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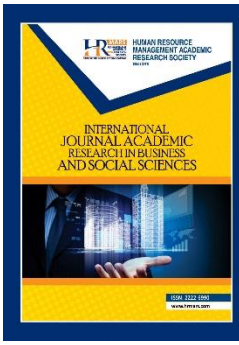
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Differences in the Spoken Discourse Produced by the Autism Spectrum Disorder (ASD) Children

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Abstract
Discourse is a social boundary that defines what statements can be said about a topic and discourse among special needs children is different. Additionally, social stories have been described as practical in educational practice and intervention. Therefore, the current research is trying to perceive the functional deficits of the ASD children by acknowledging the possibility of their autistic strengths. Likewise, the leap of research in the field of autism is enormous, and it is said to have increased dramatically in recent years.The current study uses qualitative data to provide details to the research objective; to compare the communicative intent of the spoken discourses produced by the low, medium and high functioning ASD children.There are four female and nine male ASD children selected as the sample for the study. The age is ranged from 9 to 11 years old. As for the instruments, the study utilises two main instruments; social stories and semi-structured interview questions. Nevertheless, to explain more about this phenomenon, the current research uses the Discourse Analysis Theory (Normaliza Abd Rahim, 2019). In the end, the current study is also succeeded in comparing the discourses of the ASD children according to their categories; LFA, MFA and HFA and coming up with the repertoire (list of utterances and gestures). For the communicative intent, two similarities are found; firstly, all the three groups; LFA, MFA and HFA demonstrate the seven communicative intent signals and secondly, their utterances match with the elements in the Discourse Analysis Theory (2019).
Keywords: Spoken Discourse, Autism Spectrum Disorder (ASD), Social Stories, Communicative Intent, Discourse Analysis Theory

Introduction

ASD is a disorder that comes under behaviour, communication and interaction difficulties. Autism was first found by a psychiatrist, Dr. Leo Kanner, who worked at John Hopkins University in 1943. He emphasised that the main effect of autism was the disorder in relationship development with other people (autistic aloofness). Kanner (1943) was also the first person to explain autism at an early stage. In the same year when Kanner (1943) found autism, Dr. Hans Asperger, a German scientist, documented the Asperger syndrome. Only in the 1990s, Asperger syndrome was put in the autism spectrum. However, these two disorders are different accordingly. Children with Asperger syndrome have normal development of communication and motor skills, and its

obvious symptom is social disorder. In 2013, the DSM-5 replaced Autistic Disorder, Asperger's Disorder and other pervasive developmental disorders with the umbrella diagnosis of autism spectrum disorder.

Furthermore, according to Kanner (1943), not all individuals with autism display withdrawn social behaviour. Knutsen (2013) also found that the ability of children with ASD to communicate and use language depends on their intellectual and social development. Some children with ASD may not be able to communicate using speech or language, and some may have minimal speaking skills. Others may have rich vocabularies and be able to talk about specific subjects in great detail. Some high functioning ASD children could produce echolalia. Echolalia is one of the language characteristics of autism that has been demonstrated to serve communication and social functions (Prizant & Rydell, 1984). Su, Naigles & Su (2018) also mentioned about the uneven language development among the three distinct subgroups (high verbal, middle verbal, low verbal) of (Mandarin spoken) ASD children. Since the current study also witnessed the uneven language development among the ASD children, the spoken discourses of the low, medium and high functioning ASD children were analysed and compared for their communicative intent and communicative strategies.

Literature Review

According to Prizant and Wetherby (1986), communicative intent is the skill to use expressive gestures to affect the behaviour or attitudes of others. Besides that, communicative intent is also connected to social relatedness, social cognition, and communicative knowledge. In the understanding of language and social impairment of the ASD children studies like Johnston et al., (2019); Loytomaki et al., (2019); Suraya & Normaliza (2019) mentioned about the absence of executive function (EF), and Theory of Mind (ToM) caused the ASD children to manifest the unconventional communicative means. Hence, with functional discrepancies, children with autism often face difficulty in demonstrating communicative intent.

