TRAINING MANUAL IN ENGLISH FOR PRAGMATIC LANGUAGE SKILLS THROUGH SOCIAL STORIES

ASHITHA PAUL K

Register No. 19SLP004

A dissertation Submitted in Part Fulfillment for the Degree of

Masters of Science (Speech-Language Pathology)

University of Mysore, Mysuru

ALL INDIA INSTITUTE OF SPEECH AND HEARING

MANASAGANGOTHRI, MYSURU-570006

SEPTEMBER 2021

CERTIFICATE

This is to certify that this dissertation titled **"Training Manual in English for Pragmatic Language Skills through Social Stories"** is a bonafide work submitted in part fulfillment for the degree of Masters in Science (Speech-Language Pathology) by the student holding Registration Number: 19SLP004. This has been carried out under the guidance of the faculty of this institute and has not been submitted earlier to any other University for the award of any other Diploma or Degree.

Mysuru
September, 2021

Dr. M. Pushpavathi
Director
All India Institute of Speech and Hearing
Manasagangothri, Mysuru-570006

CERTIFICATE

This is to certify that this dissertation entitled **"Training Manual in English for Pragmatic Language Skills through Social Stories"** has been carried out under my supervision and guidance. It is also certified that this dissertation has not been submitted earlier to any other University for the award of any other Diploma or Degree.

Dr. Jayashree C. Shanbal

Guide

Associate Professor in Language Pathology
Head, Tele-center for Persons
with Communication Disorders
All India Institute of Speech & Hearing
Manasagangothri, Mysuru-570 006

Mysuru

September, 2021

DECLARATION

This is to certify that this dissertation entitled **"Training Manual in English for Pragmatic Language Skills through Social Stories"** is the result of my own study under the guidance of Dr. Jayashree C. Shanbal, Associate Professor in Language Pathology, Department of Speech-Language Pathology, All India Institute of Speech and Hearing, Mysuru, and has not been submitted earlier to any other University for the award of any other Diploma or Degree.

Mysuru

September, 2021

Register No. 19SLP004

DEDICATED TO

APPA & AMMA

ACKNOWLEDGEMENT

I know how life changed for everyone during this the pandemic. Before starting of the acknowledgement, I would like to take a moment to remember all those lost their life, children who lost their parents, people who became jobless, due to this pandemic. Despite everything we went through, we humans still wake up and find things to smile about every day. I am so proud of all of us.

This dissertation would not be complete without the help of many such kind- hearted people. Thank you God, Almighty for the love you showered upon me. I am extremely grateful for all your blessings in my life. Thank you Lord for what you've done, what you're doing.

My sincere gratitude to Dr. M. Pushpavathi, Director of AIISH for giving me this platform.

I want to thank my guide Dr. Jayashree C. Shanbal for making my dissertation effortless. Thank you so much for all your guidance. I don't even know how to describe her contributions to this research. After every dissertation meeting, I used to leave her room with heartful of admiration. Thank you again for being a wonderful teacher and guide.

AIISH was my dream, like many others. Getting into this place itself was a big milestone in my life. I would like to thank all my teachers in AIISH. I take this opportunity to pay my gratitude to all of you for helping me improve my skills, believing in me, encouraging me, making me a better SLP and a human being.

I would like to thank M. N Hegde sir, for responding to our mails even during his busy schedules. Thank you for all the inputs sir. We are so lucky to get a chance to discuss our research with you. Thank you for encouraging young researchers like us and guiding us.

I would like to thank the library staffs for all the help and Shijith sir especially for patiently answering to all our phone calls and emails during lockdown when accessing books seemed difficult. I would like to thank my teachers from My Bachelor's Institute (Amrita Institute of Medical Sciences and Research Centre) especially Archana Ma'am for the support and efforts.

My dearest Appa and Amma, thankyou for everything. Thank you for the support, for the love you offered, for the trust and what not. I AM because YOU are. You have been the biggest support system in my entire life. Thank you for all those loving efforts to raise a family of two children. Thank you for all your prayers. Etta, thank you for being the best brother and my best critic and of course for sharing your Netflix and Prime subscription with me, those were my life savers during lockdowns.

Thank you so much my dearest classmates MSc. SLP A. section, we had so much fun! Thank you for patiently listening to all my presentation attempts! Also our super cool neighbours- SLP B Section for being a wonderful host during all those combined class. Thank you

Renovators 2.O for all the nice memories. I'll always cherish the team work we did for AAWAAZ 2020.

Shinsi, Sami, Anju, Anshaba, you guys are the best! My middle-of-the night, no-matter-what people. Thank you for all the love! You made my life peaceful. Hasla thank you for all those make-up hacks, Joel thankyou for sharing your data during online sessions, my clients will be grateful more than me! Anju my twin, let's make more art and do photoshoots. I will miss our movie nights and of course your Darbar! I truly appreciate all the things you guys did for me. You made my AIISH days memorable.

RIni, Ariya, Vyshna, Chitra thank you for the kind gestures. I will always miss you. Ariya, let's find more time to talk about movies and photography. Thank you Ninnee for constantly checking on me. You are a great human being.

I was also blessed with the best dissertation partners Joanna (for keeping me awake during late night works), Pradyumna (APA quick access and tech-advisor), it was nice working with you guys, and I'll always cherish the moments we shared. Thank you for all the help; it was great working with you. Finally, we made it!!!

Hey Goyal, thanks for the group studies during University Exam times. You are a wonderdul teacher. Thanks for the aloo paratta and poha, they were Yum!

Thank you so much Mansa (@happycrisps) for those awesome digital illustration you did for my dissertation. You are a great SLP and Artist. I wish you all the best!

Sag! thank you for always being there for me. Your support has meant alot to me more than you could possibly imagine. Thank you for understanding me; always inspiring me! I am blessed to have you in my life.

Thank you so much Furfur, Ahana (bae) for everything and being the constants in my life. Let's have more baked yogurts from Paragon. I miss you a lot. Without you both, how can I even think about AIISH. Thanks for constantly telling me "just go for it! You got this" and helping me prepare for AIISH entrance. Look where I am today! Thank you Jeevan for constant reminders to finish my work!

Navya chechi, Reny chechi and Malavi Di, I am grateful for you all. Thanks for the motivation and help. Thanks for all those valuable suggestions, it helped me a lot! Reny chechi thanks for clearing my doubts; for patiently listening and answering my questions. You helped me find the researcher in me. Thank you for all the long and interesting conversations and all those brilliant ideas. Navya chechi, you made my dream come true. You catalyzed the "AIISH" dream in me. You believed in me and motivated me a lot during Entrance. What would I do without you!

Thank you all!!! I'll be grateful for all of you every single day!

Table of contents

List of tables

Chapter 1

INTRODUCTION

Language is a form of communication. It acts as a tool to explore the social world; to build and promote social relationships. ASHA (1993) defined language as a rule- governed behavior; it can be spoken (i.e., listening and speaking), written (i.e., reading and writing), and/ or other communication symbol system (e.g., American Sign Language). It consists of 5 domains which includes Phonology, Morphology, syntax (referred to as the Form), Semantics (Content) and Pragmatics (Use).

The term 'Pragmatics' can be defined as the social use of language; it is the knowledge about how to use language to express as well as understand others in various social setups (Cekaite, 2018). Levinson (1983) defined pragmatics as a domain of language which deals with both the context-dependent aspects and principles of language usage and understanding.

Acquisition of Pragmatic skills is a long term process and the child tends to master the skills as he/ she participates in complex and varied social interactions. Even though the basic pragmatic skills appear to emerge at an early stage of life, more refined and precise skills tend to develop in the pre-adolescence and adolescence period. Children by the age of 9 to 10 months of age starts to combine vocalizations and gestures for basic pragmatic functions such as requesting, labeling, answering, greeting, and protesting (Bates, Camaioni, & Volterra, 1975; Dale, 1980). In the one-word utterance stage, they tends to combine the single word with appropriate gestures in order to communicate in a linguistically and socially accepted way (Cekaite, 2018). After the age of two years' communicative skills such as turn

taking, topic initiation starts to develop. Pragmatic skills demonstrates a rapidly development during the pre-school period (Neill, 2007).

Pragmatics is often impaired in children with various communication disorders. Hatton (1998) found out that children and adults who have intellectual disabilities possess pragmatic deficits. Pragmatic communication skills are found to be affected in children with Specific Language Impairment, Autism, Learning disabilities, PLI etc. (Osman et al., 2011; Papadopoulos, 2018; Kumari et al., 2016). Dedicated tools for intervening pragmatic aspects are relatively scarce. Some of the tools available for addressing pragmatic skills include "Stories for Everyday Social Skills (Set I & II)", "The Basic Pragmatic Kit", "The Advanced Pragmatic Skills Kit" etc. developed by The COMM DEALL Trust. Clinicians prefer to address the pragmatic aspects in a more tailor- made method since the deficits exhibited by the individuals are highly heterogeneous. Recent research evidences have also quoted the effectiveness of social stories in addressing social deficits.

Social stories are simple short stories intended to teach a specific prosocial skill, or to eliminate an inappropriate social skill (Carol, 1991). The idea of Social Stories was first introduced by Carol Gray (1991) for treating social communicative skills in Autism. Later many researches have been carried out using social stories for children with various kinds of emotional and behavioral issues. The aim of any social story is to foster better understanding about a specific social situation, a skill or an idea in an emotionally, physically and socially safe environment. The social story also helped the subject to improve the targetted goals by providing visual and narrative cues. Social stories ^{TM} was developed by Carol Gray in the year 1991. This has undergone a number of revisions in the later years. In 2004 Gray

developed specific criteria for writing a social story (Criteria 10.0), in course of time this has been revised making it finer and detailed: Criteria 10.1 (2010) and Criteria 10.2 (2014).

Reviewing various available literature, it seems that social stories are an effective intervention strategy for teaching children with social and emotional impairments (Bledsoe et al. 2003; Gray, & Garand 1993; Brownell, 2002; Dessai, 2005). Even though there are different authors who published their works of social stories most of the literature is done based on stories following the criteria given by Gray.

Need for the Study

The spread of Covid-19 and associated health risks increased the scope of tele- health practices. ASHA (2010) adapted the term 'tele practice' substituting other related terms such as 'telehealth' or 'telemedicine' in order to avoid confusion. "Tele-health or tele therapy, defined as the provision of health care that is offered remotely through any telecommunication tool, such as secure telephone, video conferencing, e-mail, messages, and applications for mobile devices, with or without a video connection" (Dimer et al., 2020). The non- emergency health services such as Speech Language Therapies were categorized under non-essential services and were restricted to reduce the spread. This has severely impacted the life of individuals who were regularly attending speech and language services. This necessitates the need to develop materials and intervention tools adaptable for tele-service needs.

Mashima and Doarn (2008) reported that tele-rehabilitation is a practical, suitable, and effective model for providing SLP services to a broad range of patients. A relatively new area of research also reported that computer assisted instructions were found to be motivating

for individuals with ASD. They showed improved vocabulary and interest in computer based activities when compared to manual instructions. (Sansosti & Powell-Smith, 2008).

Aim of the Study

To develop a training manual in English for pragmatic language skills through Social Stories.

Chapter 2

REVIEW OF LITERATURE

Language is a social instrument (Gray, 1978). The acquisition of language includes: (1) learning the rules (syntax), (2) ability to refer and add meaning (semantics); and (3) the ability to use language for getting things done (pragmatics). For language to be effective, it has to be a “social activity” (Westby, 2010). Other domains of language seems meaningless when one cannot ‘use language’ for communication. Literature states that children who mastered syntactic rules and semantic aspects of language still show deficits in pragmatics.

The basic concept about language usage is that it is always context controlled. When a person encounters a specific situation he/she can precisely predict the language to be used there (Hart, 1981). Schank and Abelson (1977) have termed this as "scripts", into which one will always adhere to while interacting. All these interactions as well as language use follows a rule. Even the normal conversation is rule- based. The talker and listener do follow turns, pauses, turn allocation, deletes overlaps applying these rules. Pragmatics is the study of use of language in natural communication. Pragmatic development includes the concept of how to use language to communicate and to understand what other person is speaking in various communication contexts and activities while assuming increasingly complex social roles (Hymes, 1972).

Pragmatic competence is critical in predicting later academic skills. Pragmatic skills in preschoolers were identified as early indicator of later literacy by Reeder and Shapiro (1996). They also found relation between pragmatic awareness and early writing abilities

Literature has also identified that narrative skills help to foster print literacy (Griffin et al., 2004; Snow, 1994; Snow et al.., 2007). In the same way, reading and writing skills were related to the ability to structure narratives.

