SOCIAL STORIES IN THE DEVELOPMENT OF SOCIAL COMPETENCE AND COMMUNICATION SKILLS IN THE AUTISM SPECTRUM DISORDER (ASD) CHILD

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ABSTRACT

Social competence and communication skills are weakened among autistic children in comparison to the typically developing children. Hence, this research was conducted to look at how Social Stories (Gray, 1996) act as an intervention technique that could enable an autistic child get a sense of social interactions and to understand the hidden rules that govern behaviours. The instruments used to collect data are: three social stories, interview questions and social interaction checklist. The objectives of this research are; 1) to discuss the development of spoken discourse in a Autism Spectrum Disorder (ASD) child and 2) to use the Theory of Mind (ToM) by Premack & Woodruff (1978) to explain the situation. The sample consisted of one child with Autism Spectrum Disorder (ASD) who is 3 years old when the first observation started. The observations were done for two years. The location of the research was in Semenyih Selangor, Malaysia. The findings of the research showed that the autistic child displayed very minimum social interactions towards the social stories read to him. He did not understand other people's intentions but he could acquire the language. The absence of ToM has made him unable to understand the indirect instructions. For future research, researchers in Malaysia could look for more interventions that would help ASD children to correct their responses to situations in a non-threatening manner.

Keywords:
Social Stories, Social Competence, Communication Skills, Autism Spectrum Disorder, and Theory of Mind.

INTRODUCTION

Children with autism present a series of unique problem that could create confusion for all parties involved because of the discrepancy in the understanding of their behaviour compared to normal children (Fong Chew Hoon, 2003; Normaliza Abd Rahim & Nik Ismail Harun, 2006; 2007; Normaliza Abd Rahim, 2011a; 2011b; Nurfarhana Shahira Rosly & Normaliza Abd Rahim, 2015a; 2015b; 2015c). Their social competence and communication skills are weakened in comparison to the typically developing children. Besides that, their interpersonal relationship is a one-way interaction and unnatural. Their social behaviour and language were not appropriate with their ages. That is why they always have difficulties in paying attention to their surroundings as well as to their family members. Research says that within the first few years of life, autistic children's language development trajectories have been reported to be flatter than that of typically developing children or children with other developmental disabilities. However, with proper interventions, there could be an accelerated growth.

LITERATURE REVIEW

Over the years, research on interventions given to the autistic children are numerous. Cooper et al. (2018) conducted a study on adapting psychological therapies as intervention for autism. Particularly they are surveying therapist skills, experience and confidence in working psychologically with autistic people, in order to highlight the experience of psychological therapists adapting cognitive behavioural therapy (CBT) as part of routine clinical practice. They sampled 50 therapists who attended a training

event and were asked to complete a survey about their experience of adapting CBT for autistic clients, alongside a measure of therapist confidence. The results showed that almost all therapists reported making adaptations to CBT practice when working with autistic clients. The therapists were relatively confident about the core engagement and assessment skills of CBT. The study highlights a need for training and on-going supervision to increase therapist confidence in and ability to make appropriate adaptations to CBT treatment protocols for autistic people. Thus, CBT as evidence-based psychological interventions research is in paralleled to Spain et al. (2015); and Walters, Loades & Russell (2016). Walters et al. conducted a systematic review of modifications to CBT for autistic young people in studies where the CBT intervention was found to be effective.

On the other hand, Maxwell et al. (2016) investigated how a 10-year old child (Kameron) with ASD utilised appropriation. Appropriation is an individual's act of re-purposing utterances of others for their own use (Bakhtin, 1986; Lensmire & Beals, 1994) as a writing strategy in the context of group therapy. Through the analysis, Kameron's writing revealed utilisation of appropriation as a strategy for two of the four written products. Material was appropriated from both adult authored texts performed via read aloud and from topics and values located in the local peer culture. Kameron's appropriation of shared experiences provided substance to initiate and engage in a shared peer culture. Indeed, children do write to express something, and their peer group is a powerful audience. Children's writings are often full of social meanings influenced by their interactions with peers (Dyson, 2003; Normaliza Abd Rahim & Siti Nur Aliaa, 2012). As such, when assessing writing, the entire writing process, including the strategies the writer employs must be considered (Damico, 2014).

