UNIVERSITI PUTRA MALAYSIA

TALK-IN-INTERACTION OF A MALAYSIAN ENGLISH SPEAKING AUTISTIC CHILD DURING JOINT COMPREHENSION ACTIVITIES

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By

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November 2019

Chairman : **Afida binti Mohamad Ali, PhD**
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Talk-In-Interaction involves the pragmatic knowledge governing the basic aspects of conversation such as organization of turn taking, organization of sequences and organization of repair. Such pragmatic knowledge has been found to be deficient in autistic children and it is evident in their discourse. Studies have shown that children with Autistic Spectrum Disorder (ASD) often find difficulty in discourse references which stems from atypical features of autistic language, namely – pronoun atypicality, pragmatic deficit and echolalia. These atypical features construes interaction between ASD children and their interlocutors resulting in miscommunication of sorts. Activities that require supervision and direction from an interlocutor becomes constrained and require more time including use of specific communication strategies in assisting ASD children. In the case of joint comprehension activities, comprehension in the children's interaction is the basic fundamental requirement in ensuring coherence and compliance during communication. This case study draws on Kasher's (1991) theoretical model, under which the autistic core impairments are described in terms of the knowledge required for various pragmatic functions which are analysed through discourse analysis in identifying patterns of communication that involves the language atypicalities mentioned. While studies related to ASD are largely conducted quantitatively, this study incorporated a case study methodology involving a Malaysian English speaking ASD child, to analyse the conversational interactions between the subject and the interlocutor during joint comprehension activities. The study also analyses the perlocutionary effects elicited from directive speech acts since children with autism are reported to produce more feedback during interaction and comprehend directive speech acts better than speech acts that facilitate shared understanding such as representatives and expressive(s). This was also observed to be the case with the subject of the study. The data of the case study was collected through audio/video recordings, and cross-referenced with observations during the joint comprehension activities, as well as interviews with the parents and teacher. The definitions and classifications of the disorder were reviewed from the first description by Kanner (1943) and the Theory of Mind (Leslie, 1987) interpretation of the core impairments in Autism, to the current 5th

Diagnostic and Statistical Manual of Mental Disorders (DSM-V, 2013) classifications. Many patterns of communication arose from the use of the atypical language features present; some of which impede, while some was shown to support interaction. It was found that specific communication skills among special needs facilitators have implications for communication in English where meaningful interactions can be formed with the subject, and possibly other Autistic children. It could help to create awareness among educators to establish special needs education guide/text/study/books for the field of special needs education, especially in Malaysia.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sastera

PERCAKAPAN DALAM INTERAKSI SEORANG KANAK-KANAK AUTISTIK MALAYSIA DENGAN BAHASA INGGERIS SEBAGAI BAHASA PERTAMANYA SEMASA AKTIVITI PEMAHAMAN-BERSAMA

