Secondary Education), ICSE (Indian Certificate of Secondary Education), Samacheer (Tamil Nadu state board curriculum)

Macro- level

The characteristic of given culture, Govt. policies which include varied family culture as barrier, linguistic difference, right to education and inclusive education.

METHODOLOGY

- **Research design**

A Qualitative research design was adopted for the study

- **Setting of the study**

In natural setting of the sample population

- **Population of the study**

The Population of the study includes two categories of participants.

- Category 1 – Parents of child with autism spectrum disorder and
- Category 2 – Professionals who are concerned with school readiness aspect of Children With Autism Spectrum Disorder (CWASD). They include Occupational therapists, psychologists, special educators, KG teachers.

- **Sample size**

There were 100 participants for the study. Equal sample size in both categories (50 from each category as per suggestion of World Health Organisation) were taken for the study.

- **Sampling technique**

A Purposive sampling was adopted for the study.

Criteria of selection

Inclusion criteria

- Parents of children with ASD of age 3 years and above (primary school education)
- Parents with knowledge of spoken English or Tamil language
- Professionals with minimum 8 years of experience in the respective field of practice (Professionals – Occupational therapists, Special educators, Psychologists & KG teachers)

Exclusion criteria

- Persons with Visual, hearing, speech impairment
- Exclusion of persons with physical & psychological problems

Instrumentation

The interview was conducted using a semi – structured interview guide (see Appendix A) which took 20 – 35 minutes to complete. It was developed to investigate the parents' and professionals' understanding about school readiness of Children with ASD. The participants were first asked to provide the demographic information about self in relation to field of work with years of experience and training with children with ASD & child's age.

PROCEDURE

First ethical approval was obtained from the KMCH Ethics Committee. Then the guidelines for interview was developed. Written consent was obtained from the parents and professionals to conduct and audio record the interview.

Steps in developing the interview guide

Immense literature review was carried out for understanding the terms School Readiness, Autism, School readiness in Autism, School Readiness Scales & Questionnaire used in typical developing children, in developmental disabilities and in children with autism, Occupational therapy in school readiness of children with Autism. The literature review included studies like UNICEF'S Conceptual framework On school readiness³⁴, the information on the related literature, studies in India relating to school readiness – in Review of Literature, Scales And Questionnaire like the Early Development Instrument (EDI)³⁶- Handbook, Santa Barbara School Readiness Scale, Kindergarten Readiness Checklist³⁵, collection of questionnaires used in Parents and teachers surveys on School readiness

Studies on School readiness in India, Inclusive education and school readiness in children with disabilities in relation to India was reviewed to know the System of education and how does it can influence schooling for children with ASD.

Based on the understanding from the literature review, questions were developed randomly as a form of interview guide in relation to Children with ASD, Schools And Family.

Understanding School Readiness in Children with ASD

The first interview guide consisted of about 12 questions in general category, 1 question specifically related to special educators & teachers, 1 question specific to occupational therapists & psychologists and 7 questions related to parents.

The interview guide was sent for content validation to experts in the field of child health. The experts included Occupational therapists specialised in Paediatrics (n=3), Clinical Psychologist (n=1) and Special Educators (n=2) working with children with developmental disabilities.

The content validity of the overall scale- interview guide (S- CVI) was measured by S-CVI/ Ave method by calculating average of the item level content validity index (I – CVIs) for all the items in the scale . it was found to be 0.86

As per the suggestions given by the experts, minor amendments were made in the questionnaire.

The final interview guide consisted of 9 questions in general and specific questions, 1 question for teachers & special educators, 1 question for occupational therapists & psychologists and 5 questions to parents

The questions in interview guide were in English language version but whenever required, they were translated into mother tongue of the persons' being interviewed.

Conducting Interview

The participants were randomly selected N= 100 from the available population on both categories(N= 50 participants on each category). The participants included in the interview were father(n=4), mother(n=42) and grandparents(n=4) of children with autism, occupational therapists(n=14), psychologists(n=12), special educators(n=12) and KG teachers(n=12)

Then the semi – structured interview was carried out in the participants' natural setting

The interview was conducted in the convenient language (Tamil language) of the participants, when required. The interview took approximately 20 – 35 minutes per participant. For the documentation purpose the interview was audio recorded. The audio recording was saved as data which was to be analysed.

Analysing the data

After the interview the field notes were developed and the audio was transcribed in English, it being a Common language. The entire transcribed data was edited to the codes, sub- codes to bring out themes and sub- themes. The interesting facts which were novel and important regarding the objective of the study were analysed qualitatively and being stated.

When the themes and sub- themes emerged, the data was again edited, decoded and then a schematic table was prepared to show the perspectives on school readiness of children with autism by each category of participants

The schematic table was prepared on the perspectives of both categories of participants by using the **tally mark** method in emergence of components in themes for quantitative analysis.

DATA ANALYSIS & RESULTS

Interview guide Validity

The content validity was examined to indicate how precise the tool was to measure understanding of school readiness of children with ASD. The content validity index was calculated for the questionnaire (Interview guide) as per norms by Polit and Beck (2006)²². The content validity of the overall scale (S- CVI) was measured by knowing the relevance ratings given by the experts considered relevant of 3 or 4 by the experts. S- CVI/ Ave method is used to calculate the S- CVI by measuring the average of the item level content validity index (I – CVIs) for all the items in the scale. The individual item level content validity was measured and the item which acquired, < 0.79 was eliminated. Based on this the item no. 1 and 5 in general category and item no. 2 & 5 were eliminated in questions given to parents. As per the suggestion of experts the item 5 was eliminated and added towards the item no. 3 in general category.

Finally a 16 item interview guide was prepared and the scale was found to have content validity of about 0.86 means 86% relevant items appropriate to the need of the study (acceptable for six experts- Sauls, 2004)²²

Descriptive Statistics

The raw data was entered into the SPSS for analysis. The mean and SD were obtained for continuous variables and percentages were obtained for nominal variables.

Sample characteristics- descriptive statistics was obtained for the sample (n= 50; n= 50) and are presented in the Table 1a and Table 1b.