Agreeing to the fact that intervention is always needed to support the ASD children, social stimuli are also among the common interventions used by researchers: Kim et al. (2014) used virtual avatars; Gilbertson et al. (2017) used audio clips of speech; and Dubey et al. (2015, 2017) used video clips, and all these studies used pictures as social stimuli. Bottini (2018), in his research terms social stimuli as social reward processing, claimed that examining specific sub-dimensions of reward processing may be important to clarify deficits in ASD. According to him, not only pictures, but also auditory stimuli could be experimented. Social Stories are short stories intended for children with autism to understand social situations. These stories are used to help children with autism to predict and anticipate specific situations as well as teaching appropriate behaviour within situation. The goals of 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 to 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 (Attwood, 1998; Lorimer, Simpson, Myles, & Ganz, 2002).

Hyunkyung Lee et al. (2017) investigated the disfluency characteristics of 15 children with ASD, attention-deficit/hyperactivity disorder (ADHD) symptoms and 15 age matched control children. Reading, story retelling, and picture description tasks were used to prompt words from the participants. The findings indicated that children with ASD and ADHD symptoms produced significantly more stuttering-like disfluencies (SLD) and other disfluencies (OD) when compared to the control group for all the three tasks. Further statistical analysis showed that children with ADHD symptoms produced more OD during the story retelling task than the other two tasks, whereas no significant differences in OD were observed among the three tasks in the control children. MacFarlane et al. (2017) agreed with the study of Hyunkyung Lee et al. (2017) where they were also studying the disfluency in children with ASD or language impairment. They found major disfluency types and came up with a schema in an exploratory analysis of differences. The schema could be used to code disfluency types and is also applicable as one of the checklists to quantify the features of pragmatic language that may differentiate ASD and SLI.

Since autism is considered by most researchers as involving primary impairments in pragmatic aspects of language, these pragmatic impairments have come to be viewed as intimately linked to deficits in Theory of Mind (ToM). It was first introduced by David Premack and Guy Woodruff in

1978 and according to them, "to say that someone has a theory of mind means that this individual imputes mental states to himself and to others" (p. 515). ToM is considered the core of the disorder (Baron-Cohen, 1988; Happé, 1993; Tager-Flusberg, 1993, 1997), and research on the relationships between pragmatics and ToM in autism has been highly productive.

Andrés-Roqueta & Katsos (2017) stated that pragmatic difficulties are often attributed to intrinsic features of ASD. These include a weaker tendency to integrate information from the context. Therefore, they suggested two new terms: linguistic-pragmatics (those cases of pragmatics where structural language and competence with pragmatic norms are enough to perform successfully in the task) and social-pragmatics (those circumstances where in addition to structural language and pragmatics, the child needs competence with ToM, and specifically the ability to represent other people's intentions, desires and beliefs). In supporting the study, Baixauli-Fortea et al. (2017) conducted a research on Pragmatic Competence of Children with ASD, Impact of ToM, Verbal Working Memory, ADHD Symptoms, and Structural Language. They had two objectives for the research and the second one was to analyse whether ToM, verbal working memory, ADHD symptoms, and structural language can predict pragmatic competence in children with ASD without intellectual disability (ID). The results showed worse performance in the group with ASD. The research has demonstrated that the application of ToM skills and structural language were significant predictors of the pragmatic skills of the children with ASD. Baixauli-Fortea et al. (2017) also asserted that "these findings reinforce the importance of focusing intervention programmes on mentalist abilities through experiences in real social scenarios, along with strengthening structural language components."

Based on these scenarios, the current study has two objectives to achieve:
1. To discuss the development of spoken discourse in ASD child through the use of Social Stories.
2. To use the Theory of Mind (ToM) by Premack and Woodruff (1978) to explain the situation.

METHODOLOGY

This is a qualitative research adopting case study as its research design. There was only one participant, Arman (pseudonym). He was three years old at the beginning of the study. Arman was diagnosed with autism spectrum disorder (ASD) by a paediatric neurologist and behavioural psychologist at the age of three. At the age of four, he was sent to a private institution that specialises in speech impaired children. There, he received speech-language therapy. His parents' primary concerns at the time of this study were socialization and interaction with peers. Now he is five years old and he is still weak in social interaction and communication.

