



## Characteristics of Autism Center in Malaysia

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### Abstract

Autism Spectrum Disorder (ASD) is a group of mental developmental disabilities; with one out of 625 Malaysian children has autism. The existence of center that provides varieties of treatments is crucial to reduce numerous aberrant behaviors of children with Autism. This paper aims to explore the characteristics of autism centers in Malaysia. Based on phone interviews conducted with the staff of 22 Autism centers, it was found that majority of Autism centers in Malaysia requires children to undergo a diagnostic test, offered a combination of classes and charged classes fees in the range of RM356 to RM 600 per month.

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Keywords: Autism; Malaysia; center; characteristic

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### 1. Introduction

Autism Spectrum Disorder (ASD) is a group of mental developmental disabilities (Ministry of Education Malaysia, 2012). A local survey conducted revealed that one out of 625 Malaysian children has autism (Azizan, 2008). According to the newest version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) prepared by the American Psychiatric Society (2013), ASD is characterized by 'persistent deficits in social communication and social interactions across multiple contexts, of which can be manifested in three types of deficits namely deficits in social-emotional reciprocity, deficits in nonverbal communications behavior used in social interactions and deficits in

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developing, maintaining and understanding relationships. Besides, DSM-5 also has classified ASD into three levels of severity, which are level 1 (requiring support), level 2 (requiring substantial support and level 3 (requiring very substantial support). The level 3 of ASD severity is based on social communication impairments and restricted repetitive patterns of behavior. Zooming to the social communication impairments, one may characterize it as deficits in both verbal and nonverbal social communication skills, limited initiation of social interaction and minimal response to social overtures from others. On the other hand, restricted and repetitive behavior may include stereotypes or repetitive motor movements, use of objects or speech, insistence on sameness, inflexible adherence to routines or ritualized patterns of verbal or nonverbal behavior, highly restricted interests with high intensity or focus, and hyper or hypo-reactivity to sensory input or unusual in sensory aspects of the environment (Feeley, Deka, Lubin, & McGackin, M., 2015). Children with Autism also have unusual cognitive style and sensory patterns (Hussein, 2011).

Noting the increasing prevalence rates of children with Autism, one can expect to continue seeing the individualized education program which specifically caters to the special education needs of each child with Autism. The categories of special education needs include specific learning disabilities, moderate learning disabilities, severe learning disability, profound and multiple learning disabilities, emotional and behavioral difficulty, speech, language and communication needs, hearing-impaired, visual impairment, multi-sensory impairment, physical difficulty, autism spectrum disorder and others (Hussein, 2011).

Indeed, the selection of the right childcare center that can fulfill the special education needs will affect the development of children with Autism (Azhari et al., 2015). Due to that, the existence of Autism center that provides varieties of treatments or approaches that is in line with the special education needs of children with Autism is crucial in an attempt to reduce numerous aberrant behaviors of children with Autism (Au, Mountjoy & Man, 2015; Vetrayan & Paulraj, 2015). The treatment received in Autism centers will guarantee further enhancement and development in behaviors, emotional and social aspect of children with Autism (Noiprawat & Sahachaisaeree, 2012).

Despite the existence of classes in public schools or centers (Ibrahim, Osman & Bachok, 2014) that caters to all types of brain impairment children including ASD, parents felt dissatisfied with their child's overall educational experience obtained in such places (public schools or public centers). As a result, parents of Autism children would prefer to send their children to private center to receive an individualized educational program that specifically caters to the needs of each child (Au, Mountjoy & Man, 2015). These private centers provide varieties of treatments to suit each level of children with Autism. In general, the types of treatment classes offered in private centers comprises of intervention, therapy, group classes. Each of the treatment classes offered differs in cost incurred, age requirement fulfillment and diagnostic test conducted. Thus, in an attempt to understand the different characters of Autism center in Malaysia, this paper aims to explore the characteristics of autism centers in Malaysia.

## **2. Literature Review**

In this section, review of past literature will be divided into several subsections which are types of Autism classes, criteria for class enrollment, fees for Autism classes and diagnostic tests.

### *2.1 Types of treatments available in Autism classes*

Previous studies have shown that it is effective and economical for disable students to learn new skills via observations (e.g., Schoen & Ogden, 1995; Werts, Caldwell, & Wolery, 1996; Christiansen, Lignugaris-Kraft, & Fiechtl, 1996). The treatment received in Autism classes have been proven to be effective in decreasing numerous aberrant behaviors namely aggression, stereotypic behaviors and self-injury (Au, Mountjoy & Man, 2015).

Focusing on the specific treatment offered in Autism classes itself, MacDonald, Dixon, and LeBlanc (1986) and Rehfeldt, Latimore, and Stromer (2003) found that the students gained more if the observations are conducted in a stimulus class technology. In Scotland, Her Majesty's Inspectorate of Education (HMIE, 2006) reported the majority

of the education authorities used Treatment and Education of Autistic and related Communication Handicapped Children (TEACCH), ASD-specific Speech and Language Therapy, Hanen parent program, Lovaas method and Son-Rise program for pupils with ASD.