Children with better pragmatic skills often function better in schools and other communicative contexts (Greenwood et al., 2002; Snow & Blum- Kulka, 2002). Children should know "how to use their words" when interacting with teachers and peers, how to address them, when to speak and how to speak and how to modify what they spoke.

2.1 Development of Pragmatics

Pragmatic development is contextually sensitive and it is difficult to describe it in a clear and rigid pattern. Assessing and intervening pragmatic skills are a challenging task for clinicians. The major challenging factor that contributes to this is the heterogeneity in responses by children in both experimental setup and in day-to-day interactions. They also communicate differently with strangers than with familiar ones. The development patterns described here are based on norms and it is worth to mention that there will be always individual differences:

2.1.1 Infant speech acts:

Infants throughout their first year acquire comparatively minimal or less pragmatic skills and demonstrate high evidence of communicative intent (Clark, 2003). Even before production of words, they use actions, intonation patterns and phonemes to make requests and refusals. Later, during their single-word utterances stage children start to make requests and generate statements, confirmations and responses, by combining single words with

gestures. For example, they request using single words such as "more", "give me" or "I want" along with gestures (Ervin-Tripp et al., 1990).

By the age of 2.5 years, children exhibit a wide range of communicative behaviors, and these behaviors gradually become more complex and refined. Acknowledgement, Greeting, Requesting verbally are typically acquired before two years (Fenson et al., 1994).

Development of non-verbal turn taking emerges through various play activities during first year of life. Table 2.1 summarizes the various primitive speech acts at one word stage (Dore, 1975).

Table 2.1

Primitive speech acts at the one- word stage (Dore, 1975).

Speech act	Definition	Example
Labeling	Use word while attending to object or event. Does not address adult or wait for a response	Child touches doll's eyes and says "eyes"
Repeating	Repeats part or all or prior adult utterance. Does not wait for response	Child overhears mother's utterance of "doctor" and says "doctor".
Answering	Answers adult's question. Addresses adult	Mother points to a picture of a dog and says "What's that?" child answers "bow wow".
Requesting Action	Word or vocalization often accompanied by gesture signaling demand. Addresses adult and awaits response	Child, unable to push a peg through the hole, utters "uh uh uh" while looking at mother.
Requesting	Asks question with a word, sometimes accompanying gesture. Addresses and awaits response	Child picks up books, lo" with rising intonation. Mother answers "Right, it's a book."

Table 2.1 (*continued.)*

Speech act	***Definition***	***Example***
Calling	Call's adult's name loudly and awaits response.	Child shouts "mama" to his mother across the room.
Greeting	Greets adult or object upon its appearance.	Child says "hi" when teacher enters room.
Protesting	Resists adult's action with word or cry. Addresses adult.	Child, when mother attempts to put on his shoe, utters an extended scream while resisting her.
Practicing	Use of word or prosodic pattern in absence of any specific object or event. Does not address adult. Does await response.	Child utters "Daddy" when he is not present.

Note. Reprinted from *Language Development (3 ed., p 259)* by E. Hoff, 2005, Wadsworth. Copyright 2005 by Erika Hoff.

Table 2.1summarizes 9 "Primitive speech acts" given by Dore (1975) that serves nine different communicative functions at single- word utterances of two children. It can be inferred that pragmatic skills emerges even at single word utterance level before acquiring adult form of language. Since children at this stage only exhibit limited linguistic abilities, they rely on other extralinguistic means such as intonation to indicate illocutionary force. For example the word *"mama"* can be said in falling intonation to indicate labeling; rising intonation to ask question. The same word *"mama"* when said with a sudden rising-falling contour on the other hand indicates calling mother from a distance.

As the child develops higher pragmatic skills emerge. A successful conversation requires active involvement of the listener and the speaker. The partners should follow the rules, maintain the topic, avoid overlaps and provide appropriate feedback to the speaker while communicating. These are considered as conversational skills.

2.1.2 Conversational skills:

Some of the pragmatic skills that are considered to be important while taking part in conversation include taking turns (without overlapping with the other speaker), initiating and sustaining conversations, giving feedback, asking clarifications etc. Even though infants hardly show overlapping turns, they exhibit better turn taking abilities when communicating with adults. They usually show difficulty in taking turns when communicating with more than two speakers (Ervin- Tripp, 1977).

In parallel to this, as the child develops and masters other linguistic skills they exhibit better conversation initiating and sustaining skills. In order to sustain an ongoing conversation, young preschoolers adapt strategies such as repetition and partner's utterance recasting (Pan & Snow, 1999).

Similarly conversational skills such as giving/ responding to feedback as well as repair strategies also develop at a later stage. By the age of two years, a child can repeat or verify the words when signaled explicitly by the speaker (in a familiar and natural situation). This is a kind of communication repair strategy is important for any successful conversation. In the study done by Comeau et al. (2007), they found that bilingual preschoolers switch languages to repair a breakdown in conversation. Participants of the study were two French – English bilingual children aged 2 and 3 years. It was found that both the participants were

able to effectively repair the communication breakdowns every time the experimenter asked for clarifications. Contrary to this, in another study preschoolers were inconsistent and often ineffective in asking for clarifications to communication partners. They also found difficulty in giving clarifications, particularly when the listener's feedback isn't specific (or when the context is unfamiliar) (Garvey, 1984; Lloyd et al., 1998).

Subsequently, by the age of six, children start to use phrases like *'I mean'* and they add *'I see', 'uh-huh'* and head nods to specify their attention to the speaker's message and satisfactory comprehension (Garvey, 1984; Lloyd, 1992). This is often referred to as *"back-channel feedback"* (Becker- Bryant, 2009). Children offer feedback to listeners with constructive interruptions like "I know what you mean" during middle school and adolescence period. Such pragmatic skills develop over time; making them respond appropriately even for subtle feedbacks given by the listener

2.2 Theories of pragmatics

2.2.1 Theories of Austin and Grice:

Human beings make use of language to perform a task or an action. Austin (1962) described the whole act of speaking as 'to do something'(Dick & Tesche, 2015). He made a three-fold distinction:

i. *Locution* refers to the words uttered by the speaker
ii. *Illocution* refers to the intention behind the words
iii. *Perlocution* refers to the effect of those words (illocution) on the hearer.

Table 2.2 summarizes the different speech acts given by Austin and its example.

Table 2.2

Speech act components (Austin, 1962)

Component	*Definition*	*Example*
Illocutionary force	Intended function	Request, query, promise
Locution	Form	Declarative, imperative
Perlocution	Effect	Obtaining requested object, directing other's attention

Note. Reprinted from *Language Development (3 ed., p 259)* by E. Hoff, 2005, Wadsworth. Copyright 2005 by Erika Hoff

Table 2.2 summarizes the three components of a speech act namely the intended function (its illocutionary force), linguistic form of it (locution) and the effect (perlocution). For example in the sentence "I want a pen", the intended function/ illocutionary force is the request for pen, form/ locution is the declarative and perlocution is getting the pen.

A competent adult communication partner will be able to understand the illocution (intention) behind their speaker's words. But there will be times when a message delivered will have more than one meaning (Hashiuchi & Oku, 2005). For example, the sentence "what day is it?" could imply that the speaker wants to know the day, or it can also mean that the listener came a day late/early than expected.

Grice's theory (1975) explains this particular instance in which an utterance will be having more than one meaning. He attempted to explain how a hearer implies meaning from

what is said. Grice (1975) defined *implicatures* as properties of an utterances and the same set of words will carry different implicatures on different occasions which is beyond the semantic meaning (Hewison & Kuras, 2005). Gricean theory classified implicatures into two forms: Conventional implicatures and Conversational implicatures.

The conventional implicature implies the same implicature regardless of the context whereas conversational implicature varies according to the context. Grice introduced Cooperative principles and Conversational maxims. The four conversational maxims explained by Grice include:

i. Quantity that refers to providing information as required (and not more than that)
ii. Quality implies not to say something that you believe is false or has inadequate evidence.
iii. Relation means to make the contribution relevant
iv. Manner means to avoid anonymity.

Hashiuchi and Oku (2005) came up with a number of problems related to Gricean theory. The main problems outlined were:

i. There are times in which an utterance contains more than one possible interpretation. Hence it is difficult to understand when the speaker is deliberately failing to follow a maxim.
ii. It is difficult to distinguish between different types of maxims.
iii. At times maxims seem to overlap.
iv. Grice's four maxims seem to be rather different in nature.

v. Grice argued that there is a mechanism to calculate implicature but he was not clear about how it operates.

2.2.2. The Theories of Searle and Leech

Searle (1979) attempted to figure out the meaning of an utterance in a way very similar to Gricean's method. He came up with certain rules such as Propositional act, Preparatory condition, Sincerity condition and Essential condition. He further proposed 8 rules for speech acts: requesting, asserting, questioning, thanking, advising, warning, greeting, and congratulating.

The postulates given by Leech (1983) were based on a *'formal functional'* paradigm. This concept was evolved from the ideology that one cannot understand language holistically without studying grammar (formal system) and pragmatics (functional use) and the interaction between them since both are complementary domains within linguistics.

The postulates are:

PI: “The semantic representation (or logical form) of sentence is distinct from its pragmatic interpretation.”

P2: “Semantics is rule-governed (grammatical); general pragmatics is principle-controlled (rhetorical).”

P3: “The rules of grammar are fundamentally conventional; the principles of general pragmatics are fundamentally non-conventional, i.e., motivated in terms of conventional goals.”

P4: “General pragmatics relates the sense (or grammatical meaning) of an utterance to its pragmatic (or illocutionary) force. This relationship may be relatively direct or indirect.”

P5: “Grammatical correspondences are defined by mappings: pragmatic correspondences are defined by problems and their solutions.”

P6: “Grammatical explanations are primarily formal; pragmatic explanations are primarily functional.”

P7: “Grammar is ideational; pragmatics is interpersonal and textual.”

P8: “In general, grammar is describable in terms of discrete and determinate categories; pragmatics is describable in terms of continuous and indeterminate values.”

Taking essence from all the theories discussed and borrowing the words of Hashiuchi and Oku (2005), "pragmatics is by way of the thesis that communication is problem solving". Pragmatics in brief is extracting the meaning of an utterance, depending on the context.

2.3 Neurological/ Biological Factors Affecting Social Aspects of Communication

Many children with communication delays exhibit impairments in pragmatics. Any disruptions in the social brain network that supports normal social development can cause deficits in pragmatics. Some of the causes for these disruptions include any genetic disorders, infections, developmental disabilities, trauma, and/ or any degenerative processes. A variety of developmental impairments highlight the relevance of the bio-psycho-social link in social-emotional development and pragmatic language skills (Westby, 2020).

A disturbance in any element of neural development and integration renders a person at risk for social competence impairments. As a result, children with sensory, cognitive, or attention problems, as well as syntactic and semantic language impairments are more prone to have social communication delays and disparities.

The Diagnostic and Statistical Manual of Mental Disorders – 5 (DSM- 5; American Psychiatric Association, 2013) added a new diagnostic category- Social Communication Disorder (SCD), which is considered when an individual exhibits persistent deficits in social and pragmatic skills and has manifests, the below mentioned features:

- Difficulties in social communication such as greeting, giving information socially appropriate.
- Inability to shift or change communication in accordance with the context or listener's needs. Example: speaking differently in a classroom setup and in a playground setup.
- Unable to take turns, regulate a conversational interaction or rephrasing the utterance when misunderstood.
- Unable to make inferences or understand ambiguous statements (idioms, metaphors etc).

Language researchers use the terms Pragmatic Language Impairment (PLI) and Social Communication Disorder (SCD) interchangeably even though it is controversial. According to Ozonoff (2012), there exists only less evidence to state SCD as a separate category independent of Autism or any other language disorders; making it even more debatable.

Autism Spectrum Disorder (ASD) is another common diagnostic label that has its primary deficit lying in socialization. Children with ASD exhibit deficits in sociability and social communication. They also show marked impairments in understanding and expressing emotions (Volkmar & Klin, 2005). Most of the children with ASD avoid eye contact, exhibit less communicative behaviors, make irrelevant comments, overlaps while other person talks, fail to recognize cues from the communication partners, etc. (Westby, 2020). They find it difficult to bring up topics and if they do; the topics seem to be related to their own preoccupations and will have inappropriate inflection (Rutter & Garmezy, 1983).

