Recognition of Autistic Children Knowledge through Language Input in Classroom Interaction

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Abstract: *The purpose of this research is to investigate the recognition of autistic children knowledge through the provision of language input in classroom interactions. Specifically, research on the recognition of autistic children's knowledge through language input can be elaborated into three things, they are (1) providing teacher language input in classroom interactions; (2) cognitive knowledge of autistic children based on the provision of teacher language input; and (3) the language knowledge of autistic children based on the teacher's language input. The results showed that the ability of knowledge recognition of each autistic child varies even though they are on the same level. Education and age are not always the main factors in the cognitive level of autistic children. The cognitive level and language knowledge of Class VI students are not always better than grade V students, the evident can be seen from Student 3 (S3) in six grades. The cognitive abilities and language knowledge of S3 are no better than Student 2 (S2). However, the recognition of knowledge of autistic children can be good if the language input provided by the teacher is done correctly. The provision of language input through interrogative, imperative, and declarative speech the teacher is able to recognize factual, conceptual, and procedural knowledge of autistic children.*

Keywords*: recognition, autism student, elementary school, language input, teacher*

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I. INTRODUCTION

Language development generally continues to increase along with the age. Language development is related to children's cognitive development. The higher the cognitive abilities of children, the easier language acquisition in that children. For autistic children, the conditions of development are certainly different. Difficulty to communicate is a major feature faced by children with autistic disorders.

UNESCO (2011) stated that there are 35 million people with autism worldwide. It means that on average 6 out of 1,000 people in the world suffer from autism. The Research Center for Disease Control (CDC) in America (2012) stated that the ratio of autism is 1:68. In Indonesia, in 2015 there were an estimated 12,800 children with

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autism and 134,000 with autism spectrum (Budiman, 2015). The National Health Center for Health Statistics (2016) released the latest prevalence rate and reported a new record that autism can be found in 1 in 36 children (Zablotsky, Black, & Blumberg, 2017). This ratio is considered the same in all racial, ethnic or socioeconomic backgrounds, but gender variations exist. The prevalence of autism seems to be four to five times higher in boys than girls (Christensen et al., 2016).

The cause of autism has not been found until now (Pirzadroozbahani, Ahmadi, Hekmat, Roozbahani, & Shahsavar, 2018). This includes genetic, metabolic, and central nervous disorders, infections during pregnancy (rubella), digestive disorders to heavy metal poisoning (Suteja, 2014). Abnormal brain structures such as hydrochepalus also cause autistic children (Yahya, Kurniawan, & Samawi, 2015). Another suspected cause is the behavior of mothers during pregnancy who often consume seafood that is indicated to contain high mercury due to sea water pollution. In addition, another cause is the lack of important minerals such as zinc, magnesium, iodine, lithium and potassium (Gardenia, Tursina, & Sastypratiwi, 2015). Pesticidies and poisons originating from other environments and many other environmental factors which are not yet known with certainty also cause autism (Yuwono, 2013, p. 33).

Children with autism disorders have problems in terms of communication, social interaction and limited attention in an activity, as well as repetitive or preventive (Khoirunnisyak, Akhyar, & Gunarhadi, 2017, p. 55). According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), criteria for the diagnosis of autism spectrum disorders (ASD) include persistent deficits in communication and social interaction, as well as limited and repetitive behaviors or interests (American Psychiatric Association, 2013). One of the learning barriers experienced by autistic children is cognitive barriers. Autistic children are generally difficult to communicate verbally and non-verbally, lack of concentration and lack of understanding of instructions (Ballerina, 2016, p. 247). These obstacles certainly need to be followed up, especially for teachers as a determinant of the success of teaching and learning activities. If there are obstacles in the previous development, further developments will get delayed.

