



**#18 PAPER 22 -  
BEHAVIOURAL CHARACTERISTICS OF STUDENTS WITH AUTISTIC  
SPECTRUM DISORDERS: CASES IN KASETSART UNIVERSITY,  
THAILAND**

**Pattarawat Jeerapattanatorn<sup>18</sup>**  
*Kasetsart University, Thailand*

**Abstract**

*The aim of this research is to contribute to the understanding of behavioural characteristics of four students with Autistic Spectrum Disorders (ASD) who were studying at Kasetsart University, Thailand after given specific treatments for their behaviour modification. Four students who participated in the Development of Autistic Students Project (DASP) were cases in this experimental research. The behavioural characteristics in this study included; 1) Personal and emotional characteristics, 2) Communication Skills, 3) Social interactions, and 4) Learning behaviours. Data collected during 2010 to 2015 to gain in-depth understanding of each case. The researcher employed observations, interviews, and focus group discussions as data collection techniques. Thematic analysis was performed through the process of coding to establish meaningful patterns of students' behaviour. Finding showed significant development on personal and emotional characteristics and communication skills.*

**Keywords:** *Behavioural Characteristics, Autistic Spectrum Disorders, Behaviour Modification*

**1. INTRODUCTION**

Autistic Spectrum Disorder (ASD) is characterized by 1) Persistent deficits in social communication and social interaction across multiple contexts; 2) Restricted, repetitive patterns of behaviour, interests, or activities; 3) Symptoms must be present in the early developmental period (typically recognized in the first two years of life); and, 4) Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning. (Eunice Kennedy Shriver National Institute of Child Health and Human Development, 2014) Since 2010, Kasetsart University gave opportunities to autistic high school students to study in Kasetsart University in different fields under the Development of Autistic Students Project (DASP). Students in this project were carefully treated by all relevant people such as instructors, advisors, administrators, family members, and university students in general. There were four undergraduate students majoring in Business and Computer Education in Faculty of Education and they were my advisees. They joined DASP since they were high school students and the DASP expected to see improvements of behaviour modification on all students.

**2. OBJECTIVES**

- 2.1 To describe behavioural characteristics resulted from behaviour modification treatment of four students with Autistic Spectrum Disorders (ASD) who were studying at Kasetsart University, Thailand, and
- 2.2 To immerse general recommendation for behaviour modification of students with ASD

**3. LITERATURE REVIEW**

Autism spectrum disorder (ASD) is characterized by; persistent deficits in social communication and social interaction across multiple contexts; restricted, repetitive patterns of behaviour, interests, or activities; symptoms must be present in the early developmental period (typically recognized in the first two years of life); and, symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning. (Eunice Kennedy Shriver National Institute of Child Health and Human Development, 2015) Scientists don't know the exact causes of ASD, but research suggests that both genes and environment play

<sup>18</sup> Corresponding author. *E-mail address:* doctor.mthai@gmail.com

important roles. While there's no proven cure yet for ASD, treating ASD early, using school-based programs, and getting proper medical care can greatly reduce ASD symptoms and increase your child's ability to grow and learn new skills. Research has shown that intensive behavioural therapy during the toddler or preschool years can significantly improve cognitive and language skills in young children with ASD. There is no single best treatment for all children with ASD, but the American Academy of Pediatrics (Myers SM, et al., 2007, reaffirmed 2010) recently noted common features of effective early intervention programs. These include: (1) Starting as soon as a child has been diagnosed with ASD, (2) Providing focused and challenging learning activities at the proper developmental level for the child for at least 25 hours per week and 12 months per year, (3) Having small classes to allow each child to have one-on-one time with the therapist or teacher and small group learning activities, (4) Having special training for parents and family, (5) Encouraging activities that include typically developing children, as long as such activities help meet a specific learning goal, (6) Measuring and recording each child's progress and adjusting the intervention program as needed, (7) Providing a high degree of structure, routine, and visual cues, such as posted activity schedules and clearly defined boundaries, to reduce distractions, (8) Guiding the child in adapting learned skills to new situations and settings and maintaining learned skills, and (9) Using a curriculum that focuses on language and communication, social skills, self-help and daily living skills, research-based methods to reduce challenging behaviours, such as aggression and tantrums, cognitive skills, such as pretend play or seeing someone else's point of view, and typical school-readiness skills, such as letter recognition and counting.

The current prevalence of ASD within the United States of America is estimated to be 1:160 (2010), 1:100 within the United Kingdom (2010) and 1:1000 within Thailand (2004). The reports indicated that boys are nearly five times more likely than girls to have autism (4-5:1) (Limsila, 2010). Autism is the fastest-growing developmental disorder in many countries. Doctors, psychologists, researchers and educators conducted research to help children with ASD to taking care of themselves and developing some important characteristics. It is very important for autistic students to have chance studying in normal educational institution so that they can develop their social interactions, communication skills, and personal and emotional characteristics. Kasetsart University is the first university that admitted autistic students since 2010 in cooperation with Association of Parents of Persons with Autism Bangkok and the Autism Foundation of Thailand hoping that there will be significant development on all the students.