Several studies investigating communicative intent in spoken discourse have been carried out on language and communication. Human language is indeed rich and complex, and the most challenging part is to attend to it and to reminisce everything that it communicates. Luckily, according to Givon (1992), language contains many cues that could provide information about what to attend to and what to remember later. In other words, it means that the ability to use spoken language effectively demands the communicative intent skill in both verbal and non-verbal language, which includes the comprehension and use of a communication symbol system. With this note and since ASD children are low and minimally verbal and some are even non-verbal and produce notably disfluent speech, there have been many studies conducted to look at communicative intent of the spoken discourse among autism. First was Belmonte et al., (2013) examined 31 ASD children to look at their developmental motor speech disorder by using special instruments. They managed to determine children who experienced difficulty in expressive language and those who were suffering from oral motor functioning impairment. These children were seen as having severe injuries in different areas with one and another, and because of that, their expressive language and oral motor skills were passable with their abilities. Besides that, Chenausky et al. (2019) investigated the extent of motor speech impairment from 54 low-verbal

and minimally verbal ASD children. They found that there was a need to develop spoken language interventions to cater especially the minimally verbal individuals with autism. Other than that, technology is embedded in the intervention to gauge the communicative intent of the autism too like in Wendt et al., (2019) when they used iPad-based Speech Generating Device Infused into instruction together with Picture Exchange Communication System (PECS) to help the young adults with severe autism to be able to depict the request behaviour. This study was also to highlight the communicative intent of the ASD children could be gauged in different ways.

Hengst (2020) in her book "Understanding Everyday Communicative Interactions" stated that interactions are often described as the basic ground for human society and have served as a basic model for understanding other types of communications. In particular, she said discourse analysis examines how people navigate every communicative interaction in real-time. Desiree Kaur et al. (2019) employed a case study design to observe levels of musical engagement for a group of ASD children, and they used the Sounds of Intent (SoI) Framework to see the effects of it. The results showed that the SoI Framework could create an avenue for the integration of music as the classroom activities for children with autism. Cerbo & Rabi (2019) said that children with autism, unlike their typically developing peers, do not follow all the milestones of development as regards growth and maturation. Specific to this is their delay in the social and communication aspects. Social and communication skills difficulties adversely affect the learning process of learners with ASD. It is recommended that suitable interference is needed to be conducted to address their complications.

In conclusion, with a good medium and intervention platform, communicative intent displayed by the ASD children could be observed. Joining the bandwagon, the current study was using Normaliza (2019) Discourse Analysis Theory to analyse the communicative intent displayed by the ASD children in the study and later the spoken discourses were compared.

Methodology

Referring to the research objective, the current study was required to have the qualitative data to provide the details. To date, various methods have been developed and introduced to measure the autism phenomenon. A case study design was chosen to allow for a closer approach of the ASD children. 13 ASD children were chosen with reference to the criteria provided by the DSM-5. There were only ASD students who were labelled as Level 1 and Level 2 were taken as the sample, whereas the Level 3 ASD students would likely need more intensive, long-term treatment. After a thorough discussion with a clinical psychiatrist and taken into consideration the objective of the study, ASD students who were labelled as Level 3 were excluded from the study. Therefore, only 13 with nine male and four female ASD students were selected.

Since this study was the continuation of a long study, it took the same instruments; social stories and interview questions. Not only that, the same titles of the social stories were used; (*Visit atuk and nenek in kampung, Being kind to animals and Helping my family*). After presenting the information about the communicative intent among the ASD children, the data were further compared according to the levels of the ASD respondents; low-functioning, medium-functioning and high-functioning. The comparison was clearly based on the elements inside the theoretical

frameworks. From the transcriptions, data were analysed by using the theories and presented in the following chapter.

Theoretical Framework

Discourse Analysis Theory (Normaliza Abd Rahim, 2019)		
Content	Context	Assumption
1. Theme	1. Grammar	1. Opinion
	2. Setting	2. Reference
	3. Emotion	3. Question

Table 2: Discourse Analysis Theory (DAT)

The above Table 2 displays details of DAT. Referring to Normaliza (2019), the first element of DAT is the content, and this element is analysed through a theme that could be captured from materials like books, texts or even utterances. The theme is the subject that becomes the fundamental of a text, writing, utterances or interaction. The theme can also be the main idea for the discussion. As for the context, it has three sub-elements; grammar, setting and emotion. Grammar focusses on the syntactical and morphological constituent of the words, phrases and sentences. On the other hand, the setting is analysed following the information about location, time and people. As for the emotion, it is analysed when reactions and feelings are shown as the reflection towards a situation. Finally is the assumption. Normaliza (2019) also emphasises that assumption has three sub-headings; opinion, references and question. Primarily, opinion is deliberated from all the sources that surround the discourse, which is the text, utterances and interaction. Reference, on the other hand, is seen as the opportunity that the speaker or writer could have in recalling and bringing in any ideas referring to the matter that is being discussed and lastly is questioned. This sub-element is seen as necessary because according to the theorist, it is the nature of the speaker or writer to ask questions for clarification and confirmation on certain things.

