

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter discusses the research design, conceptual framework, theoretical framework; Grice's theory, Sacks, Schegloff and Jefferson model, and Lucas's Pragmatic Analysis; qualitative approach, background of the subject, data collection, research procedure and the pilot study.

3.1 Research Design

This study is a field research involving observation, interview with the parents of the subject and recording of the subject in his natural setting. The observation was conducted concurrently with the recording session. The researcher observed the behaviour of the subject while he was interacting with his siblings, therapists and peer. The interview was carried out during the recording sessions when the parents were around to obtain information about the background of the subject or other related matters. The qualitative approach was adopted as it enables the researcher to analyze the subject's speech patterns in a variety of contexts.

The sample of this study is a 16 year old teenager who had been diagnosed autistic when he was 2 years old. He is known as Yusoof, Yuri or Azzari. For the purpose of this study, he is referred to as "Y". Two other autistic teenagers with similar age group and similar communicative ability were employed for this study. They were James (J) and Ahmad (A). The former was engaged for pilot study and the latter was

engaged to have conversation with Y. The data for this study was recorded according to the objectives of this research which are stated in Chapter One.

3.2 Qualitative Approach

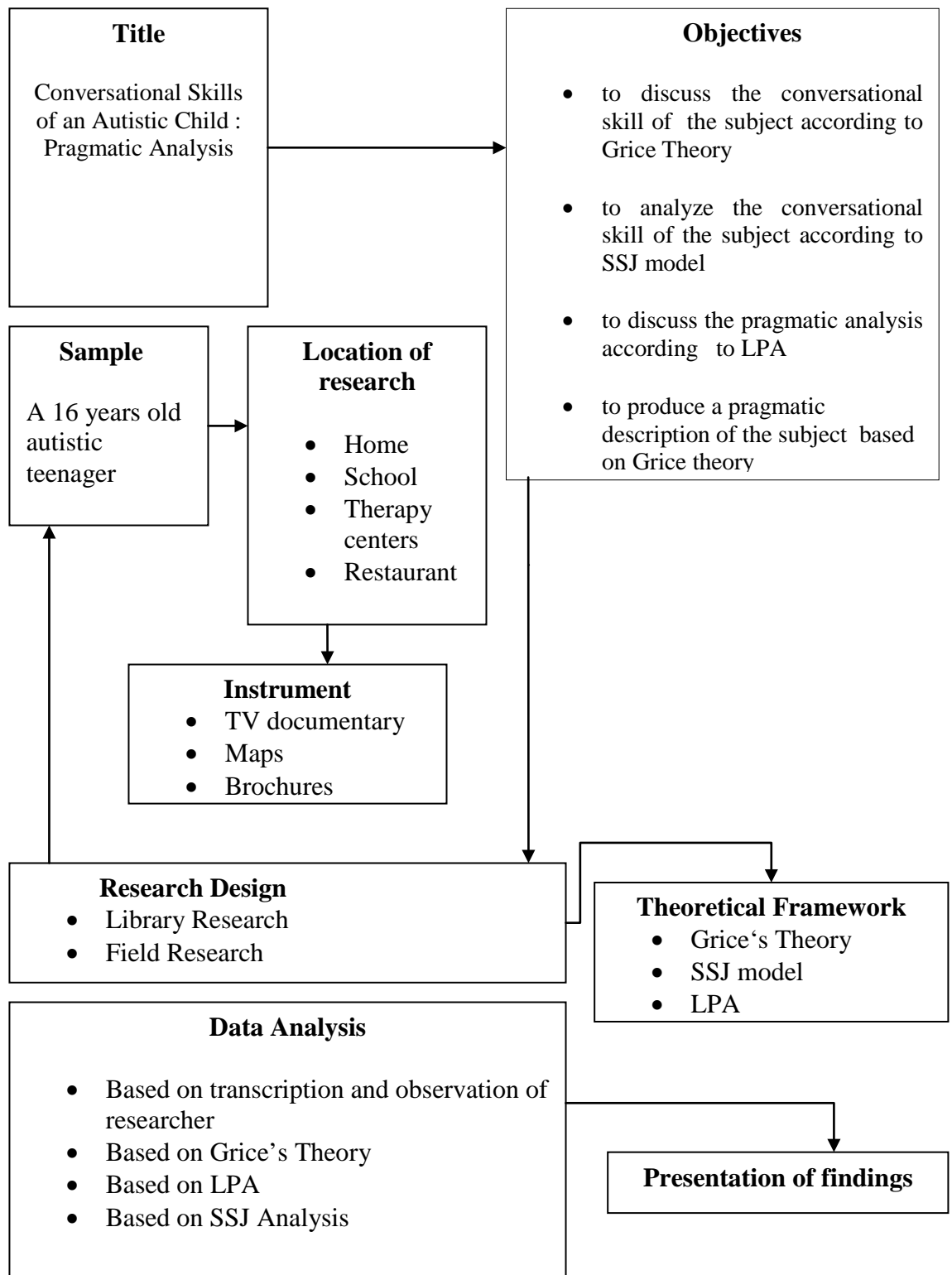
This study adopted the qualitative approach. According to Creswell (2003), qualitative research is an inquiry process of understanding that explores a social or human problem. In addition, Hara (1995) claimed that many research have proven that qualitative research methods are suitable for educational and social science research. Qualitative research provides an in-depth description of a topic or participant that cannot be quantified into fundamental elements (Schriver, 2001). Furthermore, qualitative research approach is able to encompass interpersonal, social, and cultural contexts more fully than the quantitative research approach. Ary, Jacobs and Razavieh (2005) summarized the characteristics of a qualitative research as including:

