Vol 11, Issue 4, (2021) E-ISSN: 2222-6990

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

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**To Link this Article:** http://dx.doi.org/10.6007/IJARBSS/v11-i4/8625 DOI:10.6007/IJARBSS/v11-i4/8625

Published Date: 25 April 2021

#### 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

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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

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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.

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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**

Table 2
Discourse Analysis Theory (DAT)

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

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.

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## **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	LFA		MFA		HFA	
(2019)	Utterances	Communicative Intent	Utterances	Communicative Intent	Utterances	Communicative Intent
Content	LT1. Love LT2. Peluk atuk	Communicat ion display	MT1. Cium tangan atuk dan nenek	Communicat ion display	HT1. YesLove sangat	<ul> <li>Generative language</li> </ul>
Theme	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	Intention of uttering words: the words uttered were minimal and many of them were single words and short phrases.	(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.Kindnesskuc ing makan nasi dengan ikan (cat eats rice with fish) MT6. Saya ada kucing aje cikgu. Saya sayang la	• Intention of uttering words: the words uttered were more than the LFA and many of them were single short phrases.	(love them so much) HT2. Saya peluk atuk, cikgupeluk nenek juga. (I hug my atuk and nenek, teacher) HT3. Yes, love HT4. Say I love you, cium, pegang tanganbuat macam ni (I say I love you, I kiss and hold their hands. I do like this)	Communicat ion display (pronunciati on 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		(I only have cats		HT5. Yes, I love	
	water to drink)		teacher and I love		tokma so much.	
	LT10. Tolong ayah		them.)		(tokma=nenek)	
	(I help my father)				HT6. Normally, I	
	LT15. Tolong				kiss her hands and	
	basuh pinggan				she kiss me back.	
	(helping washing				HT7. Yes	
	the plates)				cikgusaya love	
					atuk nenek saya.	
					(Yes teacher, I love	
					my atuk and	
					nenek)	
Context	LG1. Sedih (sad)	Demonstrated a lot	MG1. Sadcry	Demonstrated	HG1. Wendy	Demonstrated very
	LG2. Nangis (cry)	of ritualisation of	MG2. Happy	minimal ritualisation	sedihsaya pun	minimal ritualisation
Grammar	LG3. Hadiah	signals within the	Jumpjumpyeah	of signals within the	kena marah	of signals within the
	(present)	contexts.	MG3. Saya tak	contexts.	(Wendy is sadI'm	contexts.
	LG4.Marahsedih	Very minimal ability	tahusaya nangis (I	Ability in	being scolded too)	Ability in
	(angrysad)	in understanding	don't knowI cry).	understanding the	HG2. Sad teacher	understanding the
	LG5.	the grammar	MG4. Hadiah? Saya	elements grammar	HG3. Happy la	elements grammar
	Hadiahsuka	elements	happy teacher	was apparent from	HG4. I want	was apparent from
	(presenthappy)	Overall, didn't	(Present?) (I'm	the utterances.	present too.	the utterances.
	LG6. Haiwan mati	manage to pull	happy, teacher)	Overall, managed to	Wendy sedih	Overall, managed
	(animal will die)	together intention,	MG5. I like present.	pull together	sebab tu dia kasi	to pull together
	LG7. Krishnan	means of	Нарру	intention, means of	animals dia	intention, means of
	happy	communication and	MG6. Main dengan	communication and	makan.	communication and
		function of the	ayam, lembu (play	function of the		function of the

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

	LTi4. Saya mandi		MTi3. Anjing dia		HTi1. Kucing hari	
	pagi (I bathe in		mandi petang (dog		Isnin (cat is on	
	the morning)		is having a bath in		Monday)	
			the evening)		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	No	Changes in facial	Eggs noAtuk no	Changes in facial	No. Marah atuk	Changes in facial
(utterances+bo	LE1. Facial	expression as well	ME1. Shake head	expression as well	Aliff. (Aliff's atuk	expression as well
dy language)	expression	as eye gaze were	Nocannot	as eye gaze were	will be angry)	as eye gaze were
	changes-looking	detected a lot	Atuk angry	detected lesser than	HE1. Shake head	detected lesser than
	worried	among LFA	ME2. Making a	the LFA	Nocannot	the LFA and MFA.
	LE2. Shake head		frown face	Signals for social	Atuk marah nanti	Signals for social
	LE3. Eyes were		NoNanti telur	emotion were	(Atuk will be angry	emotion were
	looking at		sikit (Eggs will	visible in the	later)	visible clearly in the
	somewhere else		become lesser)	utterances.	HE2. Shake	utterances.
	LE4. Quiet and		Kesian kucing tu		headeyes were	
	was looking		(Pity the cat)		looking at R12	
	down		ME3. Looking sad			

