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## Social Stories to Enhance Communicative Strategies Among Autism Spectrum Disorder (ASD) Children

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### ABSTRACT

The use of strategies by children with developmental disabilities in repairing their communicative breakdowns has received little attention in the research literature to date. These children may also have fewer strategies available to them. By using Tarone's Taxonomy (1980) of communicative strategies, this current study was trying to further unravel and discuss how children with autism spectrum disorder (ASD) could enhance their spoken communicative intent in conversing about moral values. Audiotaped, semi-structured conversational data was collected from four children (two low functioning autism and two Asperger Syndrome) with autism ASD. They were seven to nine years old from Sekolah Kebangsaan Desaminium, Seri Kembangan, Selangor. Two social stories were told to the subjects; Visiting *atuk* and *nenek* in *Kampung* and Being Kind to Animals with two moral values underpinned in each social story. Findings revealed that all four ASD children were using almost all the nine communicative strategies except for word coinage. The study concluded that Tarone's Taxonomy (1980) of communicative strategies was really helpful in unravelling the communicative intent of a group of ASD children in talking about moral values based on the social stories told to them. Having said so, future research still needs to consider how these strategies or perhaps other communicative strategies could be used as attempts to repair communicative breakdowns among ASD children. It is hoped that the impairment in understanding others' mind hinders the development of an intent-based moral judgment in ASD children.

**Keywords:** *Tarone's taxonomy, communicative strategies, social stories, moral values, autism.*

### INTRODUCTION

To be successful in communication, possessing language skills only is never enough. One must also have some competency in communication. Normally, it is the ability that people have to be able to understand and express themselves. Sperber and Wilson (1995) associated those who have the above ability with possessing the pragmatic comprehension ability. As for the normal children, they should develop their ability to interpret meaning in communication that is not explicitly encoded in the linguistics expression from an early age. This however, is not seen happening in children with ASD. Autism was first appeared as a separate category in the group of pervasive developmental disorders (PDD) in the American Psychiatric Association's Diagnostic and Statistical Manual (DSM) in 1980. Only in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), subcategories like autism and Asperger syndrome are now referred to using the broader term Autism Spectrum Disorder (ASD). Other than that, the statistics in 2017 show that there are approximately 300,000 people living with ASD in Malaysia.

## LITERATURE REVIEW

### *Social Stories*

Gray (1995) is the creator of social stories and its usage in education has grown tremendously (O'Hara, 2010). According to Gray (1996), a social story is a tool for social learning that could support the safe and meaningful exchange of information. Social stories are normally short, simple and very much personalized. They can come with illustrations too. In fact, Gray (1996) did mention about the criteria of writing or choosing good social stories. In the social stories, you could incorporate many learning approaches. Besides making the stories interesting, the information in the stories could be connected to the children's personal experiences (More, 2010). O'Hara (2010) said that social stories could be considered as "a behavioral intervention to improve children's social skills through combination of visual and verbal cues". Normally they are written and used by teachers or researchers to deliver social message and "to help children successfully negotiate specific social situations that are frequently encountered by children" (More, 2011). Social stories transmit values, engage the imagination, and foster community (Kosa, 2008) and their use remains a central component of moral/ethics education and continues to be used as a foundation for values instruction (Hunter & Eder, 2010).

Furthermore, research has demonstrated that social stories can be a useful pedagogical strategy (Barnes & Bloom, 2014; Gray & Garand, 1993; Kokina & Kern, 2010; Suraya & Normaliza, 2018). In the study conducted by Suraya and Normaliza (2018) on Social Stories in the Development of Social Competence and Communication Skills in the Autism Spectrum Disorder (ASD) Child, the words uttered by the autistic child in the study was improving from one social story to another besides showing some improvements in terms of imitation and responding to instructions in Social Story two and three. Social stories are rich in textual discourse too as mentioned by Nurul Aishah et al. (2018). Social stories can be read by anybody; teachers to students, parent to children. This support good communication among family members "Good communication helps family members come to an understanding, which is the basis for all healthy familial relationships" (Jamiah & Suzana, 2018). Good communication leads to communication competence (Nuredayu, 2018).

