OMISSION REPERCUSSIONS IN THE UTTERANCES OF ADULTS SUFFERING FROM AUTISTIC SPECTRUM DISORDER

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Abstract

Autistic Spectrum Disorder (ASD) is a developmental disorder experienced by a person since childhood, which causes one's inability to communicate and express feelings. This study aims to compare the omission which occurs in the utterances of adults with ASD and normal children. The primary data were obtained from the spontaneous speeches of two adults with ASD and six children with normal development. The secondary data were obtained from storytelling technique without assistance. This study confirms that the phenomenon of omission that is present in the speech of adults with ASD and children with normal development as a control group is not too much different quantitatively, but qualitatively they have characteristics that can be used as comparisons. This special characteristic is related to the problem of autism spectrum disorders, namely the ability to communicate in responding to the interlocutor. The results of this study can contribute as a first step in diagnosing language disorders for people with ASD.

Keywords: autistic, language disorder, omission of words, social communication deficit

Abstrak

Autistic Spectrum Disorder (ASD) adalah gangguan perkembangan yang dialami seseorang sejak kecil, yang menyebabkan ketidakmampuan seseorang dalam berkomunikasi dan mengungkapkan perasaannya. Penelitian ini bertujuan untuk membandingkan pelesapan antara tuturan orang dewasa yang menderita ASD dan anak-anak normal. Data primer berasal dari tuturan spontan dari dua orang dewasa yang menderita ASD dan enam orang anak yang normal secara perkembangan. Data sekunder didapatkan dari teknik bercerita tanpa bantuan. Studi ini menegaskan bahwa fenomena pelesapan yang hadir dalam tuturan orang dewasa penderita ASD dan anak-anak sebagai grup kontrol secara kuantitatif tidak terlalu jauh berbeda, namun secara kualitatif memiliki ciri yang dapat dijadikan pembanding. Ciri tersebut berhubungan dengan permasalahan gangguan spektrum autisme mengenai kemampuan komunikasi dalam memberikan respons terhadap lawan tutur. Hasil dari penelitian ini diharapkan dapat memberikan kontribusi sebagai langkah awal diagnosis gangguan kebahasaan bagi orang dengan ASD.

Kata kunci: autis, gangguan bahasa, pelesapan kata, defisit komunikasi sosial

INTRODUCTION

Autistic Spectrum Disorder is a developmental disorder experienced by someone since childhood, causing the disability in communicating and expressing feelings. The term autism comes from Dr. Kanner's research on the behaviors of 11 children who become his patients (see Feinstein, 2010). In his research, Kanner provides several features as a diagnosis of his patients, namely a

lack of affective contact with other people, a very obsessive desire to do the same and repetitive routines, a fascination with objects that are handled with fine motor movement skills, and mutism or some kind of condition of someone who does not have the ability to speak (Feinstein, 2010). Someone who has autism has different characteristics from other people with autism. To explain this matter, the term spectrum is used.

Schopler et al. (2002) stated that autism is defined as a spectrum of social disorders, ranging from lack of awareness of surrounding situation, mental retardation, to High Functioning Autism (HFA). The term spectrum can also include various symptoms and degrees of impairment (disability) that people with Autistic Spectrum Disorder (henceforth, ASD) experience. Frith & Hill (2004) stated that autism disorders experienced by a person can include all levels of intelligence, language abilities, and severity of disorders. In a different explanation, Frith (2008) stated that autism starts when a baby is still in the womb. When a child's body sensors become active, people with ASD have difficulty responding to social signals. People with ASD have no sense of social situations, they have difficulties carrying out actions and signals like normal people. This causes people with ASD to be socially incapable as they ignore physical contact and resist reactions to minor events.