Parents (n=50) of children with ASD were interviewed. Majority among them were females (n=45) and only few male participants (n=5). The parents whose children with mean age of 4.71 ± 1.36 age going to nursery and primary school were participated. The children with ASD were going pre- schools (n=25) and primary school (n=25). All parents gave the interview in Tamil language and the vast majority of the participants' mother tongue was Tamil (n=38) and few from other cultural background Telugu (n= 2), Malayalam (n=7), Baduga (n=1), Chaurashtra (n=2). (Table. 1a)

Table. 1a . Demographic statistics of Parents in the Interview

Demographic Characteristics	Variables N= 50	Mean (average of variables)	Standard Deviation (sample standard deviation, s)
Age of the child	Years (n=50)	4.71 years	± 1.36

Demographic characteristics	Variables	Percentages (%)
Gender of the child	Boys (n= 37)	74%
	Girls (n= 13)	26%
Type of school	General private (n= 42)	84%
	Government (n= 5)	10%
	Special (n= 3)	6%
Section of the child	Pre- primary (n= 25)	50%
	Primary (n= 25)	50%
Gender of the participants	Male (n= 5)	10%
	Female (n= 45)	90%
Mother tongue	Tamil (n= 38)	76%
	Malayalam (n= 7)	14%
	Telugu (n= 2)	4%
	Chaurashtra (n= 2)	4%
	Baduga (n= 1)	2%

The professionals working in four disciplines in the field of child health were interviewed. The occupational therapists (n= 14) , psychologists (n= 12) , special educators (n= 12) and school teachers (n= 12) . The majority of the participants were females (n= 39) with only a few male participants (n=11) who worked mostly in the urban settings. Their years of experience of working with children range from 8 years to 22 years, with occupational therapists having a mean 11.35 ± 3.58 of years of experience, Psychologist 12.5 ± 4.79 years, Special educators 10.58 ± 2.39 years and teachers 9.33 ± 1.43 years.(Table . 1b)

Table. 1b . Demographic statistics of Professionals in the Interview

Demographic Characteristics	Gender N= 50		Mean (Years of experience)	Standard Deviation
	Male	Female		
Professionals	11	39	10.96	± 3.41
Occupational therapists	N= 14		11.35	± 3.58
Psychologists	N= 12		12.5	± 4.79
Special educators	N=12		10.58	± 2.39
Teachers	N= 12		9.33	± 1.43

Thematic Analysis

Audio recordings of the interviews were transcribed in the common language –English. In case of Tamil speaking respondent, the researcher self native speaker translated the data after transcription and translation, the thematic analyses of qualitative data were conducted as recommended by Barun.V and Clarke.V (2006)¹¹. The data was examined at three different levels including open, axial and selective coding.

Parents' Understanding Of School Readiness For Children With Autism Spectrum Disorder

From the thematic analysis of transcribed data, five major themes were emerged and labelled as *challenging behaviours at school, safety concerns & support, school system, social skills & language and acceptance by mainstream schools* respectively and are summarised in Table 2a

Concerns about the need and barriers that either, did impact, or had the potential to impact on school readiness for children with Autism Spectrum Disorder (ASD). For example, the parents gave importance on current educational system which the expectations and demands in start of mainstream schools may not suit due to indeed presence of problem behaviours of their child at schools.

Challenging Behaviours at School

All the parents spoke about the importance of problem behaviours, compliance, adjusting and adaptability to classroom and school environment, and inattention in the class.

A student with ASD will often display challenging behaviours in the classroom, therefore the parents felt that teacher should know how to handle children, so that they could benefit from classroom instructions and positive school outcomes as well as peer interaction enhancing academic and social skills. Teachers should be able to get the attention of the child for participation in classroom routines. They feel children need to improve their listening and understanding skills, but expectations for the children are lowered and children get away with regression of skills and behaviours in classroom.

One of the mother stated

Understanding School Readiness in Children with ASD

“...If we need to put him at school , when I call his name , he should look at me understand and come near. It is most important at school that when a teacher asks my child to repeat something , he should repeat or write if asked to write. He should understand and adopt to the school environment...”.

Some other parents expresses that their children by nature have difficulty in adjusting and adapting self to the crowd especially in class room, engaging in a task like copying from board or colouring is difficult.

One of the mother stated that..

“.....She is distracted very much in the class. ‘She doesn’t sit at a place, suddenly moves out of her place, or runs around’ as said by her teacher. Even with me she does the same. But she can sit for more than 15 minutes and listen to rhymes or songs without distractions...”

The parents expect that the school teachers should be able to bring out the end product of task by giving extra time and breaks between tasks to complete it.

Safety Concerns And Support

The second theme that emerged was **safety concerns and support**

The sub- themes being self-regulation, aggressive behaviours communication between home and school and family involvement

The second major theme that emerged relates to child’s safety and support needed. Parents perceived their children have low regulation relating to their self-care needs like indication for toilet, hunger and thirst. Their awareness about health and hygiene is poor. With their underlying communication difficulties, the parents expect the teacher to pay more attention to these areas, either by allowing parents as shadow teacher or appointing a peer tutor as a friend for their child.

One mother said...

“....She is 5 years old. I still use diapers at school, though she indicates for toileting sometimes at home. I was advised by the doctor not to use them. But I still use it for my child, because I am not with her at school and I am not sure about the cleanliness of the toilets at school...”

She also added...

“...I pick her up during lunch time, feed her and then take her back to school. For her it is 45 minutes lunch break, so I asked the principal for 1 hour and take her home... she is slow in eating and another person should feed her... food is important for health right...”

They also stressed the importance of safety during their aggressive behaviours and the children were unaware of possible dangers because of their own behaviours. Parents expect that at the school environment and during travelling in school van, one specific person needs to give additional care such that their behaviours don't hurt self or other children. The importance of communication between home and school is also highlighted as a proactive measure relating to abuse or kidnapping by strangers. The teacher should be aware of the most primary family members of the child and strategies can be exchanged in preventing deliberate consequences.

One mother said,

“...As she is a girl, I fear much. She doesn't know how strange the world is. Not aware of good or bad people and good or bad touch. Even it is a danger to normal kids. She needs care from me always, as she couldn't even call for help...”

With regard to safety of these children, parents reported that one person should be always with the child to avoid the misleading of these children. They expect their family members to support them by sharing the other roles of the primary care takers in their surroundings.

School system

The third theme concerns the parental knowledge regarding the school system, curriculum and teacher's knowledge about autism and teaching children with ASD. Parents feel that the mainstream schools should be ready to accept the children with specific needs with whatever the abilities they have. A general perception which prevailed among many parents is like a school with limited children with simplified syllabus will be appropriate for their child. Since the present educational system have high expectations and high fees system, parents express that their children could do better with syllabuses like *Samacheer Kalvi* (Tamil Nadu State board curriculum).

Understanding School Readiness in Children with ASD

They also feel that the school teachers need to go through specialised training on how to handle children with ASD in a classroom set up especially in areas of training the child to sit without getting distracted.