The cognitive aspects development in children is adjusted to the level of child development which aims to develop their thinking skills. Therefore, cognitive abilities are very important for children's lives since they need to be equipped and developed early on. So, teachers must be able to find the right language approach to taught children with autism so that learning objectives can be achieved. The variety of language input that teachers do with autistic students in classroom learning can improve their language skills and even their creativity.

Based on the description in the previous statement, researchers focus their studies on the cognitive abilities of autistic children. This research aims to describe the knowledge recognition of autistic children through language input provided by the teacher through learning process. This research used a qualitative research approach with a case study. The research was conducted at a special autistic primary school in the city of Malang, East Java, Indonesia. The reason to choose the school is because that school is a pilot school that focuses on autistic children.

II. RESEARCH METHOD

Research Approach

This research used a qualitative research method with a psychopragmatic approach. Psychopragmatics is a combination of psychological and pragmatic theories. Psychopragmatics examines the processes and patterns of a person or society mindset that is actualized through language expression and psychological processes to build or understand a language. The psychological aspect that triggers spoken and written speech of speakers is called psychopragmatics (Rahmat, Revita, & Fitriyah, 2019).

Psychopragmatic studies discuss psychological aspects based on the implicit intent of various speech acts delivered by speakers in various speech contexts (Rohmadi, 2016). Language and cognition processing are used to describe and examine the recognition of autistic children knowledge through the provision of language input in the context of classroom interactions that occur between teachers and students. Teachers must understand the psychological conditions of their students to be able to apply pragmatic features appropriately in order to carry out learning activities in class. The analysis was done by identifying the knowledge of autistic children through the provision of teacher language input that occurs in classroom interactions.

Participant

This research was conducted at the Autistic Special School Laboratory (SLB) of the State University of Malang (UM), Malang, East Java, Indonesia. The reason the school was chosen a research data since this school was used as a study center or pilot school for the surrounding autistic schools / institutions, and was awarded as the best autistic school in Malang, East Java, Indonesia. In addition, this school has the characteristics to innovate in develop its curriculum under the auspices of the State University of Malang, Indonesia.

This research is focused on autistic children in elementary school. In learning, this school divides students into each class based on their level of ability. The academic class was chosen by the researchers as the object of research because the class has the same autism type and good verbal ability. The class consists of 6 students, 1 female student and 5 male students with different grade levels and ages. They are one student from grade I, II, III, and V and two students from grade VI. From those six students, students who had a range of age and class levels that were not too far were taken, which is grade V and VI. Data is taken from 10 meetings in odd semester when learning process is conducted.

Data Collection

The Researcher conducted observations to school for 5 weeks to observe the learning process in class since learning in primary schools uses thematic / integrated learning models. Subject matter that observed during the learning process are *Bahasa* Indonesia, Mathematics, Social Sciences (IPS) and Natural Sciences (IPA). To maintain the naturalness of the data, researchers conducted recording and observation of the learning activities of autism student. Researchers also joined the learning activities in class directly without showing their identities or striking attributes, so that, students do not feel watched to make them able to produce speech as natural as possible. Research instrument used by researchers are cameras, sound recording devices, mobile phones, pens and papers. Researchers use cameras and voice recording devices to record activities that occur in class. The camera is placed in the corner of the classroom so that autistic students do not feel disturbed. Data collection techniques used are

recording techniques, elicitation techniques, observation techniques, and field recording techniques. After the data is collected, selected, coded and deemed to meet the requirements, then analyzed with data analysis guidelines in accordance with the problem being examined.