There were three research instruments used in this study. The first one was Social Stories. Three Social Stories were read to the participant. The social stories were created by the researchers based on the construction criteria highlighted by Gray (2003). Gray (2003) states that a Social Story should be individualised and it should consist of four basic types of sentences; (a) descriptive, (b) directive, (c) perspective, and (d) affirmative. The text and illustrations in the Social Stories reflected the sample's attention span and cognitive ability. The topics for the Social Stories read to the participant were *Going to the Beach*, *Playing with My Toys* and *Combing My Hair*. Over the years, Social Stories have been read to 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 researchers were also using daily and weekly checklist of social skills/social communication adapted from Gonzales-Lopez and Kamps (1997) that included communication and social interaction skills. Finally, to urge Arman to respond more to the Social Stories, a few semi-structure interview questions were also used as a tool to collect the data.

Data Collection and Analysis

A qualitative approach was adopted for this case study to accommodate the complexity of socialising and communicating of the respected participant. Additionally, because the purpose of the observation was to note spoken discourse in Arman through the use of Social Stories, the researchers were using data collection and analysis that could focus on interactions in authentic contexts, which can best be accounted for and described by utilizing qualitative methodologies (Daico & Simmons-Mackie, 2003; Simmons-Mackie & Damico, 2003).

The duration of data collection was two years. For the first year, it was merely observing Arman since he was just being diagnosed as having autism by his doctor. Slowly, a Social Story was told to Arman, but it was done by his mother. It started in January 2017 and it was done regularly without fail for months. There was no response at all although the same activity was conducted like almost every day. Only in May 2017, Arman started to respond to the Social Story. There was no social interaction, but it was just his non-verbal action that showed in respond to the story.

From May 2017 until December 2017, more serious observations were conducted. Almost all sessions were audio and video recorded. The sessions were conducted two to three times per week in Arman's house in Semenyih. Arman's mother was there too assisting the process. For each treatment session, it normally took 20 minutes with breaks in between. One Social Story was read to the sample for about 10 minutes and some engagement activities like asking Arman to respond to the story through his non-verbal action, retell the story and answer some questions that the researchers prompted to him.

Video and audio recordings of the sessions were reviewed over and over again to notice the development of the spoken discourse. The video and audio recordings were crucial to the analysis because the sample was too young to respond as how the researchers expected him to respond at times. There were times that the response was similar for weeks.

Arman's social competence and spoken discourse development were analysed based on the created checklist. The checklist consists of:

Skill 1: Greetings, using names and conversations included a) saying hello, b) answering c) asking questions about the beach, toys, d) keeping the conversation going

Skill 2: Imitation and following instructions included two behaviours; a) imitation (e.g. touch head, arms up) b) following simple instruction (e.g. comb your hair)

Skill 3: Sharing and taking turns included a) sharing in which he was asked to let the mother play with the toys he had and b) taking turns

RESULTS AND DISCUSSION

Development of spoken discourse in an ASD child through the use of Social Stories

Social Story 1: Going to the Beach

We are going to the beach. The beach is fun. I play with the sand. I play with the ball. Mama and papa play with me. I swim in the water. Papa swims with me. Sometimes, I'm scared of waves. It's okay! Papa said. I'm hungry. I want to eat. I eat with mama. I'm tired and I want to go back home. Papa drives a car. We go back home.

Table 1: Reflection of spoken discourse and responses for Social Story 1

Skill 1	Reflection of the Spoken discourse	Skill 2	Response	Skill 3	Response
a) saying hello	*Hello*	a) imitation (e.g. touch head, arms up)	*No imitation on the action of swimming No imitation on the action of hungry*	a) sharing in which he was asked to eat sandwich with his mother	*He didn't want to share. He didn't even eat the sandwich.*
b) answering Do you want to go to beach?	*Yes*	b) following simple instructions (e.g. how do you swim?)	*No respond*	b) taking turns	*No taking turns*
c) asking questions about the beach	*beach fun play mama fun hungry eat*				
d) keeping the conversation going	*no home*				

As the transcription demonstrates, Table 1 above shows the number of words that he could utter after the first Social Story was read to him. Among the words were; hello, yes, beach fun, play, mama fun, hungry, eat and no home. Arman's frequency of word utterances in Skill 1 steadily increased to an average of five to six words per session, and he maintained these improvements until the session ended. There was no imitation at all happening during these sessions. Arman also did not respond to simple instruction when he was asked to swim. As for Skill 3, Arman did not portray any sharing and taking turns behaviours.