As for the current study, two social stories used in this study reflect Gray's (2015) requirements for social stories. Besides that, the elements of moral values were being emphasized in both social stories. Thus, for the effective use of the social stories, quality communication skills and a positive relationship with the children were also looked into. Kosa (2008) stated that storytelling appeals to everybody. Indeed, social stories also appeal to special needs children especially the ASD children (Suraya & Normaliza, 2017).

According to Mahasneh et al., (2017), reading a story as a dramatic narrative may stir the emotions, contribute to the cognitive power of these emotions, and make a particular contribution to moral learning. Even since the early year Bouchard (2002) has demonstrated that children who are lack genuine moral experiences could be helped still in developing them and at the same time demonstrating moral reasoning (even though the study was focusing on the typically developing children). Here in this current research researchers want to discuss the use of moral values in the social stories as the enhancement factor in the spoken communicative intent among the ASD children.

### *Moral Reasoning and Moral Values*

Many approaches have been taken to investigate morality in the field of psychology. One of the most prominent approaches has been the use of moral reasoning. According to Kohlberg (1958), moral reasoning is concerned with how individuals reach a decision on how they ought to behave. This was of course taken from Piaget (1932) who pioneered the study on moral judgements. Piaget stated with the cognitive-developmental perspective of moral judgments in 1932. According to his theory, children were thought to develop a sense of moral identity in stages. In the first stage (heteronomous stage), children develop an orientation towards morality through their relationship with their parent(s). Due to the imbalanced nature in the relationship, children later developed their moral perspectives in complying with the parents' instruction and moral culpability is learned via objective consequences for one's behavior (Lapsley, 2006). As children progressing in their lives entering formal education and begin to interact with friends, their moral development progresses to the next stage (autonomy). An autonomous orientation to morality emerges when a child learns equality and mutual respect through negotiations and conflict resolution with friends (Piaget, 1932). Moral values were emphasized a lot among local researchers too and Wan Amizah et al. (2009) stated clearly that moral values are set to avoid contradictory in religion and culture.

On the other hand, there were researches conducted looking at moral reasoning in autism and many of them were using Kohlberg's conceptualization of moral development. Although each study investigated different aspects of moral judgment and reasoning, the findings from many studies addressed the fact that Kohlberg's methodology requires the ability to use language skills in a manner which is difficult even for quite capable individuals with ASD. Other than that, individuals with ASD use fewer mental state words (Bishop & Norbury, 2002; Tager-Flusberg & Sullivan, 1995) in their descriptions of interactions and therefore their explanations for Kohlberg's dilemmas never received high scores. Grant et al. (2005) were the earliest researchers who conducted a study on moral reasoning in autism. In their study they revealed that ASD children were likely to judge damage to people as more culpable than damage to property. Unfortunately, most of their justifications were of poor quality and simply reiterated the story line.

Additionally, ASD individuals have also been portrayed likely to place their own preferences during social interactions (Bellesi et al., 2016; Jameel et al., 2015) and more likely to choose courses of actions that were advantageous to them in comparison to normal individuals. This deficit in cognitive empathy epitomizes a credible explanation for impaired aspects of performance in ASD (Bellesi et al., 2018). Difficulties taking others' perspectives may have hindered the ability of people with ASD to consider or anticipate these possible implications, and thus reach a more sophisticated understanding of the scenarios. Richman (2018) even concluded that individuals or children with ASD relied even more rigidly on learnt rules and less tolerant one's actions regardless of intent, leading to a more 'black-and-white' and stricter pattern of responses.

Before we understand moral values, we need to know what covers moral values; moral agency. Moral agency as defined by Cushman et al. (2017) is the ability to justify one's judgement in terms of perceived moral transgression. This corresponds to Kohlberg (1958) moral development. In moral agency we have moral reasoning and moral values. Moral reasoning develops as a result of the successful resolution of cognitive conflicts (Piaget, 1932) and moral values is "an ongoing cyclical process which begins from a base-level of individual

social competency allowing for particular social interactions, which then give rise to socio-cognitive conflicts” (Cushman et al., 2017).