Oleh

MUHAMMAD NAZRIN BIN ROSLI

November 2019

Pengerusi	:	**Afida binti Mohamad Ali, PhD**
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Ujaran dalam perbualan atau berinteraksi melibatkan ilmu pragmatik yang asas seperti individu atau masyarakat bergilir-gilir untuk bercakap, berturutan dan untuk pembaikan sepanjang sesi berlangsung. Namun begitu, pengetahuan pragmatik sedemikian didapati kurang berlaku dalam kalangan anak-anak autistik dan ia terbukti dalam ujaran mereka. Kajian telah membuktikan bahawa mereka yang menghidap *Autistic Spectrum Disorder* (ASD) sering menghadapi kesukaran dalam sebutan atau ujaran yang melibatkan ciri-ciri atipikal bahasa autistik, iaitu ganti nama atipikal, defisit pragmatik dan echolalia. Ciri-ciri atipikal ini memberi tumpuan terhadap interaksi anak-anak ASD dan pengantara mereka yang menimbulkan salah faham dalam komunikasi. Hal ini kerana, aktiviti yang memerlukan penyeliaan dan arahan daripada seorang ketua menjadi terbatas dan memerlukan lebih banyak masa termasuk penggunaan strategi komunikasi khusus dalam membantu anak-anak ASD ini. Dalam aktiviti pemahaman bersama, kefahaman dalam interaksi kanak-kanak menjadi keperluan asas dalam memastikan kesesuaian dan pematuhan semasa komunikasi. Kajian kes yang dijalankan ini menggunakan Model Teoretikal Kasher (1991), iaitu gangguan kecacatan autistik dijelaskan dari segi ilmu dan fungsi pragmatik dianalisis melalui analisis ujaran dalam mengenal pasti corak komunikasi yang melibatkan ciri-ciri atipikal bahasa yang disebutkan oleh kanak-kanak ini. Metodologi kajian ini secara kajian kes yang melibatkan kanak-kanak ASD berbahasa Inggeris, untuk menganalisis interaksi perbualan antara subjek dan ahli perantara semasa aktiviti pemahaman bersama berlangsung. Walaupun, kebiasaannya kajian yang berkaitan dengan ASD dijalankan secara kuantitatif,. Kajian ini juga menganalisis kesan tindakan ujaran arahan kepada kanak-kanak yang mengidap autisme yang dilaporkan lebih banyak memberi maklum balas semasa berinteraksi dan memahami ujaran berbentuk arahan lebih baik daripada perbuatan ucapan yang lain serta memudahkan pemahaman bersama seperti bersama wakil dan ekspresif. Hal ini juga turut menjadi tumpuan dalam kajian ini. Data kajian kes ini dikumpulkan melalui rakaman audio atau video, dan merujuk silang dengan pemerhatian semasa aktiviti pemahaman bersama, serta

temuramah dengan ibu bapa dan guru yang terlibat. Pada asasnya, definisi dan klasifikasi gangguan ini telah dikaji semula dari keterangan pertama oleh Kanner (1943) dan Teori Minda (Leslie, 1987) iaitu tafsiran kecacatan teras dalam Autisme, kepada klasifikasi Manual Gangguan Diagnostik dan Statistik ke-5 semasa Gangguan Mental (DSM- V, 2013). Ternyata, banyak corak komunikasi terhasil daripada penggunaan ciri bahasa atipikal iaitu sebahagiannya menghalang, manakala sesetengahnya ditunjukkan sebagai menyokong interaksi. Jelas didapati bahawa kemahiran komunikasi, khusus dalam kalangan fasilitator keperluan khas ini memberi implikasi untuk komunikasi dalam bahasa Inggeris kerana interaksi yang bermakna dapat dibentuk dengan subjek, dan anak autistik yang lain. Hal ini boleh membantu untuk mewujudkan kesedaran dalam kalangan pendidik untuk menubuhkan panduan pendidikan keperluan khas seperti teks, kajian dan buku yang khusus terutamanya di Malaysia.

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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Master of Arts. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

ASD   Autistic Spectrum Disorder

TD   Typical Developing

ToI   Triad of Impairments

ToM (See p.4)   Theory of Mind

DSM-V (See p.4)   5th Diagnostic and Statistical Manual for Mental Disorders

CHAPTER 1

INTRODUCTION

This chapter introduces the background of the study, problem statement, objectives of the study, research questions, scope of the study, and the significance of the study. Definitions of important terms used in the study are provided with an overview of the thesis.

1.1   Background of the Study

Autism spectrum disorder is a neurodevelopmental disorder with a biological basis, which manifests in the first three years of life. Children diagnosed with Autistic Spectrum Disorder (ASD) are different from their 'typical developing' (TD) peers in many ways, especially in regards to social abilities. A known guideline to the difference would be that the ASD children possess features known as the Triad of Impairments (ToI) (Wing, 1981).