Social Story 2: Playing with My Toys

I love playing with my toys. I have many toys. Where are my toys? I have blocks. I have robots. I have dinosaurs. I have trains and airplanes. I love my toys. I like to buy toys.

Table 2: Reflection of spoken discourse and responses for Social Story 2

Skill 1	Reflection of the Spoken discourse	Skill 2	Response	Skill 3	Response
a) saying assalammualaikum	*kumsalam*	a) imitation (e.g. touch	*Yes imitation*	a) sharing in which	*He didn't want to*

		head, arms up)	*of happiness receiving toys* *Yes when asked to take green dinosaurs*	he was asked to share his toys with his mother and the researchers	*share his toys.* *He didn't play with anyone of us.*
b) answering Are you playing with toys? Do you like your toys? How many toys do you have? Where are your toys?	*Yes* *Yes* *No response.* *Me (with me)*	b) following simple instructions (e.g. Call mama to play with you.)	*No respond*	b) taking turns	*No taking turns*
c) asking questions about the toys	*Blocks Robots Like dinosaurs Go buy toys*				
d) keeping the conversation going	*Buy toys Open door Car*				

Table 2 above revealed Arman's utterances after the Social Story 2 was read to him. At the beginning, he responded to the greeting (*Salam*) said to him as his first word *kumsalam*. As the probing continued, he developed more utterances for these sessions, among the words that he uttered were *me, blocks, robots, like, dinosaurs, go buy toys, buy toys, open door* and *car*. Arman also showed improvement towards Skill 2 (imitation and following instructions). He imitated the action of happiness when receiving toys and he followed the instruction given to him when he was asked to take the green dinosaurs. However, there was still no improvement in Skill 3- sharing and taking turns as he was reluctant in sharing his toys with the researchers as well as his mother, and there was no action from him when we wanted to play with the dinosaurs with him.

Social Story 3: Combing my Hair

This is my hair. I want to comb my hair. I use a comb to comb my hair. My hair is short. It is easy to comb my hair. Mama helps me to comb my hair. Now my hair is neat. I look handsome mama said. I love my hair. I want to go outside and play. My hair is neat.

Table 3: Reflection of spoken discourse and responses for Social Story 3

Skill 1	Reflection of the Spoken discourse	Skill 2	Response	Skill 3	Response
a) saying assalammualaikum	*kumsalam*	a) imitation (e.g. touch head, arms up)	*Yes imitation of touching his head Yes when asked to comb his hair*	a) sharing in which he was asked to share his comb with his mother and the researchers	*He shared his comb.* *He didn't comb our hair.*
b) answering Where's your hair? Where's the comb? What colour is your comb? Is your hair short or long?	*This* **only pointing…no* *Red* *short*	b) following simple instructions (e.g. Call mama comb your hair.)	*No respond*	b) taking turns	*No taking turns*
c) asking questions about combing hair	*My hair* *Wash* *Comb* *Mama hair*				
d) keeping the conversation going	*Comb hair (with action)*				

Taking into consideration, with almost 84 sessions (social stories as the intervention), Arman's performance in his spoken discourse; language skills and imitation improved. This could be seen during the sessions when the Social Story 3 was told. He continued making progress through the words that he uttered; *kumsalam*, *this, red, short, my hair, wash, comb, mama hair* and *comb hair*. Like the previous sessions, as for this Social Story Arman demonstrated imitation; he touched his head and combed his hair. He was weak in responding to the instructions and he did not initiate any conversation for the entire sessions. He emitted low levels of inappropriate social behaviours and few attention securing behaviours. The intervention also was effective in improving Arman's average rates of imitation and following simple instructions (Skill 2). Although, Arman was still weak in his turn taking skills (Skill 3), he demonstrated now sharing and turns taking with materials given to him and with us.