In terms of communication, Kolk (2001) conducted a comparative study between aphasics, normal adults, and children. The finding indicates that children who are beginning to learn a language tend to use a high frequency of omission in the same way as people with agrammatical aphasia. The phenomenon of deprivation by children generally occurs in the form of oral speech due to limited ability and cognition in non-verbal (written) speech. Kolk (2001) also found that both adults and children do word slipping in their utterances. In a different context, a review by Rice et al. (2005a) stated that children with ASD also produce word omissions, especially on finiteness markers. They have problems in producing the third-person singular –s.

Regarding the phenomenon of omission, this study aims to see how omission occurs in adults with ASD and normal children as a control group. The question is, are there any differences between omisson that is present in adults with ASD and that in the control group?

LITERATURE REVIEW

Narrative Ability of People with ASD

Narrative analysis has been used to test the social communication skills of children with ASD (Dodd et al., 2011). Narrative tests can be applied to people with ASD who already have verbal communication skills. As for people with ASD who can develop speech, the challenge that is often found is the ability to start and maintain age-appropriate conversations (Gerdts et al., 2012). Individuals with ASD tend to be able to carry on conversations about topics of interest rather than topics given by other people. Someone with ASD can tell a lot about the game they like while others may talk more about God. People who talk a lot about games will find it difficult if the topic is diverted to God. These forms of difficulty can be reflected in several actions, such as the inability to convey the topic offered, reluctance shown verbally, and redirecting a chosen topic to a topic of previous interest. Therefore, comments that are irrelevant to the topic of conversation can easily be observed in people with ASD (Gerdts et al., 2012).

To find out about linguistic and cognitive abilities in people with ASD, several test devices are needed. These test devices are rarely found in non-European countries, such as Indonesia. One alternative that can be a solution to this problem is to adapt the language test tools

that have been developed by European countries. However, adaptations often raise problems related to meanings and cultures that are different from the original tool. Therefore, in one of their studies, Manolitsi & Botting (2011) stated that narration can be used as a clinical assessment to explore the ability to integrate linguistic, cognitive, and social skills. Through narration, we can see whether the utterances produced contain coherent information between the propositions presented, the pattern of using appropriate pronouns, and so on.

Halliday & Matthiessen (2013a) stated that a text must have a unity so that it can be understood as a whole. The unity includes two main parts, namely the unity of structure and the unity of text. The nature of the structure is related to text cohesion, which in this case is how language functions in integrating a text so that it can be understood by the readers. In addition, the nature of the structure is related to how listeners can understand the relationships of meaning woven and presented in a text (coherence).

In some cases, we can see texts that are deliberately presented in a non-cohesive manner. However, we as readers can understand the text well when the context is presented. Non-cohesive texts are generally present in literary forms, such as poetry. Thus, we can understand that the text 'intentionally' does not appear cohesively and the writer lets the readers understand it based on the context and aesthetics presented. However, sometimes the text which is present in a non-cohesive manner is not based on the 'intentional' element, but because of the linguistic disturbance. People who experience problems in the use of language generally have difficulties in producing cohesive utterances. Bishop (2014) shows how people with linguistic disorders produce speech. Here are some examples of the speech of a child with language disorder (Bishop, 2014).

1. *Bernard walked downstair*
2. *and **he** saw a monster*
3. *got little horns*
4. *and **he** says why you here my garden*
5. ***He** said oh I will gobble you up*
6. *and **he** gobbles **Bernard** up*
7. *and **he** has a little bit on **Bernard's** shoe*
8. *and dad reading the paper*
9. *and **the monster** ate **his** shoe.*

The examples above indicate that the child has tried his best to establish a cohesion between sentences. The pronoun *he* is used to refer to *Bernard* and the *monster*. In this case, listeners will have to think about the reference. Based on this example, Bishop (2014) wants to show that the text produced by a child with language disorder can be textually acceptable.