Social skills are also affected in children with Specific Language Impairment (SLI). There is a substantial link between language abilities and social-emotional behavior (Baker & Cantwell, 1987; Brinton & Fujiki, 1993; Gidden, 1991). When children show apparent deficits in vocabulary and morpho-syntactic skills in the absence of hearing loss or other developmental delays, then SLI is diagnosed. The limited linguistic skills of children with SLI make it difficult for them to interact with others and engage or develop social connections.

The disorder's detrimental social repercussions are evident as early as the preschool years, when children as young as three avoid speaking with language impaired peers. Conti-Ramsden et al. (2013) reported that in children with SLI, the social skill deficits that stem in childhood extend into late adolescence. The linguistic disability as well as the reduced interaction that occur due to the language impairment can cause Theory of Mind (ToM) deficits. This can lead to social withdrawal and a higher risk of peer victimization and bullying.

Children with ADHD also manifest social communication disturbances such as difficulty in taking turns, overlapping when other person talks, blurting out answers even before the speaker completes their question and many more (Camarata & Gibson, 1999; Westby & Cutler, 1994). In some children, ADHD occurs along with language disorder and exhibits deficits in social communication. However, children diagnosed with ADHD (no co-morbid language disorder) still show difficulty in pragmatic skills. (Staikova et al., 2013)

The social communication deficits in ADHD have a strong connection with their behavioral manifestations. The primary characteristics of ADHD such as inattention and hyperactivity indirectly cause problems in taking part/ sustaining conversations. Due to their attention deficits, parents/ people in the child's environment prefer to speak in short utterances which are less elaborate and more directive. This will also adversely affect pragmatic development. However, linking all the social deficits to the behavioral manifestation may mask the other potential causes such as lack of affective and cognitive ToM. Children and adolescents with ADHD find it difficult to understand emotions in photos and videos. They also show deficits in linking emotions to various situations (Celestin-Westreich & Celestin, 2013; Shin et al., 2008; Yuill & Lyon, 2007).

Children with ADHD also have deficits in interpersonal ToM and in self-talk. This also makes them difficult to regulate themselves. They find it difficult to organize and control social skills. Their lack of self- talk also causes deficits in modulating their emotional reactions.

2.4 Intervention of pragmatic skills

Pragmatic language difficulties also have social consequences and long-standing

effects in a person's life. Addressing pragmatic domains and taking up pragmatic goals are often considered to be a laborious task to clinicians. There is a lack of agreement among the professionals and researchers on how to work on pragmatic skills holistically and systematically. There is a research vacuum existing in the literature of pragmatic intervention. Because of this, management of pragmatic language is often more resource-driven rather than principle-driven (Adams, 2008).

Since pragmatics implies the use of language, it is important to focus more on real-life situations including the communication partners of the child (parents and peers) during therapy.

According to Adams et al. (2005), the intervention of pragmatic skills mainly revolves around two basic concepts:

- Focusing linguistic aspects of pragmatics: this includes speech acts, discourse skills and narratives.
- Focusing social cognition related to pragmatics: this includes Theory of Mind (ToM) and presuppositions.

According to International Classification of Functioning, Disability, and Health (WHO, 2003), any treatment has to address the functioning level of an individual. Hence it is always important to train the child to generalize the skills taught in other real- life situations.

According to Adams (2008), the major challenges for addressing pragmatics were:

i. An insufficient theoretical framework to aid intervention options

ii. Lack of a method to apply assessment outcomes to intervention

iii. Lack of evidence to support the efficiency of any clinical intervention methods

iv. Inability to identify which population of children will benefit from which intervention approach

v. Lack of evidence to prove a long-term provision for these children

Social skill training often follows behaviorist models and grounds on modeling and reinforcements. Social stories are one among the numerous treatment options to improve social skills, behaviors, or teach a new concept. It was initially devised by Carol Gray (1991) in order to address social skills in children with Autism. She has also framed criteria for writing social stories. Social Stories ^{TM} follows the criteria given by Gray. Later, many other authors and researchers also contributed to this growing branch of literature.

Social stories are customized short stories written by Speech-Language Pathologists, teachers, or parents to teach children with disabilities (such as ASD, ID) about positive behaviors on social situations that are challenging for them. According to Gray (2006), "although the goal of a social story should never be to change the individual's behavior, that individual's improved understanding of events and expectations may lead to more effective responses". One of the unique attributes of social stories is that it helps to visualize real-life situations with writing and/or illustrations making children with autism or other disabilities to understand the situation better.

Social stories intervention is rooted on techniques such as such as priming (Wilde et.al., 1992) and visual supports (Dettmer et.al., 2000; MacDuff, et.al., 1993) that are already been proved to be effective for children with autism and communication delays. Pairing the stories with illustrations and/ or videotapes helps to enhance understanding

(Hagiwara & Myles, 1999; Swaggart et al., 1995).Audio taped story lines can be also used if the child is not an independent reader.

Within the past few years, social stories became an interesting field for many researchers. Recent literature has also focused on using social stories for training children various Covid 19 rules such as wearing masks and washing hands etc. (Chandra & Aruna, 2021). Social stories can be used as a sole treatment method or can be used in combination with other methods. In another study Lorimer et al. (2002), using ABAB reversal design (in a home setup) used social story intervention in order to reduce the temper tantrum in a 5 year old autistic subject and found that there was a reduction in the problematic behavior after the introduction of social stories. In the study Lorimer paired up the social stories with other strategies such as time scheduling, emotional worksheets etc. He found that the use of social stories increased the effectiveness of the interventions that had already been tried.

In the study done by Swaggart et al. (1995), social story were used for treating the target behaviors such as, greeting behavior, sharing, and hitting along with social skill training and response cost program. The study used a single subject AB design and found that there was a positive improvement in the target behaviors after the introduction of social stories.

One of the meticulous studies in the field of social stories was done by Thiemann and Goldstein (2001). The study targeted specific social skills of 5 autistic children and their age matched peers combining visual supports (ex; social stories, picture cue cards) and video feedback. Following intervention, the subjects improved frequency of social behaviors compared to baseline. The study also reported generalization of the treatment effects in other settings also.

Delano and Snell (2006) reported that intervention using social stories improved peer interaction in three children with autism. All the three subjects showed improvement in the total time spent with other peers. In the study done by Kuttler et al. (1998), ABAB design was used to improve problematic behaviors in a 12 year old ASD child using social stories. The results suggested that there is an improvement in the behaviors (unable to wait, temper tantrums and dropping himself to floor) after the social stories intervention in different social contexts. He paired the stories with visual timetables, token economy, verbal and physical prompting by staff.

In the study done by Scattone et al. (2002) social stories were used to train problematic behaviors in three children of age 7, 7 and 15. The targeted behaviors for child 1 was tipping the chair backward or sideward; for child 2 was shouting and that of child 3 was inappropriate staring. Among the three children two were able to read the stories themselves and the third one required assistance from the teacher. It was found that there was a reduction in the targeted behaviors comparing the baseline and the intervention period. For child 1 the mean reduced from 50% to a mean of 4.6%. For Child 2 it reduced from 66.9% to 18.25% and for child 3 the mean after intervention period was 5.1% while the same during baseline phase was 18.15%.

In the study done by Brownell (2002), social stories were implemented in a musically adapted manner. This was based on the idea that children with autism have greater preference to music and it acts as a career for delivering non-musical information. This non-musical information can include spatial concepts, facts and information about social skills (Thaut, 1992). The subjects included four males between the ages of 6 to 9. The targeted behaviors were delayed echolalia (child 1), following directions (child 2) and talking in a quiet voice

(child 3 and 4). The study also compared the effect of presenting social stories in both traditional as well as in musical form. They found that both way of presentation of stories reduced the problematic behaviors of the children. Literature about the use of Social Stories in Intellectual disabilities has also shown promising results.

In the study done by Kim et al. (2014), tablet assisted social stories adhering to Gray's criteria were used for training to reduce disruptive behavior and to improve academic engagement in 3 high school adolescent children with severe intellectual disabilities (ID) in South Korea. He found that there was a positive improvement in the targeted skills after the Social Stories intervention within 1 or 2 sessions. In the study done by Dessai (2012), social stories were used to train problematic behaviors in two children of age 9 and 11 years with Semantic- Pragmatic Disorder using an ABC single subject design. It was found that there is a reduction in the disruptive behaviors even after 4-5 sessions of therapy.

The pragmatic system is widely accepted as an important domain in early development and any form of language intervention is incomplete without focusing on pragmatic aspects. When it comes to intervention of pragmatic skills, clinicians always find it difficult to identify an efficient treatment option. Social story is a growing branch of literature with numerous evidence based studies from across the globe. But, literature pertaining to social stories is relatively scant in Indian context. Taking note of all these, the aim of the current study is to develop a training manual in English to teach pragmatic language skills through social stories.

Chapter 3

METHOD

The present manual was developed as a tele-therapy resource manual for training pragmatic language skills in 2 to 8 year old children through social stories. Literature regarding pragmatic language skills and its intervention were reviewed from books, journals, previous dissertations done at AIISH and other internet sources.

The study was carried out in two phases:

Phase I: Development of training manual in English for pragmatic language skills through Social Stories.

Phase II: Validation of manual.

3.1 Phase I: Development of training manual in English for pragmatic language skills through Social Stories.

3.1.1 Material

Pragmatic domains from "Developmental Protocol for Pragmatics" (Dheepa, 2005) were adapted for developing the stories. The pragmatic domains for social stories included:

Domain I: Eye contact

Domain II: Smiling

Domain III: Giving

Domain IV: Requesting

Domain V: Greeting

Domain VI: Acknowledging

Domain VII: Topic initiation

Domain VIII: Maintenance

Domain IX: Turn- taking (Verbal)

Domain X: Clarification

Domain XI: Pause

Domain XII: Interruption/ overlap

Domain XIII: Feedback to listeners

Domain XIV: Permission directive

Each story addressed one pragmatic skill. A total of 12 stories were developed. 'Requesting and Permission Directive' (Domain IV and Domain XIV) as well as 'Turn Taking and Interruption/Overlap' (Domain IX and Domain XII) were clubbed as a single domain. Stories targeted children in the age range of 2 to 8 years old and can also be used for older age groups.

Stories were written in Microsoft Power Point version 2007 with white background. A general instruction page was included for clinicians and parents at the beginning of the manual. Each story has a cover page showing the title and a short note on the goal targeted. Each slide contains 1- 4 sentences and one concept at a time. Images, as well as Graphics

Interchange Format (GIF) images, were used for making the story interesting to the child. Each slide had an audio recording, done by the author.

Vocabulary was developmentally appropriate. Words were supplemented with pictures and audio recording of story lines as not all children learn to read by 2 years. Audio recording and editing was done using the software Audacity version 3.0.4 to make it sound more child-like. Pictures were color drawings that are culturally relevant for Indian population. Pictures for the manual were drawn by a professional artist.

3.1.2 About the Training Manual

The manual consists of:

Eye contact: Maintaining eye contact during conversation is an important pragmatic skill that develops early in life. The act of maintaining eye contact is also heavily influenced by the cultural background of an individual. It is also influenced by the age, occupation, social status of the person the child interacts with (Hegde, 2006).

Smiling: According to the existing literature social smiles develop between 1 to 2 months of age (Anisfeld, 1982). Social smiling develops through instances where the infant gazes at the caregiver's face (Lavelli & Fogel, 2005). Smiling patterns helps differentiate typically developing infants from infants with risk for disturbed development.

Giving: Giving/ sharing are a basic pragmatic skill which is usually affected in language disordered children. It is the ability to share/ divide things with others in different situations.

Requesting/ Permission directive: Children with communication disorders exhibit difficulty in expressing their wants and needs. They also have difficulty in understanding the demands others make (Hegde & Maul, 2006; Paul, 2001). Literature has identified that children who cannot request or understand the demands someone made on them, has socially inappropriate behaviors such as tantrums or fussing, grabbing things without requesting, aggression (Hegde, 2006).

Greeting: Greeting is considered as a pragmatic skill in which the child greets other persons in their environment. The way of greeting depends upon the cultural background of the child and the race.

Acknowledging: Acknowledging is the act of appreciating someone else's actions. It can be done through simple gestures or utterances

Topic initiation: Even in the initial language development period, children tend to initiate topics by pointing to things they want to talk about. Children during the pre-school period initiate topics about things around them (McLaughlin, 1998).

Maintenance: Maintenance is the ability to sustain talking about a particular communication topic with the partner without shifting to another abruptly.