One mother stated as,

“.....Our child can't learn many concepts within 3 months. They will not be able to finish 5 or 10 book in a given time. It will be mental torture for them. I prefer Samacheer syllabus as it is activity oriented, easy and simple. If she does better in secondary school then i can think of putting her into a mainstream curriculum.....”

Parents expect schools to be equipped with all resources and professionals including occupational therapists along with special educators and speech therapists together at a place. They added on that, that they can ensure the team work within school system for improving the performance of their child and can reduce their travelling to different places to access the specialised services.

One of the parent stated,

“...some schools in Chennai, I have heard run integrated schools. The school itself have OT, speech therapist and special educators. Such schools should come around in Coimbatore. I am taking him for OT to one place, special education at another and speech therapy at an even farther place. So it is better to have all under one roof...”

Social skills & language

Language is closely related to building relationship with peers, communicating child's needs to the teachers emerged as a dominant theme. All parents talked extensively about inability of the child to interact with peer and express his/her felt need.

One of the parents stated that,

“...toilet indication and intimation in any gestures or any non-verbal communication is more than enough for my client in school...”

Many of the parents with limited English skills are from different cultural backgrounds especially Telugu and Malayalam speaking parents were particularly concerned about the medium of instruction being used by the school for their children. Parents emphasised the use

of English or the environmental language being used by the other children would benefit their child.

Parents were also concerned about the disconnect between the children and their peers as well as the teachers. They felt that their children needed to participate in group activities, extra-curricular activities, during prayer time and also during play.

One of the parents stated as,

“...I am a Malayalee and my husband is a Tamilian, now we reside in Tamil Nadu. Till 1.5 years I was in Kerala in my mother’s home. There everyone speaks in Malayalam at all times. Then I came and settled here. I speak Malayalam and my husband speaks Tamil to him. My child is very much confused and he finds difficulty in understanding. Also in school and other environments her in Tamil Nadu everyone speaks in Tamil, so he doesn’t understand and thus doesn’t mingle with them...”

Acceptance By Mainstream Schools:

Another important theme the parents talked about the **acceptance by mainstream schools**. They explain the negative attitude, lack of initiative and lack of understanding ASD by the school authorities.

Many parents had actually changed the school within a year because of the unhappiness with teachers and the attitude of the management towards the child. They were also not willing to make the child participate in the classroom along with other children. Safe guarding in all school activities. They brought out their dissatisfaction with the schools in regard to nil recognition and nil effects on their child.

They perceive that only with extra support services of therapy, special education training outside the school, the child is able to survive in mainstream.

The majority of parents encountered various negative interactions with schools during enquiry for placement of their child in mainstream schools.

Many said worried stories on suspension of their child and impatience of school stating irrelevant reasoning for the same.

A parent stated :

“.....I felt really really bad, when I went for admission for him. When the principal of the school asked his name, he didn't answer and looked away. But he was well trained in answering basic questions like his name, names of our family members, even in basic concepts like colour, shapes and orally says A to Z, also rhymes. But because of the unfamiliar environment, he was distracted and also had fear in communicating to unknown persons. Immediately they said...he should go to a special school. Why did you bring him here...he has not even said one word and they didn't have patience too.....”

They felt that most of mainstream schools displayed a lack of understanding of ASD where they viewed their child as MR they have not taken any step to devise modifications to curriculum and support services meaningfully for the child.

Occupational Therapists' Understanding Of School Readiness For Children With Autism Spectrum Disorder

The understanding on school readiness by occupational therapy professionals varies with that of parents & other professionals, the emerged themes were ***severity of the condition, parental attitude & family, development and well being, social competence, educational system*** (Table – 3a)

Severity of the condition:

The occupational therapists understand that for a child to start the mainstream, the characteristics of the particular child determines the readiness. They were of general view, with early detection and early intervention, the child with moderate to severe autism could enter a primary school level.

One OT said:

“.....It is difficult to say for me in general when a child with autism can go to a mainstream school .because I have seen different types of autistic children. One in hypoactive other can be hyperactive. Some may fall under mild other may be at severe level.... See it depends on the severity of symptoms and the child's acquisition of skills...”

Most of the occupational therapists were of the view that before going to a mainstream school, the child should be sent to a play school at least for few hours to develop social behaviours.

They believe social behaviours could be enhanced by child's observation of similar age children, peer interaction and group mingling.

An OT added:

“..... I suggest schooling for the child mainly to normal KG sections at least for 2-3 hours per day. Usually I integrate autistic children not for education but a component called “social factor.....”

Many view sending a child to school even at early years for peer interaction , along with intensive and regular therapy and remedial education could help the child for school readiness.

They believe that sensory problems remained as one of the most crucial factor and that sensory behaviours are not completely resolved rather it will be redirected or modulated in other ways.

One of the OT stated::

“.....Rather than focusing on treating sensory symptoms like flapping, jumping the child can be directly modulated in end product of task. In spite of having sensory issues, if a child can handle his own behaviours without disturbing others, then I feel child is ready for any social situation.....”

Parental attitude & family

The second major theme evolved is based on attitude of the parent and family.

The OT's view that parents are overwhelmed by the unrealistic expectations of their child. It depicts their poor knowledge and understanding of ASD as a disorder which is lifelong, hinders their acceptance of child's possibilities.

One OT said:

“.....parents have more expectations from their child. The first concern for them is like when he will be able to perform like normal children. Though I say daily, they frequently keep asking me. It is difficult for me to make them to understand their child's ability.....”

Occupational therapists mentioned the lack of environmental opportunities, involvement of the child in social situations and a play environment due to social stigma prevails in the parents.

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An OT shared an experience with parents,

“....many parents what they say is, ‘my aunt doesn’t know that we are coming for therapy. Also, if child goes outside for play, neighborhood will come to know his problem. Hence I am not letting the children to go outside’. They want to hide the problem. It is the social stigma more than the need of the child.....”

They also suggested with regard to the involvement and co- operation of the family as a whole for the better improvement including the school performance. It is necessary all the family members including grandparents should understand the child’s condition

An OT said

“....Firm kindness attitude should be there among family members. There should be a primary care taker in the family and others must support these children in engaging with tasks. Mingling with the child’s own family members is also very important..t”.

Development & Well Being

OT’s view in head start with proper academics, the physical development, fine motor skills, cognitive and communicative skills for school readiness.

The developmental milestones in respect to physical well being like walking or stair climbing is considered a primary development for manipulation within physical structure or barrier within the environment. The fine motor abilities, hand function and writing must be intervened early to prevent delay in acquiring skills.

