

Asperger's Syndrome in Autistic Children and Their Modes of Learning Through Casual Speech Method

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Abstract: The objective of this study is to identify the Asperger's Syndrome in autistic children by observing their behaviour, their extralinguistics factors and to develop the best teaching method in learning Malay Language. The five children with autistic learning disabilities were observed. This case study used for five children whom have been endorsed by a medical officer and special education teachers as people with autism. They participated in the Special Education Programme for Integrated Learning Disabilities. In order to select appropriate teaching methods for autistic children, researchers implemented six methods of learning in the classroom. There are Common Method Without Music, Common Method Without Songs, Common Method Without Drama, Casual Speech Method With Music, Casual Speech Method With Songs and Casual Speech Method With Drama. Observations showed that the most frequent behavioral symptom displayed by the children was reduced when this method was implemented. Casual Speech Method With Songs is the best method to reduce the asperger syndrome of five subjects to the minimum in learning Malay Language. The Casual Speech Method With Songs is the best method and be created in Teaching Module in learning Malay Language. This module can be reviewed by Ministry of Education to be applied in Special Education Programme for Integrated Learning Disabilities in Learning Malay Language. Based of their observed behavior the best method produced a strategic learning method that can enhance the communication skill of autistic children

Key words: Asperger's syndrome, Autistic children, casual speech, singing method, learning.

INTRODUCTION

Asperger's Syndrome is a pervasive developmental disorder on the autism spectrum characterized by social deficits, relatively normal language and cognitive development, and the presence of idiosyncratic interests (Henderson, 2001). Pervasive development disorder are a group of conditions that involve delays in the development of many basic skills, most notably the ability to socialize with others, to communicate, and to use imagination. The symptoms of Asperger's syndrome vary and can range from mild to severe. According to WebMD (2011), the common symptoms include problem with social skills, eccentric or repetitive behaviors, unusual preoccupations or rituals, communication difficulties, limited range of interests, coordination problems, and skilled or talented.

Children with Asperger's syndrome generally have difficulty interacting with others and often are awkward in social situations. They have problems in making friends and maintaining attention. In addition, children with this condition may develop odd, repetitive movements, such as hand wringing or finger twisting. A child with Asperger's syndrome may develop rituals that he or she refuses to alter, such as getting dressed in a specific order or taking the same path to school everyday. They may not make eye contact when talking to someone and may have trouble using facial expressions and gestures, and understanding body language. They also tend to have problems understanding language in context. A child with Asperger's syndrome may develop an intense, almost obsessive, interest in a few areas, such as sports schedules, weather, or maps. Their movements may seem clumsy or awkward, however many children with Asperger's syndrome are exceptionally talented or skilled in a particular area, such as music or math (American Psychiatric Association, 2000).

The exact cause of Asperger's syndrome is not known. However, the fact that it tends to run in families suggests that a tendency to develop the disorder may be inherited (passed on from parent to child). Asperger's syndrome has only recently been recognized as a unique disorder. For that reason, the exact number of people with the disorder is unknown, although it is more common than autism. Estimates suggest Asperger's syndrome affects from 0.024% to 0.36% of children. It is more common in males than in females, and usually is first diagnosed in children between the ages of 2 and 6 years (Morris, 2011). Asperger's syndrome is a type of

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pervasive development disorder, a group of conditions that involve delays in the development of many basic skills, most notably the ability to socialize with others, to communicate, and to use imagination (WebMD, 2011).

Both Autism and Asperger's syndrome are increasingly referred to as Autism Spectrum Disorders, in that they cause delays in typical development of a child across a broad range of areas. Asperger's syndrome is at the milder end of this spectrum. These disorders begin in early childhood and continue through to adult life. They affect three crucial areas of development, which are sometimes referred to as the triad of impairments in verbal and nonverbal communication, social interaction and imaginative or creative play. Signs of Asperger's syndrome and Autism usually will appear in the first three years of a child's life, although there is no exact age for when signs of these disorders will emerge. These signs may differ between children in type and severity as well, so Autism, Asperger's syndrome and similar disorders are often seen as occurring on a spectrum. These disorders are not intellectual disabilities or mental illnesses, or caused by poor parenting skills. Currently, Asperger's and Autism cannot be diagnosed at birth through means such as blood tests or brain scans. Diagnosis occurs as delays are observed in the child's development, typically at two years of age although some researchers are arguing for earlier diagnosis (Fitzgerald & Corvin, 2001). The diagnosis of autism and autism spectrum disorders is made in early childhood, with symptoms manifesting within the first years of life. It affects boys 3 to 4 times more often than girls (Lou Laporta, 2011).