Results and Discussion

Comparison of the communicative intent of the spoken discourses produced by the low, medium and high functioning ASD children

Discourse Analysis Theory (2019)	LFA		MFA		HFA	
	Utterances	Communicative Intent	Utterances	Communicative Intent	Utterances	Communicative Intent
Content Theme	LT1. Love LT2. Peluk atuk nenek (hug atuk and nenek) LT3. Peluk la (hug) LT4. Sayang LT5. Peluk atuk, peluk nenek (hug atuk, hug nenek) LT6. No LT7. Makan kucing (cat eats) LT8. Tahu LT9. Kasi makan kasi minum air (give animals	• Communication display • Intention of uttering words: the words uttered were minimal and many of them were single words and short phrases.	MT1. Cium tangan atuk dan nenek (kiss atuk and nenek's hands) MT2. Saya cakap I love you (I tell them I love you) MT3. Hug them MT4. Ye tahu (Yes I know) MT5.Kindness…kucing makan nasi dengan ikan (cat eats rice with fish) MT6. Saya ada kucing aje cikgu. Saya sayang la…	• Communication display • Intention of uttering words: the words uttered were more than the LFA and many of them were single short phrases.	HT1. Yes…Love sangat (love them so much) HT2. Saya peluk atuk, cikgu…peluk nenek juga. (I hug my atuk and nenek, teacher) HT3. Yes, love HT4. Say I love you, cium, pegang tangan…buat macam ni… (I say I love you, I kiss and hold their hands. I do like this…)	• Generative language • Communication display (pronunciation was clear) • Intention of uttering words: the words uttered were more than LFA and MFA and many of them were long phrases and clauses.

	food to eat and water to drink) LT10. Tolong ayah (I help my father) LT15. Tolong basuh pinggan (helping washing the plates)		(I only have cats teacher and I love them.)		HT5. Yes, I love tokma so much. (tokma=nenek) HT6. Normally, I kiss her hands and she kiss me back. HT7. Yes cikgu…saya love atuk nenek saya. (Yes teacher, I love my atuk and nenek)	
Context Grammar	LG1. Sedih (sad) LG2. Nangis (cry) LG3. Hadiah (present) LG4.Marah…sedih (angry…sad) LG5. Hadiah…suka (present…happy) LG6. Haiwan mati (animal will die) LG7. Krishnan happy	Demonstrated a lot of ritualisation of signals within the contexts. Very minimal ability in understanding the grammar elements Overall, didn't manage to pull together intention, means of communication and function of the	MG1. Sad…cry MG2. Happy Jump…jump…yeah MG3. Saya tak tahu…saya nangis (I don't know…I cry). MG4. Hadiah? Saya happy teacher (Present?) (I'm happy, teacher) MG5. I like present. Happy MG6. Main dengan ayam, lembu (play	Demonstrated minimal ritualisation of signals within the contexts. Ability in understanding the elements grammar was apparent from the utterances. Overall, managed to pull together intention, means of communication and function of the	HG1. Wendy sedih…saya pun kena marah (Wendy is sad…I'm being scolded too) HG2. Sad teacher HG3. Happy la HG4. I want present too. Wendy sedih sebab tu dia kasi animals dia makan.	Demonstrated very minimal ritualisation of signals within the contexts. Ability in understanding the elements grammar was apparent from the utterances. Overall, managed to pull together intention, means of communication and function of the