An occupational therapist stated :

“.....Writing is the frequent complaint I get from parents who send their children to regular schools. Like slow in writing, difficulty from copying from board. So, we should look into fine motor skills also.....”

The cognitive abilities with basic letter and number identification, matching colors and pictures, puzzles being the foremost part of concern for Occupational Therapists. They feel for successive schooling, pre-academics skills of attention and concentration needs to be focused on individual basis. With an additional regard to receptive communication they felt the need of exploring the environment with 1-2 words or in the manner of non-verbal communication atleast.

Social competence:

The attainment of independence in basic activities of daily living like at least indicating for toileting, feeding self with spoon, assisting in dressing or undressing being the major components in self care. As per the perception of OT's these skills determine the level of competency in absence of the primary care giver in school environment.

An occupational therapist said:

“.....ADL skills are most important. The child should be able to use toilet , handle spoon while eating without assistance of others are skills to be trained first. In OT session itself before child goes to school and to be continued even after schooling till achieving maximum independence....”

Some OT's felt that play behavior are an added on component for the better development of cognitive abilities when there is peer interaction and learning through the experiences. For a better school outcome , they felt the child must be re-directed from sensory to productive play and from solitary to associative or group play. To develop such skills , they usually advise play school as mandatory for children with autism before schooling. They also added increased time in physical , motor and outdoor play can have effects on their sensory symptoms too.

Occupational therapists felt that the typical child is motivated to learn but for a child with ASD automatic learning doesn't occur at any time. So it always appears like the child's training becomes more academic oriented. Awareness of dangers due to their challenging behaviours is an important factor which needs to be considered. Due to lack of social judgement, repetitive behaviours, the environmental situations, abilities to seek help, there is always a concern for the child's safety and other children's safety.

Educational system

Occupational therapists highlighted that the current schooling system with advanced demands at early stage, competitiveness among peers and criteria to be met before start of schooling are the challenges for parents of children with autism face now – a days. The level of demands varies with the standard of syllabus they follow. Many schools expect the child to verbalize and answer to questions where as children with autism would not be able to verbalize.

Understanding School Readiness in Children with ASD

They have the negative attitude towards these children. In the present century though the awareness has increased, understanding their capabilities and giving opportunities to children with autism is very less.

An OT added as:

“...Few schools accept these children with autism that too only if the child is verbal. Though they accept ,teachers are not aware of handling these children Either they isolate the child or treat with punishment as similar to other kid where as children with autism don't understand the concept of punishment”

Schools should adapt and adjust to the children's needs with respect to time , routines and teaching methods . Such flexibility if adopted by schools these children have uneven skills development where they are extremely good at one area.

An OT stated,

“...schools apart from academics, can take initiative and tend to develop child's interest area, where the child's talents are shown...that can be in sports , dance or music or at a single subjected like English or maths....”

The current educational system, needs to provide resources to staff ,appoint professionals or even provide with teaching materials necessary for these children.

Though Government policies have been framed good for inclusive education, there is still a lack of proper and adequate facilities in schools to meet the needs of children with ASD. Also some therapists added that if funds were allotted for these children, it would be beneficial. A better success in the performance of these children is at proximity.

Psychologists' Understanding Of School Readiness For Children With Autism Spectrum Disorder

From the transcribed data , three major themes evolved during the thematic analysis include **characteristics of the child , parental concerns , schools and educational system.**(Table – 3b)

Characteristics of the child:

Psychologists view that for sending a child with ASD it is mandatory to consider the range of severity where he/she falls and associated co-morbid features of hyperactivity or lower level of intelligence. Many psychologists perceive this co-morbid features as added difficulty to the child in deciding the school for them. These may delay their regular schooling and difficulty in the school environment. Though core IQ test is difficult to calculate at that age and in relation to autism ,many psychologists view that the physical , language and communication can be viewed for predicting the child's mental functioning and ability to learn. They felt that if receptive language is good, the expressive language skills can be strongly built at the early ages.

A Clinical Psychologist shared her experience with two children:

“.....I have seen a child with autism studying in an English medium school whose mother tongue is Malayalam and settled in Tamil Nadu. He was able to communicate appropriately in all environments demanding various languages. But the child with low intelligence and speech delay had difficulty with 2 languages, in fact even with his own mother tongue. It is the intelligence that matters.....”

Most of them stated the importance of the collaboration and cooperation between the professionals like occupational therapist, speech therapist , psychologist , special educators and teachers along with parent involvement that the schooling for Children with ASD can be enhanced .

They foster that the areas of functioning that need to be dealt with these children should be done by the professionals specific to their field. They believe the team work will be effective for children with ASD for good school outcome as well as the child's future as a whole.

A psychologist stated that,

“....I expect all professionals to work together along with the parent and child to improve in all the skill areas, for effective decision making regarding school readiness....”

Parental concern:

The second major theme what psychologist stated was in regard to parental concern. They expect the parents of children with Autism Spectrum Disorder to accept them fully whole heartedly with whatever difficulties and capabilities they have. Added that they suggest parents not to expect more than the level they could do which could pressurize the child and stress them.

Clinical psychologist added:

“...parents should accept the child 100% not to pressurize them to go for normal schooling and accepting the suggestions from professionals in matters of child’s skills must be important for the future of child.....”

The family situation remains a key term for the psychologist where they highlighted on the social economic culture and family members relationship for the positive growth of Children with ASD. The economic stress affecting the social relations between family members can have indirect effect on child’s performance is the critical view from psychologist.

They believe psycho educating the parents, family members and building harmonious relationship between them would bring a positive family situation for children with autism towards schooling.

Schools and educational system:

Many psychologist critically stated views on prevailing educational system and how it being barrier for children with autism towards schooling.

They stated the importance of acceptance of children with special needs as per norms by government. The practical difficulties , the implementation by school are not up to mark. They believed that the unrealistic parental attitudes and outcome of education for children with autism has fostered many school managements to come out of traditional set ups to move to advanced income based business area. Due to the need for schooling, for all children with autism is not met properly.

A psychologist stated as:

“.....Right to education act is a nice policy by Government but practically it seems impossible. ASD has recently been included in Indian Disabilities Act. B.Ed courses here don't have channels for practical work directly with these children, in regular Spl.Ed courses autism is viewed in the form of MR and treated accordingly.....”