- | | |
|----------------------|---|
| Concern for context: | Qualitative inquiry is contextual. It is bound by a setting as it is assumed that human behaviour is context-bound. |
| Natural setting: | The focus of a qualitative inquiry is holistic, thus it takes place in a natural environment. |
| Human instrument: | Methods used to collect and analyse data must take into account human experience and situations. |
| Descriptive data: | Qualitative research uses subjective data. It includes participants' experiences and perspectives. |

This method of data collection is in line with Labov (1970) recommendation, a well known sociolinguist who claimed that the best method to obtain a complete and quality speech is to record the conversation through obvious observation. This approach enables the researcher to conduct observation and to do video recording.

With these explanations of qualitative approach, the researcher feels that it is a suitable approach for this study as the topic falls within the description mentioned above.

3.3 CONCEPTUAL FRAMEWORK



This diagram is designed to conceptualize the flow of this study and summarizes the processes involved in this research in a visual form.

3.4 THEORETICAL FRAMEWORK

The framework of this study consists of a theory and models which are listed below:

3.4.1 Grice Theory

3.4.2 Sacks, Schegloff and Jefferson model (SSJ Model)

3.4.3 Lucas Pragmatic Analysis (LPA)

3.4.1 GRICE'S THEORY

This theory was chosen as a framework because it is one of the most influential theories of pragmatics and is cited as the hub of pragmatics research (Fasold 1990:128). Grice's Theory was introduced by Paul Grice in 1975. It has two central tenets known as "cooperative principle" and "speaker meaning". This theory is an extension of speech act theory which was proposed by Austin (1962). Grice expanded this theory by developing several related principles such as conversational implicature, cooperative principle and speaker meaning.

Grice viewed utterances as complex and delicate performative words that can be interpreted into several versions from that was originally intended by the speaker based on the background and cognitive level of the hearer. In communication, the cognitive factors must be taken into account. The cognitive factors are facts that can be manifested by the listener involved in the conversation. The degree of manifestation is dependent on the ability of the listener to make assumptions of what is being said and the clarity of the message sent by the speaker. This requires both participants in a conversation to make effective contribution or cooperate in the interaction. Cognitive

factor is important in maintaining conversation as both participants must possess same cognitive ability in order to understand each other and to infer the meaning of the utterances (speaker meaning).

Another important aspect of Grice theory is the notion implicature. He coined the terms “implied” and “implicate.” Implicature refers to other possible meaning of an utterance other than the linguistic meaning for example, when someone says “Can you close the door?,” one would not necessarily answer “Yes,” but would perform the act of closing the door. The hearer understood the question as a request which may not necessarily what the speaker intends to convey. The hearer has made an implicature of the utterances by assuming that the speaker is commanding him to close the door. This concept “implicature” is suitable for this study as the subject Yusoof (Y) is an autistic person, whose utterances are often misinterpreted by his conversational partner or people around him because he has poor communication skill. Therefore, his hearer must be able to infer and analyzed the implied message in Y’s utterances.