	LG8. Jumpa atuk dan nenek (visit atuk and nenek) LG9. Mandi sungai (swim in the river)	message within the context.	with chickens and cows)	message within the context.	(Wendy is sad that's why she feeds the animals) HG5. Ayah Aliff bawa kereta (Aliff's father drives the car)	message within the context.
Setting Location Time	LL1. Aliff kampung (Aliff is in kampung) LL2. Wendy main dengan animals (Wendy is playing with the animals) LL3. Kampung LL4. Rumah (at home) LTi1. Kampung…rumah nenek (at nenek's house) LTi2. River LTi3. Pagi (morning) LTi4. Saya mandi pagi (I bathe in the morning)	Echolalia Two (R4 and R5) from LFA had their echolalia	ML1. Wendy kat rumah (Wendy is at home) ML2. Krishnan pun kat rumah. (Krishnan is at home too) ML3. Semua kat rumah mereka (All are at home) MTi1. Kampung and house Petang dan malam (evening and night) MTi2. Kucing pagi (cat in the morning) MTi3. Anjing dia mandi petang (dog	Echolalia Two (R7 and R10) from MFA had their echolalia	HL1. Di rumah mereka (at their house) hL2. Aliff is in kampung and at the river. HL3. Wendy's animals are at home. HL4. Krishnan and his family are staying at home HL5. Wendy kat rumah (Wendy is at home) HL6. Krishnan pun kat rumah. (Krishnan is at home too)	Echolalia One (R13) from HFA had his echolalia.

			is having a bath in the evening)		HTi1. Kucing hari Isnin (cat is on Monday) HTi2. Anjing hari Selasa ke cikgu (dog is on Tuesday right teacher?) HTi3. Tengahhari sebab kalau pagi sejuk (it's afternoon, because if it's in the morning it's cold)	
Emotion (utterances+body language)	No **LE1. Facial expression changes-looking worried** **LE2. Shake head** **LE3. Eyes were looking at somewhere else** **LE4. Quiet and was looking down** Tidak (No)	Changes in facial expression as well as eye gaze were detected a lot among LFA	Eggs no…Atuk no **ME1. Shake head** No…cannot Atuk angry **ME2. Making a frown face** No…Nanti telur sikit (Eggs will become lesser) Kesian kucing tu (Pity the cat) **ME3. Looking sad**	Changes in facial expression as well as eye gaze were detected lesser than the LFA Signals for social emotion were visible in the utterances.	No. Marah atuk Aliff. (Aliff's atuk will be angry) **HE1. Shake head** No…cannot Atuk marah nanti (Atuk will be angry later) **HE2. Shake head…eyes were looking at R12** If you ask properly, you can take it.	Changes in facial expression as well as eye gaze were detected lesser than the LFA and MFA. Signals for social emotion were visible clearly in the utterances.

	Atuk marah (Atuk is angry) Sedih (sad) **LE5. Stare at researcher** **LE6. Eyes were looking at somewhere else** Cry		Saya tak bawa balik (I won't take them back home) **ME4. Shake head and look sad** Sad so I bring home the baby cat **ME5. Looking happy** **ME6. Smiling**		Cannot steal of course. Must ask. **HE3. Making a frown face** No tak boleh, cikgu. Kena tanya. Berdosa… (No, you cannot teacher. You have to ask…it's sinful) **HE4. Facial expression changes.**	
Assumption Opinion	LO1. Boleh (Yes) LO2. Tak (No) LO3. Tak tahu (I don't know) LO4. Dia…abang tolong (The brother is helping her) LO5. Dia tak tahu (She doesn't know) LO6. Cikgu… tolong…aaa…em	Vocalisation was demonstrated. Opinions were not visible.	MO1. Boleh (Yes) MO2. Kerja sekolah senang (Homework is easy) MO3. Tanya emak (Ask the mother) MO4. Sebab dia kecil lagi (Because they are still small) MO5. Yes they can MO6. I don't want homework	No vocalisation. Demonstrated minimal ritualisation of signals within the contexts. Minimal opinions were heard.	HO1. Boleh cikgu (Yes they can, teacher) HO2. Sebab dia sekolah (Because they go to school) HO3. Tak boleh (No)…cannot HO4. Because dia adik, Krishnan abang (Because they are sisters	No vocalisation. Demonstrated very minimal ritualisation of signals within the contexts. Opinions were heard clearly.