With all this prevailing difficulties, psychologist added the importance of teachers support, to give special attention to these children and teaching them accordingly with use of different modes of teaching which would ensure better outcomes for Children with ASD in schools

Special Educators' Understanding Of School Readiness For Children With Autism Spectrum Disorder

The special educators as a part of schools and education system, gave their perspectives regarding school readiness in children with ASD. The three major themes emerged from the data were **challenging behaviors, self –care and family** (Table – 3c)

Challenging Behaviours

Special educators view that the crowd in the school exaggerates the behaviours of children with ASD. Due to this, children with ASD find it difficult to coping with peer and adjust to social situation.

A special educator stated:

“.....I feel few kids adapt. In accommodating in regular school, some may take time in tolerating and adjusting with others, so be sure that accommodation in school environment should not increase the problem again.....”

They also state that hyperactivity which makes them difficult in sitting inside the classroom and paying attention to teachers' instruction need to be settled. They also felt that these children can adjust well and can cope up with the curriculum if the teachers were trained to handle these children in an effective manner. The problem of isolation can be handled by them with use of different ways in teaching a single concept and making them to interact with other children.

A special educator said:

“.....The special child should be considered as a normal child in a normal school, if teachers are able to handle them in an effective way. I know teachers would accommodate and train the autistic children in the normal setup.....”

They felt that the basic concepts like colours, shapes, letters and number identification, scribbling should initially trained on 1:1 basis for a better foundation to enter into the school.

Self care

Special educators stressed that the child should be trained to go by self to appropriate places in the school, handle own school books, stationeries and eat by self. They felt that these skills must be trained first on individual basis as the school's first expectation was that.

A special educator stated as:

“.....The basic qualities what the school expects from the child are toileting, eating by self and book maintenance. The child's abilities and skills should be communicated to the school.....”

The next major concern from special educators in view of self care was self help skills and their safety. They suggested teachers could pay individual attention to the needs of the child or by peer tutoring handle safety concerns of the child

One of the special educators said,

“.....If child does not follow teachers' instructions the peer tutor could explain the steps/ remind this child not to get distracted during class work.....”

Family Support

Many special educators view that the family background and economic level can foster/hinder the school readiness factors for autism children. The parents have high expectations from the school even though the child doesn't have the readiness skills. Therefore, it is advisable that parents should take professional help in decision making in mainstreaming the child.

A special educator said:

“.....Parents from a high socio- economic status want their child to study a CBSE, ICSE curriculum. But they should understand that schools should be selected on their child’s attention, capability and the school support system should be ready to provide special services & care to their child.....”

They expected the involvement of family members should be there for child to participate in all activities. There should be a primary care taker who is frequently in communication with the school and continue with special training and instructions given by the school.

Teachers’ Understanding Of School Readiness For Children With Autism Spectrum Disorder

The teachers in mainstream schools said that that they don’t have much knowledge and understanding about ASD. They shared their experiences as they handle them at class. The themes emerged were ***expressing needs, lack of knowledge and specified skill*** (Table– 3d)

Expressing needs

The teachers in general school were more concerned about their communication and speech. The teachers said they find difficulty in finding out the needs of the children. They felt if children could develop speech and then join to school it could be better.

A teacher said

“.....here mostly, many children are unable to express their need like going to the restroom. Also they are not at all eating, only if forced, they eat one spoon of food only. If feeding and toilet training is practised and then child is sent to school it will be better.....”

They felt more than academics, the normal routines like going for toilet, eating by self is difficult for them.

Lack of knowledge

The teachers put forward that inspite of lack of knowledge, it is difficult for them to handle challenging behaviours. They find also problem in making the child to follow their

instructions. Additionally they had a need to repeat the instructions specifically for them with many repetitions

A teacher stated:

“.....the other children follow, if I say take your note book, two times they pick. But for these children we need to repeat nearly more than five times by going near to them.....”

The academic activities like writing, reading and making them to engage is difficult for the teachers. The teachers are keen on spending extra time and guiding the children but by then other children get distracted. Children with ASD also show sudden emotional outbursts like anger, irritation, cry, throwing objects and running around, the teachers in regular school are unaware of the reason and have difficulty in controlling such behaviours.

Therefore the teachers expect the children to be trained to sit in a class room and have the ability to be engaged in task at least for few minutes. They were of the opinion that a special school would help the child than a mainstream.

Specified skill

The teacher viewed that children with ASD to be more intelligent than the other children. Though they appear not to have listened to the instructions, they were able to display these skills at home.

One teacher exclaimed that,

“.....actually I was surprised. One day when I taught a social story about the cow. That child was not paying attention to my voice. But the next day when his mother enquired about the story told in the class I was shocked. Then I came to know these kids were brilliant than other children.....”

They have a general belief that these children if interested they are very good at the specific skill and performance. They felt that if the child is trained in activities of their interest they will have a good future

Quantitative Analysis

Table 2a. Factors of School Readiness as Perceived By Parents of Children with Autism Spectrum Disorder

Themes	Sub- Themes	%
Behavioural challenges at School – 90%	Negative Behaviour	81.25%
	Compliance	58%
	Adjusting & Adaptability	32%
	Distractability	26%
Safety Concerns & Support – 64%	Self Regulation	60%
	Aggressive Behaviour	38%
	Communication between home & School	28%
	Family Involvement	36%
School systems – 58%	Curriculum	62%
	Staff Development	42%
	Inclusive & Integrated Setup	26%
Social Skills & Language – 54%	Language Barrier	62%
	Cultural Difference	58%
	Lack of ability to communicate	58%
	Needs	36%
	Isolation	
	Lack of involvement in group Play activities	28%
Acceptance by Main Stream – 52%	Negative attitude	64%
	Lack of Initiative	32%
	Lack of understanding Autism	46%

Table 3 a . Factors of School Readiness as Perceived by Occupational Therapists in Children with Autism Spectrum Disorder

Themes	Sub- Themes	%
Severity of Condition – 87.5%	Child Characteristics	75%
	Early detection &	68.75%
	Intervention	62.5%
	Mainstream	62.5%
	Sensory Behaviours	
Parental attitude & Family – 81.25%	Acceptance	81.25%
	Expectation	81.25%
	Social Stigma	75%
	Family Involvement	50%
Development & Well being – 81.25%	Physical Development	87.5%
	Fine Motor Skills	75%
	Cognition and	
	Communication Abilities	68.75%
Social Competence – 68.75%	Independency in self care	68.75%
	Play behaviours	62.5%
	Self regulation & Safety	56.25%
Educational System – 62.5%	Demands of School	87.5%
	Negative attitude	81.25%
	Flexibility in school functioning	75%
		68.75%
	Lack of Resources	