Varying Perspectives on Omission

A study conducted by Allen (2000) found that omission phenomenon is associated with a person's pragmatic ability to process conversational information. Children with ASD who possess the hallmarks of pragmatic competence may be desensitized to the pragmatic features of such informative structures and discourse. Another study is conducted by Itoÿ & Oshimaÿÿ (2014), who compared the average length of speech of developing children, and showed that ASD children have "preferred term structures". The study found that there is a susceptibility of children with ASD to the pragmatic features of information structure and discourse. Children with ASD

tend to use empty terms (blank subject or blank object). This research assumes that the subject or object is intentionally omitted because the speaker is pointing to or looking at the object (Guerriero et al., 2006).

In a different context, Hyams (2012) pointed out that subject omission phenomenon is related to limited language processing abilities. Allen (2000) explained the "blank subject" phenomenon from various pragmatic factors, while du Bois (1987) explained the "blank subject" phenomenon in children's language. According to Du Bois (1987), in discourse, even adults tend to lexicalize only one term per sentence (pronounced as vocabulary without eliminating terms) to reduce the burden on language processing skills.

RESEARCH METHOD

This study applied a mixed method approach, meaning that the analysis is carried out by using a combination of data counting and inductive explanation of the data acquired (Creswell & Creswell, 2018). Participants in this research consist of two groups. The first group or the experimental group consists of two adults suffering from ASD. When the data were taken, they aged 25 years and 3 months old (ASD 1) and 22 years and 3 months old (ASD 2) respectively. They both go to a Boarding School for Special Needs or *Sekolah Luar Biasa* (SLB) *BCD Nusantara Berasrama* in Depok, West Java. ASD 1 has been studying at SLB Nusantara for 4 years and 10 months and ASD 2 has been going there for 7 years and 9 months. The participants have undergone some psychology tests, namely CARS test (Childhood Autism Rating Scale), Stanford Binet, and Grafis, in order to see their levels of intelligence and status of autism. The psychology tests show that they both need the help of others to continue developing (*requiring substantial support*). The tests also indicate that their learning ability is far below the average of people sharing the same age. The IQ score of ASD 1 is 24, while that of ASD 2 is 34. Table 1 shows that there is a gap between the *chronological age* and the *mental age*. ASD 1's mental age is the same as that of a child aged 6 and ASD 2's mental age is the same as that of a child aged 7,5 years old.

Table 1. Psychological data of participants with Autism Spectrum Disorder (ASD)

Identity	ASD 1	ASD 2
CARS (Childhood Autism Rating Scale)	Severe	Severe
Mental Age (MA)	6 years old	7,5 years old
Chronological Age (CA)	25 years and 3 months	22 years and 3 months
IQ	24	34
IQ Classification	Mentally defective	Mentally defective

Both participants with ASD live in Jakarta and use the Indonesian language in their daily communication. The two participants are chosen for some reasons. First, based on the psychology test, both of them suffer from ASD with mentally defective classification. Second, they are adults suffering from ASD who have the ability to speak Indonesian and have no problem with hearing. Third, they both can interact socially with people they just know in a proper manner and are responsive. Therefore, they are expected to be able to show good cooperation during the research.

The control group in this research are three children aged 6 years old and three others aged 7,5 years old. The control group is divided into two, based on the adult research participants

having ASD mental age. Based on the results of psychological tests, the control group has the same mental age as their psychological age. Children aged 6 years old are labeled as A, while children aged 7,5 years old are labeled as B. Those participants are chosen in accordance with the psychology test result of the participants in the experimental group. The control group is used as data comparison to see whether there is a difference in omission production between people having ASD and children of the same mental age.

Procedures

For the data collection, this study uses audio recording techniques. To keep the participants focus of attention, the conversations were recorded without the awareness of the participants. For the experimental group, the recording was carried out at the Boarding School For Special Needs in Beji, Depok, under the consent of their guardian (the Headmaster of the Boarding School). For the control group, the recording was conducted at school and at home.