Many past studies have found evidence that there are significant relationships between empathy, culture, moral values and moral reasoning. All these studies suggest that self- superiority and conversation values have been identified as related to morality and automatically linked to empathy. Sabariah et al. (2015) was looking at cultural identity among Chinese ethnicity through the Chinese New Year advertisement from the perspective of moral values. Therefore, they play significant role in moral development and reasoning. Moral values according to Cushman et al. (2017) yield intrinsic pleasure in two things; seeing other people do well, and acting the way they do. They continued by saying that “moral values are acquired largely through reward-maximization mechanisms widely implicated in non-moral and especially non-social decision- making”. Normal individuals under normal circumstances would have heuristic responses (Cushman et al., 2017) to any social dilemmas that they are encountering and would act according to the encountered dilemmas or behaviors of their social partners. Unfortunately, moral values will be at stake when they have obtained extensive experience (Rand et al., 2014) and they favor defection (not complying to it). This according to Rand et al. (2017) would be due to the quality of a culture’s social institutions.

Indeed moral values are something that is very perceptible. There were not many studies that have looked into moral values among ASD individuals because of the stem “people with ASD exhibit deficits in ToM abilities”. One concept related to social competences is Theory of Mind (ToM), which refers to social-cognitive abilities that are crucial for social interaction and comprise abilities such as to recognize, understand, explain and predict other people’s and our own behavior (e.g. Baron-Cohen et al., 1985; Perner, 1991). A large number of researches on ToM have revealed difficulties in individuals with ASD (e.g. Ozonoff et al., 1994; Dziobek et al., 2006; Golan et al., 2006). Moreover, it has been postulated that deficits in ToM may contribute to ASD individuals’ difficulties with developing and maintaining social relations (Downs & Smith, 2004).

Having said that, there were studies that showed these ASD individuals were impaired in cognitive empathy (the ability to understand other person’s perspectives) but not emotional empathy (the ability to emotionally react to an affective state of another person) (Rogers et al., 2007; Dziobek et al., 2008; Jones et al., 2010; Schwenck et al., 2012).

Therefore, the present investigation is interested in trying to further unravel and discuss the use of Tarone’s Taxonomy (1980) of communicative strategies in conversing about moral values to enhance the spoken communicative intent among ASD children.

## METHODOLOGY

Audiotaped, semi-structured conversational data was collected from four children with autism spectrum disorder (ASD). Two of them were under the category of low functioning autism and the other two were the high functioning autism or also known as Asperger Syndrome children. All of them were seven to nine years old from Sekolah Kebangsaan Desaminium, Seri Kembangan, Selangor. The conversations between researcher and them were transcribed. For the present study, transcripts of these conversations were based on the semi-structured interview questions. There were nine questions for Story 1 and eight questions for Story 2 (see Table 2).

It afforded many examples in which the participants succeeded and did not succeed in displaying the moral values. The main research instrument used in this study was social stories. Social stories are to share accurate social information and to promote social

understanding. These short, individualized stories provide support in new and sometimes confusing social experiences (Gray, 1995). A social story also helps ensure a child’s accurate understanding of social information for a given setting (Gray, 1998) and gives instruction regarding who, what, when, where, and why of a social situation. Two social stories were told to the participants. The social stories were created by the researcher based on the construction criteria highlighted by Gray (2000). Gray (2000) also states that a social story should be individualized. The text and illustrations in the social stories reflected the sample’s attention span and cognitive ability. The topics for the social stories told to the sample were Visiting *Atuk* and *Nenek* and Being Kind to Animals. Over the years, social stories have been told to the autism children for different purposes and as for the current research, the social stories served to increase the use of appropriate social skills. Other than that, the researcher was also using some questions on pragmatic and social factors that most probably cause challenges to children with ASD based on studies by Loukusa and Moilanen (2009). Material that was constructed was within framework of relevance theory.