Table 3b . Factors of school readiness as Perceived by Psychologists in Children with Autism Spectrum Disorder

Themes	Sub- Themes	%
Characteristics of the Child – 91.66	Severity & Intelligence	75%
	Developmental Domains	58.33%
	Collaborative team work	50%
Parental Concerns- 83.33%	Acceptance	66%
	Family support	58.33%
	Psycho education	58.33%
Schools & Educational system- 75%	Govt. Regulation	66.66%
	View of education	58.3%
	School of Management	50%
	Teachers Support	50%

Table – 3c Factors of School Readiness as Perceived By Special Educators in Children with Autism Spectrum Disorder

Themes	Sub- Themes	%
Challenging behaviour – 91.66%	Adjustment	75%
	Attentiveness	66.66%
	Teachers Handling	58.33%
	Basic Concepts	58.33%
Self care – 83.33%	Basic act of daily living	66.66%
	Self help& Safety	50%
Family – 58.33%	Decision making	75%
	Primary care taker	66.66%

Table – 3d Factors of school readiness as perceived by Teachers in children with Autism Spectrum Disorder

Themes	Sub- Themes	%
Expressing needs – 83.33%	Speech	66.66%
	Self Care	41.66%
Lack of Knowledge – 75%	Following instructions	58.33%
	Engaging in task	50%
	Sitting Tolerance	41.66%
	Special School	41.66%
Specified Skill – 83.33%	Intelligence	88.33%
	Extraordinary Talent	50%

Understanding School Readiness in Children with ASD

Based on the descriptive statistics, there were a number of factors reported by the participants as reasons for a child with autism to have difficulty in school readiness.

Participant related factors

90% of parents reported that the challenging behaviours of the children was a barrier to school readiness. 62% of the parents indicated language as a important barrier especially to communicate needs and involvement in group activities. 64% of the parents identified safety concerns at school and family involvement were important factors. Parents (38%) were also concerned about the safety aspects of the child especially in terms of the child interacting with strangers. Only 26% of the parents considered inclusive and integrated school set up & distractibility, though these were very important school readiness factors.

About 87.5% of the occupational therapists viewed the importance of the severity of the condition being a major component in determining the school readiness of children with ASD. The physical development (87.5%) and fine motor development (75%) rated as important for schooling of children with autism in mainstream.

66.66% of the psychologists in this study view the importance of Government regulations, a crucial factor for sending a child with ASD to mainstream school. Also 58.33% of them considered parental acceptance being a determinant of school readiness in children with ASD.

Special educators (75%) gave much importance to the decision making in sending children with ASD to school as a major concern for the successful school outcome. Their main concern (91.66%) for a child with ASD at school is their challenging behaviours.

About 75% of the teachers in this study demonstrated that they have lack of training and knowledge in dealing with the children with ASD in mainstream schools. 66.66% of teachers expected the speech skills as a major determinant of school readiness in children with ASD.

Child related factors

Most of the participants (62%) felt age is an important factor for school readiness. They (50%) were of the view point that a typically developing child should enter pre- KG by 2 ½ - 3 ½ years of age. Language (50%) especially functional communication skill was considered to be an important factor.

Understanding School Readiness in Children with ASD

38% of the participants reported that the children with ASD were not mingling with peers.

School related factors

The participants (36%) felt that decision to send a child to school should be done through an assessment by a team rather than only one professional. They (36%) were also of the opinion that following Samacheer (Tamil Nadu state board syllabus) syllabus would make it easy for children with ASD to participate fully in curricular activities. Many of the parents/ professionals (52%) felt that the children with ASD were rejected by schools, that too without appropriate reasons(57.6%)

Support system

26% of the participants felt that a joint family & a supportive family is very important for starting off schooling for a child with ASD

DISCUSSION

The aim of the present study was to explore the understanding of parents and professionals about school readiness for children with ASD. A survey of several professional groups directly involved with the school readiness process for students with ASD investigated factors which were more important for individuals with ASD. A valid interview guide was developed and used to help address their understanding of school readiness.

The common themes that finally emerged from the study was the social skills, challenging behaviours, educational system, lack of training and knowledge by school teachers, functional communication and support. Much of the research in understanding of school readiness for children with ASD has taken into consideration parents, teachers and early intervention specialists (Mc Intyre, Micaella, 2016)⁹. The present study focuses on an in depth insight into the perspectives of both parents and professionals including therapists, special educators, clinical psychologists and school teachers.

Findings in this study added to findings of previous studies based on an Indian context. The participants emphasized new perspective about importance of age as a factor for typically developing children to enter into a mainstream school by 2 ½ - 3 ½ years, studying in a school which follows Samacheer curriculum and emphasis on family support system.

Majority of the parents emphasized on teacher training and knowledge in how to tackle challenging behaviours. These behaviours relate to children's ability to appropriately participate in independent tasks within the classroom environment (Fleury, Thompson & Wong, 2014)¹⁸. According to psychologists, parents and therapists, the consequences of teachers' limited understanding of ASD, the behavioural standards and expectations resulted in inappropriate behaviours in the school environment. This finding is consistent with the study of Stoner et al., 2007³⁸, wherein parents indicated that the most significant barrier to transition process is the lack of preparation and understanding of ASD on the part of the educational professionals. These behaviours can be a barrier for the child to fully engage in the classroom and also lead parents being called to pick up their child from school. In extreme situation it also results in parents, being asked to shift the child to a special school. These findings of the present study add on to the literature of previous studies (Starr; Martinni; Kuo, 2014)⁵. Concerning the meso- system, Bronfenbrenner (1979 a) indicated that the

developmental potential of any given setting for a child is increased as a function of the number of supportive links between that setting and other context involving the child.

Behaviour challenges along with deficit in communication fostered as a factor in determining the school readiness, limits the access of children with autism to regular schools. The positive school outcome is correlated with the behaviours of children with ASD limiting the child to participate in school routines (Ashburner, Ziviani & Rodger, 2010)¹⁸. The restrictive repetitive behaviours of the children can make it very difficult for children with ASD to fully participate in classroom activities. These behaviours may limit their access to the general education curriculum & typically developing peers. Thereby it would reduce the opportunities that children with ASD have to develop the academic and social skills related to positive school outcome (Fleury, Thompson & Wong, 2014)¹⁸

The social deficit with lack of self control and personal responsibility in their own duties was considered a major difficulty for children with autism to cope up with the academics.(Lloyd, Irwin, Hetzman, 2009)¹⁸. The safety aspect in mishandling and road travel for children with autism at school was considered as a crucial factor in preparing these children for schooling.