In addition to this concept, Grice added another principle to his theory called the cooperative principle which describes how people interact with one another. It states that one must make the required contribution in a conversation in order to make it moves forward. This principle describes how people normally behave in a conversation. For those who obey the cooperative principle in their language use will make sure that what they say in a conversation furthers the purpose of that conversation. The cooperative principle outlines the four maxims of conversation (quantity, quality, relation and manner).

1. maxims of quantity –
 - i. make your contribution as informative as required
 - ii. do not make your contribution more informative than required.

2. maxims of quality –
 - i. do not state what you believe to be false
 - ii. do not say that for which you lack adequate evidence

3. maxim of relation -
 - i. be relevant

4. maxims of manner -
 - i. Avoid obscurity of expression.
 - ii. Avoid ambiguity.
 - iii. Be brief.
 - iv. Be orderly.

This maxim can be summarized in the following diagram.

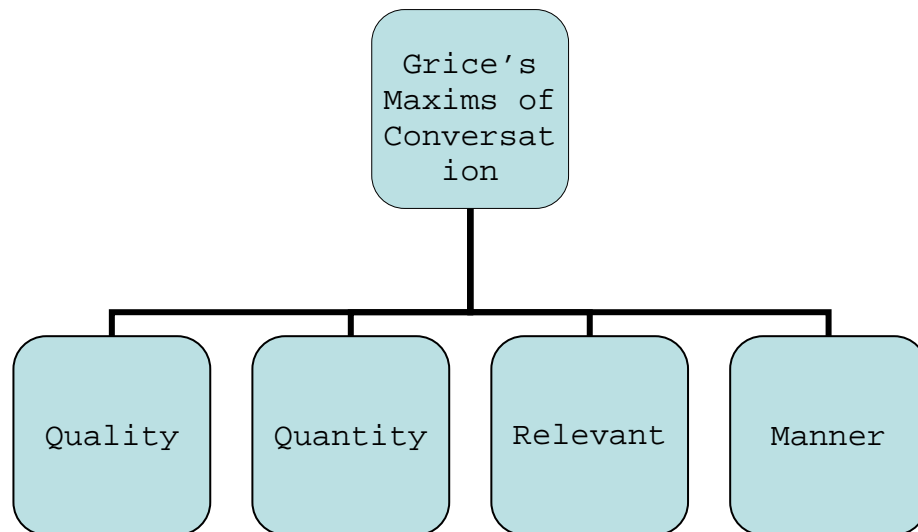


Fig. 3.1 Grice's maxims of conversation

Finally, the theory includes the component called speaker meaning. Meaning refers to the intended message that the speaker wants to convey which may be different from the linguistic meaning. It is important to make a distinction between speaker meaning and linguistic meaning because a speaker can and often does, diverge from what is meant by the sentence he utters (even if it is neither vague nor ambiguous). A speaker can mean something other than what the sentence means, for example, when someone says “it’s a hot day.” This utterance could mean he wants the air-conditioner on, he wants a glass of cold water or he is simply making a statement about the weather.

Sentences have meanings, and speakers mean things in using them. The meaning of a sentence is determined by the meanings of its constituents, together with its syntactic structure, but what a speaker means in using it is often not determined by what it means, since he may mean something more or something else. Linguistic meaning of a sentence is determined by the meanings of its constituents and how they are arranged syntactically (in linguistic terms, the meaning, or semantic interpretation, of a sentence is a projection of its syntax at the level of logical form). For example, if a person says “elephants do not wear dress,” linguistically, the sentence is correct as it conforms to the rule of syntax; and if one do not question the truth or falsity of the sentence. Therefore, sentence meaning is subjective and it is the hearer’s duty to decipher and make inferences on the truth of a statement.

Based on the discussion above, the researcher feels that Grice's theory is relevant to be used as the framework of this study. This theory provides a platform to justify the idiosyncracies in the conversational skills of individuals with autism.