a. *Interview questions*

Table 1: Semi-structured interview questions

	<b>Story 1:</b> Visiting <i>atuk</i> and <i>nenek</i> in <i>Kampung</i> <b>Values:</b> Love and respect	<b>Story 2:</b> Being kind to animals <b>Values:</b> Kind heartedness and humanity
Q1	Do you love <i>atuk</i> and <i>nenek</i> ? Do you respect <i>atuk</i> and <i>nenek</i> ?	Do you have animals at home? Do you love animals?
Q2	How do you show love? (action) How do you show respect? (action)	How do you show love to the animals? (action)
Q3	Do you help <i>atuk</i> and <i>nenek</i> ? Do you help your mother and father at home?	How do you take care of the animals? Can you only give water but no food? Can you only give food but no water?
Q4	If you don’t feed the animals, what will happen to them? How do you love the animals? Do you respect animals?	If you don’t feed the animals, what will happen to them? Can you give fish bones to the cats and rabbits?

b. *Tarone’s Taxonomy of Communicative Strategies*

Tarone’s Communicative Strategies (CS) are quite different from the psycholinguistically orientated researchers, such as Færch and Kasper (1984). Tarone (1980) studies communicative strategies from the perspective of social interaction. Communicative strategies to Tarone happen when two interlocutors had mutual attempts and agreed on the meaning. Communicative strategies in this study are the description of the ASD children’s pattern of language use based on what they know as they try to communicate with others by using (as much as possible) the target language specified. Tarone used to propose that “communication strategies have an interactional function, as they are used for a joint negotiation of meaning between speaker and hearer”, but with the absent of joint negotiation of meaning among the ASD children a little amendment have been made to this proposal and that is the contribution of this study to this taxonomy. Tarone (1980) divided the communicative strategies into three main types; paraphrase, transfer and avoidance. Each of the three main types has its own constructs as listed in the following Table. In this current

research Tarone's Taxonomy of Communicative Strategies is used as guidelines in analysing the spoken intent of the ASD children in order to motivate them to discuss the moral values contained in the social stories.

Table 2: Tarone's Taxonomy of Social Strategies (1980)

Types of CS	Constructs
Paraphrase	Approximation Word coinage Circumlocution
Transfer	Literal translation Language switch Appeal for assistance Mine
Avoidance	Topic avoidance Message abandonment

c. *Social Stories*

(i) *Social story 1: Visiting atuk and nenek in Kampung*

I am Aliff and I am 10 years old. I am so happy because it is a school holiday, and I get to follow mama and papa to *kampung* to visit *atuk* and *nenek*. I left our house at 9.00 a.m. after breakfast. Papa drives the car. It takes two hours for us to reach *kampung*. I am so excited. It has been four months that I have not seen *atuk* and *nenek*. I really cannot wait for this moment. We arrive at *kampung* at 12 noon. *Atuk* and *nenek* welcome us. They are old. Mama said, *nenek* is 60 years old and *atuk* is 70 years old. Although they are old, they are still strong.

"Come inside, Aliff", said *atuk*. "*Nenek* has just finished prepared lunch for us." "Come let's eat." "O.K. *atuk*." I answered back.

Inside the house we had our lunch. All the food that *nenek* cooks is delicious. She is a good cook. I always enjoy *nenek's* cooking. Only in *kampung* I get to eat fresh and delicious food. After eating, together with mama, I help *nenek* washing the plates and cups. I ask *nenek* to rest and let me do all the cleaning.

"Aliff, if you are not tired, later in the evening you can follow *atuk* to the farm. I need to feed all the animals." *Atuk* said. "No. I am not tired, *atuk*. I will definitely follow you."

In the *kampung*, I can see many animals. I can see goats, chickens and cows. They all belong to *atuk*. *Atuk* takes care of all the animals. My uncle Rashid helps him. When I am in *kampung*, I get to help *atuk* and uncle Rashid feeding the goats, chickens and cows. I am happy to see all those animals because I cannot see them near my house.

Uncle Rashid told me that, after feeding the animals, I can follow him to the river. I am so excited. At the river, I can see many green trees. The water of the river is clean, very cold and refreshing. I do not see any rubbish at all thrown in the river. I remember my teacher tells me, we need to keep our river clean. *Atuk* says the green trees give fresh and healthy air.