According to Malaysian Ministry of Education (2009), autistic children studying in primary schools in Malaysia consists of a total of 1176 boys and 326 girls. In secondary schools, about 350 male students are autistic while another 104 are female. The data was last updated at the end of year 2009. The objectives of this study are as to identify the Asperger's syndrome in autistic children based of their observed behavior, determine the extra-linguistic factors that govern the speech acts of children with Asperger's syndrome and produce a strategic learning method that can enhance the communication skill of autistic children.

Methodology:

This case study was conducted on five children suffering from autism. Their diagnosis was confirmed by a medical officer from a government hospital and special education teachers from the Ministry of Education. These children attended the Special Education Programme for Integrated Learning Disabilities. This special education class consisted of 17 teachers and 60 pupils but only five of them were confirmed autistic.

Researchers recorded each autistic children's behavior while their teacher was teaching. The instruments used to record the behavior of subjects were anecdotal record form, interval recording form, advanced anecdotal record form and record system form. Frequency of behavioral symptoms which occurred during a study session were assessed by researchers. All data were measured in percentage and were presented in the chart. The researchers distributed questionnaires to be filled by special education teachers and parents of the subjects.

The study also covered the social skills not yet acquired by the autistic children. Thus the researchers felt that Casual Speech Method (CSM) would be most appropriate for this group. This method is considered suitable for autistic children because they can relax and be entertained by music and songs. Autistic children is living in their own world. Therefore, it is hoped that the method can bring out their hidden skills from within themselves. CSM with music, songs and drama were used in order to encourage speech and communication among autistic children.

The data from this study can determine whether autistic can be taught to speak and interact with peers, rather than being marginalized. The behavior and emotional displays by autistic children were interpreted from a positive angle and then used to create learning modules that suit their needs. The findings of this study will have an impact on language learning in casual and relaxed setting so that autistic children are interested in talking. A strategic learning module will be produced specifically for autistic children.

RESULTS AND DISCUSSION

Asperger's Syndrome in Autistic Children:

The researchers have quoted earlier statement about autism, written by Fitzgerald & Corvin,(2001). Description of Asperger's syndrome in this section will be based on their classification. Both Autism and Asperger's syndrome are referred to as Autism Spectrum Disorders, in that they cause delays in typical development of a child across a broad range of areas. They affect three crucial areas of development, which are sometimes referred to as the triad of impairments in verbal and nonverbal communication, social interaction and imaginative or creative play. For this study, the data is classified according to language, social, emotional, and cognitive development. Data on nonverbal behavior will be presented in different table.

The profile comparison of five subjects before and after being taught by using the Casual Speech Method (CSM) with music, drama and songs are as follows:

Subject 1:

Triad of Impairments

1. Language
2. Social
3. Emotional
4. Cognitive

Before CSM

Able to spell one syllable
Liked to be alone, disobedience to teachers
Talked to herself, sensitive and laughing for no apparent reason
Slow to answer questions, slow to respond and daydreaming

Triad of Development

1. Language
2. Social
3. Emotional
4. Cognitive

After CSM

Can spell five words, according to syllables, completing sentences, singing songs taught with lyrics that are displayed.
Started chatting with others and listening to teacher's command
Speaking with friends, less sensitive and turned to see her friend with a smile
Dared to try to answer questions and responded when asked to and love to sing

Subject 2:

Triad of Impairments

1. Language
2. Social
3. Emotional
4. Cognitive

Before CSM

Able to spell all the words, customize all the pictures and complete sentences, singing songs taught with lyrics that are displayed
Liked to turn the face towards the window, rubbing eyes, scratching his head, shaking legs and bucked the chin.
Speaking to himself, sensitive, rarely smiled and did not want to express his feelings
Slow to answer questions, slow to respond, daydreaming, do not like to look at teachers, disobedience to teachers and no response