There were two methods used in this study. The first method was the participants were asked to make a narration without aid. In this case, the utterances produced by the participants were the responses to the questions asked by the researchers. The questions were based on a theme about a vacation or a game. For the second method, the researchers used a picture (see Figure 1). The picture was chosen because it has been commonly used to see the utterances of people with language disorders such as aphasia (Goodglass et al., 2001).
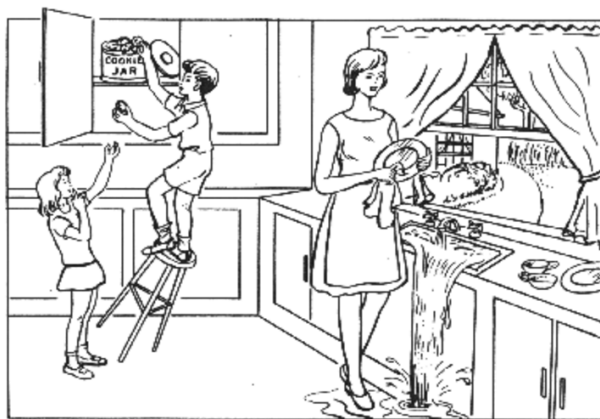

Figure 1. The Cookie Theft Picture
Source: Goodglass et al., 2001

Data Processing Techniques

The participants' utterances were recorded and then transcribed. Their utterances were their responses to the questions raised by the researchers. The transcription is divided into three narrative segments. The first narrative segment involves utterances about a topic. The second narrative segment deals with utterances of a different topic. The last segment is when there is a long pause that indicates the end of a speech.

Next, the transcriptions were given numbers. For example, A1 indicates the first utterance produced by A, B1 indicates the first utterance produced by B, P1 indicates the first utterance produced P, and so on. The data that has been selected will then be displayed sequentially according to the sequence of the conversations. Several conversation segments display the

conversation situation or context as additional information in conducting analysis. Conversation segment data that does not display the situation or context of the conversation indicates that the situation that occurs is the same as the situation in the previous segment.

RESULTS AND DISCUSSIONS

Omission in Adults Suffering from ASD and Normal Children

The omission phenomenon shown in Table 2 and Table 3 below shows how adults suffering from ASD and the normal children produced utterances with omission. The discussion on omission in this paper refers to Halliday & Matthiessen (2013a), who state that omission is a sentence formed from an incomplete clause consisting of nominal, verbal, or clausal components.

Table 2. Omission by Adults with ASD

Participants	Methods	Number of Clauses	Nominal Omission	Verbal Omission	Clausal Omission	Omission Ratio
ASD 1	With aid	25	8	3	6	0,68
ASD 1	Without aid	26	14	5	10	1,11
ASD 2	With aid	125	22	3	26	0,40
ASD 2	Without aid	150	34	10	44	0,58

The two participants with ASD do the most omissions with nominal and clausal with the highest omission ratio of 1,11. Compared with the omissions done by the children, omissions by children have lower omission ratios.

Table 3. Omission by Normal Children

Participants	Methods	Number of Clauses	Nominal Omission	Verbal Omission	Clausal Omission	Omission Ratio
A1	With aid	56	4	5	8	0,30
A1	Without aid	16	6	0	7	0,81
A2	With aid	38	12	1	10	0,60
A2	Without aid	17	5	1	7	0,76
A3	With aid	39	9	5	2	0,41
A3	Without aid	14	5	0	3	0,57
B1	With aid	14	6	4	0	0,71
B1	Without aid	16	5	1	2	0,5
B2	With aid	13	3	0	4	0,53
B2	Without aid	28	5	5	1	0,39
B3	With aid	14	4	0	3	0,5
B3	Without aid	25	5	8	4	0,68

Both adults suffering from ASD and the children in the control group perform omission with a varying number of uses. However, it should be noted carefully whether the use of omission of adults suffering from ASD and children with control groups is in accordance with the context of speech. The context of the speech in question is whether the response given is in accordance or not with the expectations of the listener if the speech is returned to the text as a whole.

Nominal Omission

In the nominal omission, the constituent omitted is the one functioning as the subject. Below is the omission by ASD1. No aid was used in this case.