3.4.2 SACKS, SCHEGLOFF AND JEFFERSON MODEL (SSJ MODEL)

Sacks, Schegloff and Jefferson (1974) pioneered CA. They argue that conversation has its own structure and rules; and looks at the method used by speakers to structure conversation efficiently. This means they look for example, at the way people speak, take turns, what turn types such as adjacency pair; and discourse markers which indicate opening, closing and link between and across utterance. (Pridham,2001)

The best known and widely accepted model of turn-taking is that developed by Sacks, Schegloff and Jefferson (1994) which is illustrated on the next page. It is chosen for this study because it describes the actions that take place in a conversation. Therefore, the researcher felt it is a useful guide to check on which of the processes are present or missing in Y's speech. This model emphasizes on the importance of turn-taking because it is the fundamental organization of social interaction. Turn-taking must take place in an interaction at some appropriate transition points. A turn is a point in one's talk when another may or does speak. In CA, turn-taking is an integral unit to the formation of any interpersonal exchange (Boden, 1994:66).

The flow chart illustrates the mechanism which assigns turns to participate in conversation. According to the flowchart, the current speaker in the conversation may select the next speaker to speak, and so the person selected must then respond. If the current speaker does not select the next speaker, then one of the speakers may opt to

speak next. If, however, none of them does so, then the current speaker has the option of continuing to speak (Jamaliah, 1995).

In this model, the turn-taking mechanism allows the individual to produce at least one constructional unit and it can only occur at a transitional relevance point (TRP). TRP implies the end of one unit type which can be a clause or a phrase. The notion of “turn” is tied to the individual. If a turn is taken away from the rightful speaker by another speaker, the current speaker may interfere or protest by saying “wait a minute,” or “I haven’t finished yet,” or “hold on.” Turn-taking in the SSJ model will be further illustrated in the following conversation consisting of four turns involving two speakers.

The model predicts that each turn will relate to one speaker for example,

Example 1

TURN	1	2	3	4
SPEAKER	A	B	A	B
1.	Y:	Jelatik		
2.	T:	sit down. How are you?		
3.	Y:	I am fine, thank you.		
4.	T:	Are you happy today?		
5.	Y:	Going to Jelatik.		
6.	T:	Do you feel happy today?		
7.	Y:	Yes, Jelatik		

(Data T12)

This conversation excerpt is taken from the therapy session Y had with his therapist (T12). This is a typical turn-taking routine that SSJ model suggests and can be

seen throughout the video-recording. Y did not interrupt the flow of the turn-taking sequence as this is a normal response that one can expect from an autistic person. They usually lack argumentative skill and are not usually good at interrupting. Their conversation is limited to single utterance and they depend on probing to continue a talk. This can be observed from the transcript which reveals that both speakers took turns alternately throughout the conversation (this conversation has 292 turns).