Triad of Development

1. Language
2. Social
3. Emotional
4. Cognitive

After CSM

Able to spell all the words, customize all the pictures and complete sentences, singing songs taught with lyrics that are displayed
Started chatting with others, listening to teacher-command, focused in class and participate actively
Started to talk with teachers, less sensitive, turned to to see a friend with a smile
Dared to try to answer questions, respond when told to, love to sing and read in a loud voice

Subject 3:

Triad of Impairments

1. Language
2. Social
3. Emotional
4. Cognitive

Before CSM

Can color in the image, can spell one syllable and a few words and bad hand writing
Unfriendly, solitary and more quiet, not comply with teacher-command, have to call his name repeatedly
Stared hard towards teachers, sensitive and low self-esteem because of relatively low physical condition and always stirred a friend
Slow to answer questions, slow to respond and daydreaming

<u>Triad of Development</u>	<u>After CSM</u>
1. Language	Can spell five-syllable words, complete a sentence, keen to do activities given, tried to sing but the voice is still unclear
2. Social	Started talking to others, followed teacher-command, keen to speak
3. Emotional	Talking to friends, less sensitive, turned to see a friend with a smile
4. Cognitive	Dared to answer questions, responded to command, like to read song lyrics

Subject 4:

<u>Triad of Impairments</u>	<u>Before Casual Speech Method</u>
1. Language	Can coloring in the image, can only spell one syllable
2. Social	Friendly but like stirring a friend, walk, do not sit still, like standing up and not following the instructions of teachers, like electrical gadgets
3. Emotional	Speaking to himself, imitating his teachers and peers words, prefer to use the word 'lah' in each of his spoken word and laugh for no reason
4. Cognitive	Slow to answer questions, slow to respond, day dreaming, only write his name, need help in his written work

<u>Triad of Development</u>	<u>After Casual Speech Method</u>
1. Language	Assisted by teacher in doing his exercise and can write his name only
2. Social	Start chatting with others, listening to teacher instruction when song is on track, sit quietly when his demand to play song is fulfilled
3. Emotional	Speaking to himself but able to control emotions, less sensitive, but moved and cried when he heard instrumental songs
4. Cognitive	Dared to try to answer questions and respond when asked

Subject 5:

<u>Triad of Impairments</u>	<u>Before Casual Speech Method</u>
1. Language	Beautiful hand writing, can color the right pictures. Able to spell and read sentences
2. Social	Always smiling, but still shy with peers and teachers. Like to be silent and seemed not hear the teacher-command.
3. Emotional	Expect teacher's attention. Not excited if the teacher does not see him.
4. Cognitive	Moderate response, not focus.

<u>Triad of Development</u>	<u>After CSM</u>
1. Language	Hand writing more clear when assisted by teacher. Able to spell many words.
2. Social	Love to chat. Inclined to follow teacher's instruction. Polite. Eager to learn.
3. Emotional	Positive if there is a motivation and reward. Always need words of encouragement from teacher. Like to smile.
4. Cognitive	Dared to answer questions. Give better response when doing exercise.

Results from recorded autistic children behavior during six sessions of learning in the classroom are shown in Table 1.

Table 1: Nonverbal Communication in Autistic Children.

Behavior	Subject1	Subject2	Subject3	Subject4	Subject5
Screaming	3				
No response	9	2		10	
Disturbing friend, teachers and tools				11	
Biting object/finger	11	7	2		
Swing leg	10	5	5	7	2
Walking/moving/standing	10	2	1	19	
Eye rubbing/scratching head	5	7	12	17	9
Bucked the chin	13	7	2	13	16
Placing the head and hands on the table	39	11	9	1	26

Based on the researchers observation in the classroom which was conducted by a special education teacher, it was obvious that subject 1, subject 2 and subject 5 were more inclined in placing their head and hands on the table. Subject 3 action was more on rubbing the eyes and scratching his head while subject 5 did more on walking, moving and standing. They affect crucial area of development, which are sometimes referred to as the triad of impairments in nonverbal communication. Mounting research suggests that in children with Autism Spectrum Disorders (ASD), fundamental developmental processes are disrupted. These include the capacity for shared or joint attention, reciprocal emotional and social interactions, including subtle affect gesturing, creative and meaningful use of language (Just et. al., 2004). Furthermore, emerging evidence suggests that caregivers who work on these processes may help the children make more progress especially in language and thinking capacities than caregivers who do not (Siller & Sigman, 2002).