In another, interventions classes or approaches have been practiced as well, albeit the effectiveness of it is still questionable. This is because, evidence-based, universities sponsored interventions (such as randomized controlled trials) have been modified and does not resemble the original interventions which resulted to the ineffectiveness of such interventions on children with Autism (Kasari & Smith, 2013).

Other treatments or approaches that were also used are visual communications systems, cognitive-behavioral therapy, social skills training, play therapy, video interaction guidance, psycho-educational profiling and social stories. Children with Autism, who undergo these treatments indicated a significant improvement in their imitation ability (Paulraj, Karim & Vetrayan, 2015). In England, schools reported using a number of autism-specific approaches, including the Picture Exchange Communication System (PECS), SCERTS, Treatment and Education of Autistic and related Communication Handicapped Children (TEACCH), Applied Behavioral Analysis (ABA), visual timetables/schedules, Social Stories, Intensive Interaction and sensory integration (Charman et al., 2011).

Besides of the treatments above available in Autism classes, activity therapy such as art therapy that comprised of painting therapy, drama therapy, puppet shows, cinema (movie) therapy, music therapy and rhythmic moves should also be considered. These activity therapies help to reduce aggressive moods (Khakzanda & Aghabozorgi, 2015), develop emotion, intellect, concentration, creative thinking, muscle fibers, and motor skills. In Asia, a country such as Thailand, research conducted at the Research and Development Center of Autistic Inclusive Education of Demonstration School at Khonkaen University discovered that activity therapy classes conducted in the good environment for children with Autism could enhance and promote learning development among children with Autism (Noiprawat & Sahachaisaeree, 2012). In line with that, the questions posed is:

What are the types of treatment classes that your center provides for children with Autism?

## *2.2 Criteria for class enrollment (age requirement)*

In England, out of sixteen schools that were included in the research, the age of the ASD pupils are; one school aged below ten years, four schools aged above ten years and the remaining aged range two to nineteen years (Charman et al., 2011). Children from the age of three years and nine months, up to seventeen years are eligible for placement in one of Aspect's schools (Autism Spectrum Australia, 2016). Eden Children's Center, Singapore accept ASD children aged two to six years. Meanwhile, individuals aged eighteen to fifty-five years are eligible to enroll into Eden Center for Adults who have completed their special school programs (Autism Association Singapore, 2016). Also, Eden School, Singapore provides services for ASD children for aged seven to eighteen years (Eden School, 2016). In line with that, the question posited is:

What is the age requirement (minimum and maximum age) set to enroll for the classes at your center?

## *2.3 Autism classes fees charged*

At the Dubai Autism Center (DAC), the fee for a child is Dh140,000 on average per year (approximately RM153,166 per year). The school charges each parent only Dh30,000 (approximately RM32,821 per year). The rest of the funds come from donations and government funds. At the Emirates Autism Center, Amel Galal Sabry, founder, and managing director says the cost per student comes to nearly Dh70,000 (approximately RM76,583 per year). Parents are charged Dh42,000 (approximately RM45,950 per year) -she organizes fund raisers and other initiatives to raise the rest of the amount (Chaudhary, 2012). In Australia, the fees are \$5,190 per year (Autism Spectrum Australia, 2016), which is approximately RM15,340 per year. Eden School, Singapore fees are currently at S\$350 per month (approximately RM1,029 per month) (Eden School, 2016), while Eden Center for Adults, Singapore range of fees are S\$100 to S\$1,200 per month (approximately RM294 - RM3,529 per month) (Autism Association Singapore, 2016). In line with that, the question posited is:

How much are the fees for classes charged at your center?

#### 2.4 Diagnostic test

The diagnostic test is usually conducted before students' intake to allocate students with Autism at a suitable class. During the diagnostic test, some preliminary information about the students' level of functioning will be captured (Au, Mountjoy & Man, 2015). HMIE (2006) reported that at all types of provision that they visited, more than 50% of the pupils with ASD had a medical diagnosis, while the remainder is the mixture without diagnosis and unclear whether the pupils had a diagnosis or not. In Australia, to be eligible for placement in one of Aspect's schools, students need to have a current diagnosis and also a current standardized cognitive or developmental assessment (Autism Spectrum Australia, 2016). At the Eden Children's Center, Singapore, children must be clinically diagnosed with ASD or suspected ASD (Autism Association Singapore, 2016), while at the Eden School, Singapore, children need to be diagnosed with ASD (Eden School, 2016). Thus, the next question posed is:

What is/are types of a diagnostic test conducted for children with Autism who is interested to enroll in classes at your center?