Turn- taking (Verbal)/ Interruption/ Overlap: Communication is a two way process. One has to play the role of a speaker as well as a listener during any communication act. The entire conversation itself may break down when one of the communication partners fail to perform the role of a speaker and listener alternatively without overlapping (Hegde, 2006).

Clarification: Clarification is the ability to enquire about doubt or seek explanation in an ongoing conversation.

Pause: Pause / pause time is considered to be the amount of time present between words in a sentence. Pause time has to be adequate, neither too less nor more.

Feedback to listeners: Feedback to listeners can be defined as the ability of an individual to provide a response to their communication partner. It can be either positive or negative and can be expressed through gestures/ utterances.

3.1.3 Treatment Procedures and Sequence

The manual includes Baseline assessment, Treatment and Probe (generalization) procedures researched and described by Hegde (Hegde et. al., 1979; Hedge, 1980; Hegde& McConn, 1981; Hegde, 2006) which was taken with permission by contacting the author.

The manual contains (See Appendix II):

- **A baseline recording sheet:**
- **Treatment recording sheet**
- **A probe recording sheet**

A detailed assessment is necessary for instituting client-specific intervention.

1. ***Determining the Baseline:*** The baseline evaluation is the first step of treatment. It aids in determining the need for treatment and serve as an objective and quantitative basis for assessing the child's treatment progress. The manual contains a Baseline Evaluation Sheet.

There are two kinds of baseline evaluation trials: evoked and modelled.

Evoked trial: no modeling is given.

Modelled trial: the clinician will ask a question and answers it immediately.

During baseline evaluation the clinician should not give feedback for the child's correct, incorrect or no response. The procedure to carry out the evoked and the modelled baseline trials is explained below in Table 3.1 and Table 3.2.

Table 3.1

Procedure for evoked baseline trial

Steps for Evoked Baseline Trials		**Note**
Clinician	*[Reads the social story of the target skill]* Ask a question.	No modeling
Child	Saying incorrect answer	Incorrect response
Clinician	Records the incorrect response in the score sheet	No corrective feedback

Table 3.2

Procedure for modelled baseline trial

Steps for Modelled Baseline Trials		**Note**
Clinician	*[Reads the social story of the target skill]* Ask a question *Say*, (answer).	Modeling
Child	Saying incorrect answer	Incorrect response
Clinician	Records the incorrect response in the score sheet	No corrective feedback

2. ***Executing Treatment:*** After the baseline assessment, the clinician will instrument the treatment. The Baseline and Treatment Trials have a common design. But unlike baseline trials, Treatment trials encompass verbal praises and corrective feedbacks. The story has to be read once at the beginning of each session and target behavior has to be noted throughout.

Contrary to baseline evaluation described above, a Treatment trial begins with modeling and is gradually faded to introduce an evoked trial. The procedure to carry out the evoked and the modelled treatment trials is explained below in Table 3.3 and Table 3.4.

Table 3.3

Procedure for modelled treatment trial

Steps for Modelled Treatment Trials		**Note**
Clinician	*[Reads the social story of the target skill]* Ask a question *Say,* (answer).	Modeling
Child	Saying incorrect answer	Incorrect response
Clinician	Records the incorrect response in the score sheet	*Corrective feedback / Verbal praises*

Table 3.4

Procedure for evoked treatment trial

Steps for Evoked Treatment Trials		**Note**
Clinician	*[Reads the social story of the target skill]* Ask a question	No modeling
Child	Saying incorrect answer	Incorrect response
Clinician	Records the incorrect response in the score sheet	*Corrective feedback / Verbal praises*

Partial modeling ("say you have to ……") and hinting ("did you forget something" or "don't forget to ……..") are two standard techniques used to fade modelled trials into evoked trials.

Progression Criteria: After 5 successive correct imitated responses, evoked trials can be introduced fading the modelled ones. After 10 consecutive correct evoked responses clinician can move into Generalization.

Probe (Generalization: A probe is an untrained stimulus that is used to check whether the child is able to perform similarly as the stimuli trained previously. One can use puppets or similar stories and check the response of the child. The procedure to carry out the probe trial is explained in Table 3.5.

Table 3.5

Procedure for probe trial

Steps for Probed Trials		**Note**
Clinician	*[A variation of the trained stimulus is presented]* Ask a question	No modeling or prompts
Child	Saying correct answer	A correct probe response
Clinician	[clinician does not respond to the child's response] Records the incorrect response in the score sheet	*In case of an incorrect/ no response, the clinician records it as incorrect without providing any feedback*

Probe Criteria: 90% correct probe responses.

- If the child cannot meet 90%, the social story should be reintroduced.
- If the child meets 90%, the next target skill can be introduced.

If the child is able to use the target skill in other communication contexts/ natural settings (home, school etc.) the skill is considered to be mastered.

An example of illustration of the currently developed Manual is given in Appendix I

3.2 Phase II: Validation of the social story

The manual was content validated by three Speech- Language Pathologists (SLPs) who had a minimum experience of five years in dealing with children having communication disorders. The Questionnaire was adapted from Manual of Adult Non-Fluent Aphasia Therapy in Kannada (Goswami & Shanbal, 2010). SLPs were asked to rate the answers in a 5-point rating scale as Very Poor, Poor, Fair, Good and Excellent. The modifications

suggested were incorporated in the Manual. The story was rated based on the language used, domains targeted, clarity, picture stimuli and its ethical acceptability, visibility of the texts, clarity of the audio sample etc.

Table 3.6

Validation Questionnaire

Sl. No	PARAMETERS	VERY POOR	POOR	FAIR	GOOD	EXCELLENT
1.	Is the language used in the manual simple?					
2.	Are the picture stimuli used in the manual of appropriate size?					
3.	Are the picture stimuli used in the manual appropriate in terms of color and dimensions?					
4.	Are the stories culturally and ethically acceptable?					
5.	Is the audio clarity up to the mark?					
6.	Are the texts written recognizable and have adequate font size?					
7.	Are the audio samples comprehensible and have acceptable rate of speech?					
8.	Are the picture stimuli within the visual field of an individual?					
9.	Is the manual covering important pragmatic domains?					
10.	Overall, is the manual user friendly?					

3.2.1 Findings of Validation

The manual was content validated by 3 SLPs. The findings of the validation are summarized in the table below:

Table 3.7

Responses of the judges

Sl. No	PARAMETERS	VERY POOR	POOR	FAIR	GOOD	EXCELLENT
1.	Is the language used in the manual simple?				✓✓	✓
2.	Are the picture stimuli used in the manual of appropriate size?				✓✓	✓
3.	Are the picture stimuli used in the manual appropriate in terms of color and dimensions?				✓	✓✓
4.	Are the stories culturally and ethically acceptable?				✓	✓✓
5.	Is the audio clarity up to the mark?				✓	✓✓
6.	Are the texts written recognizable and have adequate font size?					✓✓✓
7.	Are the audio samples comprehensible and have acceptable rate of speech?				✓✓	✓
8.	Are the picture stimuli within the visual field of an individual?					✓✓✓
9.	Is the manual covering important pragmatic domains?				✓	✓✓
10.	Overall, is the manual user friendly?				✓	✓✓

All the three judges rated the manual as “Excellent” in terms of recognizability of the text and appropriate placement of pictures. Two out of three judges rated the manual “Excellent” in terms of user friendliness, audio clarity, cultural and ethical acceptability, picture color, dimension and pragmatic domains covered. One judge rated size of the picture, simplicity of the language used, comprehensibility as well as rate of speech of audio sample as “Excellent”.

Two out of three judges rated the manual as “Good” in terms of simplicity of the language used, size of the picture, comprehensibility as well as rate of speech of audio. One judge rated “Good” for pragmatic domains covered, audio clarity, cultural and ethical acceptability, picture color, dimensions and user friendliness. To summarize, the manual received grading of excellent or good from the judges. Therefore, the manual can be used for training pragmatic language skills in children.

Chapter 4

SUMMARY AND CONCLUSION

The primary focus of the current study was to develop a training manual in English for pragmatic language skills through Social Stories. The developed manual was made as a tele-therapy resource considering the current pandemic situation. The spread of Covid -19 triggered the requirement of tele-health and tele-rehabilitation services; including Speech-Language Therapy. This sudden shift from direct one-to- one therapy to tele- mode aggravated the need for developing resources that are tele-friendly. Training pragmatic skills is often challenging and laborious to clinicians. There exists a research vacuum regarding pragmatic language intervention. Literature also suggests a paucity of material that is culturally and ethically acceptable for Indian population. Social Stories is itself a less explored realm in India, even though plenty of research is taking place in the Western scenario. Hence the currently developed manual is truly one of its kind for treating pragmatic deficits.

The development of the manual was carried out in two phases. Initially, literature regarding pragmatic language skills and its intervention were reviewed from books, journals, previous dissertations done at AIISH and other internet sources. In the first phase, social stories along with scoring and interpretations were framed. Pragmatic domains from "Developmental Protocol for Pragmatics" (Dheepa, 2005) were adapted for developing the stories. The domains included: Eye contact, Smiling, Giving, Requesting, Greeting, Acknowledging, Topic initiation, Maintenance, Turn- taking (Verbal), Clarification, Pause, Interruption/ overlap, Feedback to listeners and Permission directive.

The entire manual was created as a PowerPoint presentation with colored pictures and GIFs, digitally made by a professional artist. The baseline, treatment, and probe protocol was adapted from "Treatment Protocols for Language Disorders in Children, Volume II: Social Communication" (Hegde, 2006), with permission. In phase two, the developed manual was content validated by three SLPs for the language used, domains targeted, clarity, picture stimuli and its ethical acceptability, visibility of the text, clarity of the audio sample, and overall user friendliness. The manual received a grading of good to excellent from all three judges.

To conclude, the current manual will assist clinicians in planning and executing treatment for pragmatic language skills in a more systematic manner. The uniqueness of the manual is its illustrations and audio recordings, which makes it interesting for the child and for the use of the manual through tele-mode.

Implications and Future directions

i. The current manual was developed in a PowerPoint format and hence can be used as a tele- therapy resource. The manual also contains illustrations and audio recordings making it more user-friendly. A printed copy of the manual can be used for direct face-to-face therapy as well.

ii. The manual can be field tested in neuro-typical individuals as well as in other language disordered populations such as Autism, Intellectual Disability, Social Communication Disorders, Specific Language Impairment and in other conditions where pragmatic language is impaired. This helps to document the efficacy and effectiveness of the manual. Conducting studies in such populations also helps in making the manual more evidence-based.

iii. Pragmatic deficits are present in adults with various communicative and neuro degenerative conditions. Hence the current manual can also be modified to target those individuals. The manual can also be used for Persons With Stuttering (PWS) to remediate difficulties while engaging in conversation. Social stories help them to better orient to the communication context and helps in reducing their tension.

iv. Currently the manual is developed in English. Hence it can be adapted to various Indian languages to check for its efficacy.

v. The manual consists of 14 domains of pragmatics. In future, more domains of pragmatics can be incorporated such as informing, quantity/conciseness, perspective taking, idioms, humor etc.

Limitations:

i. The manual developed was not field tested in any population.

ii. The pictures used in the manual were clipart pictures and not real pictures.

iii. All domains of pragmatics were not included.

Reference

Adams, C., Baxendale, J., Lloyd, J., & Aldred, C. (2005). Pragmatic language impairment: case studies of social and pragmatic language therapy. *Child Language Teaching and Therapy*, 21(3), 227–250. https://doi.org/10.1191/0265659005ct290oa

Adams, C. (2008). Intervention for children with pragmatic language impairments. *Understanding Developmental Language Disorders: From Theory to Practice*, 189–204. https://doi.org/10.4324/9780203882580

American Speech-Language-Hearing Association. (1993). *American Speech-Language-Hearing Association. https://www.asha.org/policy/rp1982-00125/*

American Speech-Language-Hearing Association. (2010). *American Speech-Language-Hearing Association*. https://www.asha.org/practice-portal/professional-issues/telepractice/

Anisfeld, E. (1982). The onset of social smiling in preterm and full-term infants from two ethnic backgrounds. *Infant Behavior and Development*, 5, 387–395. https://10.1016/s0163-6383(82)80048-9

Austin, J. L. (1962). *How to do things with Words*. Harvard U. P

Baker, L., & Cantwell, D. P. (1992). Attention deficit disorder and speech language disorders. *Comprehensive Mental Health Care*, 2(1), 3-16.

Bates, E., Camaioni, L., & Volterra, V. (1975). The acquisition of performatives prior to speech. *Merrill-Palmer Quarterly of Behavior and Development* , 205-226., http://www.jstor.org/stable/23084619.