Data Analysis

Speech and behavior segments along with the context of teachers and autistic students in class interactions are determined as data and it is analysed by the interactive procedure model of Miles & Huberman (2007). Recognition of knowledge of autistic children arising from teacher language input when class interactions are developed and tested. Analyzing the speech of autistic children as a response due to the provision of teacher stimulants, researchers track teacher stimulants to influence the recognition of autistic children 's knowledge. Special attention is paid to examining the impact of what follows afterwards, and focusing on the directed flow of concepts embedded in the conversation. Thus, researchers can examine the effect of stimulants before and after teacher stimulants are given to children with autism and the possibility of generating further thought on each teacher stimulant. The data is coded based on four domains that show the differences in cognitive knowledge produced by autism student. To classify teacher language input, researchers adopted the findings of Chin (2007) and Bloom's revised cognitive developmental theory of taxonomy (Krathwohl, 2002). The researcher considers the stimulant aspects of the teacher related to the situational possibilities of the conversation, the development of subject matter knowledge, and the rotation management.

III. RESEARCH FINDING

Recognition of Autistic Children Knowledge Through Language Input in Classroom Interaction

Recognition of autistic children knowledge through language input provided by the teacher in classroom interaction can be analyzed in three ways, they are: (1) language input in classroom interaction; (2) cognitive knowledge of autistic children; and (3) language knowledge of autistic children.

Teacher Language Input in Classroom Interaction

Teacher's language input is necessary to develop cognitive and language skills of autistic children. Based on the results of data analysis, the language input provided by the teacher refers to cognitive processes in class interactions in the form of: (1) questions, (2) commands, and (3) declarative. The details of each language input can be described in the following table.

Table 1 Teacher Language Input provided in Classroom Interaction

Teacher Language Input	Teacher Approach Strategies	Cognitive Level
Interrogative	• Socratic questioning • pomping • reflecting toos • constructive challenge • semantic tapestry • stimulating multimodal • framing with question based-prelude • framing with question based-outline	• remembering • understanding • applying • analyzing
Imperative	- direct orders - command with the intention of prohibition - command with the intention of request	• remembering • understanding • applying

	- giving permission - command with the intention of inviting - command with an urgent intention - suggestion	▪ analyzing
Declarative	- strengthen / motivate -convince -solution - giving direction in the form of instructions - giving reminder - giving flattery / appreciation	▪ remembering ▪ understanding

The previous table stated that the language input provided by the teacher to children with autism in classroom interactions is implemented with interrogative, imperative, and declarative. Language input in the form of interrogative speech is carried out with various approaches that indicate a cognitive level at the level of remembering, understanding, applying, and analyzing. Meanwhile, language input in the form of imperative and declarative speech is carried out with various approaches that indicate a cognitive level at the level of remembering, understanding, and applying. From these data, it can be concluded that the level of language input provided by teachers to autistic children includes the ability to remember, understand, apply, and analyze.

1. **Cognitive Knowledge of Autistic Children Based on Teacher Language Input in Classroom Interaction**

Based on the results of data analysis, the knowledge of autistic children through teacher language input in classroom interactions used two-dimensional references, they are the dimensions of knowledge and dimensions of cognitive processes. Dimensions of knowledge of children with autism, including: (1) factual knowledge, (2) conceptual knowledge, (3) procedural knowledge, and (4) metacognitive knowledge. Meanwhile, dimensions of cognitive processes, including (1) remembering, (2) understanding, (3) applying, (4) analyzing, (5) evaluating, and (6) creating. Both dimensions of the children cognitive knowledge can be classified in the table below.

Table 2 Cognitive Knowledge of Autistic Children Through Teacher Language Input in Classroom