### 3.0 Methodology

Specific research focusing on Autism center is still new. Noting that, exploratory means is suitable for this research. Therefore, for the purpose of this study, 22 Autism centers located in Selangor and Federal Territory of Kuala Lumpur, Pulau Pinang, Johor, and Sarawak have been identified, and phone interviews with the centers' staff have been conducted and recorded. Two interviewers have been selected and conducted the interview with a set of guided open-ended questions. Questions asked during the phone interviews mainly covered several attributes, namely availability and eligibility of Autism treatment offered for children and their parents, types of treatment offered, fees charged for the treatment session and availability of relevant diagnostic test. Data obtained from phone interviews were coded using attribute coding. The list of questions asked during the phone interviews are as follows:

1. What are the types of classes that your center provides for children with Autism?
2. What is the age requirement to enroll in the classes at your center?
3. How much is the fee for classes charged at your center?
4. Is there any pre-requisite test or diagnostic test conducted for children with Autism who is interested to enroll in classes proceed at your center?

### 4.0 Analysis of Findings

#### 4.1 Descriptive analysis of the interviewee

The staff of the 22 Autism center has been interviewed, and results of the interviewed will be used further for this study. The results of the phone interview are as depicted in table below:

Table 1. Characteristics of Autism Center

Characteristics of Autism Center	Frequency	Percentage
Type of classes		
Intervention class	5	22.7
Activity Therapy	3	13.6
Group classes	1	4.5

Others	11	50
Not applicable	2	9.1
Minimum age requirement		
0 – 2yo	8	36.4
3 – 4yo	9	40.9
5 – 6yo	4	18.2
Not applicable	1	4.5
Maximum age requirement		
0 – 5yo	1	4.5
6 – 10yo	7	31.8
11 - 15yo	4	18.2
16-20yo	6	27.3
Not applicable	2	9.1
Others	2	9.1
Classes Fees Charge (RM)		
225 and below	5	22.7
226 – 355	6	27.3
356 – 600	7	31.8
601 and above	4	18.2
Diagnostic Test		
Interview	1	4.5
Assessment	14	63.6
Interview and Assessment	1	4.5
No test	6	27.3

#### 4.2 Types of Autism classes

The staff of the 22 Autism center has been interviewed and based on Table 1 above; it was found that the types of classes provided are intervention classes, activity therapy and group classes (drama, art, music, etc.). The majority of the classes (50%) provide a combination of classes caters to children with Autism, such as group classes, art classes, and intervention classes. This is followed by intervention (22.7%), activity therapy (13.6%) and group classes (4.5%) caters to children with Autism.

#### 4.3 Criteria for class enrollment (minimum and maximum age requirement)

The majority of the Autism center put minimum age requirement of 3 to 4 years old (40.9%), followed by children with Autism aged 0 to 2 years old (36.4%), 5 to 6 years old (18.2%) and not applicable (4.5%). As for the maximum age required to enroll at Autism center, 6 to 10 years old (31.8%), 16 to 20 years old (27.3%), 11 to 15 years old (18.2%), 0 to 5 years old (4.5%), and the remaining are classified as not applicable (2%) and others (2%).

#### 4.4 Autism classes fees charged

It was found that majority of the autism centers charged classes fees in the range of RM356 to RM 600 per month (31.8%), followed by RM 226 – 355 per month (27.3%), RM below RM 225 (22.7%). As such, looking at the fees charged, one may conclude that only middle to high-income parents of Autism children can afford to send their ASD children to treatment classes offered by these private Autism centers.

#### 4.5 Types of diagnostic test

It was found that the autism centers require the ASD children to be diagnosed first before making any decision for them to enter or enroll in any treatment classes provided by the center. The majority of the centers requires ASD children to undergo assessment (63.6%). Some centers do not require any diagnostic test to be conducted before enroll to the ASD classes (27.3%), this is followed by interviews with both parents and their ASD children (4.5%) and solely interview with parents of ASD children (4.5%) respectively.

For ASD centers that do not require any diagnostic test to be performed earlier, another preliminary requirement that needs to be fulfilled by parents of ASD children is to bring medical documents such as referral or recommendations from medical doctors who had previously diagnosed the ASD children. As such, either diagnostic test or medical documents is very crucial as it will determine the level of ASD suffered by these children. After the completion of the diagnostic test or reviewing the medical documents, the center will be able to determine the right treatment classes for the children based on their ASD level.

#### 5.0 Conclusion and recommendation

Based on the analyses conducted above, it can be concluded that majority of Autism centers in Malaysia requires ASD children to undergo a diagnostic test in the form of assessment before they enroll in the classes offered in any Autism center. Looking at the classes offered in Autism center, it was also found that majority of the Autism centers offers a combination of classes for children with Autism, such as group classes, art classes, and intervention classes. The minimum age requirement to enroll in Autism centers is 3 to 4 years old while the maximum age limit for enrollment in Autism center is 6 to 10 years old. Besides, it was also found that majority of the autism centers charged classes fees in the range of RM356 to RM 600 per month. Based on the findings, it can be concluded that treatment offered by Autism centers in Malaysia are mainly catered to middle income to high-income families of Autism children only. Also, it is further suggested for Autism center to receive children with Autism below the age of 3 years old as well so that they can receive early treatment.

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