#### **4. METHODOLOGY**

This research is experimental research. The researcher treated students under behaviour modification framework of the DASP. The treatments included 1) promote language and communication activities of students; 2) promote group assignments to foster social interactions; 3) observe personal and emotional characteristics then give advice to shape their intended behaviours; 4) observe their learning styles during classes then assess their learning outcomes by using questions; and 5) assess their homework submitted to me to check their understanding and writing skill. The focus of development include four dimensions; personal and emotional characteristics; communication skills; social interactions; and learning behaviours. Aside from researcher, family members, instructors, administrators, and buddy students has been treating students with ASD to help regarding behaviour modification. Four students of Faculty of Education which are my advisees were cases in this research. Data collected during 2010 to 2015 to gain in-depth understanding of each case. The researcher employed observations, interviews, and focus group discussions as data collection techniques. Thematic analysis was performed through the process of coding to create established, meaningful patterns of students' behaviour.

#### **5. FINDINGS**

In general, the development happened clearly on personal and emotional characteristics and communication skills. There were fair improvements on learning behaviours but, in another hand, no significant improvement social interactions. Treatment details were depended on special characteristics of each student. The results on behavioural characteristics of each student before and after treatment (2010-2015) showed in the following.

Table 1: Behavioural characteristics of each student before and after treatment (2010-2015)

		Student 1 Male, 23, now graduated	Student 2 Male, 22, 5th year	Student 3 Male, 21, 4th year	Student 4 Male, 22, 4th year
Personal & Emotional Characteristics	Before	Anxious mood, irritability, easy frustration, especially regarding relations with friends in class. But a particularly hospitable to only favorite people.	Serious on studying and fear of low academic performance. Sometime acted inappropriate manners such as picked up things on professors' tables without permission and use high volume of voice	Sometimes acting like a powerful man and spasmodic gestures as acting imitates cartoon characters. Sometimes made a phone call to teacher at very late night just wants to ask what he wants to know.	A lethargic student. He ignored all suggestions. He has no concern on studying but gives interest on computer games.
	After	There were significant improvements. He acted more mature. The anxious mood, irritability, easy frustration were disappeared.	When taught by reasons, he was adjusted himself in all suggestions. He learned everything easily by just simple conversation.	He seems to be growing up to be mature. He said 'I'm sorry to call very late at night. It will never happen again. I need to improve myself'	There were no improvements until the present time.
Communication Skills	Before	Talkative person who can speak continuously for a long period without concerning the audience. The writing skill was not good enough. He could not be able to elaborate or explain long discussion on assigned topics.	He has special ability on formal speech. He could recognize various contents and convey into words precisely but, in another hand, he lacked on writing skill. When in class, he suddenly spoke out when teachers are giving lecture.	Lack of speaking skills. Sometime he speaks in the way that no one can understand. However, he did well in writing works.	He does not talk much. He speak only when he want to speak. Writing skill is in the need to improve dramatically.
	After	He learned more how to speak and listen. He is now a good listener. However, most of the writing has not developed until the present days.	He knew more about the timing of when to speak. He did very well on speaking improvement. The writing has evolved slightly when continue giving written assignments to him.	He improved slightly in his speaking. For the writing, he had don great writing job after assigning to writing any topic that he likes. Now he could be able to write in English language explaining what he learned from his practicum experience.	There were no communication developments that can be observed. The student still looks like the same as he used to be.
Social Interaction	Before	His social interaction was great, but only to persons that he favoured. When he likes specific people, he would continue greetings and make conversations for a long time. He failed in group assignments since he could not participate in group.	He interacts better with preferable people only. But he failed in participating in group activities. He usually does everything alone and it looks like he loves to do that too. However, it made him look like people with no public mind.	Interact with people for only specific job-related assignments and some activities in his own interests only.	There was no interaction with anyone. He preferred to keep quiet and stay alone.
	After	Still there were no improvements.	There were tiny improvements. He sometime help working on school activities during evening time. He said that he recognizes the need to improve social interaction and he would try to adjust.	Still there were no improvements.	Still there were no improvements.
Learning Behaviours	Before	In class, he usually does not concentrate on his study. He could not stay in class too long as other students could do. Frequently, he lacked of learning focus. It seems that he has some particular things to think in his head. He often looks anxious.	He studied very hard in all subjects. He always made note talking for his reviews. However, he sometimes made noises during class.	He seemed to be not concentrating in lessons because he watches only what is on his laptop screen. But by giving him specific questions related to the lesson topic, he could be able to answer nicely. By observation, he likes to learn from multimedia such as videos, internet, etc. He still has the same learning styles in all subjects.	He did not pay attention to the lessons. No concentration on submitting assignments. Most of the classes, he often sleep in the classroom.
	After	There were tiny improvements on him. He has more concentration on lessons. He looks calmer and less anxious comparing to the previous time.	He continued his serious learning concentration in all subjects. Even he looks more mature and stop made noises in class but the level of anxious about academic performance still high.	However, there were no worry about his academic performance because he always responsible to his all requirements.	Still there were no improvements.