Children Knowledge Dimension	Children's Cognitive Processes Through Teacher Language Input					
	remembering	understanding	applying	analyzing	Evaluating	creating
Factual Knowledge						
• Day	s1, s2, s3	s1, s2, s3	s1, s2	-	-	-
• Date	s1, s2	s1, s2	s1, s2	-	-	-
• Month	s1, s2, s3	s1, s2, s3	s1, s2	-	-	-
• Years	s1, s2	s1, s2	s1, s2	-	-	-
• Time	s1, s2	s1, s2	s1, s2	s1	-	-
• Numbers	s1, s2, s3	s1, s2, s3	s1,s2, s3	-	-	-
• Upper and lower case letters	s1, s2, s3	s1, s2, s3	s1,s2, s3	s2	-	-
• fruits	s1, s2, s3	s1, s2, s3	s1,s2, s3	s1,s2, s3	-	-
• Vegetables	s1,s2,s3	s1,s2,s3	s1,s2,s3	--	-	-
• Colors	s1, s2, s3	s1, s2, s3	s1, s2,s3	s1,s2,s3	-	-
• Animal	s1, s2, s3	s1, s2, s3	s1,s2,s3	s1,s2,s3	-	-
• Land transportation	s1, s2, s3	s1, s2, s3	s1, s2	s1, s2	-	-
• Air transportation	s1, s2	s1, s2	s1	s1	-	-
• Sea transportation	s1, s2	s1, s2	s1, s2	s1	-	-
Conceptual Knowledge						
• Shapes	s1, s2, s3	s1, s2, s3	s1,s2, s3	s2	-	-

• Four-legged animal	s1, s2, s3	s1, s2, s3	s1, s2,s3	s1, s2	-	-
• Profession	s1, s2, s3	s1, s2	s1, s2	s1, s2	-	-
• The function of transportation	s1, s2	s1, s2	s1, s2	s1, s2	-	-
• Plant parts	s1, s2, s3	s1, s2, s3	s1, s2	s1	-	-
• Song title	s1, s2	s1, s2	s1	s1	-	-
Procedural Knowledge						
▪ addition	s1, s2, s3	s1, s2, s3	s1, s2,s3	s2	-	-
▪ multiplication	s1, s2	s1, s2	s1,s2	s2	-	-
▪ division	s2	s2	s2	s2	-	-
▪ How to make a cake	s1	s1	s1	s1	-	-
▪ Become a pilot	s1	s1	s1	s1	-	-
Metacognitive Knowledge	-	-	-	-	-	-

Note:
s1 = Putra, a boy, Grade VI
s2 = Jaka, a boy, Grade V
s3 = Putri, a girl, Grade VI

The previous table shows that the cognitive knowledge of autistic children in grades IV, V, and VI is in the factual, conceptual and procedural dimensions. Knowledge of autistic children on the metacognitive dimension has not yet emerged. In the cognitive process through teacher language input, children with autism generally have the ability to remember, understand, apply and analyze. However, the cognitive knowledge that each autistic child has is different.

In factual knowledge, from the cognitive process, S1 is able to 'remember', 'understand', and 'apply' all existing knowledge based on the teacher language input. The cognitive process at the 'analysis' stage is obtained by providing knowledge about numbers, fruits, colors, animals, land transportation, air transportation and sea transportation. Almost the same as S1, from the cognitive process, S2 is able to 'remember', 'understand', and 'apply' existing knowledge based on language input provided by the teacher in classroom interactions. The cognitive process at the 'analysis' stage is obtained by providing knowledge about upper- and lower-case letters, fruits, colors, animal and land transportation. Unlike S1 and S2, not all cognitive processes 'remember', 'understand', and 'apply' are controlled by S3, let alone the 'analysis' stage. The cognitive process of 'remembering' and 'understanding' is obtained by providing S3 through knowledge input about days, months, numbers, upper- and lower-case letters, fruits, colors, animals, and land transportation. The cognitive process of 'application' is obtained by S3 through the input of knowledge about numbers, upper- and lower-case letters, fruits, colors, and animals while 'analysis' is obtained through the input of knowledge about fruits, colors, and animals.