Triad of Impairments refers to the three core deficits found in ASD children, namely, in socialization and social interaction, language and communication, and a preference for repetitive, stereotyped behaviour rather than creative play (Faras, 2010; Hie & Kee, 2019). This triad is the crux of autism and is evident even in those with a very high level of cognitive ability, therefore requiring acknowledgment on the part of the supervisor and the parents, during interaction with the child (Wire, 2005. p. 2). Firstly, impairment in social interaction means having difficulty in social conversation and quite often feeling uncomfortable around others, resulting in an off-hand or rude social manner. There may also be a disinterest or dislike in working with a group or pair and a strong preference for being allowed to work independently and alone. The second impairment refers to unusual social communication, where these children's voices may be too soft or loud, "Their speech is garbled and long-winded, or too brief, and there may be elective muteness or echoing of words and phrases" (Wire, 2005. p. 3).The Triad of impairments differentiates the ASD child to their TD peers, and this was observed during their interaction with their interlocutors. TD children, in general, understand the rules of conversation while ASD children do not. This difference is because TD children's 'talk-in-interaction' is intact unlike ASD children.

Another example is that some children find having direct eye contact with others difficult, even painful, and may focus on the mouth or a point beyond the face. However, this does not mean they are not noticing everything through their peripheral eye vision. The third aspect of the triad is a lack of flexibility, where the ASD child has difficulties in breaking a habit or routine behaviour that was adapted since young.

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Studies on language development and communication of ASD children have noted that ASD children have communicative impairments. These impairments are most evidently manifested in their pragmatic and discourse functioning alongside the atypical features of language within their 'Talk-In Interaction', such as Echolalic responses (Kasher, 1991. p. 2). These studies have noted how the pragmatic and discourse deficiencies of ASD children during interaction with their interlocutors causes significant delays in communication, such as excessive repetition of irrelevant phrases during interaction and the child not fully comprehending the interlocutor's instructions (Tager-Flausberg et al., 2001; Watkins et al., 2015; Hie & Kee, 2019).

"Talk-In-Interaction is the pragmatic knowledge governing the essential aspects of conversation such as the organization of turn-taking, organization of sequences, and organization of repair" (Kasher, 1991. p. 1). Such pragmatic knowledge is deficient in autistic children, as demonstrated in their discourse during communication. Past studies (Tager-Flausberg et al., 2005; Watkins et al., 2015; Baron-Cohen, 2019) have shown that children with Autistic Spectrum Disorder (ASD) often find difficulty in discourse references stemming from atypical features of language, namely – pronoun atypicality, pragmatic deficit, and echolalia. Echolalia is the act of repeating the same utterances by the ASD child, either done in interaction or by his/her own. Pronoun reversals refer to situations where the ASD child utilizes the opposite pronoun during interaction with an interlocutor. The deficit of pragmatic knowledge in ASD refers to ASD children not being able to comprehend the pragmatic aspect during a conversation, namely, the usage of implicatures to convey a specific message (Baron-Cohen, 1985; 2019). These features restrict interaction between ASD children and their interlocutors, resulting in poor communication. This miscommunication occurs during activities that require supervision where direction from an interlocutor becomes constrained hence requiring more time and specific communication strategies in assisting the ASD child to comprehend the conversation during an interaction.

The conditions on the spectrum broadly differ in terms of the severity of symptoms. Autism is a developmental disorder, affecting more than six children in a thousand, and second only in frequency to mental retardation (Newschaffer et al., 2007. p. 1). It is a life-long biological disorder with a wide range of appearances. As the autistic diagnosis includes individuals of very different aptitudes in different criteria, autism refers to Autism Spectrum Disorders (ASD) (Frith & Happé, 1994). Allott (2001) stated that the underlying condition of autism has been untreatable through many different forms of treatment with limited success so far. In addition, there is presently no consensus about the fundamental causes of autism.

In line with the pragmatic difficulties discussed, Baron-Cohen et al.(1985. p. 1) developed the Theory of Mind (ToM)(See p. xv) to explain how ASD children lack or have impaired language and social competence. The theory states that autistic children have a specific problem with mental representations and do not develop the ability to mind-read or rather, to comprehend the intentions of the speaker. Baron-Cohen, Leslie, and Frith (1985) also use ToM to explain how language skills that do not focus on social interaction or social interpretation especially reading and writing, are preserved,

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such as the echolalia features of an ASD child. Individuals with an impaired ToM such as ASD children can interact with other people, but they will fail in deducing the correct state of mind of the interlocutor, therefore not allowing any accommodation in their conversation (Hobson, 2019). A ToM impairment suggests that ASD children fail to transfer their language acquisition skills from internalization to interpretation successfully and that in Autism, the pragmatics of language is impaired, while syntax, such as word structure in sentences and face processing or perception are relatively intact (Baron-Cohen et al., 1994). This ties in with the study by Eisenmajer and Prior (1991. p. 351) who argued that "autistic children fail in the theory of mind tasks due to pragmatic difficulties."

