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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 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 to 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                          | 2. Question    |
| 3. Emotion                                           |                                       |                |

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) | Content Theme | Utterances                                                                 | Communicative Intent                                                                 |
|---------------------------------|---------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|                                 |               | LFA                                                                 |                                                                                      |
|                                 |               | Communicative Intent                                                                 |
|                                 |               | MFA                                                                 |                                                                                      |
|                                 |               | Communicative Intent                                                                 |
|                                 |               | HFA                                                                 |                                                                                      |
|                                 |               | Communicative Intent                                                                 |
| **LT1. Love**                   |               | • Communicaton display                                                                 |
| **LT2. Peluk atuk nenek**       |               | • Intention of uttering words: the words uttered were minimal and many of them were single words and short phrases. |
| (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)** |               |                                                                 |
| **MT1. Cium tangan atuk dan nenek (kiss atuk and nenek’s hands)** |               | • Communicaton display                                                                 |
| **MT2. Saya cakap I love you (I tell them I love you)** |               | • Intention of uttering words: the words uttered were more than the LFA and many of them were single short phrases. |
| **MT3. Hug them**               |               |                                                                 |
| **MT4. Ye tahu (Yes I know)**   |               |                                                                 |
| **MT5. Kindness...kizing makan nasi dengan ikan (cat eats rice with fish)** |               |                                                                 |
| **MT6. Saya ada kucing aje cikgu. Saya sayang la...** |               |                                                                 |
| **HT1. Yes...Love sangat (love them so much)** |               | • Generative language                                                                 |
| **HT2. Saya peluk atuk, cikgu...peluk nenek juga. (I hug my atuk and nenek, teacher)** |               | • Communication display (pronunciation was clear)                                  |
| **HT3. Yes, love**              |               | • Intention of uttering words: the words uttered were more than LFA and MFA and many of them were long phrases and clauses. |
| Context | Grammar |
|---------|---------|
| 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) | 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 |
| 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 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 |
| 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 |
| Setting Location | Time | Echolalia Two (R4 and R5) from LFA had their echolalia | Echolalia Two (R7 and R10) from MFA had their echolalia | message within the context. | message within the context. | message within the context. |
|------------------|------|----------------------------------------------------|-----------------------------------------------------|--------------------------|--------------------------|--------------------------|
| LG8. Jumpa atuk dan nenek (visit atuk and nenek) | LL1. Aliff kampung (Aliff is in kampung) | ML1. Wendy kat rumah (Wendy is at home) | ML2. Krishnan pun kat rumah. (Krishnan is at home too) | (Wendy is sad that’s why she feeds the animals) | HG5. Ayah Aliff bawa kereta (Aliff’s father drives the car) |
| LG9. Mandi sungai (swim in the river) | LL2. Wendy main dengan animals (Wendy is playing with the animals) | ML3. Semua kat rumah mereka (All are at home) | HL1. Di rumah mereka (at their house) | (Wendy is sad that’s why she feeds the animals) |
| | LL3. Kampung | MTi1. Kampung and house Petang dan malam (evening and night) | HL2. Aliff is in kampung and at the river. | (Wendy is sad that’s why she feeds the animals) |
| | LL4. Rumah (at home) | MTi2. Kucing pagi (cat in the morning) | HL3. Wendy’s animals are at home. | (Wendy is sad that’s why she feeds the animals) |
| | LTi1. Kampung…rumah nenek (at nenek’s house) | MTi3. Anjing dia mandi petang (dog) | HL4. Krishnan and his family are staying at home | (Wendy is sad that’s why she feeds the animals) |
| | LTi2. River | | HL5. Wendy kat rumah (Wendy is at home) | (Wendy is sad that’s why she feeds the animals) |
| | LTi3. Pagi (morning) | | HL6. Krishnan pun kat rumah. (Krishnan is at home too) | (Wendy is sad that’s why she feeds the animals) |
| | LTi4. Saya mandi pagi (I bathe in the morning) | | | | (Wendy is sad that’s why she feeds the animals) |

Echolalia One (R13) from HFA had his echolalia.
| 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. |

| 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. |

| 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) | | | | | |
| Assumption | Opinion | Vocalisation was demonstrated. Opinions were not visible. | Demonstrated minimal ritualisation of signals within the contexts. Minimal opinions were heard. | Demonstrated very minimal ritualisation of signals within the contexts. Opinions were heard clearly. |
|------------|---------|-----------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 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 | 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. |

**LE5. Stare at researcher**

*LE6. Eyes were looking at somewhere else*  

**Cry**

**Atuk marah (Atuk is angry)**  

**Sedih (sad)**

**CRE4. Shake head and look sad**  

**Saya tak bawa balik (I won’t take them back home)**  

**ME4. Smiling**

**ME5. Looking happy**  

**ME6. Smiling**

**HE3. Making a frown face**

*HE4. Facial expression changes.*  

**Cannot steal of course. Must ask.**  

**HE5. Looking happy**  

**HE6. Smiling**

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

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