Bavin, L. B. (2009). *The Cambridge Handbook of Child Language*. Cambridge University Press.

Becker-Bryant (2009). *Pragmatic development*. In The Cambridge Handbook of Child Language, ed. by Edith Bavin. Cambridge University Press

Bledsoe, R., Myles, B. S., & Simpson, R. L. (2003). Use of a Social Story intervention to improve mealtime skills of an adolescent with Asperger syndrome. *Autism*, *7*(3), 289–295. https://doi.org/10.1177/13623613030073005

Brinton, B., & Fujiki, M. (1993). Language, social skills, and socio emotional behavior. *Language, Speech, and Hearing Services in Schools*, 24, 194-198. https://doi.org/10.1044/0161-1461.2404.194

Brownell, M. D. (2002). Musically adapted social stories to modify behaviors in students with autism: Four case studies. *Journal of Music Therapy*, *39*(2), 117–144. https://doi.org/10.1093/jmt/39.2.117

Camarata, S. M., & Gibson, T. (1999). Pragmatic language deficits in attention-deficit hyperactivity disorder (ADHD). *Mental Retardation and Developmental Disabilities Research Reviews*, 5, 202-214. https://10.1002/(sici)1098-2779(1999)5:3<207::aid-mrdd7>3.0.co;2-os

Cekaite, A. (2012). Child Pragmatic Development. *The Encyclopedia of Applied Linguistics*. https://doi.org/10.1002/9781405198431.wbeal0127

Celestin-Westreich, S., & Celesti, L. (2013). ADHD Children's Emotion Regulation in FACE© – Perspective (Facilitating Adjustment of Cognition and Emotion): Theory, Research and Practice. *Attention Deficit Hyperactivity Disorder in Children and Adolescents*. https://doi.org/10.5772/54422

Chandra, S & Aruna, P.(2021). Efficacy of Digital Social Stories among children with Autism Spectrum Disorder during the Global Pandemic: COVID-19. *Res. J. Humanities and Social Sciences*. ; 12(1):32-36. https://doi.org/10.5958/2321-5828.2021.00006.1

Clark, E. V. (2003). *First Language Acquisition*. (2nd ed.). Cambridge University Press.

Comeau, L., Genesee, F., & Mendelson, M. (2007). Bilingual children's repairs of breakdowns in communication. *Journal of child language, 34*(1), 159–174. https://doi.org/10.1017/s0305000906007690

Communication Deall.(n.d).Teaching tools for parents and therapists (Com DEALL Kits). https://www.communicationdeall.com/teaching-kits

Conti- Ramsden, G., Moka, P. L. H., Pickles, A., & Durlin, K. (2013). Adolescents with a history of specific language impairment (SLI): Strengths and difficulties in social, emotional and behavioral functioning. *Research in Developmental Disabilities, 34*, 4161-4169

Dheepa, D., & Shyamala, K., C (2005). *Developmental Protocol For Pragmatics*. Unpublished Master's Dissertation, University of Mysore, Mysore.

Delano, M., & Snell, M. E. (2006). The effects of social stories on the social engagement of children with autism. *Journal of Positive Behavior Interventions, 8*(1), 29–42. https://doi.org/10.1177/10983007060080010501

Dessai, R. D. (2012). Effectiveness of Social Stories in Children with Semantic Pragmatic Disorder. *Advances in Life Science and Technology 3,* 13–19. https://doi.org/10.1.1.840.1987

Dettmer, S., Simpson, R. L., Myles, B. S., & Ganz, J. B. (2000). The Use of Visual Supports to Facilitate Transitions of Students with Autism. *Focus on Autism and Other Developmental Disabilities, 15*(3), 163-169. https://doi.org/10.1177/108835760001500307

Dick, L., & Tesche, T. (2015). How to do things…. *LaborARTorium*, 301–320. https://doi.org/10.14361/9783839429693-021

Dimer, N. A., do Canto-Soares, N., dos Santos-Teixeira, L., & de Goulart, B. N. G. (2020). The COVID-19 pandemic and the implementation of telehealth in speech-language and hearing therapy for patients at home: An experience report. *Codas, 32*(3), 3–6. https://doi.org/10.1590/2317-1782/20192020144

Ervin-Tripp, S. (1977). Wait for me, roller skate! In S. Ervin-Tripp & C. Mitchell Kerman (Eds.). *Child Discourse* (pp. 165-188). Academic Press. https://doi.org/10.1016/B978-0-12-241950-8.50015-0

Ervin-Tripp, S., Guo, J., & Lampert, J. . (1990). Politeness and persuasion in children's control acts. *Journal of Pragmatics*. 14(2):307-331. https://doi.org/10.1016/0378-2166(90)90085-R

Fenson, L. Dale, P., Reznick. J.. Bates. E. Thal. D., & Pethick, S. (1994). Variability in Early Communicative Development. *Monographs of the Society for Research in Child Development,* 59, 242.

Garvey. (1984). *Children's talk*. Harvard University Press.

Gidden, J. J. (1991). School children with emotional problems and communication deficits: Implications for speech-language pathologists. *Language, Speech, and Hearing Services in Schools,* 22, 291-295. https://doi.org/10.1044/0161-1461.2201.291

Goswami, S. P., & Shanbal, J. C. (2010). Field testing of Manual for Adult Non-fluent Aphasia Therapy in Kannada (MANAT-K). Research Project, All India Institute of Speech and Hearing.

Gray, B. (1978). Pragmatics of language and literature. *Journal of Pragmatics*, *2*(2), 189–194. https://doi.org/10.1016/0378-2166(78)90012-7

Gray, C. (1991). *Carol Gray Social Stories*. https://carolgraysocialstories.com /social-stories/the-discovery-of-social-stories/

Gray, C.(2006). *How to write social stories*. www.thegraycenter.org.

Gray, C.(2021). *Carol Gray Social Stories*. https://carolgraysocialstories.com/

Gray, C. A., & Garand, J. D. (1993). of Students with Autism with Accurate. *Focus on Autistic Behavior*, *8*(1), 1–10. https://doi.org/ 10.1177/108835769300800101

Greenwood, C., Walker, D., & Utley, C. (2002). Relationships between social communicative skills and life achievements. In H. Goldstein. L. Kaczmarek, & K. English (Eds.), *Promoting Social Communication Children with Developmental Disabilities from Birth to Adolescence.* Brookes Publishing Co.

Grice, H. P.(1975). *Syntax and Semantics* (Vol.3). Academic Press.

Griffin, R.. Hemphill, L. Camp. L., & Wolf, D. (2004). Oral discourse in the preschool years and later literacy skills. *First Language,* 24. 123-147.

Hagiwara, T., & Myles, B. S. (1999). A Multimedia Social Story Intervention. *Focus on Autism and Other Developmental Disabilities, 14*(2), 82-95. https://doi.org/10.1177/108835769901400203.

Hart, B. (1981). Pragmatics: How language is used. *Analysis and Intervention In Developmental Disablities, 1*(3–4), 299–313. https://doi.org/10.1016/0270-4684(81)90004-5

Hashiuchi, S., & Oku, T. (2005). Main Approaches to Pragmatics, *chugokugakubn Journal 4*, 1–1.

Hatton, C. (1998). Pragmatic language skills in people with intellectual disabilities: A review. *Journal of Intellectual and Developmental Disability* (Vol. 23, Issue 1, pp. 79–100). Informa Healthcare. https://doi.org/10.1080/13668259800033601

Hegde, M. N. (1980). An experimental-clinical analysis of grammatical and behavioral distinction between verbal auxiliary and copula. *Journal of Speech and Hearing Research,* 23, 864-877. https://doi.org/10.1044/jshr.2304.864

Hegde, M. N. & Mc Conn, J. (1981). Language training. Some data on response classes and gener altzation to an occupational setting. *Journal of Speech and Hearing Disorders,* 46, 353-358. https://doi.org/10.1044/jshd.4604.353

Hegde, M. N.. Noll. M. J., & Pecora, R. (1979). A study of some factors affecting generalization of language training. *Journal of Speech and Hearing Disorders*, 44, 301-320. https://doi.org/10.1044/jshd.4403.301

Hegde, M. N. (2006). *Treatment protocols for language disorders in children Social communication (*Vol II). Plural Publishing

Hegde M. N., & Maul, C (2006). *Language disorders in children: An evidence based approach to assessment and intervention.* Ally& Bacon.

Hewison, D., & Kuras, M. (2005). Book reviews: Book reviews. *Journal of Analytical Psychology*, *50*(3), 395–403. https://doi.org/10.1111/j.0021-8774.2005.00541.x

Hoff, E.(2005). *Language Development (3 ed.).* Wadsworth.

Hymes, D. H. (1972). On communicative competence. In J. B. Pride & J. Holmes (Eds.), Sociolinguistics (pp. 269–93). *Harmondsworth:* Penguin.

K. Reeder, J. Shapiro (1996). Literate Apprenticeships. R. Watson & H. Goelman (Eds.).: The Emergence of Language and Literacy in the Preschool Years (pp. 119-133). Norwood, NJ: Ablex.

Kim, M., Blair, K. C., & Lim, K. (2014). Research in Developmental Disabilities Using tablet assisted Social Stories TM to improve classroom behavior for adolescents with intellectual disabilities. *Research in Developmental Disabilities*, *35*(9), 2241–2251. https://doi.org/10.1016/j.ridd.2014.05.011

Kumari, S., Pyata, R., Afreen, B. K., et al. (2016). Pragmatic Skills in Children with Different Types of Learning Disability: A Comparative Study 224.6-9

Kuttler, S., Myles, B. S., & Carlson, J. K. (1998). The use of social stories to reduce precursors to tantrum behavior in a student with autism. *Focus on Autism and Other Developmental Disabilities, 13*(3), 176–182. https://doi.org/10.1177/108835769801300306

Lavelli, M., & Fogel, A. (2005). Developmental changes in the relationship between the infant's attention and emotion during early face-to-face communication: The 2-month transition. *Developmental Psychology*, 41, 265–280. https://doi.org/10.1037/0012-1649.41.1.265

Leech, G.(1983). *Principles of Pragmatics* . Longman

Levinson, S. (1983). *Pragmatics.* Cambridge University Press.

Lloyd, P. (1992). The role of clarification requests in children's communication of route directions by telephone. *Discourse Processes, 15*, 357-374. https://doi.org/10.1080/01638539209544817

Lloyd, P., Mann, S., & Peers, I. (1998). The growth of speaker and listener skills from five to eleven years. *First Language*, 18(52), 081–103. https://doi.org/10.1177/014272379801805203

Lorimer, P. A., Simpson, R. L., Smith Myles, B., & 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 Behavior Interventions*, *4*(1), 53–60. https://doi.org/10.1177/109830070200400109

McLaughlin, S. (1998). Later language development: The school age and adolescent and intervention (4th Ed.). Ally & Bacon.

MacDuff, G. S., Krantz, P. J., & Mc Clannahan, L. E. (1993). Teaching children with autism to use photographic activity schedules: maintenance and generalization of complex response chains. *Journal of applied behavior analysis*, *26*(1), 89–97. https://doi.org/10.1901/jaba.1993.26-89

Mashima, P. A., & Doarn, C. R. (2008). Overview of telehealth activities in speech-language pathology. *Telemedicine and E-Health*. https://doi.org/10.1089/tmj.2008.0080

O'Neill D, K. (2007). The language use inventory for young children: a parent-report measure of pragmatic language development for 18- to 47-month-old children. *Journal*

of speech, language, and hearing research : JSLHR, *50*(1), 214–228. https://doi.org/10.1044/1092-4388(2007/017).

Osman, D. M., Shohdi, S., & Aziz, A. A. (2011). Pragmatic difficulties in children with Specific Language Impairment. *International Journal of Pediatric Otorhinolaryngology*, *75*(2), 171–176. https://doi.org/10.1016/j.ijporl.2010.10.028

Ozonoff, S. (2012). Editorial Perspective: Autism Spectrum Disorders in DSM-5 - An historical perspective and the need for change. *Journal of Child Psychology and Psychiatry, 53*(10), 1092-1094. https://doi.org/10.1111/j.1469-7610.2012.02614.x

Pan, B. A., & Snow, C. E. (1999). The development of conversational and discourse skills. *The development of language,* 229-249.

Papadopoulos, D. (2018). A general overview of the pragmatic language-social skills and interventions for children with autism spectrum disorders. *Autism Open Access*,*8* (225),2.

Paul, R. (2001). Clinical art and science. In R. Paul (Ed.). Introduction to clinical methods in communication disorders. Baltmore.