Another major theme which the professionals stated relating to schooling was social stigma. Added on to the finding of previous study stating the negative attitude by family members as a stigma in schooling for children with ASD(Micaela Connolly, Irvine Gesch, 2016)⁴, the current study depicts that even the society's and school's understanding about the condition is also a major determinant.

The exo- system concerns the environment that are "external" to the children (Bronfenbrenner, 1986)⁶. In the present research parents and other service providers (occupational therapists and psychologists) noted the importance of family based support systems as a critical part of the exo- system. Participants indicated that emotional and instrumental assistance that often comes from family members is beneficial for school readiness as well as for coping with raising a child with ASD.

A number of participants in the present study talked about finding the right place for schooling for their children was a source of effort anxiety. Parents worried about the lack of appropriate curriculum, school support, staff with expertise and knowledge of ASD. Lilley

talked of a “highly fractured educational field” (2012)¹⁸ where participants were conflicted and bewildered by contradictory educational policies and practices.

In view of inclusive education and children with autism in India, the major drawback is on schools understanding and accepting these children. It is suggested that school administrators and teachers realise and accept the children irrespective of their socio-economic, cultural and level of ability (Sanjeev & Kumar, 2007)¹². The private schools also should ensure such programs as per the act of inclusive education. The prevailing situation depicts the practical difficulties and drawbacks from the Government policies and regulations towards the schooling of children with special needs (Integrated education for disabled children, 1974., Right to education act, 2014). The schools could ensure the framework of curriculum to meet the special need children and not isolating in separate figures as framed by National curriculum framework in Indian system, 2005. The teachers knowledge could be ensured by attending the specialised educational training from the policy of Sarva Sikshiya Abhiyan (SSA). This make the instructional practices best for inclusive education and in handling children with special needs in regular schools (Vidhyanantham. S & Devan. K, 2012)¹⁵

In consistence with the findings of the present study, Forest et al. (2004)⁶, has also suggested that the compliance and behavioural characteristics as stated by the professionals’ are a challenge for children with autism in the participation of school curriculum. Improving the cognitive skills, physical well being, fine motor skills, behaviours, self help skills will foster schooling of children with ASD and that can be considered as pre- requisite skills towards the regular schools. The beneficial impact was an outcome from the interventions on these domains for successive schooling. (McIntyre et al. 2006., Rodus et al. 2005, & Forest et al., 2004)⁹. The involvement of family and acceptance of child in family foster better school readiness factor for children with ASD. The involvement of family and parent at the early age of child foster successful outcomes at school towards future. (Kohl et al. 2000, Laverick. 2008., Hill et al 2004., Schutting et al. 2005)⁶

CONCLUSION

To our knowledge, this study is the first of its kind to specifically develop a interview guide on “understanding school readiness of children with ASD” in India. It is also the first study to include parents and professionals from diverse faculties and conduct a semi – structured interview to analyse their perspective on school readiness of children with ASD. Moreover the present study contributed to the existing ASD literature by including multiple perspectives on school readiness of children with ASD. The finding of the present study highlighted on the need to overcome challenging behaviours, social skill deficit, having functional communication with minimal independence in self care, family support and finally appropriate educational system with in service teacher training, which could contribute towards positive school outcomes for children with ASD.

These findings could serve as a basis to stimulate the parents and stakeholders to emphasize the importance of child- centered focus on school readiness.

LIMITATIONS AND RECOMMENDATIONS

LIMITATIONS

The findings from the current study must be interpreted with caution in view of a number of limitations.

First this study was based on volunteer participants and purposive sampling, thus the views of the participants may not represent the “understanding of school readiness in children with ASD” from the larger population. It was difficult in recruiting the large number of participants from the professional groups. Secondly most of the parents participants were female. Therefore the extent to which the fathers perspective represented is not clear. Finally the professionals participants in each field varied in number. Therefore there was also varied responses from the professionals.

RECOMMENDATIONS

Although the current study provides some valuable insights into the understanding of school readiness of children with ASD, much research still needs to be done. In addition larger qualitative and quantitative studies including more number of professionals from varied fields would give more insight and credence to the current findings.

A study on comparison between parents’ and professionals’ perspectives can also be done.

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**PARENTS' AND PROFESSIONALS' UNDERSTANDING OF SCHOOL
READINESS FOR CHILDREN WITH AUTISM SPECTRUM
DISORDER- A QUALITATIVE ANALYSIS**

INTERVIEW GUIDE

Questions in General

1. When do you think an autistic child is ready to go to school?
2. Is age an important factor for school admission?
3. What skills should be considered to determine that the child is ready to join mainstream school?
 - i. In terms of intelligence
 - ii. In terms of interacting with other children/ adults etc.
 - iii. In terms of ADL skills/ self – help skills
 - iv. In terms of language skills
 - v. In terms of writing skills
 - vi. In terms of understanding
 - vii. In terms of Sitting tolerance..any level?
 - viii. In terms of Play
 - ix. Safety part in specific to children with autism to be concerned.....Why do you think these are important?
4. How behaviours of autism will affect school performance of children?
5. On what basis the school must be selected for an autistic child? Relating to School structure/ child's performance/ other
6. Which curriculum you feel best for these autistic children? CBSE/ state board/ Montessori/ other. Why?
7. Whose decision will be appropriate in deciding schooling for the autistic children? Professionals/ parents/ other
8. Opinion on current on educational system and Government policies in relation to children with autism.
9. Relate the family with school readiness in children with autism

For professionals, [in particular]

- i. Did you recommend the child for schooling?
If yes.....on what basis you decide that the child is ready to start normal school?
If no.....on what basis you decide that the child is not ready to start normal school?

For teachers & Special educators [in particular]

- i. Was there a situation wherein you had to stop the child from school? If yes...on what basis you decided that the child is not fitting in school

To parents, [in particular]

1. Does your child goes to school? If no...interview stopped. If yes...what type of school special/ mainstream/other
2. Was there a situation, at any point of time, wherein your child was rejected admission in school for being autistic?If yes...What are the reasons for rejections?Are they aware & understand of your child's condition?Do you think the reasons are relevant/ appropriate for rejection? If yes.....can you explain why?
3. What was the reactions/ opinion of your family members when you wanted your child to start of with school?
4. Who do you think in your family helped you in preparing the child for schooling?
5. The current challenges in the educational system and Government policies which relating to your child?