In term of conceptual knowledge, if we saw it from the cognitive process, S1 is able to master the stages of 'remembering', 'understanding', and 'applying' all existing knowledge based on language input provided by the teacher. The cognitive process at the 'analysis' stage is obtained through the provision of knowledge about four-legged animals, professions, means of transportation, plant parts, and song titles. S2 is able to master 'remembering' and 'understanding' stages of all available knowledge based on the language input provided by the teacher, and only the knowledge of song titles is not mastered at the application stage. The cognitive process at the 'analyzing' stage is obtained through the provision of knowledge about the shape of the building, four-legged animals, the profession, and the function of the means of transportation. Meanwhile, at the 'remembering' stage, S3 did not master the

knowledge of the transportation tools and song titles. At the 'understanding' stage, S3 does not master knowledge about professions, transportation equipment functions, and song titles, while at the application stage, S3 only mastered knowledge of building shapes and four legged animals.

In term procedural knowledge, it can be seen from the cognitive process, which is 'remembering', 'understanding', and 'applying' stages, S1 only does not master the knowledge of division, and in the 'analysis' stage S1 mastered knowledge of how to bake a cake and become a pilot. In the 'remember', 'understanding', 'applying', and analyzing 'stages, only the knowledge of how to make a cake and become a pilot is not mastered by S2. Meanwhile, the cognitive processes of 'remembering', 'understanding', and 'applying' are mastered by S3 on the knowledge of addition.

2. Language Knowledge of Autistic Children based on Teacher Language Input

The language knowledge of autistic children based on the language input provided by the teacher in classroom interactions, including (1) semantic knowledge, (2) narrative knowledge, (3) descriptive knowledge and (4) argumentative knowledge. In detail, each linguistic knowledge is described in the table below.

Table 3 Language knowledge of autistic children

No	Language Knowledge	Data	Autistic children
1	Semantic (word and meaning)	Unit of time	
		▪ Day, date, year	s1, s2, s3
		▪ at 15.00, at 06.00	s1, s2
		Profession	
		▪ Farmer	s1, s2
		▪ Army	s1, s2
		▪ Teacher	s1, s2, s3
		▪ Police	s1, s2
		▪ Doctor	s2, s3
		▪ Nanny	s1
		▪ Nurse	s2
		▪ Chef	s1, s2
		▪ Diver	s2
		▪ Technician	s2
		▪ Clown	s1, s2
		▪ Tailor	s1, s2
		▪ Gardener	s1
		▪ Dancer	s1
		▪ Farmer	s1, s2, s3
		▪ Football Player	s1, s2, s3
		▪ Astronaut	s1
		▪ Barber	s1
		▪ Racer	s1
		▪ Painter	s1, s2, s3
		▪ Waiter, Reporter	s1
		Vehicle	
		▪ Train	s1, s2, s3
		▪ Car	s1, s2, s3
		▪ Ambulance	s1, s2, s3
		▪ Airplane	s1
		▪ Layer Ship	s1
		▪ Bus	s1, s2, s3

		▪ Pedicab	s1, s2
		▪ Carriage	s1
		▪ Bajaj	s2
		Animals	
		▪ Cat	s1, s2, s3
		▪ Elephant	s1, s2, s3
		▪ Dog	s1, s2, s3
		▪ Lion	s1, s2
		▪ Horse	s1, s2
		Shapes	
		▪ Circle	s1, s2, s3
		▪ Crescent	s1, s2
		▪ rectangle	s2
		▪ Curl	s2
		▪ Star	s1, s2, s3
		▪ Heart	s2
		▪ Square	s1, s2, s3
		▪ Oval, Triangle	s1
		Part of Plants	
		▪ Root	s1, s3
		▪ Stem	s1, s3
		▪ Tree	s1, s3
		▪ Leaves	s1, s3
		▪ Flower	s1, s3
		Color	
		▪ Pink	s1, s2, s3
		▪ Yellow	s1, s2, s3
		▪ Green	s1, s2, s3
		▪ Orange	s1, s2, s3
		Flower	
		▪ Rose, Jasmine	s3
2	Narrative	- Activities on Sunday	s1, s3
		- Helping mom	s1
		- Play at home with brother/sister	s2
3	Descriptive		
	• Descriptive objective	- Profession	s1, s2
		- Four legged animal	s1, s2, s3
	• Descriptive explanative	- Become a pilot	s1
		- Make a cake	s1
		- Police duty	s1, s2
		- Soldier weapon at war	s1
	• Descriptive correlative	Watering plant activity with supporting media like picture	s1
4	Argumentative	-Traffic violation	s1