For a better understanding of the disorder, it is essential to explain DSM-V, which is the standard classification of mental disorders and includes the current diagnosis of an ASD individual. DSM-V (5th Diagnostic and Statistical Manual of mental disorders) (See p. xv) published by the American Psychiatric Association (2013), addresses four main characteristics in the diagnosis of an ASD child. Firstly, there are persistent deficits in social communication and social interaction across multiple contexts, such as social-emotional reciprocity where the ASD child would exhibit a lack of emotion in his/her responses, showing minimal empathy towards the speaker's situation, and exhibiting limited nonverbal communication such as gesturing and maintaining eye-contact. Secondly, there are restricted, repetitive patterns of behaviour, interests, or activities by the child. Thirdly, the symptoms must also be present in the early developmental period and cause clinically significant impairment in social, occupational, or other important areas of current functioning, such as not being able to cooperate in a classroom due to unusual social interactions. Finally, the symptoms mentioned should not be confused with an intellectual disability (intellectual developmental disorder) or global developmental delay such as Dyslexia. Unlike the dated versions of the DSM such as DSM 1 to four, the DSM-V categorizes the classes of the disorder into three levels of severity, namely, level 1 with the lowest severity up to level 3 with the highest severity (American Psychiatric Association, 2013). It is also worthy to note that the subject of the study is categorized under Level 1 of severity under the DSM-V (see p. xv). This context will be discussed further in chapter 2.

In line with this instrumental preference, children with autism are reported to produce more feedback during interaction and comprehend better towards directive speech acts than speech acts that facilitate shared understanding such as representatives and expressive speech acts (Baron-Cohen, 1985; 2019). Searle (1975) also argued that in order to understand indirect speech acts, the speaker and hearer need to have mutually shared factual background information, and the ability of the hearer to make inferences. Subsequently upon application, it is harder to apply to interactions with the children with ASD due to the pragmatic deficit that they share.

In retrospect, the findings of the study are expected to reveal the patterns and language use of the English speaking Malaysian ASD child in his interaction with others.

1.2 Problem Statement

Past studies (Kasher, 1991; Baron-Cohen, 2000; Tager-Flausberg et al., 2005; Watkins et al., 2015; Clarke, 2019) on ASD children have concentrated on the aspect of ASD children's language development and acquisition in comparison to typical developing (TD) children in which some focused on the pragmatics perspective and its relation to semantics. For example, the studies mentioned above have shown that verbal children with autism use semantic groupings (e.g., bird, boat, food) in very unusual ways to categorize and to retrieve words (Tager-Flusberg, 1985; Lewis & Boucher, 1988; Minshew & Goldstein, 1993). The focus on the pragmatics perspective has resulted in a lack of research on ASD children's language data from the perspective of discourse analysis and conversation analysis (O' Reilly et al., 2016).

A study by Yeo and Teng (2015) on the socio-cultural perspectives and interventions for language development in ASD children did not utilize discourse analytic approaches in analysing the data but instead relied mainly on descriptive analysis of audio and video. A discourse analysis approach can be used to examine language in the natural communicative context of social interaction, showing how sentences are never isolated nor self-contained utterances that merely describe states of affairs. Discourse analysis as an analytical approach also demonstrates that sentences are typically shaped to perform social actions, and that they are situated within specific interactional trajectories (Goodwin, 1987; Sacks, 1992; O' Reilly et al., 2016). Utterances and turns of talk thus emerge, not solely as the products of an individual's cognitive processing, but as the outcome of an interactive process between interlocutors (Schegloff, 1995).