Use of Theory of Mind (ToM)

The theory of mind is treated by many researchers as "one of the domain-specific naive theories among the several kinds of knowledge in human minds". The theory claims that human beings are capable of sharing attention and interrelating their emotions with each other in proto-dialogic exchanges. This means that human beings are able to impute mental states to themselves and to others. Those who are not able to do so are diagnosed as having ASD. Tomasello (1999), said "the theory of mind (ToM) is uniquely human and the role of ToM is the main force in the development of all the child's social and communicative skills."

Many research in autism have been conducted by using this theory. Syriopoulou Delli, Varveris & Geronta (2017) conducted a research to examine the application of ToM and other two cognitive theories in children with ASD. Clearly, they reported that children with ASD showed significant deficits in the development of ToM. Furthermore, paralleled to this theory, Fadda et al. (2016) explored the role of ToM in moral judgement (MJ) among ASD children. A group of 30 children with ASD was compared in MJ and ToM with 30 typically developing (TD) children. In the moral task, children were told two versions of a story: in one version the protagonist acted according to a moral intention but the action resulted in a harmful consequence; in the other version the protagonist acted according to an immoral intention, but the action resulted in a harmless consequence. Children were asked which of the two protagonists was the "naughtier." The analysis of the MJ in relation to ToM showed that children with ASD lacking ToM abilities judged guilty the protagonists of both versions of the story in the moral task because both of them violated a moral rule.

Agreeing to the fact of deficit ToM abilities in the ASD chidren, Miranda et al. (2017) conducted a research on Social Cognition in Children with High-Functioning ASD and Attention Deficit/Hyperactivity Disorder. They found that the HFASD and ADHD groups showed worse performance on the verbal ToM task than the TD group, and only the performance of the HFASD group was significantly lower than the TD group on the contextual ToM task. This study supported the findings of the previous study by Hutchins et al. (2016). On all the measures, both on the battery that rated explicit ToM knowledge and on the TOMI inventory focused on applying ToM to daily life situations, the ASD group had worse performance than the other groups. However, the ADHD group achieved higher performance on the explicit tasks, that is, on the laboratory measures.

Subsequently, the results of the research showed that the autistic child displayed very minimum social interactions towards the social stories read to them. The sample did not understand other people's intentions but he could acquire the language by uttering some simple words that he could remember. The lack of ToM in the autistic child made him not understand the indirect instructions.

CONCLUSION

As a conclusion, Arman, the one and only participant for this research could utter a few words when he was asked questions about the Social Stories told to him. The number of words uttered by him was improving from one Social Story to another. Other than that, Arman did not show any imitation and did not respond to instruction during the sessions of Social Story 1. He later showed some improvements in terms of imitation and responded to instructions in Social Story 2 and 3. In terms of sharing and turn taking, only during sessions in Social Story 3 Arman showed a joint attention by wanting to share his comb with the researchers and his mother. This case study which was a preliminary research conducted allowed the researchers to gauge the underlying social competence and communication skills developed by an autism child before a larger scale research could be conducted. Results obtained from this study were similar to a few past studies (Kim et al., 2014; Gilbertson et al., 2017; and Dubey et al., 2015, 2017), which claimed that Social Story or Social Narrative helps children with ASD to gain social information and to promote social understanding among them. Furthermore, in explaining the research by using ToM, the current research supports the previous research with the fact that lack of ToM in the autistic child has made the child unable to understand the indirect instructions. This is very much supporting Syriopoulou Delli, Varveris & Geronta (2017), Miranda et al. (2017) and Hutchins et al. (2016).

The window that is obtained from the research has enabled the researchers to gain indepth understanding of autism children's sensitivity like their age, surrounding, and therapy sessions that they have undergone or are still undergoing. The results of this research are useful especially to parents with ASD children and teachers who teach ASD or even ADHD learners.

Therefore, further research is warranted to investigate other interventions that would help ASD children to correct their responses to situations in a non-threatening manner. Other than that, perhaps more implications of Social Stories towards ASD children could be explained by using other cognitive theories like Theory of Executive Functions and Weak Central Coherence Theory.

REFERENCES

Andrés-Roqueta & Katsos. (2017). The Contribution of Grammar, Vocabulary and Theory of Mind in Pragmatic Language Competence in Children with Autistic Spectrum Disorders. *Frontiers in Psychology*. 8:1035.

Attwood, T. (1998). The links between social stories, comic strip conversations and the cognitive models of autism and Asperger's syndrome. Retrieved November 20, 2001, from *http;//www.tonyayywood.com/paper5.htm*.