Based on the previous table, it is known that the language knowledge of each autistic child is obtained differently. When it is traced, the language abilities acquired by autistic children are dominated by S1, followed by S2, and finally S3. S1 mastered linguistic knowledge related to semantic, narrative, descriptive, and argumentative knowledge. S2 also has semantic, narrative and descriptive language knowledge but is limited. Meanwhile, S3, only has the semantic linguistic abilities that pretty much mastered, while the narrative and descriptive abilities are low.

Furthermore, from the topics/materials that taught by the teacher, most of them can be found near or located around the environment of autistic students, such as the type of color, type of flower, type of animal, plant parts, transportation, profession, activities at home. This shows that the teacher's language input is able to recognize the language knowledge of autistic children. Linguistic knowledge whose topic is close to an autistic child is easily understood by every autistic child, while a fairly abstract topic can only be understood by one of the autistic student (S1).

IV. DISCUSSION

Recognition of children with autism knowledge through the provision of teacher language input in classroom interactions can be analyzed in three ways, they are: (1) teacher language input in class interactions; (2) cognitive knowledge of autistic children; (3) language knowledge of autistic children.

Providing Teacher Language Input in Classroom Interaction with Autistic Children

Based on the result finding of the research, the provision of teacher language input in classroom interaction is done through interrogative, imperative, and declarative speech. However, the majority of teacher language input is done through interrogative speech. Imperative, and declarative utterances are used to support interrogative teacher speech. The use of interrogative speech, instructions in giving questions and the use of multimodal is done so that autistic children are able to express their ideas through language activities.

Most of the questions asked by teachers are low cognitive levels questions (memorizing and remembering). Only a few students are able to respond to teacher language input at the 'application' and 'analysis' levels, which is S1 and S2. S3 is able to respond to teacher language input at the 'analysis' level but she is very slow, the teacher requires semantic tapestry, multimodal stimulation, and pomping many times so that S3 is able to produce speech, this is related to research by Chin (2007). It is shown that the language ability of S3 is lower when compared to S1 and S2. In order to interpret what other people say, children integrate words into more meaningful units and integrate auditory with contextual information. Children who are slower or who are incompatible with hearing and visual information are at risk for language misunderstanding directed at them. Because linguistic input is so fast, if children are slow even by a few hundred milliseconds in processing lexical items, the effects will accumulate during sentence formation (Bavin, et.al., 2014).

Cognitive Knowledge of Autistic Children Based on Teacher Language Input

Based on the research finding, it is found that the highest cognitive dimension of autistic children is at the stage of procedural knowledge. Although all autistic children are at this stage, mastery of each autistic child is different. Among the three autistic children, S3 has the lowest cognitive knowledge. Although they are able to remember, understand, apply and analyze, the ability of S3 is only at the stage of completing answers to teacher input. There are so many feedbacks in the form of multimodal stimulus done by teachers. in addition, simple reinforcement, including extra time for favorite activities, attention from peers or adults, stickers, toys, or food, but simple, natural and related to the interests and needs of children with autism will be effective (Cockerham & Malaia, 2016). The ability to compose words into sentences is still simple, and many are silent. Unlike the case with S2 which despite having different levels and ages, but he has a fairly good cognitive ability. Meanwhile, S1 in general

has good cognitive abilities. S1 is able to remember, understand, apply, and even analyze all the language input from the teacher both factual, conceptual, and procedural knowledge. The teacher does not give too much inducement to S1. Teachers simply provide multimodal stimulus or use repetitive questions to develop S3 cognitive abilities.