Furthermore, studies of ASD in Malaysia have primarily focused on strategies and interventions for language and cognitive development (Yeo & Teng, 2015) where the data recorded in the class or laboratory setting were not analyzed using discourse analytic approaches. These studies have not looked at the patterns and features of the impairments of language in ASD children that is used throughout the different aspects in conversation such as the socio-pragmatic functions, speech acts elicited, organization of turn-taking, sequences, and organization of repair in perlocutionary feedback, and strategies in avoiding feedback. An exception can be seen in an unpublished PhD thesis by Che An (2010) whose study on an ASD teenager, focused on the socio-pragmatic functions of language during interaction. However, this study did not look at the effects of different speech acts on the structure of the conversation of an ASD child but did feature several atypical features previously stated by Wing and Gould (1979) such as Echolalic responses.

A literature search revealed that studies on the talk-in-interaction of English speaking ASD children during joint comprehension activities in Malaysia have yet to investigate areas related to the conversational aspects, such as the atypical features of language in ASD children. Those (studies) that exist introduce separate perspectives to the study, such as music and art therapy (Fong & Jelas, 2010). However, the question of whether such children in interaction with others use linguistic features is under-researched in Malaysia. This gap of knowledge requires further study. This study also arose from the

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researcher's own experience where observations at the selected school for special abilities as well as the child's home revealed that there are problems in interaction and the use of appropriate communication skills during joint comprehension activities. (Researcher's observation and personal communication with parents and teachers).

Apart from the lack of studies using conversation or discourse analytic approaches (O' Reilly et al., 2016) and the wide gap of knowledge mentioned, another factor that is scarcely studied is that the L1 of the ASD child involved in the study is English despite being native Malaysians (Indian, Chinese & Malay) (Researcher's personal communication with a medical specialist, September 24, 2017). Such atypical language acquisition could happen to ASD children growing up excessively watching cartoons in English. According to a personal conversation with a medical doctor specializing in mental disorders of children and young adolescent, it is noted that ASD children are obsessed with these cartoons due to their fixation on matters that interests them (Researcher's personal communication with a medical specialist, September 24, 2017). ASD children with English as their first language are a growing norm in Malaysia though the methods and environment of the children's language learning/acquisition often vary. The parents' own experiences with acquiring or learning English play a role in creating the environment and opportunity where language learning can take place for the ASD child (Yamat et al., 2014, p. 1).

In line with the phenomenon where Malaysian ASD children speaking English as their first language, there also appears to be an issue in understanding the interaction with these children during a conversation (Hie & Kee, 2019). A literature search revealed that a lack of studies on Talk-In-Interaction of English speaking Malaysian ASD children who come from Malay-English bilingual homes where Bahasa Malaysia is the dominant language during joint comprehension activities. The cause of such a phenomenon could be attributed to how the ASD child absorbs the English Language found in the media. From a personal communication with a medical specialist in ASD, it is revealed that ASD children in Malaysia with English as their L1 had become a norm, especially in urban areas. Kremer-Sadlik (2005) states that typically, children whose parents' native language is other than that of the dominant culture develop an accent that is closer to their peers rather than to their parents. This finding would open up another possibility of a research perspective on how Malaysian ASD children with English as their L1 language development is like compared to their TD peers.

The findings of previous studies on subjects whose L1 is not English (Tseng & Fuligni, 2000) to studies that utilize subjects whose L1 is English but were more proficient in the second language (Bruck, 1982), yield different results and further show that language acquisition and development are heterogeneous. Bruck (1982), for example, examined Canadian children who are language impaired and experience low levels of L1 competence, but who learns in a bilingual environment. The children's L1, English, is the language of the majority culture, but they attend French immersion programs. The study compared language test scores of four groups of subjects: French immersion children with language impairment; English stream children with language impairment; French immersion children with typical language abilities; English stream

children with normal language abilities. It shows that "the [language-impaired] children acquired proficiency in French at no cost to first language development, academic progress, or cognitive skills" (p.57).