Baixauli-Fortea, I., Casas, A.m., Berenguer-Forner, C., Colomer-Diago, C. & Roselló-Miranda, B. (2017). Pragmatic competence of children with autism spectrum disorder. Impact of theory of mind, verbal working memory, ADHD symptoms, and structural language. *Journal of Applied Neuropsychology: Child*. https://doi.org/10.1080/21622965.2017.1392861

Bakhtin, M. M. (1986). The problem of speech genres. *In C. Emerson & M. Holquist (Eds.), M M Bakhtin: Speech genres and other late essays* (pp. 60-102) (V. W. McGee, Trans.). Austin: University of Texas Press.

Baron-Cohen, S. (1988). Social and pragmatic deficits in autism: Cognitive or affective? *Journal of Autism and Developmental Disorders*, 18, 379-402.

Bottini, S. (2018). Social reward processing in individuals with autism spectrum disorder: A systematic review of the social motivation hypothesis. *Research in Autism Spectrum Disorders*. Volume 45, January 2018, Pages 9-26

Cooper, K., Loades, M.E. & Rusella, A. (2018). Adapting psychological therapies for autism. *Research in Autism Spectrum Disorders*. 45 (2018) 43–50

Damico, J.S. (2014). Discriminant validity with a direct observational assessment system: Research with previously identified groups. *Clinical Linguistics & Phonetics*, 28, 617-626

Damico, J. S. & Nelson, R. (2010) *Reading and Reading Impairments, in The Handbook of Language and Speech Disorders* (eds J. S. Damico, N. Müller and M. J. Ball), Wiley-Blackwell, Oxford, UK. doi: 10.1002/9781444318975.ch12

Damico, J.S & Simmons-Mackie (2003). Qualitative Research and Speech-Language Pathology. *American Journal of Speech-Language Pathology*, May 2003, Vol. 12, 131-143

Dubey, I., Ropar, D. & Hamilton, A.F. (2015, 2017). Measuring the value of social engagement in adults with and without autism Molecular Autism, 6 (35) (2015)

Dyson, L.L. (2003). Children with Learning Disabilities Within the Family Context: A Comparison with Siblings in Global Self–Concept, Academic Self–Perception, and Social Competence. *Learning Disabilities, Research and Practice*. Volume 18, Issue 1 February 2003

Fadda, R., Parisi, M., Ferretti, L, Saba, G., Foscoliano, M., Salvago, A. & Doneddu, G. (2016). Exploring the Role of Theory of Mind in Moral Judgment: The Case of Children with Autism Spectrum Disorder. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2016.00523

Fong Chew Hoon. (2003). *Appropriateness of Management Behavior Toward Children with Autism in A School*. A Case Study. Master of Education thesis. Kuala Lumpur: University of Malaya.

Gilbertson, L.R, Lutfi, R.A & Weismer, S.E (2017). Auditory preference of children with autism spectrum disorders *Cognitive Processes*, 18 (2017), pp. 205-209

Gray, C. (2000). The new social story book. Arlington, TX: Future Horizons, Inc.

Happé, F. (1993). Communicative competence and theory of mind in autism: A test of relevance theory. Cognition, 48, 101-119.

Hutchins, T.L, Prelock, A., Morris, H., Benner, J., LaVign, T. & Hoza, B. (2016). Explicit vs. applied theory of mind competence: A comparison of typically developing males, males with ASD, and males with ADHD. *Research in Autism Spectrum Disorders*. Volume 21, January 2016, Pages 94-108

Hyunkyung Lee, Hyunsu Sim, Eunju Lee & Dahye Choi (2017). Disfluency characteristics of children with attention deficit/hyperactivity disorder symptoms. *Journal of Communication Disorders*. Volume 65, January–February 2017, Pages 54-64

Lensmire, T.J. & D.E. Beals (1994). Appropriating others' words: traces of literature and peer culture in a third-grader's writing. *Language in Society*, 23: 411-25.

Lorimer, P. A., Simpson, R. L., Myles, B. S., & Ganz, J. B. (2002). The use of social stories as a preventative behavioral intervention in a home setting with a child with autism. *Journal of Positive Behavioral Interventions, 4*, 53-60.