Historically, it was believed that only surface behaviors and symptoms associated with ASD could be altered and that these fundamental developmental processes that were disrupted due to biological differences were not very amenable to favorable change (Greenspan & Robinson, 2004). At this time, there is no prescribed treatment regimen for individuals with Asperger's syndrome. In adulthood, many lead productive lives, living independently, working effectively at a job (many are college professors, computer programmers, dentists), and raising a family.

The Extra-Linguistics Factors that Govern The Speech Acts of Autistic Children:

The extra-linguistics factors that govern the speech acts of autistic children was derived from questionnaire and interview with special education teachers, parents and subjects of the study. The roles of the parents were very important because autistic children spend most of their time at home. Most parents spend time to communicate with their children because they knew their children cannot be left alone for a long period of time. Parents also provided time table and facilities for their children to learn at home. Apart from that, they gave reward and praise when their children succeeded in accomplishing a task given by them. Parents restricted their autistic children from mingling outside their homes because they feared the community will not be able to understand and tolerate the behaviours of their autistic children. This apprehensiveness resulted in a negative impact to the development of their children.

According to parents, they do not have knowledge and exposure about autistic and did not know the appropriate method to help children with autistic behaviors. Due to this reason, parents often end up with frustrating effort in joining the follow-up activities conducted at school. According to Stoppard (1998), parents often rely on special education teachers to give a complete tuition and education to their autistic children. Many parents felt that they do not possess the knowledge and effective techniques to teach their autistic children. Parents are hopeful for a specific module to educate autistic children as to help them educate their children the correct way. For the time being, they can only send their children to a special school, preferably while they are still kids because they believe various therapies can be inculcated even though the result will not be encouraging.

The roles of the teachers to understand and to identify the talents or skills possessed by autistic children are in accordance with Malaysia National Philosophy of Education. Teachers need to enhance the talents possessed by these children. For example, subject 4 was more inclined and interested in electrical and electronic equipments such as cameras, computers, and mobile phones. Teachers are required to educate autistic children on self-care such as hygiene, clothing and nutrition. In addition, teachers also need to monitor the behavior of autistic children because behavior is related to learning achievement. In addition, teachers can diversify their teaching methods so that autistic children are keen to learn. According to the teachers, autistic children should be encouraged to mix with normal children so that they can interact, not just trapped in their own world.

Peers also influence the development of autistic children either at home or at school. At school, there is an influence of peers in the classroom during the learning process eventhough every autistic child has different

behavior. They are interested in their peers, who have certain talents and influence to draw their interest. For example, subject 2 is an athlete of great interest to many subjects and he is their idol. This prompted subject 1 and 5 to come to school every day to meet their idol. Most children with autism in Ashum Gupta & Nidhi Singhal (2009) research found to be able to physically approach others to initiate an interaction, but had an impaired ability to initiate and sustain verbal interactions. They failed to achieve typical developmental milestones in language and showed use of language in socially inappropriate ways. Some autistic children have emotional disorders such as depression, screamed abruptly and cry incessantly. These behaviours affected other autistic children. They in turn followed the negative behaviors shown by their friends. There were also those who liked to bully and this factor caused some children not to come to school.

Environmental and habitation factors affect autistic children as normal children do not want to socialize and interact with them. As a result, they feel marginalized, and finally there is a sense of inferiority and lack of motivation. This will hinder the social skills of the child. The study by Howlin & Yates (1999), Pierce & Schreibman (1995), and Pepperber & Sherman (2000) found that peer influence is very crucial. Home environment is not conducive to the learning process for autistic children. Neighbours and local communities do not have the knowledge and exposure on autistic and they do not understand the real situation faced by autistic children. Lack of motivation from teachers and parents have been identified to affect the behavior of the studied subjects. Praise and recognition is necessary in educating autistic children. Motivation should be given to them from the beginning, especially by parents and teachers in guiding these children. Rewards such as gifts and words of motivation can lead them to learn better.