“If we breathe the fresh and healthy air, we become healthy.” Said *atuk*.

I spend long hours swimming and playing in the river. I am never bored being in kampong. I love my kampong and I love my *atuk* and *nenek*. I will always come and visit them in the *kampung*.

(ii) *Social story 2: Being Kind to Animals*

My name is Wendy. I am 10 years old. I like animals. At home, I have six animals; a dog, two cats, two rabbits and a hamster. My brother likes animals too. My dog and my cats are outside the house and my rabbits and hamster are inside the house. My family and I take care of the animals together.

I remember we had the dog first. We named him Black Joe because he is black. My father bought him from a shop. We pet him since he was small. Now he is big and strong. He guards our house. Black Joe is not scared of water. He likes taking a bath. Bathing him is my brother's duty.

“We can have all these animals in our house,” said mother. “But I want both of you to help me taking care of them.” “We understand, mama.” I replied.

The two cats that we have were stray cats before. On my way back home, one day, I found two kittens looked very hungry and had no mother. Therefore, I took them back home. I fed them milk and the wet food. Now they have been with me for three years. My brother and I named them Kitty and Kimmy. Kitty is female and Kimmy is a male cat. Both Kitty and Kimmy are very close to Black Joe. Those who said that dog and cats cannot be friends, are wrong. Giving Kitty and Kimmy a bath is my duty.

Jumpy is the name that I gave to the rabbit. Jumpy was given by my uncle as my birthday present. I love Jumpy so much. He likes jumping, that is why I named him Jumpy. Jumpy's best friend is Dino the hamster. Father bought the hamster for my brother as his birthday present. Dino is small and taking care of him is the easiest.

Every day, after we come back from school, we must make sure that we feed all the animals. After we have done our homework, we are allowed to play with the animals. I remember my teacher told me at school,

“We must be kind with all the animals. We love the animals, the animals love us.”

## RESULTS AND DISCUSSION

Based on the two social stories told, the four ASD children were then being interviewed and asked the above questions. The responses from the four ASD children were analyzed by using the nine strategies in Tarone's Communicative Strategies. The results are presented in the Tables (3a-3g) below.

Table 3a: Paraphrase - Approximation (Story 1)

Subject	Interview question	Utterance
S1	Q1	Love
	Q3	Yes, Yes, Clean car
	Q4	Yes
S2	Q1	Love
	Q3	Help, Help home
S3	Q1	Yes love, Yes
	Q3	Respect, definitely
S4		Of course
	Q1	Ye love, Ye, Tolong
	Q3	Tolong

Table 3a: Paraphrase - Approximation (Story 2)

Subject	Interview Question	Utterance
S1	Q1	Yes, Yes, Food
	Q3	Water
S2	Q1	Yes, Yes, Food
	Q3	Water
S3	Q1	Yes pets, Yes so much, Cannot I think
	Q3	No definitely,
	Q4	Die Yes to cats no to rabbits
S4	Q1	Yes ada, Yes sayang Bagi makan
	Q3	Tak boleh
	Q4	Tak boleh juga, Kesian animals Cats boleh rabbits tak makan bones

As can be seen from the above Tables, all the four ASD children were using almost all the nine communicative strategies except for word coinage. S1 and S2 were LFASD and S3 and S4 were HFASD or herein Asperger syndrome.

Table 3a showed utterances uttered by all the four ASD children when their conversation was analysed by using the approximation strategy. Since the questions asked by the researcher were in the target language (English language), all the subjects (ASD children) were trying their best to answer in the language. Their intent in trying to speak was captured. In approximation strategy, the subjects were using the target language vocabulary item or structure, which they know was not correct, but they tried. The words or phrases used shared semantic features with the desired item to satisfy them. Other than that the utterances were also matched with the moral values underpinned each story.