While another study by Tseng and Fuligni (2000) reports that adolescents who talked to their parents in English rather than in the mother tongue were less likely to engage in conversation with their parents. Whatever the cause behind the phenomenon, it warrants a more in-depth study to identify the variables behind its origins. The findings of this study could contribute new information to the discipline where are a lack of research on Malaysian ASD children with English as their L1.

In regards to DSM-V (5th Diagnostic and Statistical Manual of Mental Disorder) (See p. xv), Malaysian studies on ASD children do not categorize their ASD subjects according to the severity of ASD although the DSM-V states that there are different levels of severity. Children who are classed at Level 1 'require support'; children that are classed at Level 2 'require substantial support', while children that are classed at Level 3 'require very substantial support (American Psychiatric Association, 2013). Not classifying or categorizing ASD subjects according to levels of severity in studies involving ASD children, limits the understanding of how different levels of severity impedes pragmatic knowledge that they are facing during interactions.

The gaps of knowledge mentioned and discussed have little contribution towards the overall state of awareness regarding the language development of Malaysian ASD children, thus, presenting a gap in understanding the interaction during conversation of a Malaysian child whose first language is English but comes from a non-native English background.

1.3   Objectives

This study aims to investigate Talk-In-Interaction of a Malaysian Autistic (ASD) child whose L1 is English, during joint comprehension activities. Thus, the specific objectives of this study are to:

1.   analyze the linguistic features and communication patterns used by the ASD English speaking child during joint comprehension activities, and

2.   examine the perlocutionary effects in the conversational structure of the ASD child, through directive speech acts by the interlocutor.

1.4 Research Questions

Based on the objectives above, the following research questions are forwarded:

1. What are the linguistic features and communication patterns used by the Malaysian ASD English speaking child with the interlocutor(s) during interaction in joint comprehension activities?

2. In what ways does the use of the specific communication patterns and linguistic features affect the ASD child's interaction with the interlocutor during joint comprehension activities?

3. How does the use of directive speech acts affect the interaction with the ASD child in terms of the perlocutionary effects during joint comprehension activities?

1.5 Theoretical Perspective

This study draws on several theories to examine the general structure of the Talk-In-Interaction, the discourse patterns, and the sequence structure of information exchange. The theories identified are Kasher's Modular Pragmatic of Knowledge (1991), which focusses on Talk-In-Interaction Pragmatics, Theory of Mind (Baron Cohen et al., 1985), Speech Acts theory by Searle (1975) to categorize and identify the linguistic features and communication patterns utilized by the subject derived from the Atypical Language Features in ASD children (Wing & Gould, 1979; Baron-Cohen, 1988).

Discourse analysis (Brown & Yule, 1983) was used to analyse spoken transcription which attempts to understand or interpret the patterns embedded in the data (Sterponi & Kirby, 2016). This is to make sense of what the subject is doing with his language. The steps include coding, organizing categories, identifying patterns, and reporting conclusions (O' Reilly et al., 2016). The theoretical perspective will be discussed further together with the conceptual framework in chapter 2 of this study.

1.6 Significance of the Study

This research can assist in understanding ASD children's communication, explicitly using a discourse analytic approach concerning the communication patterns and type of language used by English speaking ASD children during joint comprehension activities with their interlocutors. Since most of the previous studies were conducted in the context of isolated (classroom) settings and did not focus on the Talk-In-Interaction within communication (Nair, 2015; Yeo & Teng, 2015), it is hoped that this research can provide insights into the current issues of communication of English speaking ASD children in Malaysia. The National Autism Society in Malaysia (NASOM) states that around 8000 – 9000 children born yearly may have Autism although there are no

official registry for the number of individuals diagnosed with Autism in Malaysia (Murad, 2019).

This study would be able to contribute data on the Autistic linguistic features and communication patterns used by an ASD English speaking Malaysian child during joint comprehension activities. It could further contribute to the understanding of the roles and influence of the interlocutor in interaction by analysing their structure of speech as well as communication patterns during joint-comprehension activities.