Specific Learning Method that can Enhance the Communication Skill of Autistic Children:

Six learning methods were carried out by researchers, namely: *music, without music, with songs, without songs, with drama, and without drama*. The best method for enhancing the communication skill of autistic children is then selected as a learning module for them. Music, songs and drama were used separately in the teaching and learning of autistic children at the National Autism Society of Malaysia (NASOM) when researchers conducted a pilot study. Later, the three methods were and called Casual Speech Method (CSM). This method was used by the researchers to enhance the communication skills of the five subjects. Researchers found that the best learning mode for autistic children was the combination of the three methods which have now been published in the form of teaching and learning module. With music, songs and drama, the subject focused more on the teacher's teaching and their behaviors were less asperger.

After the CSM was applied, the subjects Asperger's syndrome was reduced while their focus of learning increased. CSM with song was the most popular followed by CSM with music, and lastly CSM with drama. The usual method of teaching did not attract the subject. CSM that includes the elements of music, drama and songs obtained the highest average scores among the subjects. It is a proof that this method has attracted their interest to learn more and to play more. Williams (2003) reported that only 7 percent of 161 studies that make reference to play in autism actually explicitly focused on play. Without appropriate intervention, children with ASD are likely to remain on the fringes of peer groups deprived of opportunities to experience an otherwise rich and meaningful play life (Wolfberg, 2004).

Observation of the five subjects showed that every child had different skills in social, emotional and cognitive aspects. Each had their own strengths and weaknesses. After CSM was used inside the classroom, the five subjects showed an increase in social skills. The behavior of five subjects inside the classroom is shown in Table 2.

Based on percentage calculations, the Casual Speech Method with songs showed a decrease in Asperger's Syndrome among the five subjects by 17, which is equal to 80 percent. This was followed by a Casual Speech Method With Drama. The same syndrome showed a decrease by 27, which is equal to 61.5 percent. Casual Speech Method With Music showed a decrease of the same syndrome among the five subjects by 30 or 45.4 percent in Table 2.

The integration of music in all the three method proved to be the best indicator of a behavior controller for autistic children compared to the usual methods which do not use music, song or drama at all. The best learning mode is CSM with songs because when this method was used, the non-attentive behaviors of the five subjects was reduced to a minimum in Table 3.

Songs have been composed and played back in accordance with the level of autistic children's activities. Music can calm their soul. Indirectly this method can reduce their Asperger's Syndrome. Participating in music therapy allows autistics the opportunity to experience non-threatening outside stimulation, as they don't engage in direct human contact. As far as autism is concerned, studies have shown that music therapy has a significant, positive influence when used to treat autistic children. Music has a magic to improve their socio-emotional development and assist in both verbal and non-verbal communication. Improved socio-emotional development: In the first steps of a relationship, autistics tend to physically ignore or reject the attempts of social contact made by others. Music therapy helps to stop this social withdrawal by an initial object relation with a musical instrument. Instead of seeing the instrument as threatening, autistic children are usually fascinated by the shape,

feel and sound of it. Figure A shown the best method is music by looking at the percentage. Therefore, the musical instrument provides an initial point of contact between the autistic and the other individual by acting as an intermediary. Assisted in both verbal and non-verbal communication. When music therapy is used to aid in communication, its goal is to improve the production of vocalization and speech, as well as stimulate the mental process of comprehending, conceptualizing and symbolizing. A music therapist will attempt to establish a communicative relationship between the behavior of a child with autism and a specific sound. An autistic person may have an easier time recognizing or being more open to these sounds than they would to a verbal approach. This musical awareness, and the relationship between the autistics' actions and the music, has potential to encourage communication (Evans, 2011).