	mm (Teacher can help)				and Krishnan is a brother) HO5. Homework is easy HO6. Tak boleh cikgu. (No they can't, teacher)	
Reference	LR1. Tolong ayah (I help my father) LR2. Tolong cuci car…cuci (I help him with washing the car) (hardly made reference) LR3. Aliff suka atuk nenek LR4. Sedih…cry (sad) LR5. Hadiah…suka (present…happy) LR6. Boleh (Yes) LR7. Cik…gu tolong (Teacher can help)	Vocalisation References were hardly made by one respondents and only visible minimally from others.	MR1. Saya mandi pagi (I bathe in the morning) MR2. Saya tolong emak, ayah, semua. (I help my mother, father and everyone) MR3. Nanti telur sikit (Eggs will become lesser) MR4. I help my mum with washing…baju, pinggan. (clothes and plates) MR5. I don't want homework	No vocalisation. Demonstrated minimal ritualisation of signals within the contexts. Minimal references were heard.	HR1. Saya tolong ayah cuci kereta. (I help my father washing his cars) HR2. Boleh cikgu (Yes they can, teacher) HR3. Sebab dia sekolah (Because they go to school) HR4. Saya tolong kakak. (I help my sister) HR5. Kakak pun tolong saya…homework.(My sister helps me too with my homework)	No vocalisation. Demonstrated minimal ritualisation of signals within the contexts. References were heard clearly.

					HR6. I help Yaya my sister cleaning up her toys.	
Question	LQ1. Tidak selamat? (Not safe?) LQ2. Mati (Die) LQ3. Mati ke? (Die?) LQ4. Mati ke teacher? (Did they die teacher?) LQ5. Saya tak tahu. (I don't know) LQ6. Mati kot (Die, I think)	Minimal awaiting response from the LFA respondents was observed Questioning ability was very minimal too.	MQ1. Cikgu rasa, mati ke kucing tu? (Do you think they will die, teacher?) MQ2. Wendy biarkan? (Did Wendy leave them?) MQ3. Ye ke? Tak kot. (Is it? I don't think so) Selamat saya rasa. (I think they are safe) MQ4. People come and save them…kan teacher? (right, teacher)	Awaiting response from the MFA respondents was good. Questioning ability was apparent and could be observed clearly too.	HQ1. Die? HQ2. Tak la…dia cari makan lain. (I don't think so. They somewhere else to find their food) HQ3. Orang lain datang. (Other people will come) HQ4. Betul tak teacher? (Isn't it teacher) HQ5. Yes they will. HQ6. Why Wendy did not want to save them?	Awaiting response from the HFA respondents was good. Questioning ability was demonstrated clearly too.

Only the HFA respondents (HT1-HT13) demonstrated generative language ability where the number of words that they uttered were more than the LFA and MFA, and many of the utterances were long phrases and clauses; for examples, “Saya peluk atuk, cikgu…peluk nenek juga”, “Say I love you, cium, pegang tangan…buat macam ni…” and “Saya kasi animals makan cat food dan minum air”. On the contrary, the LFA respondents only demonstrated communication display and intention of uttering words. Apart from that, the words uttered were minimal and many of them were single words and short phrases (LT1-LT15 e.g. “Love”, “Peluk atuk nenek”, “sayang”, “kasi makan”). As for the MFA, the number of short phrases produced by them were more (MT1-MT11); for examples, “Cium tangan atuk dan nenek”, “Saya tolong adik”, “Tolong semua cikgu”.

The second communicative intent observed was the ability in ritualising the form of signal within the contexts. This element of communicative intent happened when the ASD respondents had difficulties and they found it challenging to respond to the situations or questions during the sessions. For this communicative intent, during the ‘grammar session’, the LFA respondents demonstrated a lot of ritualisation of signals within the contexts; for examples (LG1-LG13), “Sedih”, “Nangis”, “Marah…sedih” and “Aliff makan” and did not managed to pull together the intention, means of communication and function of the message within the context. As for the MFA respondents, they demonstrated minimal ritualisation of signals within the contexts because they managed to pull together intention, means of communication and function of the message within the context; for examples (MG1-MG11), “Saya tak tahu…saya nangis”, “Hadiah? Saya happy teacher”, and “Aliff main dengan lembu kambing”. Finally, the HFA demonstrated very minimal ritualisation of signals within the contexts and overall, they managed to pull together intention, means of communication and function of the message within the context and as a result, they produced better utterances (HG1HG7); for examples, “Wendy sedih…saya pun kena marah”, “I want present too. Wendy sedih sebab tu dia kasi animals dia makan” and “Aliff swims in the river. He eats food with family and he feeds animals too”.