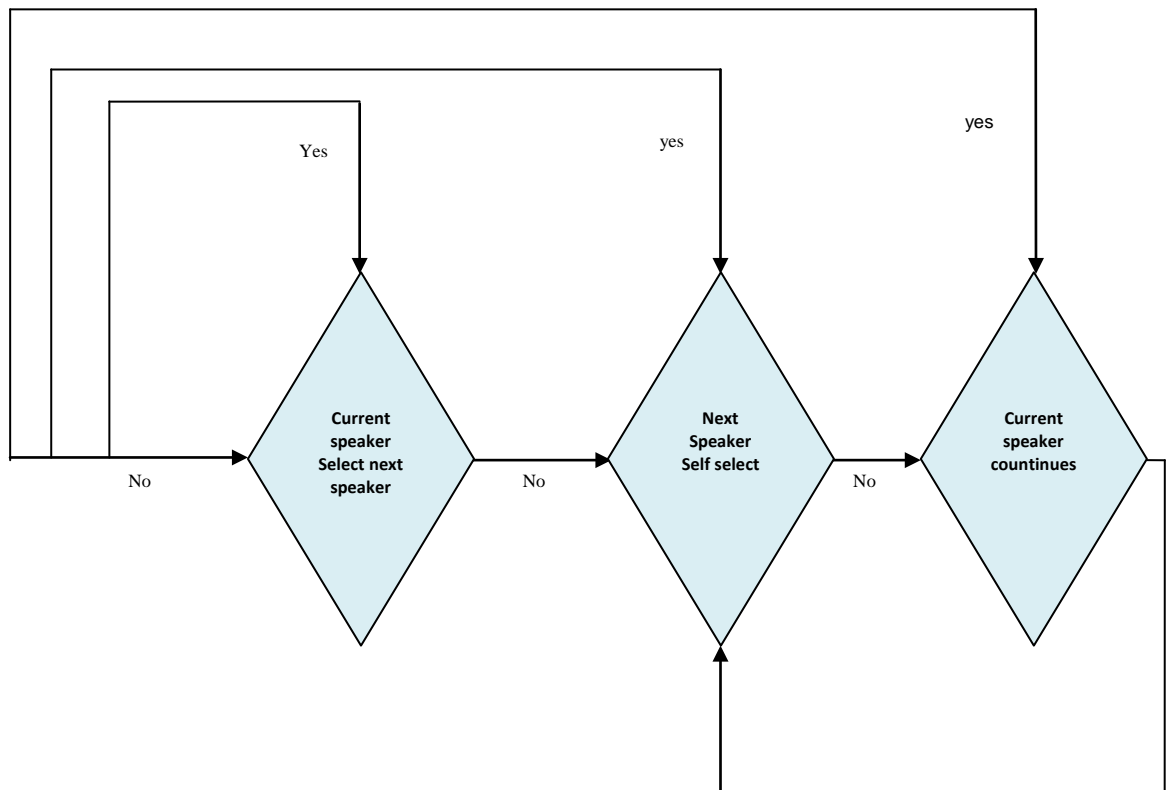


Fig. 3.2 The SSJ Model of Turn –Taking

This figure shows that the current speaker will choose the next speaker to take the turn and after that, he will continue and so the pattern goes on. However, the turn taking may not go according to the sequence above. The second speaker may not take up the opportunity to speak thus, allowing speaker A to continue speaking after TURN 1 as illustrated below:

Example 2

TURN	1	2	3	4
SPEAKER	A	A	B	A

This can be illustrated in the fragment below which is taken from T11. Y did not follow the sequence suggested in Example 1 because he was too anxious to talk about the event,

1. Y: Airport?
2. Y: Airport?
3. M: Oh! do you want to talk about airport?
4. Y: Yes

This happens occasionally with the subject of this study. The detail of this pattern will be discussed in the following chapter.

3.4.3 LUCAS'S PRAGMATIC ANALYSIS (LPA)

Lucas Pragmatic Analysis (LPA) was introduced by Ellyn Lucas who is an authority in the field of language disordered children. She has done numerous works with clinicians, therapists, educators and parents who have interest in children with language disorders. LPA is a qualitative analysis and it is suitable for children who are mentally – challenged such as autistic, Down syndrome, attention deficit disorder and Asperger syndrome. These children are often diagnosed to have communication deficit

especially in the pragmatic aspect. This analysis contains nine questions which are shown below:

1. Does the child's language contain objects, actions, and events in a variety of relationships?
2. Does the child use a variety of forms to express a variety of functions?
3. Does the child use utterances that are appropriate for the context?
4. Does the child answer questions appropriately or does the child only respond?
5. Does the child initiate or create new utterances in new contexts?
6. Does the child use the same construction over and over with some of the lexical items?
7. Does the child exhibit any of the specific language disorders (auditory misperception, off-target responding, syntactic errors, semantic word errors, word-finding difficulties, topic or referent identification, neologisms, topic closure, tangentiality and echolalia).
8. Does the child perform a variety of speech acts?
9. Does the child use a variety of terms to denote time, space, quantity, and / does the child use a variety of qualifiers?

Table 3.3 Lucas Pragmatic Analysis

Based on the questions in the analysis, the researcher feels that LPA is a suitable assessment for Y who has been diagnosed autistic and exhibits language disorder.

3.5 LOCATION OF THE STUDY

This study was carried out at a few places namely the subject's home, at the therapy centers, at one of the home of the subject's peers, at his school, and at a school canteen. The subject interaction was recorded at these places to see if there is any change of speech patterns when he is in different domains. At the time of the recordings, the subject was also in contact with other people outside his immediate family such as with his teachers, his therapists, strangers and his peers.