Priya, K., S (1994). *Test of Pragmatics*. Unpublished Master's Dissertation of AIISH, Submitted to the University of Mysore, Mysore.

Rutter, M., & Garmezy, N. (1983). Developmental psychopathol ogy. In E. J. Hetherington (Ed.), Handbook of child psychol ogy, Vol. IV: Socialization, personality, and social development. (pp. 601-616). Wiley.

Sansosti, F. J., & Powell-Smith, K. A. (2008). Using computer-presented social stories and video models to increase the social communication skills of children with high-functioning autism spectrum disorders. *Journal of Positive Behavior Interventions*, *10*(3), 162–178. https://doi.org/10.1177/1098300708316259

Scattone, D., Wilczynski, S. M., Edwards, R. P., & Rabian, B. (2002). Decreasing disruptive behaviors of children with autism using social stories. *Journal of autism and developmental disorders*, *32*(6), 535–543. https://doi.org/10.1023/a:1021250813367

Schank, R. C, & Abelson, R. P. (1977). Scripts, plans, goals and understanding: An inquiry into human knowledge structures. HUlsdale.

Searle, J. R. (1979). Expression and meaning. Cambridge University Press.

Shin, D.W., Lee, S.J., Kim, B.J., Park, Y., & Lim, S. W. (2008). Attention deficits contribute to impaired facial emotion recognition in boys with attention-deficit/hyperactivity disorder *Neuropediatrics*, 39(6), 323-3277. https://doi.org/ 10.1055/s-0029-1202286

Snow, C. (1994). What is so hard about learning to read? A pragmatic analysis. In J. Duchan. L. Hewitt & R. Sonnenmeier (Eds.). Pragmatics: From Theory to Practice (pp. 164-184). Englewood Cliffs, NJ: Prentice-Hall.

Snow, C., & Blum-Kulka, S. (2002). From home to school: School-age children talking with adults. In S. Blum-Kulka & C. Snow (Eds.). Talking to Adults: The Contribution of Multi-party Discourse to Language Acquisition (pp. 327-341). Mahwah, NJ: Lawrence Eribaum Associates.

Snow, C., Porche, M., Tabors, P., & Harris, S. R. (2007). Is Literacy Enough Baltimore: Paul H. Brookes.

Staikova, E., Gomes, H., Tartter, V., McCabe, A., & Halperin. J. M. (2013). Pragmatic deficits and social impairment in children with ADHD, *Journal of Child Psychology and Psychiatry*, St.1275-1283 https://doi.org/10.1111/jcpp.12082

Swaggart, B. L., Gagnon, E., Bock, S. J., Earles, T. L., Quinn, C., Myles, B. S., et al. (1995). Using social stories to teach social and behavioral skills to children with autism. *Focus on Autistic Behavior*, 10, 1–16.

Thiemann, K., & Goldstein, H. (2001). Social stories, written text cues, and video feedback: Effects on social communication of children with autism. *Journal ofApplied Behavior Analysis*, 24, 425–446.

Volkmar, F., & Klin, A. (2005). Issues in classification of autism and related disorders. In F. Volkmar, R. Paul, A. Klin, & D. Cohen (Eds.), Handbook of autism and pervasive develop mental disorders: Vol. 1: Diagnosis, development, and neurobi ology (pp. 5-41).Wiley.

Westby, C. E. & Cutler, S. (1994). Language and ADHD: Understanding the bases and treatment of self-regulatory behaviors. *Topics in Language Disorders*, 14, 58-76. https://doi.org/10.1097/00011363-199408000-00006

Westby, C. E. (2010). The Changing World of Communication. *Topics in Language Disorders 30* (1):64–71. https://doi.org/10.1097/TLD.0b013e3181d0a0ab

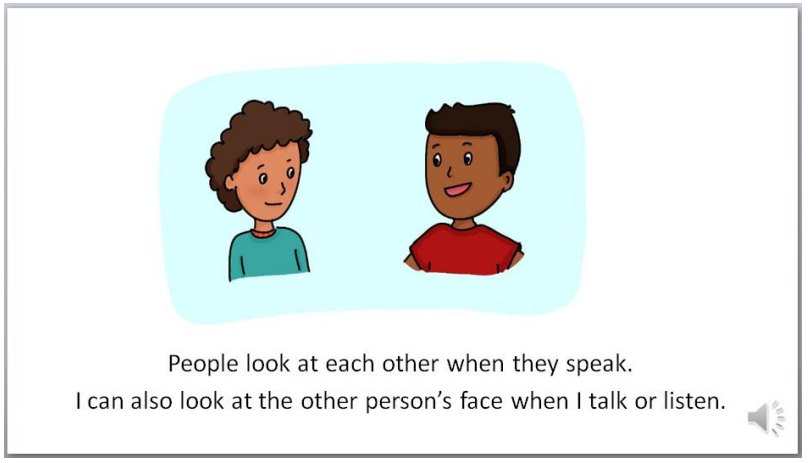
Westby, C. E. (2020). Social- Emotional bases of pragmatic and communication development. In Singleton, N. C., & Shulman, B. B.*Language Development Foundations, Processes and Clinical Applications (3 Eds.)*. Jones & Barlett Learning. Wilde, L. D., Koegel, L. K., & Koegel, R. L. (1992). Increasing success in school through priming: A training manual. University of California.

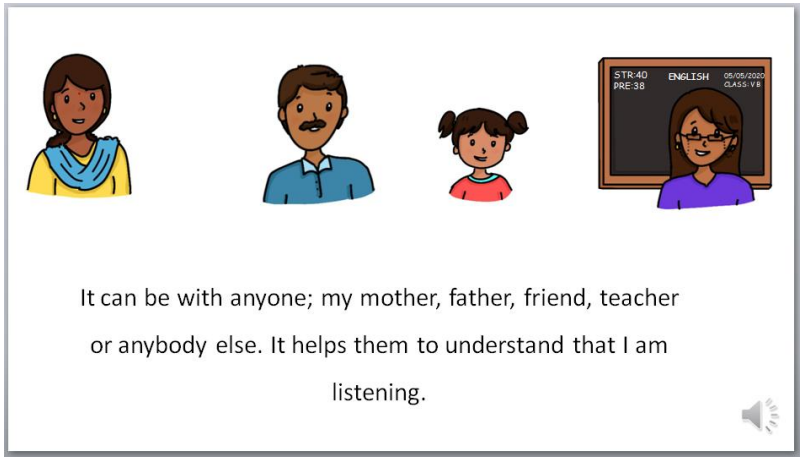
Yuill, N., & Lyon, J. (2007). Selective difficulty in recognising facial expressions of emotion in boys with ADHD. General perfor mance impairments or specific problems in social cognition? *European Child & Adolescent Psychiatry, 16(6), 398-404.*

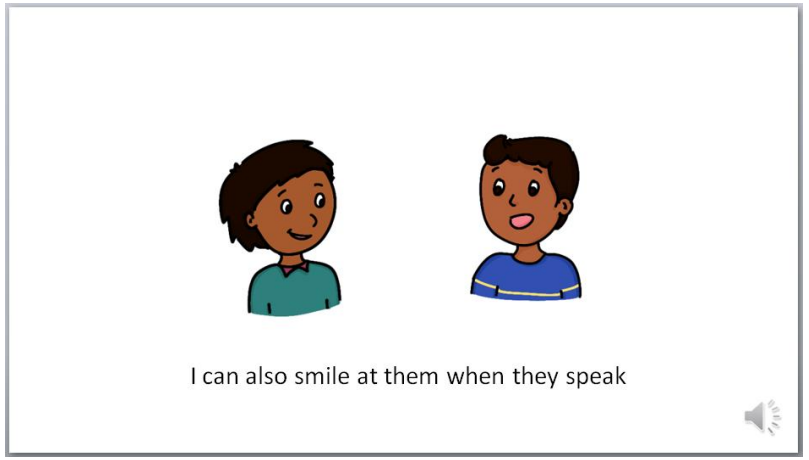
Appendix 1

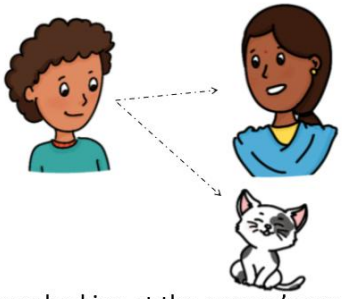
Illustrations:

Domain I: Eye contact



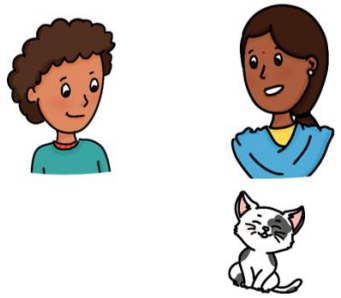




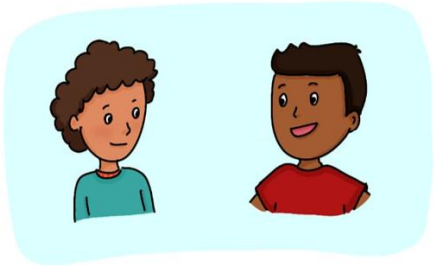


I must not keep looking at the person's eye all the time.

It is good to look at the object they are talking about and then look back to the speaker's face.

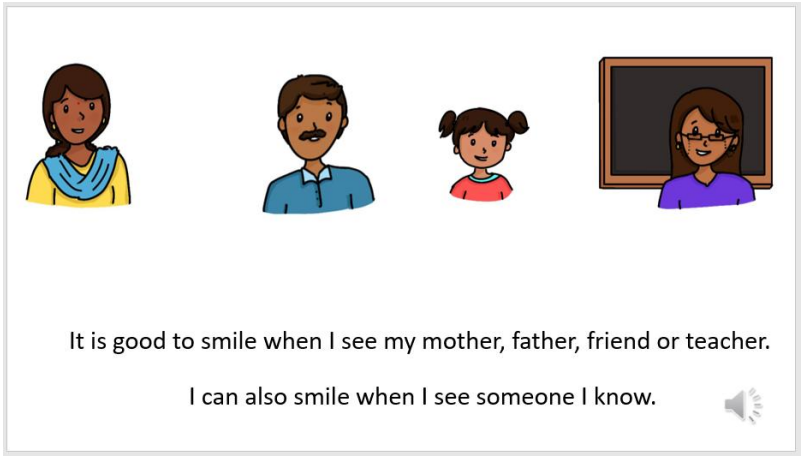


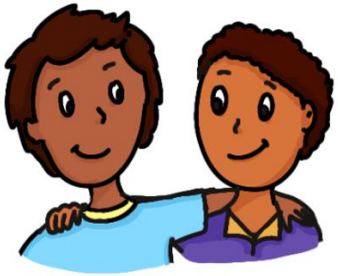
If mother is talking about the pet cat, I can look at the cat and mother alternatively.



This is how people talk.

Domain II: Social Smile





If I smile at them, they will become happy and I will also be happy.
Smiling at strangers is not a good habit.
Because they can be good people or bad people.

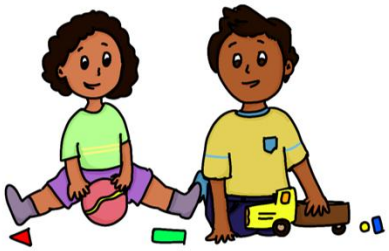
Maybe I can try smiling from next time onwards.

Domain III: Giving

LET'S SHARE AND CARE

SOCIAL STORY ON GIVING/ SHARING

Sharing is a major pragmatic skills and is often found to be affected in some children.. It is the ability to share/ divide things with others during different situations.



I have seen kids playing with toys

I can also sit and play with them.

It is important to share toys when I play with someone else

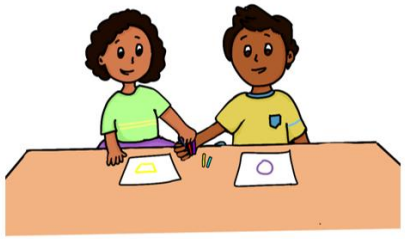
When I share something with others, they will be also happy.

Sharing means that you care for others.

Sharing is important not just while playing.

I can share my snacks.

I can share my books.



I can share my crayons or anything else with others.

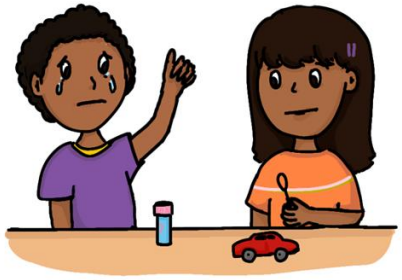
Let me try sharing from next time onwards

Domain IV and XIV: Requesting and Permission Directive

I can also request my parents, teachers or someone else to get something.