      (1) [...] (1P)   ASD1, biasanya kalau liburan pergi ke mana?
               (2ASD1)   Biasanya Ø kalau liburan ya malam Minggu.
               (3)   Sama Minggu pagi. [....]

         [...] (1P)   ASD1, where do you often go on vacation?
               (2ASD1)   Usually Ø go on vacation on Saturday night.
               (3)   And Sunday morning. [....]

      In example (1), ASD1 did the nominal omission. Even though the omitted constituent is not expressed, the utterance can be understood. However, ASD1 did not answer the question. Compare this with the nominal omission by ASD2 in example (2) below. The utterances were produced based on the picture (with aid).

      (2) [...] (1ASD2)   Tutup kerannya atau buka kerannya *mampet*.
               (2)   Ø Harus dibuka dulu biar *nggak* pada banjir. Karena ini dapur. Bersih. Tidak boleh ada apa-apa [....]

         [...] (1ASD2)   Close the tap or open the clogged faucet.
               (2)   Ø has to be opened first so it doesn't flood. Because it's a kitchen. Clean. There can't be anything [....]

      Example (2) indicates that Ø refers to the tap. However, in terms of context, the utterance is confusing as it means "opening the tap will prevent flooding". Now observe the omission produced by A3, a six-year old normal child. The omission does not make the utterance ambiguous.

      (3) [...] (1P)   A3 sukanya permainan apa?
               (2)   Ø permainan frozen, terus main kuda poni, kucing, dan hmm permainannya dapur-dapuran [....]

         [...] (1P)   What game do you like to play, A3?
               (2)   Ø frozen game, play with the little pony, cat, and hmm kitchen game [....]

      Based on the results of calculations, adults suffering from ASD 1 performed eight nominal omissions with four ambiguous uses. ASD 2 produced 22 nominal omissions with eight ambiguous uses. Meanwhile, children without aid made a total of 19 nominal omissions but none of them was ambiguous. With aid, the children performed 13 omissions with only one ambiguous use.

Verbal Omission

In verbal omission, the linguistic element omitted is the one functioning as a verbal constituent. It is the main constituent which generally is accompanied by the subject constituent on the left side and if any, object constituent, compliment, and/ or adverb on the right side (Alwi et al., 2000). Example (4) demonstrates a verbal omission by ASD1.

(4) [...] (1ASD1) Kadang suka jalan-jalan ke mal.
    (2)   Terus Ø ke mal naik tak (...) Naik mobil.
    (3)   Terus kalau Ø naik mobil beli (...)
    (4)   Ke malnya jalan-jalannya ke (...)
    (5)   Beli apa aja. [...]

   [...] (1ASD1) Sometimes go to the mall.
    (2)   Then Ø to the mall by tax (...) car.
    (3)   Then when Ø by car buy (...)
    (4)   At the malls, we go to (...)
    (5)   What things to buy [...]

In the example above, the order of the first to third utterances is a sequence of events expressed by a continuing conjunction. This provides the opportunity to choose a strategy for the escape of the verbal form which has been mentioned in the first utterance. Compare with the segment from ASD 2 below. In this example, the verbal omission creates ambiguity.

(5) [...] (1ASD2) Beta mengerti kenapa beta tidak mau menyukai gambar yang kekacauan.
    (2)   Piring sama cangkir Ø.
    (3)   Piring di rak.
    (4)   Itu bingung (menunjuk pada gambar) [...]

   [...] (1ASD2) I understand why I don't want to like chaotic images.
    (2)   Plate with cup Ø.
    (4)   Plate on the shelf.
    (5)   It's confusing (pointing at the picture) [...]

Now observe example (6), produced by B2, a normal child. In this example, the child described what he saw in the picture. The verbal omissions do not create ambiguity.