When compared with normal children, of course, the cognitive stages of autistic children are lower. In the context of education that refers to Bloom's taxonomy theory, normal children in grade I of primary school are at the stage of 'remembering' and 'understanding', class II is at the stage of 'understanding' and 'applying, class III is at the 'applying' stage, class IV is at the 'applying' and 'analyzing' stage, class V is at the 'evaluating' and 'creating' stage, class VI is at the better 'evaluating' and 'creating' stage (Bujuri, 2018). However, children with autism are very likely to have the ability at the stage of 'evaluating' and 'creating' when they are provided with varied and creative teacher language input.

Language Knowledge of Autistic Children's Based on Teacher Language Input.

Based on the result finding stated before, in general the language knowledge of children with autism develops quite well even though the cognitive and linguistics abilities of each autistic child vary. S1 has semantic, narrative, descriptive, and argumentative abilities that are better than S2 and S3. Teacher language input provided in the form of socratic questioning and pomping is able to encourage S1 to develop cognitive and linguistic abilities. This can be seen in the following dialogue of the teacher and the autistic child (S1).

> T   : who want to tell a story? S1 do you want to do that?
> S1 : … (look nervous and doubt to start a story)
> T   : "S1 inhale and exhale!"
> S1 : ….(inhale by following the teacher suggestion)
> G   : "on sunday?
> S1 : "Yesterday, Sunday… morning… awake…car…by car" (pause)
> G   : "Where are you going by car?"
> S1 : "take a walk!"
> G   : "Where?"
> S1 : "to sent..."
> G   : "sent what?"
> S1 : "Package (lough out loud) around the city"
> G   : "for what?"
> S1 : "dia. Diaper into house..houses"
> G   : "Oh, take a walk around the city to deliver diapers from house to house. S1 is smart
> S1 : (smiling)
> G   : "Then, what happened?"
> S1 : (while holding his hand and scratch his head) "Eat."
> G   : "Where do you eat?"
> S1 : (muttered softly while playing his hand) ..un..run."
> G   : "Hah? Where?" (high pitch) I cannot hear you clearly."
> S1 : "run..run..(while scratching his head). "Warun"
> G   : "Waruuung" (correcting the pronounciation)
> S1 : "Wangur."
> G   : "Waarung." (spelling)
> S1 : "Waruuuung"
> G1 : "Yes, good job. After that?"
> S1 : "Home. Done!"
> G   : "Wah, good job S1? S1 take a walk while helping mom selling a diaper.
> S1 : (Smiling)
> G   : "Good Job. Give applause for S1!"

In the conversation between the teacher and S1 above it appears that the teacher's language input is done through socratic questioning such as 'Sunday?', 'Where?', 'Sent what?', 'What?' nd declarative speech by repeating the S1 answer (as forms of speech reinforcement) as well as by giving awards / praise such as 'smart', 'good job', 'give applause'. In the previous conversation it appears that there is narrative knowledge possessed by S1. As explained in a research by Diehl et al. (2006), when children with and without ASD are carefully matched for age, cognitive abilities, expressive and receptive language skills of children with ASD show significant disturbances in story coherence but not in story length or syntactic complexity (clauses subordinate). In other researches, children with ASD create narratives with syntactic sentences that are shorter and fewer than the language of children with non-ASD (King et al. 2013). A research by Peristeri et al. (2017) compared children with ASD with high language levels (HL), low language levels (LL) and non-ASD children who were suitable for language, age and cognitive abilities. The results showed that narratives produced by children with ASD LL had lower syntactic complexity (fewer subordinate clauses) than the other two groups, while there were no differences between HL ASD and non-ASD children of the same size. Based on some of the views above it can be concluded that autistic children have a pretty good narrative ability even though the sentences produced are not complex.

However, different condition is found in S3. Although the level and age of S3 is the same as S1, cognitive abilities possessed are different. This is shown in the following dialogue between the teacher and S3.