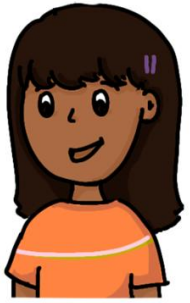
If I ask for permission, they will understand what I want.

This makes them happy too



People will feel bad, if I snatch things from them.

Requesting is the best way to ask



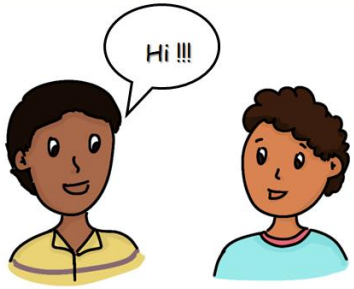
I will try requesting others from next time onwards

Domain V: Greeting

SAY HI.....SAY BYE

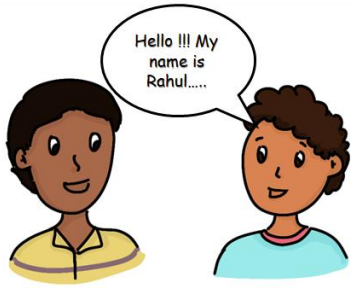
SOCIAL STORY ON GREETING

Greeting is considered to be one of the major social skills. Children with communication disorder often tends to lack the ability to socially greet others



I meet a lot of people everyday.

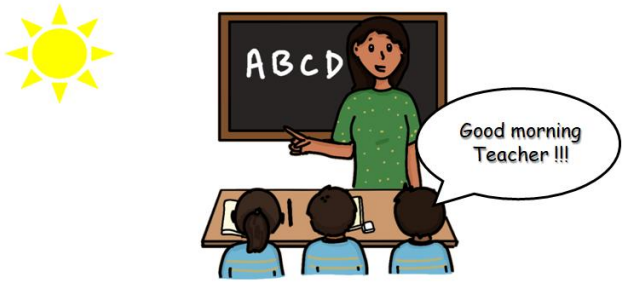
It is important to tell “Hi” or “Hello” when I see someone I know.



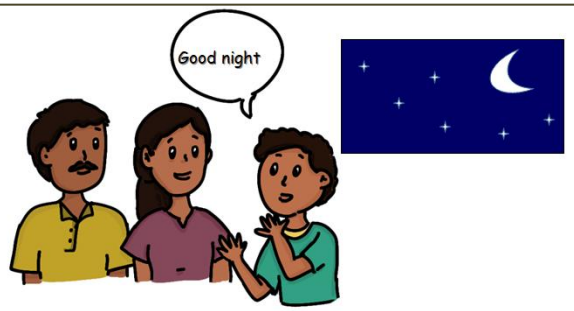
Telling “Hi” helps me to connect with people.

I can also start a conversation after this.

I can tell “Bye” or “Tata” or “See you later” when I leave someone.



I can say “Good Morning” when I see someone in the morning.

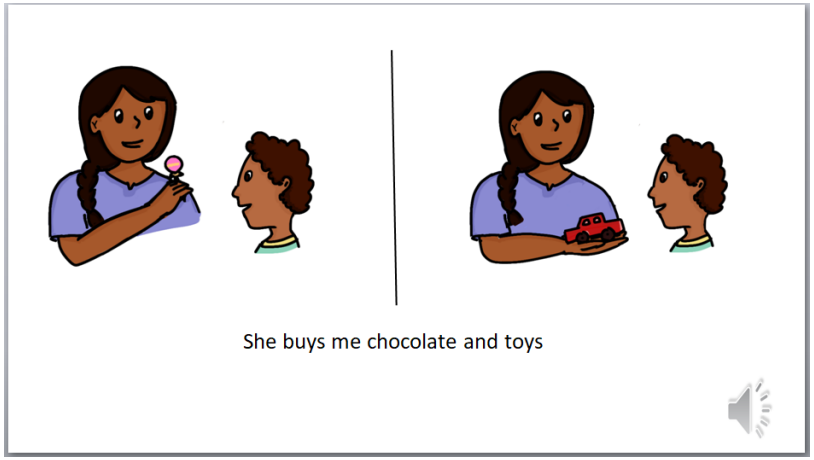


I can try telling “Good Night” to my family when I go back to bed.

Greeting others is a good idea.

I’ll try to greet people I know from next time onwards.

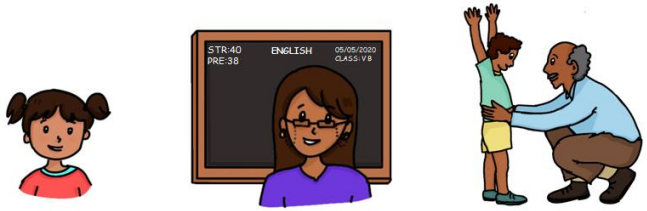
Domain VI: Acknowledging



My father helps me to tie up the shoe laces

He takes me out.

They also helps me in many other ways.



It is not just my parents who help me; it can be my friends,

teachers and grandparents

It is good to appreciate all their efforts.

I can use the magic word “THANKYOU’ to show my love to them

This makes them happy too.

Indeed, I can also help them in return

Helping others means caring others.

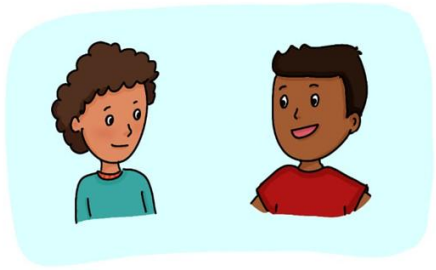
Let’s help each other and thank them for their help.

Domain VII: Topic initiation

LETS GET STARTED

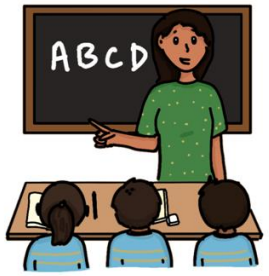
SOCIAL STORY ON **TOPIC INITIATION**

Topic initiation is the ability to introduce a new topic in a discourse. It is the ability to start a conversation and is often found to be affected in disordered population



I meet different people in my life every day.

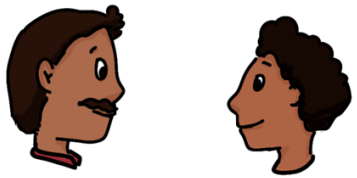
I play with my friends in school, I talk with them, we learn together



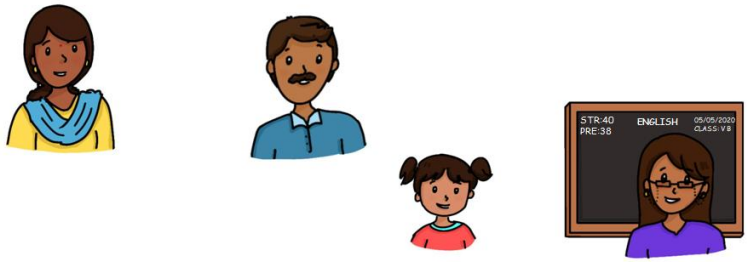
Our teacher teaches us new things everyday

At home, I talk with parents.

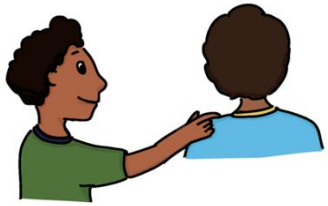
I can also share my thoughts, ideas with them while talking



There are some rules I have to keep in my mind when I talk;
like any other games.
First I have to approach them



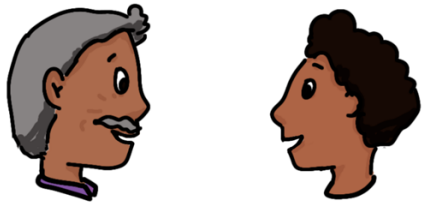
It can be anyone; my father, mother, friends or teachers



I can also call out their name or can tap on their shoulder.

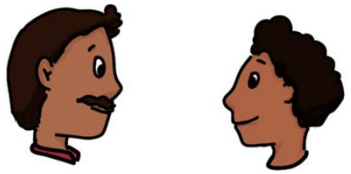
If they are talking with someone else, I have to wait until they finish

I can use the magic words such as “Excuse me.....’” Or “ May I.....”
before I start speaking



I should speak politely and gently when I talk with older people.

This is a way of respecting them.



I should also talk about things which are relevant to the situation.

If I want to share something urgent I can share about that also

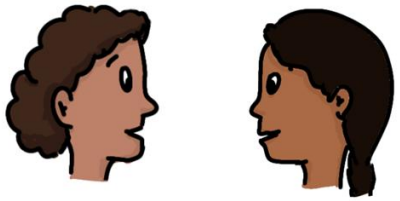
Let me try using these rules from next time onwards.

Domain VIII: Maintenance

LET'S TALK AND TALK

SOCIAL STORY ON **MAINTENANCE**

Maintenance is the ability to maintain/ sustain talking about the same topic through out the conversation. The individual switches the role of both speaker and listener during a conversation



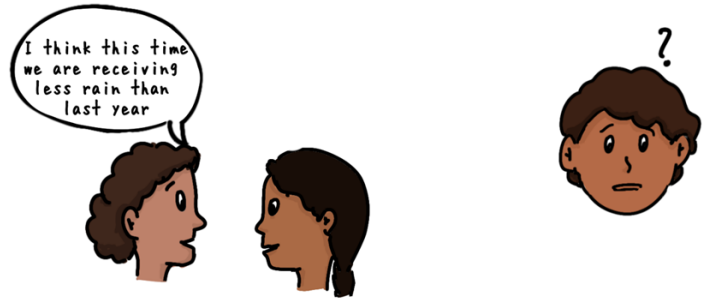
People talk with each other to share their thoughts and opinions

It is important to stay on the same topic when we speak.

This helps others to follow better and will avoid confusions

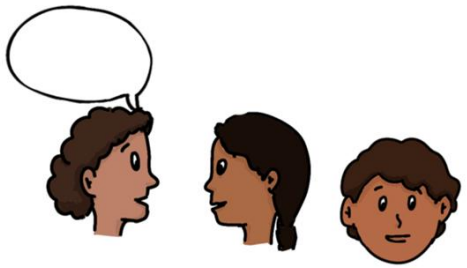
I should make sure that I know the topic before I talk with them.

This helps me to talk better



Sometimes people talk about things I don't know about.

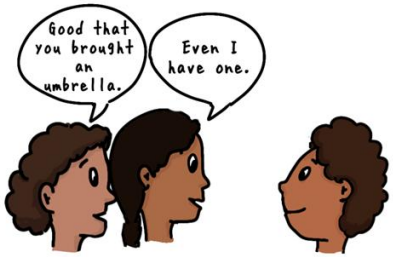
This is fine



I can listen to them before speaking and understand the topic.

I can also ask for doubts if I don't understand

I can say about what I think, I can ask questions, I can add to what someone said. I can even ask for clarification



But it is important to ask and say about things related to the topic.

This makes the conversation continue without any break

This also helps me to get new information.

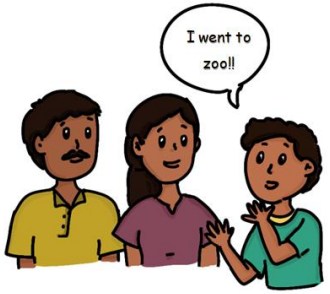
From next time onwards, I will try to speak like this

Domain IX and XII: Turn- taking (Verbal) and Interruption/ overlap

WAIT AND SPEAK

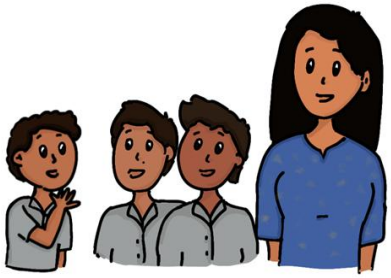
SOCIAL STORY ON **TURN TAKING / INTERRUPTION AND OVERLAP**

Nonverbal turn taking develops by around 10 months to 16 months and the child tends to exhibit conversational turn taking by around 3-4 years of age. It is the ability to successfully take turns without interrupting in between.



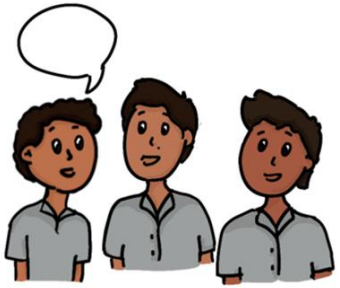
I talk with different people everyday.