(6) [...] (IB2) Lalu ada jendela. Ada piring, Ø sendok, Ø kuali, Ø keran, Ø tempat cuci piring, lalu Ø lemari.
    (1)   Tempat (...)
    (3P)   Di luar ini ada apa nih?
    (4B2)   Ø rumput. Ø halaman. Ø pohon. Ø buahan. [....]

   [...] (IB2) Then there is a window. There is the plate, Ø spoon, Ø frying pan, Ø tap, Ø sink, and Ø cupboard
    (2)   Place (...)
    (3P)   What can you see outside?
    (4B2)   Ø Grass. Ø yard. Ø tree. Ø fruit. [....]

Based on the calculation of verbal omission, ASD 1 performed one verbal omission and one ambiguous use of omission. ASD 2 did three verbal omissions and three ambiguous omission use. Meanwhile, the children (without aid) performed only one verbal omission and no ambiguous use of verbal omission. With aid, the children produced four omissions and zero ambiguous use.

Clausal Omission

Another form of omission taking place in the participants' utterances is the omission of subject and predicate. Such omission may create ambiguity as demonstrated by ASD 2 in example (7) below.

(7)	(1ASD2)	Ibu mencuci piring sampai banjir.
	(2)	Makanya aku harap dia bertanggung jawab atas kebodohon atau kepintaran yang harus dinyatakan dia.
	(3)	Memang begitu Ø.
	(4)	Kalau enggak Ø.
	(5)	Jadi Beta sudah menyatukan dalam kekacauan di rumah [....]
	(1ASD2)	Mother is washing dishes until it's flooded.
	(2)	So, I hope she is responsible for the stupidity or intelligence that she must declare.
	(3)	Indeed Ø.
	(4)	If not Ø.
	(5)	So, I have to unite the chaos at home [...]

The narration segment above was based on the cookie theft picture. The clause omission produced by ASD 2 made the utterance difficult to understand. It is not clear for the hearers what referents ASD 2 had in mind.

Based on the calculations, ASD 1 performed six clausal omissions and two ambiguous omissions. ASD 2 did 26 verbal omissions and 11 ambiguous omissions. Meanwhile, the children performed 22 clausal omission and one ambiguous clausal omissions (without aid). With aid, the children produced seven omissions and one ambiguous use of omission.

Omission in Response to Questions

In both spoken and written language, normal people will make omissions based on the context of speech. The omitted referent usually refers to the referent that has been mentioned before. Compare example (8) and (9).

(8)	1P	: Permainan apa yang paling A sukai?
	2A	: Bola boling sama bola biliar!
	1P	: What game do you like the most?
	2A	: Bowling ball and billiard ball!

In a two-way communication as example (8), participant 2A gave a short response. Although he omitted the clausal subject, based on the context, the utterance was totally understood by the interlocutor. Example (9) is a response to the question of what 2A experienced during the holiday.

(9)   Biasanya kalau liburan saya ke patung Purbalingga. Kadang Ø ke patung Purbalingga. Kadang Ø jalan-jalan ke mal.

Usually when I'm on vacation, Ø go to the Purbalingga statue. Sometimes Ø to the statue of Purbalingga. Sometimes Ø walks to the mall.