The analysis identifies potential barriers to effective communication. Additionally, integrating the results into training programs would be beneficial to the Autistic discipline/community in terms of improving language use and communication skills of special needs teachers in interacting with ASD children. It would also help in understanding the perlocutionary acts in the conversational structure of ASD children elicited through directive speech acts by the interlocutor.

1.7   Scope and Limitations of the Study

This study investigates the conversational interaction of a Malaysian Autistic child whose L1 is English during joint comprehension activities, using naturalistic sampling methods such as audio and video recording of the joint comprehension activities, interview with the parents, and observation of the child both at home and school. Furthermore, this study is based on the point of view of Pragmatics of Language, and draws on Kasher's (1991) theoretical model, under which the autistic core impairments were described in terms of the particular knowledge required for various pragmatic areas, such as the Talk-In-Interaction pragmatics whereby turn-taking is primarily concerned, and further analyzed through discourse analysis approach.

The study focused on only the verbal responses of the communication. Hence, the scope of this study does not include non-verbal behaviour, reaction, gender and ethnicity of the interlocutor, the linguistic level, as well as the ethnicity of the subject.

While studies related to ASD are mostly conducted quantitatively, this study incorporates a case study methodology and utilizes a discourse analytic measure to assess the linguistic features and communication patterns in the conversation of the subject during joint-comprehension activities. The study also focusses on the perlocutionary effects elicited from directive speech acts.

The data will only be collected through audio/video recording. The definitions and classifications of ASD are reviewed from Kanner (1943), Leslie's (1987) interpretation of the core impairments in Autism through the Theory of Mind, and the latest DSM-V (2013) classifications.

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1.8   Definition of Terms

The definitions of important key terms relevant to this study are as follows:

ASD Child/Autistic Child

A child that is diagnosed with Autism Spectrum Disorder (ASD) who exhibits three core deficits namely, in socialization and social interaction, language and communication, and a preference for repetitive, stereotyped behaviour rather than creative play (Faras et al., 2010) .

Interlocutor

In linguistics, discourse analysis, and related fields, an **interlocutor** is a person involved in a conversation or dialogue. Two or more people speaking to one another are each other's interlocutors (Meyerhoff & Klaere, 2017)

Talk-In-Interaction (Pragmatic)

"The pragmatic knowledge governing the essential aspects of conversation such as the organization of turn-taking, organization of sequences, and organization of repair" (Kasher, 1991. p. 1) .

Mental Disorder

"A behavioural or psychological syndrome or pattern that occurs in an individual." (DSM-V, 2013, p.1) .

Naturalistic Data

Naturalistic data is the "data that make up records of human activities that are neither elicited by nor affected by the actions of social researchers." (Given, 2008, p.5)

Joint-Comprehension/Attention

"An early social-communicative behaviour in which two people share an attentional focus on an object or event, for the sole purpose of sharing that interesting object with each other." (Bakeman and Adamson, 1984, p.1)

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1.9 Overview of Thesis

Chapter 1 describes the background of the study, which explains the gap in the research on children with Autistic Spectrum Disorder (ASD). This chapter also presents the statement of the problem, the research questions, the purpose, significance of the study, the limitations and definitions of key terms. Chapter 2 presents the theoretical perspectives and a review of the literature. The review of the related literature is provided by a thorough investigation into the language atypicality of ASD children and their Talk-In-Interaction. A detailed review of the literature to the different perspective of studies on ASD children from previous studies in western countries and Malaysia are discussed in this chapter. Chapter 3 describes the research design and the methodology of the study. It describes the participant, instruments, data collection, and data analysis procedures. Chapter 4 reports the research findings and analysis. Chapter 5 highlights the conclusion and contributions of the study. The chapter ends with suggestions for further research.

1.10 Summary

The chapter has provided an overview of the whole study. It consists of the background section where the Talk-in-interaction of ASD children during joint-comprehension is explicated. Moreover, the chapter highlighted the gaps which were observed in previous work and established the need for the study to be conducted. This is followed by elaboration on research objectives and questions raised, and to be addressed in the study. Finally, the contributions of the study are presented and identified.

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