Table 2: Comparative Behavior of Five Subjects in Classroom

Behavior of 5 Subjects	Common	Casual	Common	Casual	Common	Casual
	Method without Music	Speech Method with Music	Method without Songs	Speech Method with Songs	Method without Drama	Speech Method with Drama
Screaming	2 98	1 99	0 100	0 100	0 100	0 100
No response	10 90	1 99	5 95	2 98	3 97	0 100
Disturb friends, Teachers and tools	4 96	0 100	1 99	0 100	5 95	1 99
Biting objects/ fingers	8 92	5 95	2 98	1 99	2 98	2 98
Swing leg	3 97	2 98	13 87	1 99	8 92	2 98
Walking/moving/ standing	9 91	4 96	6 94	3 97	7 93	3 97
Eye rubbing/ Scratching head	10 90	4 96	14 86	3 97	14 86	5 95
Bucked the chin	14 86	6 94	8 92	4 96	15 85	4 96
Placing head and hands on the table	13 87	7 93	22 78	3 97	31 69	10 90
Total	73	30	71	17	85	27

Table 3: Comparative Reduced Behavior of the Six Methods.

Behavior of 5 Subjects	CMXMusic	CSMusic	CMXSongs	CSSongs	CMXDrama	CSDrama
Screaming	98	99	100	100	100	100
No response	90	99	95	98	97	100
Disturb Friends and Teachers	96	100	99	100	95	99
Biting Objects/fingers	92	95	98	99	98	98
Swing Leg	97	98	87	99	92	98
Walking/moving/standing	91	96	94	97	93	97
Eye rubbing/scratching head	90	96	86	97	86	95
Bucked the chain	86	94	92	96	85	96
Placing head and hand on the table	87	93	78	97	69	90
Total	827	870	829	883	815	873

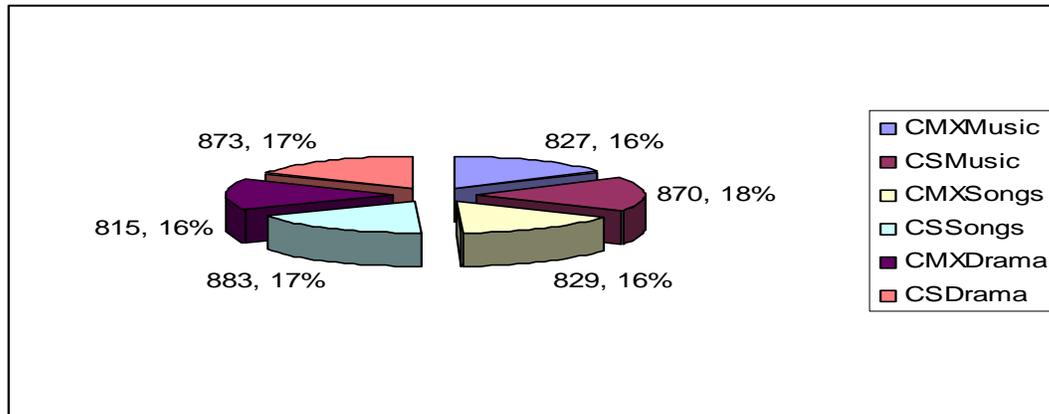


Fig. A: Percentage of the Six Methods.

Conclusion:

Based on the research findings, Casual Speech Method With Songs is the best method in the Teaching Module in learning Malay Language in school. This method is found to help control their behavior while in the classroom. Autistic children seemed interested in music and instrumental music is able to control their emotions from acting too aggressively. The songs of the late Tan Sri P. Ramlee was tested and very popular among the autistic children and the implications of the songs can soothe their emotions. Basic social skills, emotional and cognitive important for autistic children in managing their lives and all the three basic skills can be enhanced by introducing music as a key element in their learning sessions. Combination of communication skills and songs can be established with the guidance and motivation from parents, teachers, peers and society by produce a strategic learning method that can enhance the communication skill of autistic children. The special module and special CD with the late P Ramlee songs can be produce by using the six method. The Teaching Module for autistic children because Ministry Education still lack of special module for autistic children, Based on such findings, researchers hope that all parties can work together to help autistic children not to be marginalized by society. The community must see the child as a special gift from God.

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