OPERATIONAL DEFINITIONS

School readiness

The readiness characteristics of the children with ASD to start of mainstream school

Parents

The care takers of the child include mothers, fathers, grandmothers , grandfathers

Professionals

Professionals who work with children with Autism Spectrum Disorder include Occupational therapist, psychologist, special educators and teachers handling these children in mainstream schools.

Children with Autism Spectrum Disorder

The children diagnosed with ASD and who is 3 years and above attending the school

DEMOGRAPHIC DATA OF TEACHERS

S.NO	SEX	EXPERIENCE IN YEARS
1	F	8
2	F	8
3	F	8
4	F	10
5	F	10
6	M	11
7	F	9
8	F	8
9	F	9
10	F	12
11	F	8
12	F	11

SOCIO DEMOGRAPHIC DATA OF PARENTS IN THE INTERVIEW

S.NO	AGE	SEX	SECTION	SCHOOL	LANGUAGE	CARE TAKER
1	4.5 YEARS	FEMALE	LKG	GENERAL	TAMIL	MOTHER
2	4 YEARS	MALE	PRE-KG	GENERAL	TAMIL	MOTHER
3	7.5 YEARS	MALE	1ST STD	NURSERY &PRIMARY	TAMIL	MOTHER
4	6.5 YEARS	MALE	PRE-KG	NURSERY &PRIMARY	TAMIL	MOTHER
5	3.5 YEARS	FEMALE	PLAY	N&P	TAMIL	MOTHER
6	4YEARS	MALE	PRE-KG	GENERAL	TAMIL	MOTHER
7	4.5 YEARS	MALE	LKG	GENERAL	MALAYALAM	MOTHER
8	6 YEARS	MALE	UKG	GENERAL	TAMIL	MOTHER
9	5.5 YEARS	MALE	UKG	GENERAL	MALAYALAM	MOTHER
10	5YEARS	MALE	PRE-KG	GENERAL	TAMIL	MOTHER
11	5.5 YEARS	FEMALE	UKG	PRIMARY	MALAYALAM	MOTHER
12	4 YEARS	MALE	PLAY	PLAY GROUP	MALAYALAM	MOTHER
13	4 YEARS	FEMALE	LKG	GENERAL	TAMIL	MOTHER
14	6 YEARS	MALE	LKG	GENERAL	TAMIL	MOTHER
15	3 YEARS	FEMALE	PRE-KG	GENERAL	TAMIL	FATHER
16	3 YEARS	MALE	PRE-KG	MONTESSORI	BADUKA	GRAND FATHER
17	4 YEARS	MALE	LKG	GENERAL	KANNADAM	MOTHER
18	4 YEARS	MALE	LKG	GENERAL	TAMIL	FATHER
19	7 YEARS	FEMALE	1ST STD	GENERAL	TAMIL	MOTHER
20	4.5 YEARS	MALE	LKG	MONTESSORI	CHAURASHA	MOTHER

21	4 YEARS	MALE	PRE-KG	GENERAL	TAMIL	MOTHER
22	4 YEARS	MALE	PLAY	GENERAL	TAMIL	MOTHER
23	4.5 YEARS	FEMALE	LKG	GENERAL	MALAYALAM	MOTHER
24	4.5 YEARS	FEMALE	LKG	GENERAL	TAMIL	MOTHER
25	3.5 YEARS	MALE	LKG	GENERAL	CHAURASHA	MOTHER
26	3.5 YEARS	MALE	PRE-KG	GENERAL	MALAYALAM	MOTHER
27	3 YEARS	MALE	PRE-KG	GENERAL	TAMIL	GRAND MOTHER
28	3 YEARS	MALE	PRE-KG	GENERAL	TAMIL	MOTHER
29	6 YEARS	M	1ST STD	GOVT	TELUGU	MOTHER
30	7 YEARS	M	1ST STD	GENERAL	TAMIL	MOTHER
31	3 YEARS	M	PLAY	N&P	TAMIL	GRAND MOTHER
32	3.5 YEARS	M	PRE-KG	GENERAL	TAMIL	MOTHER
33	7 YEARS	M	1ST STD	GOVT	TAMIL	MOTHER
34	3 YEARS	FEMALE	PRE-KG	GENERAL	TAMIL	MOTHER
35	4.5 YEARS	M	UKG	GENERAL	TAMIL	MOTHER
36	4.5 YEARS	M	PRE-KG	MONTESSORI	TAMIL	FATHER
37	6.5 YEARS	M	1ST STD	GENERAL	TAMIL	MOTHER
38	6 YEARS	FEMALE	LKG	GENERAL	MALAYALAM	FATHER
39	4 YEARS	M	PRE-KG	SPL	TAMIL	MOTHER
40	4.5 YEARS	FEMALE	PRE-KG	GENERAL	TAMIL	MOTHER
41	5 YEARS	M	LKG	GENERAL	KANNADAM	FATHER
42	7.5 YEARS	M	1ST STD	GOVT	TAMIL	MOTHER

43	6 YEARS	M	1ST STD	GOVT	TAMIL	GRAND MOTHER
44	5 YEARS	M	PRE-KG	SPL	TAMIL	MOTHER
45	3.5 YEARS	FEMALE	PRE-KG	GENERAL	TAMIL	MOTHER
46	4.5 YEARS	M	PRE-KG	GENERAL	TAMIL	MOTHER
47	7.5 YEARS	M	1ST STD	GOVT	TAMIL	MOTHER
48	4.5 YEARS	M	PRE-KG	SPL	TELUGU	MOTHER
49	3 YEARS	M	PLAY	GENERAL	TAMIL	MOTHER
50	3.5 YEARS	FEMALE	PLAY	GENERAL	TAMIL	MOTHER

DEMOGRAPHIC TABLE OF OCCUPATIONAL THERAPISTS

S.NO	SEX	EXPERIENCE
1	F	10
2	M	9
3	F	10
4	M	12
5	M	10
6	M	12
7	M	9
8	F	10
9	F	10
10	F	11
11	F	9
12	F	10
13	F	22
14	M	16

DEMOGRAPHIC DATA OF SPECIAL EDUCATORS

S.NO	SEX	EXPERIENCE
1	F	14
2	F	10
3	F	10
4	F	16
5	F	9
6	F	8
7	F	12
8	F	8
9	F	10
10	F	11
11	F	10
12	F	9

DEMOGRAPHIC DATA OF PSYCHOLOGIST		
S.NO	SEX	EXPERIENCE
1	M	22
2	F	15
3	M	12
4	M	18
5	F	10
6	F	8
7	F	10
8	F	10
9	F	8
10	F	19
11	F	9
12	M	9