3.6 SUBJECT OF RESEARCH

3.6.1 Background of the subject

The subject of this study is a 16 year old autistic boy who lives in Kuala Lumpur with his parents. By the end of this study he is 18 years old. His nickname is Yusoof. This is not his real name to protect his identity and to respect his feeling. However, the reports attached in the appendix refers him by his birth name; and in the transcripts he is referred to as Yuri or Azzari. Hereafter, the subject will be referred to as Y.

Y attends normal school in the housing area where he lives. He is the eldest of Five siblings. Parents are professionals and have completed tertiary education. Therefore, they believe that Y should be placed in a mainstream school so that he could gain positive benefits from being in a normal environment. This belief proves to be true as Y has picked up some positive habits from school for example, participating in some school activities with normal children, responding when called by normal children, and learning to queue at the canteen. Y sat for UPSR (Ujian Penilaian Sekolah Rendah) and PMR. He passed both exams with reasonable achievement. Y's first language is English.

3.6.2 History of Diagnosis and Intervention Programs

Y was born after eighteen hours of labour. At birth, his body appeared bluish which indicated that he suffered from lack of oxygen. He was delivered by forceps. In his early childhood years, Yusoof experienced bouts of high fever and had to take plenty of antibiotics. He was admitted several times in the first three years of his life. Y has many sensorial problems like most autistic children do. He could not differentiate hot, cold, pain and ticklishness. When he was tested in a sensory test conducted by a sensory integration therapist (in Singapore), he did not respond well to this test. He continued playing with the toys while the therapist rubbed him with objects of different textures and temperatures, as if he did not feel anything. At times, he could be hyper-sensitive to external stimulation. For example, he is sensitive to a lot of sounds such as the sound of a blender, a grass cutter and a baby's cry. These sounds will make him frantic and irritable till the time of this study.

Y was taken to see an audiologist when he was 18 months old. His parents suspected that Yusoof could have some hearing problem as sometimes he did not respond when his name was called and sometimes he did. At 18 months, Y had not developed any speech. The audiologist conducted a hearing test on Y and also interviewed his parents in order to obtain more information about Y's characteristics and habits. At the end of the interview, the audiologist indicated that Y did not have any hearing problem but he could be autistic. Y was then referred to a psychiatrist to confirm the symptoms mentioned by the audiologist.

Upon the diagnosis of the psychiatrist (refer appendix B), the parents enrolled him in an international kindergarten. The teachers were mainly from England and this

is why Y's first language is English. He picked up his early words from the kindergarten such as "hot", "apple" and "aeroplane". Then, he went through several intervention programmes such as speech and occupational therapies twice a week until the age of five. At home, he learned to read and write from his mother. By the age of four, Y was able to read and write although his speech had not developed yet. By the age of six, he could produce short phrases such as "My name is Yusoof" and "I am six years old." However, Y's speech does not develop into longer and complex sentences. It remains at single word utterance most of the time.

The researcher managed to obtain reports about Y from his present psychiatrist and therapists that he sees weekly (refer to appendix B). Many of the earlier assessments (when Y was younger) are no longer in his parent's keeping because it has been a long time.

3.6.3 Intervention Programs

When he was two years old, Yusoof attended several therapy programs such as speech therapy, occupational therapy, physiotherapy and educational therapy. He went for all these programs until he was 12 years old. This information is obtained from his parents (through an interview). They however, no longer keep all the records of Yusoof therapies routines but able to recall some of the activities that Yusoof had to do in each of the therapy program.

In speech therapy, Y was taught how to expand sentences and vocabulary through several game activities such describing objects, matching words to pictures and naming things in his environment. At the same time, the parents were trained how to

speak to Yusoof when he asked for things such as making him speak in complete sentences and name the objects that he wanted. In occupational therapy, Y went through activities to improve his gross and fine motor skills. Among the activities he had to do were dismantling and assembling toys to strengthen his wrists; threading and coloring to improve his finger grip and matching games to improve his concentration. In physiotherapy, Yusoof did many physical activities such as cycling, walking on a beam (forward and backward), and other manipulation activities to improve his joints and posture.

Currently, Y is still going through some cognitive developmental therapies known as Feurstein and Brain Power therapies and physical activities such as doing some gymnastic activities. Reports from the therapists are attached in the appendix but there is no written report from the gymnastic coach. He attends these therapy sessions once a week for two hours for each session.