This communicative intent element was seen again during the ‘opinion session’ and ‘reference session’. Since the LFA respondents found the questions posed to them challenging and they could not respond exactly to the questions, they demonstrated the vocalisation element. They produced unintelligible speech; for examples (LO1-LO6), “Dia…abang tolong”, Cikgu… tolong…aaa…emmm” and, and (LR1-LR7), “Tolong cuci car…cuci”, “Hadiah…suka” and “Cik…gu tolong”. Furthermore, there was vocalisation and minimal ritualisation of signals within the contexts that was demonstrated by the MFA and LFA respondents. Utterances produced by the MFA (MO1-MO6 and MR1-MR5) were more sensible; for examples, “Kerja sekolah senang”, “Sebab dia kecil lagi”, “I don’t want homework” and “Saya tolong emak, ayah, semua”, and the HFA respondents also produced clear utterances (HO1-HO7) and (HR1-HR7); for examples, “Because dia adik, Krishnan abang”, “Homework is easy.”, “Saya tolong ayah cuci kereta.” and “Kakak pun tolong saya…homework”.

Correspondingly, the next communicative intent observed was echolalia, and echolalia occurred in the respondents’ utterances. Two (R4 and R5) from LFA, two (R7 and R10) from MFA and one (R13) from HFA respondents had echolalia in their utterances. The echolalia produced by these respondents were immediate echolalia where most of the time they were echoing their friends’ answers; for examples, “Kampung…rumah nenek” and “Pagi”, “Saya

mandi pagi", "Krishnan pun kat rumah" (ML2 and ML6) and "Wendy kat rumah" (HL1 and HL5) or they responded by repeating the words or phrases from the questions posed to them; "River", "Kucing pagi" and "Kucing hari Isnin".

Furthermore, the ASD respondents demonstrated another communicative intent which was alternating eye gaze, persistent signalling and body language. For this, the LFA displayed a lot of changes in facial expression as well as eye gaze during the sessions; for examples (LE1-LE9) – changes in facial expression included looking worried, shaking of the head, looking elsewhere, and staring at the researcher. In contrast, changes in facial expression as well as eye gaze were lesser in MFA (ME1-ME6) and HFA (HE1-HE6) respondents.

Finally, the ASD respondents from the three groups were also observed in terms of their awaiting response from the listener and ability to question. Observations showed minimal awaiting response and minimal ability to question by the LFA respondents. The LFA respondents did not modify the form of a signal or use an alternative strategy (LQ1-LQ6); for example, "Saya tak tahu", "Mati" and "Mati kot", and as for their minimal questioning ability, they only asked simple questions: "Tidak selamat" and "Mati ke teacher?". On the other hand, the MFA respondents demonstrated good awaiting response ability and their questioning ability was apparent and could be observed clearly, too; for examples (MQ1-MQ4), "Ye ke? Tak kot", "Cikgu rasa, mati ke kucing tu?" and "People come and save them…kan teacher?". Similarly, the HFA respondents demonstrated good awaiting response where they managed to modify the form of a signal or use an alternative strategy like reasoning; for examples (HQ1-HQ8), "Tak la…dia cari makan lain" and "Mati la…sebab terbiar" as for their questioning ability, they could come up with these questions such as "Why Wendy did not want to save them?" and "Takkan orang lain tak nampak cikgu?".

Conclusion

In conclusion, two similarities were found; firstly, all the three groups; LFA, MFA and HFA demonstrated the seven communicative intent signals and secondly, their utterances matched with the elements in DAT (2019). On the other hand, among the differences were the length of the utterances produced by the LFA, MFA and HFA respondents and the echolalia and also the gestures that they exhibited. Moving on to the communicative strategies, all strategies were engaged by the 13 ASD respondents and they were different in terms of the degree on how much the engagement was.