MacFarlane, H., Gorman, K., Ingham, R., Presmanes, A., Papadakis, K., Kiss, G. & van Santen, J. (2017). Quantitative analysis of disfluency in children with autism spectrum disorder or language impairment. *PLOS*. Published: March 15, 2017https://doi.org/10.1371/journal.pone.0173936

Maxwell, J., Weill, C., & Damico, J. (2016). Investigating the Use of Appropriation in the Writing of a Child with Autism: A Case Study. *Journal of Communication Disorders 65 (2017) 10–21*

Miranda, A., Berenguer, C., Rosello, B., Baixauli, I. & Colomer, C. (2017). Social Cognition in Children with High-Functioning Autism Spectrum Disorder and Attention-Deficit/Hyperactivity Disorder: Associations with Executive Functions. *Frontiers in Psychology*. 8:1035.

Normaliza Abd Rahim (2011a) Penerapan Cerita Sosial Melalui Lakonan dalam Kalangan Kanak-kanak Sindrom Asperger. *Jurnal Sains Sosial dan Pengurusan Teknologi* UMP. 3, 25- 34.

Normaliza Abd Rahim & Nik Ismail Harun (2006) First We Imagine Then We Collaborate: An Insight with Autistic Children. *Jurnal Gading*. 10 (2), 57-67.

Normaliza Abd Rahim & Nik Ismail Harun (2007) The Learning Styles of the Special Needs Children Using Pictures and Storyboard Writing: A Case Study. *Gading Business and Management Journal*. 11(2), 41-56

Normaliza Abd Rahim (2011b) Gangguan dalam Sesi Bercerita Kanak-kanak Sindrom Asperger. *Jurnal Linguistik*, 13, 1-10.

Normaliza Abd Rahim & Siti Nur Aliaa Roslan (2012) Analisis Bercerita dalam Kalangan Kanak-kanak Sindrom Asperger Melalui Digital Grafik. *Jurnal Bahasa*, September-Disember 2012, 27, 186-192.

Nurfarhana Shahira Rosly, Normaliza Abd Rahim & Hazlina Abdul Halim (2015c). Pengaruh Cerita Kanak-kanak Terhadap Kanak-kanak Sindrom Asperger. *International Journal of Language Education and Applied Linguistics (IJEAL)*. 2, August, 75-85

Nurfarhana Shahira Rosly & Normaliza Abd Rahim (2015a) The Integration of Storytelling Elements in Learning Techniques among Asperger Syndrome Children. *Journal of Business and Social Development*. 3 (1), 76-87

Nurfarhana Shahira Rosly & Normaliza Abd Rahim (2015b) Penerapan Elemen Penceritaan dalam Teknik Pembelajaran Kanak-kanak Sindrom Asperger. *Journal of Business and Social Development*. 3 (1), 76-87

Premack, D. & Woodruff, G. (1978). Does the chimpanzee have a "theory of mind"? *Behavior and brain sciences*, 4, 515-526.

Spain D, Sin J, Chalder T, Murphy D. G, Happé F (2015). Cognitive behaviour therapy for adults with autism spectrum disorders and psychiatric co-morbidity: a review. *Research in Autism Spectrum Disorders* 2015; 9:151–62.

Sung Yeun Kim, Nathan Prestopnik & Frank A. Biocca (2014). Body in the interactive game: How interface embodiment affects physical activity and health behavior change. Computers in Human Behavior. Volume 36, July 2014, Pages 376-384

Syriopoulou, D., Varveris & Geronta (2017). Application of the Theory of Mind, Theory of Executive Functions and Weak Central Coherence Theory to Individuals with ASD. *Journal of Educational and Developmental Psychology*. Vol. 7, No. 1

Tager-Flusberg, H. (1992). Autistic children talk about psychological states: Deficits in the early acquisition of a theory of mind. *Child Development*, 63, 161-172.

Tomasello, M. (1999). The cultural origins of human cognition. Cambridge, MA: Harvard University Press.

Walters, S., Loades, M., & Russell, A. (2016). A Systematic Review of Effective Modifications to Cognitive Behavioural Therapy for Young People with Autism Spectrum Disorders. *Review Journal of Autism and Developmental Disorders*, 3(2), 137-153.