3.7 INSTRUMENT

3.7.1 Flash cards, pictures, brochures

The instrument used for this study were pictures from flash cards, traveling brochures, prerecorded television programs and story books. The storybooks were chosen from the selection they have at home which is of the primary school level. An example of the recording is T12 at his peer's home. Some story-books were used to encourage conversations between Ahmad (A) and Y. They focused on themes like dinosaurs and animals which are their favorite topics. The traveling brochures were chosen because the subject likes to talk about traveling.

3.8 RESEARCH PROCEDURE

This research was conducted in two phases. The phases are:

1. Phase One – pilot study
2. Phase Two – actual research

3.8.1 Pilot Study

The pilot study was conducted over the period of one week and involved one autistic subject. Two recordings of conversation with the subject was obtained. (Refer to appendix 1 and appendix 2). He is 14 years old and has similar background to the subject of this study. He is named as James for the purpose of this study. He went through similar intervention programs such as speech therapy, behavioural therapy, occupational therapy and special education program. He comes from an educated family and both parents are working professionals. The subject is chosen as he fits the criteria for this study which are verbal autistic, can read and write, poor social skills, a male teenager and able to conduct conversation about his favorite topics. His favorite subjects are animals and traveling. So, the researcher used some farm animals books and some traveling brochures. Finally, the subject was chosen because the researcher has easy access to the subject.

The purpose of this pilot study is to establish the following:

1. To understand the conversational skills of an autistic teenager
2. To determine the feasibility of carrying out the actual research on an autistic person

3. To determine the suitability of the instruments to collect speech samples when carrying out the actual research.

The pilot study enables the researcher to gauge the limitations of this study and to plan appropriate strategies to collect data when conducting the actual research. This study provides clues to the researcher how much speech can be collected from the subject of the actual research later on and how to get around an autistic person. It is necessary to emphasize here that the parents of this subject only allowed audio recording of their son's speech. This posed difficulty for the researcher when transcribing the speech later on when there are some words that are not clear. The researcher had to rely on her memory to recall the body language of the subject when he produced the utterances.

3.8.2 Findings of the pilot study

This study discovers that the subject observed some of Grice's theory and sometimes violated the maxims, and sometimes there was an overlap of violation. The data for the pilot study were analyzed according to the maxims. There are a total of 30 exchanges in these two conversation samples. The total count of each maxim is illustrated in Table 3.3. Each maxim is discussed and accompanied by samples of related exchanges. For example, the first discussion is about the maxim of quantity.

3.8.2.1 Maxims of quantity

1. Make your contribution as informative as required.
2. Do not make your contribution more informative than is required.

Trip to Malacca

1. R: Hi, James, how are you? (and shook his hand)
2. J: Hi, fine thank you. <not looking. Then, he sat on the sofa, watching tv >
3. R: What are you doing this school holiday?
4. J: School holiday. Holiday. Go somewhere.
5. R: Where did you go?
6. J: // < looked at R, as though he was going to respond > Then, decided to be silent >

This excerpt reflects the violation of Grice's maxim of quantity no. 2, where the subject did not give the information required which is "somewhere." The hearer R was expecting more detail on "somewhere" but did not obtain it as J decided to be silent. This behaviour may seem a violation of the maxim to normal speakers but the researcher made an assumption that "somewhere" could mean something symbolic to J. However, he was not able to tell what "somewhere" referred to. The percentage of quality maxim produced by the subject which is 9 out of 30 exchanges which was considered reasonably good. This reflects that he does not speak out of context in these two conversations. He speaks only sufficiently.

3.8.2.2 Maxims of quality

This maxim states that:

1. Do not state what you believe to be false
2. Do not say that for which you lack adequate evidence.

The subject observes these maxims in both dialogues. He did not state anything that is not true although it may seem so. For example, in Appendix P2, L32-34 ;

32. J: Buy daddy present. Present. Christmas present.

33. M: What do you wan to buy for Daddy?

34. J: Video movie./ Can watch at home.

These exchanges reflect that J is assuming his father would like to have movie video as a Christmas present. He has not asked his father what birthday present he would like. Therefore, J's utterance lacks evidence. It could also mean that J plans to get his father the video so he could watch too. This ulterior motive is displayed in L34. Of the total exchanges obtained in these two conversations (n=30), J was only observant the maxim of the maxim of quality twice (1.4%).