## 6. DISCUSSION

By considering the overall development of the four students with ASD towards behaviour modification, personal and emotional characteristics and communication skills have improved dramatically. There was tiny development on learning behaviour while there were no significant improvements on social interactions. The following figure indicated level of development of the four dimensions in researcher's framework.

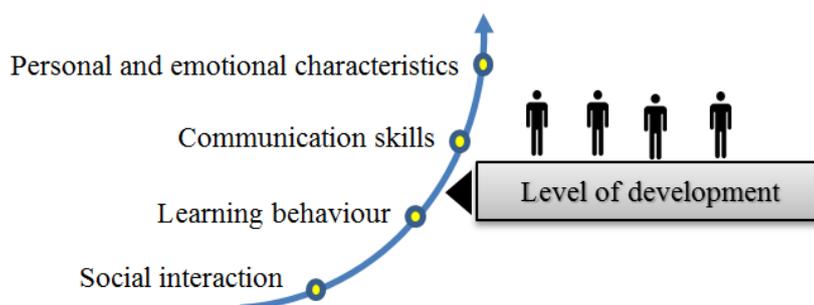


Fig. 1 Level of development of the four dimensions in general

The finding found that the emotional and personal behaviour has improved significantly. The teaching along with giving reasons took important role for behaviour modification. Autistic students always remember what they are taught very well and adapt easily if they could do. An article published by an autistic student named Chao indicated that he accepts all recommendations and welcome change (Chao, 2014). Appropriate treatments along the years changed boys to mature men. A lot of inappropriate manners were disappeared. Communication skills of students have also improved especially during conversation. Students knew when to speak and when to listen. This might also be the result from improving personal and emotional characteristics. Development of writing skill was happened only on a student who loves writing from the beginning. In this case is exceptional since most students with autism spectrum disorder hate to write (Oehler, 2013). Learning behaviours have slightly improved because learning behaviours are connected with their personal and emotional characteristics. However, since social interactions are not improved which affecting group assignment activities, as a result, learning behaviour then could not develop accordingly?

The summary of the four students were found to be the only student who has not shown improvement in all aspects. When studying more about his surrounding context, it showed that the student does not live with his parents but living with his aunt whose workload is quite heavy so she did not set aside time to take care of the student as it should be. The student spent the day playing computer games and internet until he was game addicted. He spent time in the game until very late night and had few hours to sleep. This made him sleeping in most of the classes and there were no concern in any learning activity.

The result of this research confirmed the findings of the previous researches. It can be again concluded that the biggest obstacle to adjust the behaviour of students with autism is family factors such as disapproval, treats children inappropriately, no cooperation with school. The behavioural modification could not be succeeded if the family is not contributed enough for the care of the student.

## 7. RECOMMENDATIONS

1) Behaviour modification of students with ASD must be done with the cooperation of all parties. Conversations and teachings by reasons will help students understand and adjust their behaviours very well. Together with correct treatments, time will help adjusting their characteristics from boys to mature men and we can feel significant changes on them.

2) There should be a study on the specific occupations for graduates with ASD and how to prepare them for those occupations.

## **8. ACKNOWLEDGEMENTS**

Deep appreciation goes to Dr. Wandee Sutthinarakorn for the great inspiration.  
Thanks all my autistic student advisees for your attempts and your goodness.

## **9. REFERENCES**

- Chao. (2014). Unfolding 10 Behavioural Characteristics of Autistic Students.  
Retrieved from <http://pantip.com/topic/32585970>.
- Limsila, P. (2010). *Autistic Spectrum Disorders in Thailand*. Bangkok: Faculty of Education, Kasetsart University.
- Myers SM, et al. (2007, reaffirmed 2010). American Academy of Pediatrics clinical report: Management of children with autism spectrum disorders. *Pediatrics*, 120(5): 1162-1182.
- NICHHD. (2014). *Autism Spectrum Disorder (ASD): Overview*.  
Retrieved from <http://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd/index.shtml>.
- Oehler, K. (2013). "Please Don't Make Me Write!". *Autism Asperger's Digest* . January/February 2013.