Table 3c: Paraphrase - Circumlocution (Story 1)

Subject	Interview Question	Utterance
S1	Q2 Q4	See <i>atuk nenek</i> salam
S2	-	-
S3	Q3	I only have <i>nenek</i> I called <i>maktok</i> ...help <i>maktok</i> a lot Mother and father never asked me to help them.
S4	Q3	<i>Atuk</i> dan <i>nenek</i> tak selalu suruh tolong. Sama mama dan ayah tak selalu suruh tolong

Table 3c: Paraphrase - Circumlocution (Story 2)

Subject	Interview Question	Utterance
S1	-	-
S2	-	-
S3	Q3 Q4	Many ways...depends on the animals (that's all) I never forget to feed the animals.
S4	-	-

Table 3c displayed the words and phrases articulated by the four ASD children. In circumlocution, the subjects described the characteristics or elements of an object or action instead of using the appropriate target language structure. Here, we could see that the LFASD; S1 and S2 were having problems answering some questions asked to them and they were not even able to speak anything. S1 and S2 intent could not be demonstrated. Unlike S3 and S4, they were detected to use this strategy when asked Do you help *atuk* and *nenek*? and Do you help your mother and father at home?. And S3 in story when he was asked How do you take care of the animals? and If you don't feed the animals, what will happen to them?

Table 3d: Transfer - Literal translation (Story 1)

Subject	Interview Question	Utterance
S1	Q2 Q3 Q4	Peluk and kiss Help umi wash pinggan Peluk, kiss, give food Animals no respect tapi love
S2	-	-
S3	-	-
S4	Q4	Animal akan mati tak makan dan minum Bagi makan dan minum Sayang bukan hormat

Table 3d: Transfer - Literal translation (Story 2)

Subject	Interview Question	Utterance
S1	-	-
S2	Q4	Animals kecil tak besar Nanti mama marah
S3	-	-
S4	Q4	Stray cats pun kena bagi makan dan minum Dalam cerita tu Wendy tak bagi, so saya tak bagi.

Table 3d displayed more interesting findings. In this strategy, literal translation, the ASD children translated word for word from their native language. This strategy was adopted by S1 and S4 for story 1 and S2 and S4 for story 2. S3 was an Asperger syndrome child who was very articulate in the target language. He completely did not use Malay language at all. Although questions were asked to them in English, researcher were allowed and supported the subjects if they answered in their native language. With this strategy S1 could utter many utterances to visualize her intention of showing her understanding towards the moral values that supported the story. S2 in story 2 was also trying the same. S4 was quite expressive in his native language in presenting his intention to discuss the moral values

Table 3e: Transfer - Appeal for Assistance (Story 1)

Subject	Interview Question	Utterance
S1	Q3	Tolong? Macam mana tolong, teacher?
S2	Q3	How to help <i>atuk</i> ? <i>Atuk</i> is very old.
S3	Q3	Help? How teacher?
S1	Q4	What happen? Can they die?
S2	Q4	Kita boleh sayang animals ke teacher? Love.
S4	Q4	I love animals macam I love <i>atuk</i> and <i>nenek</i> , can right teacher?

Table 3e: Transfer - Appeal for Assistance (Story 2)

Subject	Interview Question	Utterance
S1	-	-
S2	Q2	What hamster, teacher? My rabbit not Jumpy
S3	-	-
S4	Q4	Kalau dia termakan macam mana teacher?
	R: so how?	Bagi dia air
S1	Q2	Love? Respect? Macam mana teacher?
	R: you hug? Kiss?	Tak tahu...yes

Table 3e showed utterances made by the subjects (S1, S2 and S4 only) in both stories. This strategy appeal for assistance happened when the subjects asked for the correct term or structure when they did not understand. This was also difficult since most of the time they were tripped because they could not even deliver the questions. After a few attempts of probing from the researcher, those utterances came out from the subjects.