Subsequently, the current study was succeeded in coming up with the repertoire (utterances and gestures) from the ASD children presented in tables of the comparison of the communicative intent and communicative strategies. Overall, in terms of the communicative intent, the LFA respondents did not demonstrate the generative language ability instead they showed of the vocalisation ability. This was seen from the utterances that they produced; they were only simple words and if they came up with longer phrases or clauses, they became unintelligible. Furthermore, having the MFA respondents in the study, we could see big differences between the HFA and the LFA. MFA respondents was observed as not having the generative language ability but they could utter more words and phrases and they did have a little vocalisation in their utterances sometimes. In comparison to the LFA, the MFA's utterances were more senseful. Echolalia, alternating eye gaze and body language were also realised in them. In comparison to the HFA, changes in facial expression as well as eye gaze

were detected lesser in the MFA. Finally, the MFA respondents demonstrated good awaiting response ability and their questioning ability was apparent and could be observed clearly too.

References

Alias, A. (2013). The issues in implementing transition program for special needs students. *Journal of Special Education*. *9* (16):9-14. Canadian Center of Science and Education.

Asperger, H. (1991). Autistic psychopathy in childhood. *In Frith, Uta (ed.), Autism and Asperger Syndrome*. Cambridge: Cambridge University Press, 1991: 37–92.

Belmonte, M., Saxena-Chandhok, T., Cherian, R., Muneer, R., George, L. & Karanth, P. (2013). Oral motor deficits in speech-impaired children with autism. *Front. Integr. Neurosci* https://doi.org/10.3389/fnint.2013.00047

Cerbo, S. N., & Rabi, N. M. (2019). The social and communication skills difficulties among Learners with Autism Spectrum Disorder. *International Journal of Academic Research in Business and Social Sciences*, 9(6), 1152–1162.

Chenausky, K., Brignell, A., Morgan, A., & Tager-Flusberg, H. (2019). Motor speech impairment predicts expressive language in minimally verbal, but not low verbal, individuals with autism spectrum disorder. *Autism & Developmental Language Impairments*. *Volume 4*: 1–12

Givón, T. (1992). The grammar of referential coherence as mental processing instructions. *Linguistics*, 30, 5–56. https://doi.org/10.1515/ ling.1992.30.1.5

Hengst, J. A. (2020). Understanding everyday communication interactions. *Taylor & Francis*. Published by Routledge

Johnston, K., Murray, K., Spain, D., Walker, I., & Russell, A. (2019). Executive function: Cognition and behaviour in adults with Autism Spectrum Disorders (ASD). *Journal of Autism and Developmental Disorders.*

Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child: Journal of Psychopathology, Psychotherapy, Mental Hygiene, and Guidance of the Child 2*: 217–50.

Knutsen, J. (2013). The understanding of teaching in children with Autism Spectrum Disorder. University of Pennsylvania.

Loytomaki, J., Ohtonen, P., Laakso, M. L., & Huttunen, K. (2019). The role of linguistic and cognitive factors in emotion recognition difficulties in children with ASD, ADHD or DLD. *International Journal of Language and Communication Disorders*. *Vol. 00*, NO. 0, 1–12

Abd Rahim, N. (2019). Kajian wacana dan strategi komunikasi. Teori dan Aplikasi. Penerbit UMT Universiti Malaysia Terengganu

Prizant, B. M. (1984), Echolalia in autism: assessment and intervention. Semin. Speech Lang, *4*:63-78.

Prizant, B. M., & Wetherby, A.M. (1986). Communicative Intent: A framework for understanding social-communicative behaviour in Autism. *American Academy of Child and Adolescent Psychiatry*.

Su, Y., Naigles, L. R., & Su, L. (2018). Uneven expressive language development in Mandarin-exposed preschool children with ASD: Comparing vocabulary, grammar, and the decontextualized use of language via the PCDI-Toddler form. *J Autism Development Disorder 48*, 3432–3448 (2018). https://doi.org/10.1007/s10803-018-3614-x

Amirrudin, S., & Abd Rahim, N. (2019). Social Stories in the development of social

competence and communication skills in the Autism Spectrum Disorder (ASD) child. *IUKL Research Journal Vol. 7* No.1 2019

Wendt, O., Hsu, N., Simon, K., Dienhart, A., & Cain, L. (2019). Effects of an iPad-based Speech-Generating Device Infused into Instruction with the Picture Exchange Communication System for Adolescents and Young Adults with Severe Autism Spectrum Disorder. *Behavior Modification* 2019, *Vol. 43*(6) 898–932