3.8.2.3 Maxim of Relation

This maxim states that :

1. Be relevant

In these two samples of conversation, the subject is consistently relevant. Although autistic children are known to speak out of context (not relevant), however, this is not true with James. The findings show that out of 45 exchanges that took place between J, M and S, the subject uttered 13 relevant utterances. The total number of utterances produced by J are 22 (n=22). These responses include repetition (example, L42, 43 & 45), therefore are not counted as a display of relevance. Grice's maxim of relevant states that one must say things that are relevant to the topic of conversation. For

individuals with autism, this may seem difficult to do because one of their difficulties is to stay focus. They are often not able to concentrate on a conversation or complete a task. So, they sometimes stray from the topic of conversation. Therefore, J flouts the maxim of relevance for example, in L4 (appendix P1) where he answered “somewhere” instead of telling the researcher where he actually gone. He provided an irrelevant answer.

In contrast, J’s answer is justifiable from the perspective of the Relevance Theory (Sperber and Wilson, 1995). According to this theory, relevance is relative and subjective as it depends on the knowledge of the hearer when they encounter an utterance. The hearer must evaluate the context, the background of the speaker , the preceding utterance and the following utterance and the topic of conversation. In this example, the phrase “however” is relevant to the subject but irrelevant to the hearer.

3.8.2.3.1 Maxims of manner

This maxim states that;

- 1.Avoid obscurity of expression.
- 2.Avoid ambiguity.
- 3.Be brief.
- 4.Be orderly.

In terms of maxims of manner, J observed maxim 3 and 4 diligently. His utterances were brief and he spoke in an orderly manner (refer Appendix P1 and Appendix P2). He observed the turn-taking rule and did not interrupt except in L42- 45 where J displayed a little break in the turn-taking because he tried to impose on his mother to get him some potato chips. He went back to his turn in L45 after his mother asked him what he wanted (L44). The subject only responded instead of initiating. Therefore, the probability that he does not observe turn-taking rule is very little.

3.9 CONCLUSION OF THE PILOT STUDY

The pilot study has provided the researcher new information on further improvements that need to be taken to facilitate the actual research. Some of the improvements are:

3.9.1 Need for other theories to support the discussion especially the theory on conversation analysis. This theory is necessary to explain the paralinguistic behaviours of the subjects such as turn-taking and repetition. Another theory is necessary to assess the subject is pragmatic skills. This is vital to estimate the capability of the subject to interact with others around him at present and to plan strategies to help him communicate better in future.

3.9.2 instruments of the study need to be diversified such as including more brochures, prerecorded documentary programs that he likes, or newspaper articles. With these changes, the researcher hopes to be able to generate longer and richer conversations from the subject of the actual research.

3.9.3 scope of the study needs to be expanded to analyzing conversational behaviours such as repetition, proximity and turn-taking. This will provide a general idea on how the subject carries out his conversation to express his thoughts.

Table 3. 2 Summary of Pilot Study finding

Grice Maxim of Conversation	P 1	P2	Total display of maxim	%
1. Quantity				
1.1 Make as informative as required	L1& L2, L5 & L6	L4, L6, L8,	9	30
1.2 Do not make informative than required	L87L9 L1&L2 , L4&L5 L7&L8	L14, L18	8	27
2. Quality				
2.1 Do not state what you believe to be false				
2.2 Do not say that for which you lack adequate evidence	L4	L10	2	1.4
3. Relevant				
3.1 Be relevant	L7	L2,L4, L8,	4	13
4. Manner				
4.1 Avoid obscurity of expression.	L4	L10	2	53
4.2 Avoid ambiguity.	L4	L10	2	53
4.3 Be brief.	L2, L4, L9	L4.L6, L8,L14, L18, L19	6	20
4.4 Be orderly.				
Total exchanges	10	20	30	

3.10 Summary

This chapter has discussed the methodology used for this study which is the qualitative approach; the rational for adopting this approach; the subject of this study including his background, history of diagnosis, and intervention programs; the conceptual framework; the theoretical frameworks which encompass Grice's Theory, SSJ Model and LPA; and the pilot study. All of these factors determined the direction of this investigation and the data collection.