Example (9) shows a number of subject referential omissions. The hearer could understand the omitted referent because the referent saya 'I' has been mentioned before.
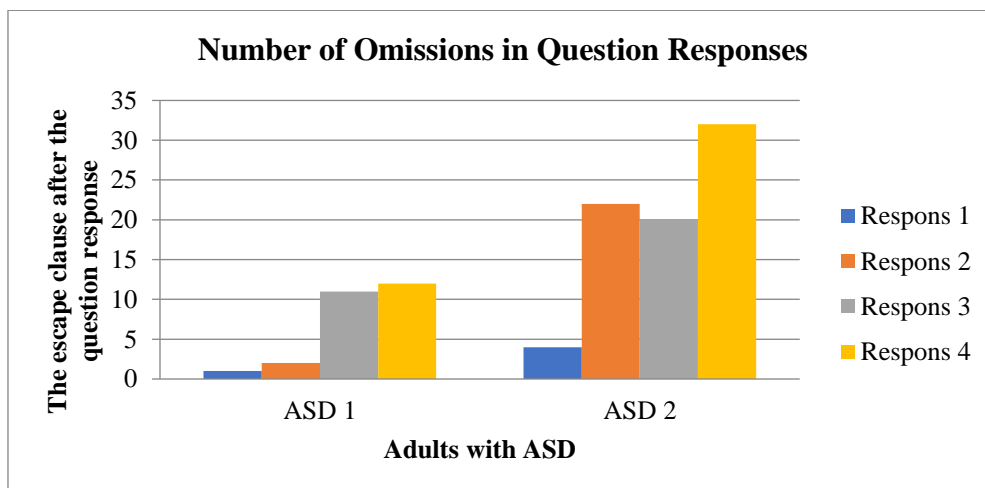
Graph 1 below shows the number of omissions in the responses produced by the normal children. When children respond to questions, a count is made in the form of the number of omissions present in each response before the next question is given. The graph also demonstrates that A2 produced the highest number of omission (nine omissions).

Number of Omissions in Question Responses
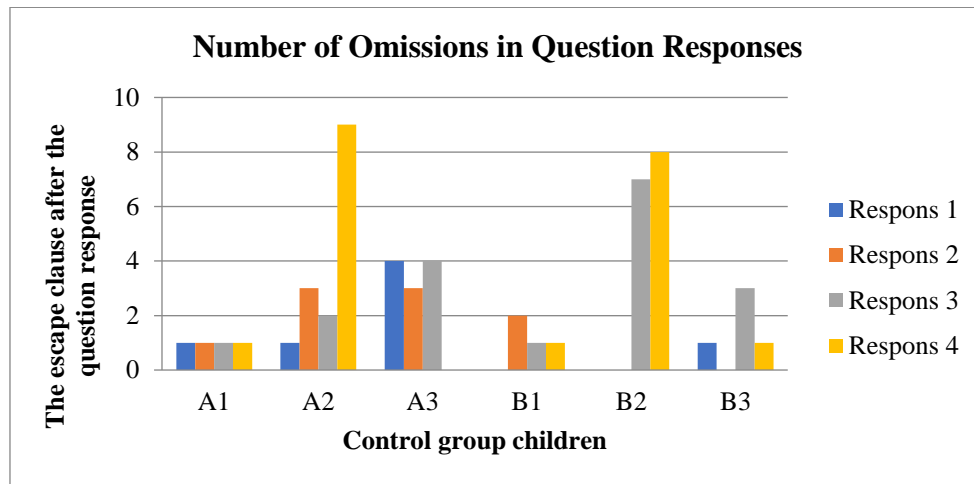
Graph 1. Omission in response to questions by children

Meanwhile, there were two children in group B (B2 and B3) who did not discharge their responses. Compare this with Chart 2 below. Graph 2 describes the number of omissions produced by the two adults with ASD. The highest number of omissions was produced by ASD 2 (32 omissions).

Comparing the omission production in both groups, the explanation is as follows: (1) adults with ASD respond to questions with more utterances than the normal children, (2) adults with ASD produced more discharges than normal children, (3) both adults with ASD and children began to respond to questions for the first time with brief utterances.

Number of Omissions in Question Responses

Graph 2. Omission in response to questions by adults with ASD

CONCLUSION

This study shows that the number of omissions in the speech of adults with ASD is not too much different from that of children. However, in relation to social communication, this study demonstrates that omissions produced by adults with ASD are related to the failure in cohesion and coherence in their utterances. In general, the use of omission by adults suffering from ASD is present in references that are difficult to determine. Utilizing linguistic theories put forward by Halliday & Matthiessen (2013a) about the unity of a text seems to be a fruitful avenue to describe the communication deficits by Indonesian adult speakers with ASD.

NOTE

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