T : "Miss S3 what is this?" (while showing picture to S3)
S3 : "Sick People"
T : "Have you ride ambulance?"
S3 : "Wiiiiiiuuuu…" (Imitate ambulance siren)
G : "Yes that the sound. Have you ride an ambulance?"
S3 : "yes"
G : "Do you get sick and ride ambulance?"
S3 : "Once"

The dialogue above is a conversation between the teacher and S3 when asking questions about transportation. The teacher gives questions to S3 by using picture media. In this situation, it is appeared that the use of picture media is effective for stimulating autistic children to communicate and recognize the knowledge of autistic children even though there are also conversations that are not incomprehensible. This is in line with the views of Tager-Flusberg et al. (2005), which stated that the range of linguistic abilities in children across the autism spectrum, makes two main differences. First, some children with ASD fail to acquire oral language skills beyond the basic or minimum level, which can range from no words spoken to less than 20-30 words (Kasari et al., 2013); about 30% of children with autism are included in this group (Tager-Flusberg and Kasari, 2013). Second, in groups of children who are verbal, some present with normal language while others have prominent language deficits, including difficulties with grammatical understanding and use (Tager-Flusberg and Joseph, 2003; Baird & Norbury, 2016). In the literature, the latter two groups are often distinguished by the terminology of normal autism language (ALN) and autism with language disorders (ALI).

Because ASD (Autism Spectrum disorder) is on a continuum, there is a significant heterogeneity in the phenotypic appearance of individuals with this disorder, ranging from the mild to more severe disorders. The range of abilities is also seen in the language skills of children with ASD: some present with intact language skills, while

others develop little or no language (Tager-Flusberg, 2004). In addition, in groups of children who acquire language, pragmatic skills have been found to be consistently poor while grammar abilities can greatly vary, even in individuals with high functioning autism. Some children present with grammar in the average range (Kjelgaard and Tager-Flusberg, 2001; Tek et al., 2014), while others have difficulties with grammar (Roberts et al., 2004; Eigsti et al., 2007 ; Tek et al., 2014; Durrleman and Delage, 2016; Modyanova et al., 2017).

Thinking ability of autistic children is likely to be dominated by visual rather than verbal (Kamio & Toichi, 2000). The pattern of switching back to see other images can reflect the focus on visual stimulation over hearing or it can show a more detailed processing of the available images, which will be consistent with previous literature [e.g. Happé, 1994].

V. RECOMMENDATIONS FOR FUTURE RESEARCH

This research has only limited data to 3 autistic children with grades V and VI. Future studies are expected to be able to retrieve data with a greater number of students, as well as the location of the data taken. Provision of language input from variety of teachers can also be considered as further research because the teaching style of each teacher is certainly different. Age and teacher experience in teaching is likely to be determinant factors of teacher flexibility and skills when teaching autistic children. The use of strategies and techniques to teach teachers creatively and appropriately can make the knowledge of autistic children develop and increase. Furthermore, such research and future findings will contribute to find the teaching model to teach autistic children in the classroom effectively.

VI. CONCLUSION

Every autistic child has varying cognitive abilities. Education and age are not always the main factors in the cognitive level of autistic children. Class VI students' cognitive level and their language knowledge are not necessarily better than grade V students, the evidence of this statement is occurred to S3. The cognitive abilities and language knowledge of S3 are no better than S2. Recognition of knowledge of autistic children can develop very well if the teacher is able to provide language input correctly to each child. The placement of students in the same class (with different levels) has not been a determinant of the learning success of autistic children if the teacher has not been able to identify and find the right way / strategy to optimize the abilities of each autistic child. With this research, teachers hope to determine the right approach so that learning objectives can be achieved, which is the achievement of the cognitive level in each child. Sharpening and strengthening as well as varied and creative multimodal instruments are needed in teaching autistic children so that the cognitive achievements and language knowledge of each autistic child can be achieved.

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