Table 3f: Transfer - Mime (Story 1)

Subject	Interview Question	Utterance
S1	Q2	~love: pouting lips sign of kiss~ ~respect: shake head~
S2	Q2	~love: pouting lips sign of kiss~ Open arms sign of hug ~respect: shake head~
S3	Q2	~love: pouting lips sign of kiss~ Open arms sign of hug
S4	-	-

Table 3f: Transfer - Mime (Story 2)

Subject	Interview Question	Utterance
S1	Q2	~patting the cat~
S2	Q2	~patting the cat~
S3	-	-
S4	-	-

Table 3f presented the results for the seventh strategy-mime. Mine happened when the subjects used nonverbal strategies in place of a meaning structure of what they intended to speak. This strategy was used many times by the LFASD (S1 and S2) especially when they were asked How do you show love? (action) and How do you show respect? (action) (story 1) and How do you show love to the animals? (action) (story 2). Even using nonverbal strategy, researcher could identify the subjects' intention in trying to deliver the moral values message.

Table 3g: Avoidance - Topic avoidance/Message abandonment (Story 1)

Subject	Interview Question	Utterance
S1	Q2	
	Q4	
S2	Q1	<i>Atuk nenek tua</i>
S3	Q3	Help maktok because she's old Mama is not old no need to
S4	-	-

Table 3g: Avoidance - Topic avoidance/Message abandonment (Story 2)

Subject	Interview Question	Utterance
S1	Q3-take care	I like hamster
S2	Q3-take care	I don't like name Black Joe
S3	Q3-take care	Mama and ayah take care of me
S4	Q3-take care	Klinik haiwan la teacher

Last but not least, Table 3g offered results for these two strategies topic avoidance and message abandonment. Tarone (1980) said that topic avoidance or message abandonment is a strategy that ones used as passing concepts when they encountered vocabulary or meaning structures that were not known to them. It could also due to when they wanted to talk about a concept but were unable to continue because they were stuck and could not continue (mid-utterance was stopped). There were apparently adopting strategies in communication. Based on the four subjects, these strategies were detected when they did not really sure the meaning of respect and take care. They did not answer the questions rightly at all but their intention to abide to the questions was there; How do you show respect? S2 *Atuk nenek tua*. This showed the intention of respect. Do you help *atuk* and *nenek*? and Do you help your mother and father at home? S3 answered Help *maktok* because she's old and Mama is not old no need to help.

All in all, Tarone's Taxonomy (1980) of communicative strategies were really helpful in unravelling the communicative intent of a group of ASD children in talking about moral values based on the social stories told to them. According to Tarone (1980) "communication strategies do not seem to be a part of the speaker's linguistic knowledge; rather they are descriptive of the learners' pattern of use of what they know as they try to communicate with

speakers of the target language. In order for the researcher to decide on the communicative strategies adopted by the subjects in this study, the analysis was tied up with language used by the subjects to bring into question the relationship of these strategies to communicative competence.

#### CONCLUSION

The primary goal of moral values as intervention to enhance the spoken communicative intent among ASD children is to promote their awareness and sensitivity to the elderly and animals. The current study which was using moral values as intervention that took place in an informal setting within the community utilizing reading social stories—a pedagogical tool that children inherently favour (Barnes & Bloom, 2014). This study would give benefits to parents of these ASD children and the ASD children themselves. Although there have been so many interventions and treatments presented by champions in the field, this could contribute to one too. One is the social stories used in the study, when the stories are interesting and significant to these ASD children they will listen and would want to participate. Parents could use these simple stories to deliver social message and to help them to negotiate with some specific social situations. Kosa (2008) said that “social stories transmit values, engage the imagination, and foster community” indeed it was in this study. Other than that, if not by using Tarone’s Taxonomy of Communicative Strategies, researchers would not be able to notice the ability that the ASD children had in communicating their intentions about the moral values inside the social stories. For all this while Tarone’s taxonomy has never been used in analysing this interesting phenomenon. All in all, this study has contributed to another spectrum on how social stories, moral values and communicative strategies could be connected. Having said this future research needs to consider how these strategies or perhaps other communicative strategies could be used as attempts to repair communicative breakdowns among the ASD children. Other than that, there is also a need to consider for these ASD children to enhance their motivation in delivering their intention and at the same time engaging in small communication. Last but not least, it is hoped that the impairment in understanding others’ mind hinders the development of an intent-based moral judgment in the ASD children.

#### ACKNOWLEDGEMENT

We would like to thank the school for giving us the opportunity to have some of their ASD students for us to do the data collection.

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