	Tidak (No) 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		If you ask properly, you can take it. 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 askit's sinful) HE4. Facial expression changes.	
Assumption Opinion	LO1. Boleh (Yes) LO2. Tak (No) LO3. Tak tahu (I don't know) LO4. Diaabang tolong (The brother is helping her)	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	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	No vocalisation. Demonstrated very minimal ritualisation of signals within the contexts. Opinions were heard clearly.

	LO5. Dia tak tahu		MO6. I don't want		abang (Because	
	(She doesn't		homework		they are sisters	
	know)				and Krishnan is a	
	LO6. Cikgu				brother)	
	tolongaaaem				HO5. Homework is	
	mm (Teacher can				easy	
	help)				HO6. Tak boleh	
					cikgu. (No they	
					can't, teacher)	
Reference	LR1. Tolong ayah	Vocalisation	MR1. Saya mandi	No vocalisation.	HR1. Saya tolong	No vocalisation.
	(I help my father)	References were	pagi (I bathe in the	Demonstrated	ayah cuci kereta. (I	Demonstrated
	LR2. Tolong cuci	hardly made by one	morning) MR2.	minimal ritualisation	help my father	minimal ritualisation
	carcuci (I help	respondents and	Saya tolong emak,	of signals within the	washing his cars)	of signals within the
	him with washing	only visible	ayah, semua. (I	contexts.	HR2. Boleh cikgu	contexts.
	the car)	minimally from	help my mother,	Minimal references	(Yes they can,	References were
	(hardly made	others.	father and	were heard.	teacher)	heard clearly.
	reference)		everyone)		HR3. Sebab dia	
	LR3. Aliff suka		MR3. Nanti telur		sekolah (Because	
	atuk nenek		sikit (Eggs will		they go to school)	
	LR4. Sedihcry		become lesser)		HR4. Saya tolong	
	(sad)		MR4. I help my		kakak. (I help my	
	LR5. Hadiahsuka		mum with		sister)	
	(presenthappy)		washingbaju,		HR5. Kakak pun	
	LR6. Boleh (Yes)		pinggan. (clothes		tolong	
			and plates)		sayahomework.(	
					My sister helps me	

	LR7. Cikgu		MR5. I don't want		too with my	
	tolong (Teacher		homework		homework)	
	can help)				HR6. I help Yaya	
					my sister cleaning	
					up her toys.	
Question	LQ1. Tidak	Minimal awaiting	MQ1. Cikgu rasa,	Awaiting response	HQ1. Die?	Awaiting response
	selamat? (Not	response from the	mati ke kucing tu?	from the MFA	HQ2. Tak ladia	from the HFA
	safe?)	LFA respondents	(Do you think they	respondents was	cari makan lain. (I	respondents was
	LQ2. Mati (Die)	was observed	will die, teacher?)	good.	don't think so.	good.
	LQ3. Mati ke?	Questioning ability	MQ2. Wendy	Questioning ability	They somewhere	Questioning ability
	(Die?)	was very minimal	biarkan? (Did	was apparent and	else to find their	was demonstrated
	LQ4. Mati ke	too.	Wendy leave	could be observed	food)	clearly too.
	teacher? (Did		them?)	clearly too.	HQ3. Orang lain	
	they die teacher?)		MQ3. Ye ke? Tak		datang. (Other	
	LQ5. Saya tak		kot. (Is it? I don't		people will come)	
	tahu. (I don't		think so)		HQ4. Betul tak	
	know)		Selamat saya rasa.		teacher? (Isn't it	
	LQ6. Mati kot		(I think they are		teacher)	
	(Die, I think)		safe)		HQ5. Yes they will.	
			MQ4. People come		HQ6. Why Wendy	
			and save		did not want to	
			themkan		save them?	
			teacher? (right,			
			teacher)			

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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

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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

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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.

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