I talk with my parents at home



I talk with my friends and teachers at school.

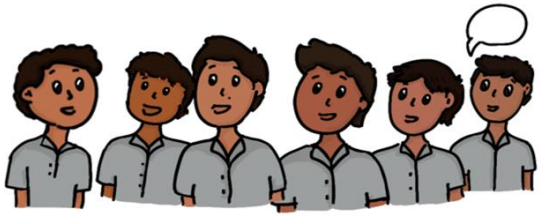
It is important to speak and listen during conversation



I have to wait when other people talk.

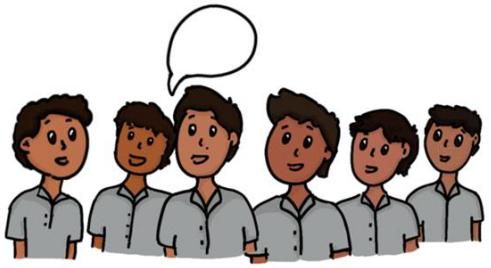
They will also wait for me when I talk.

Because everyone has something to share



When there are more than one person,

I might need to wait longer. This is also fine



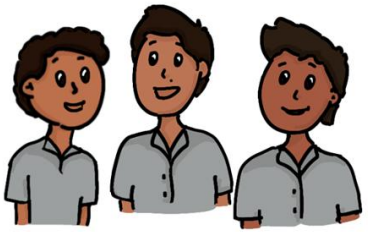
I can also nod my head, look at them or smile at them when they talk.

This helps them to understand that I am listening

If I want to share something urgently, I can interrupt them.

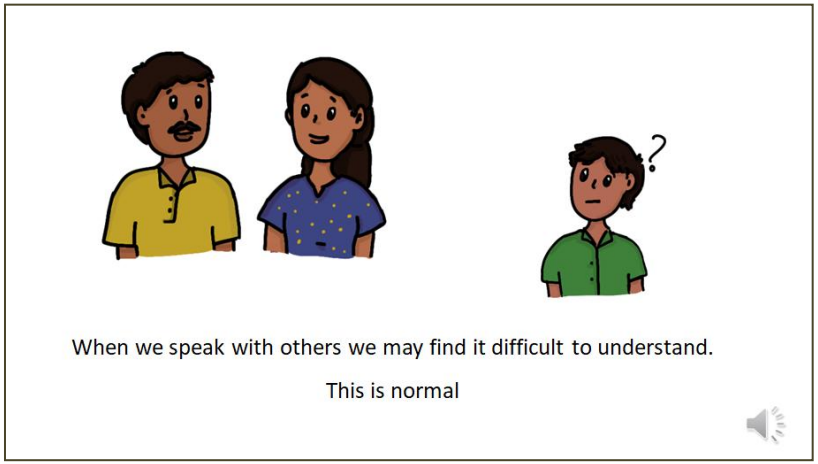
At this time, I can use the magic word " Excuse me...."

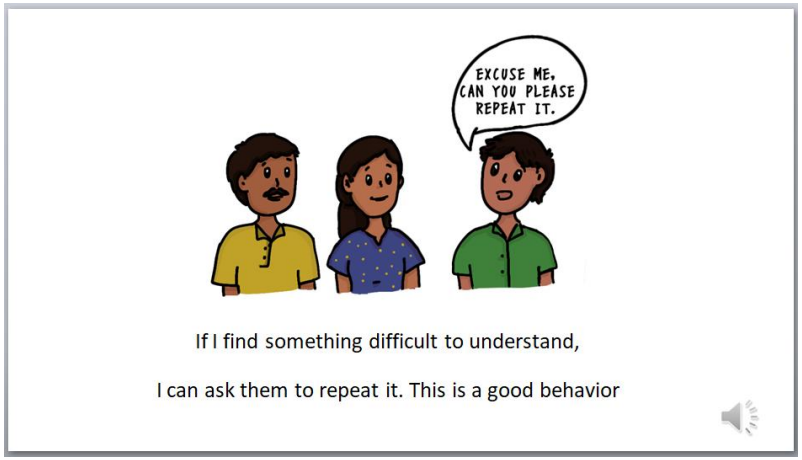
This is a good behavior

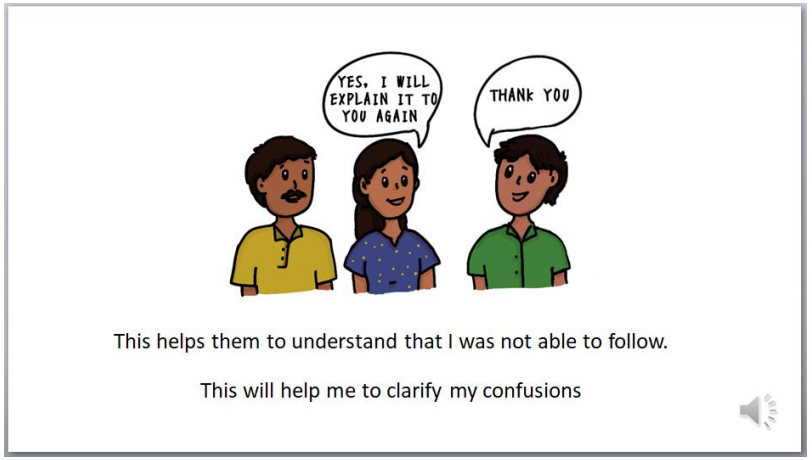


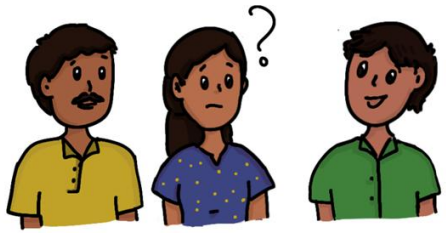
Next time onwards I'll make sure that I will give enough time for other people to talk

Domain X: Clarification



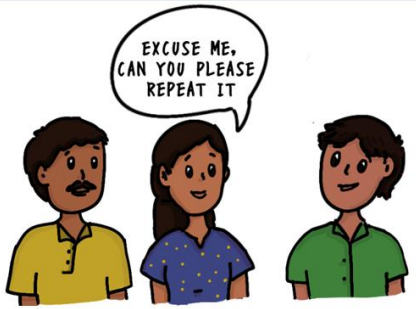






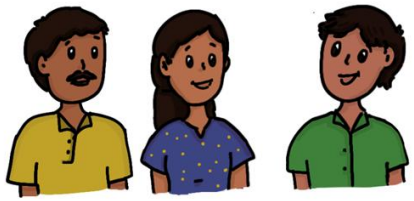
Sometimes when I speak they may not understand.

This is also normal



They will also ask me to repeat.

I can repeat my words slowly and clearly



This helps them to understand things better.

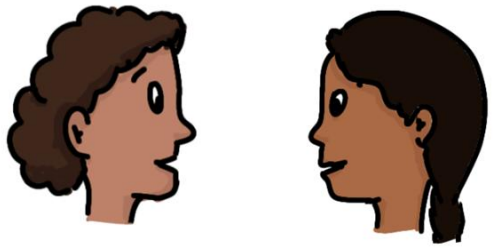
Hence asking doubts is a good thing

Domain XI: Pause

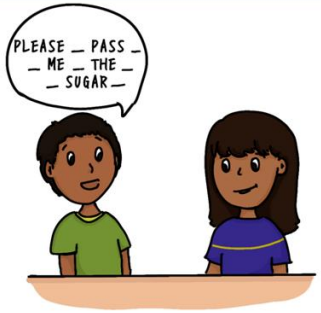
LET'S TAKE TIME AND TALK

SOCIAL STORY ON PAUSE

Pause / pause time is considered to be the amount of time present between words in a sentence. Pause time has to be within adequate level, not being too less or more

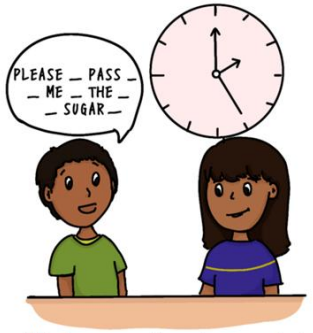


We speak with many people everyday.



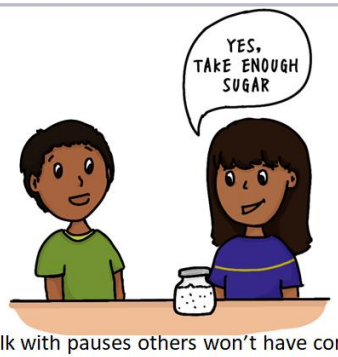
It is important to speak slow when we speak with others.

This helps others to understand better



This will take more time to complete.

This is fine. I can take enough time I want



When I talk with pauses others won't have confusions

It is also important not to pause too long or too short.

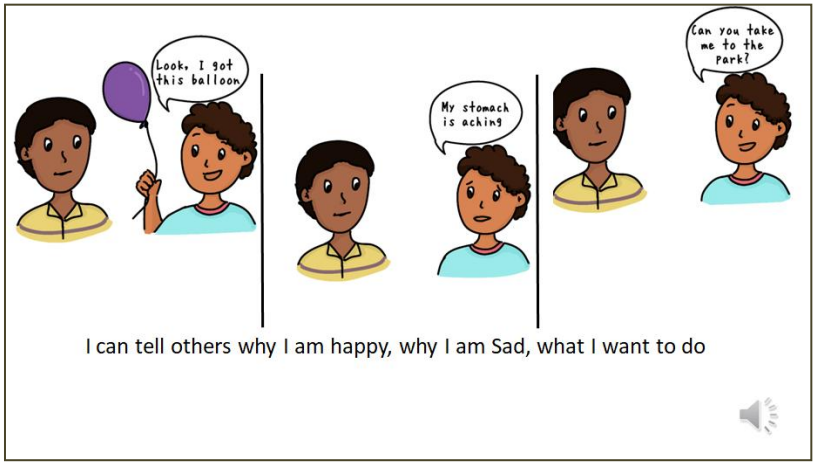
If I pause too long, it will be difficult to understand

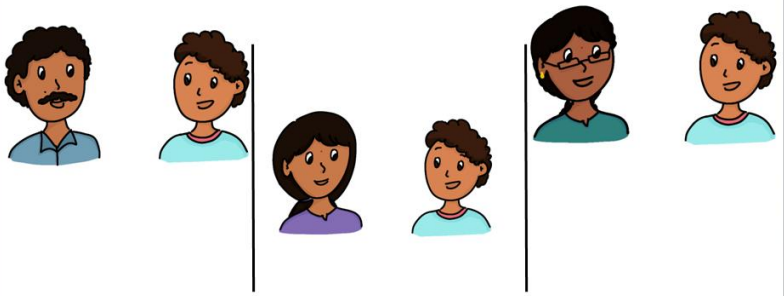
If they still finds it difficult with pause,

they might ask me to repeat.

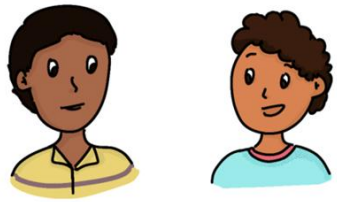
This is also fine

Domain XIII: Feedback to listeners

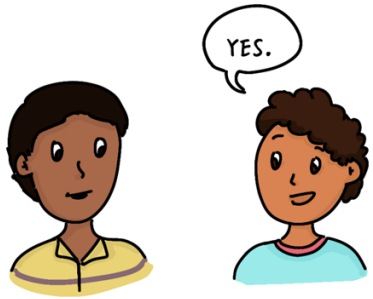




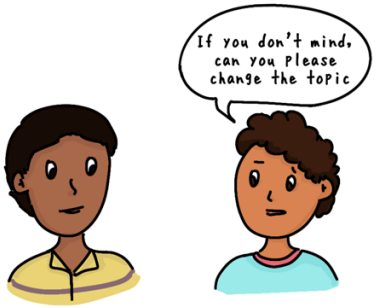
It can be with anyone; my father, my mother, or teacher. It is also important to give response when others speaks with me



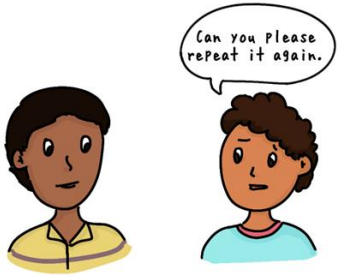
I can nod my head or look into their eyes when they talk. This helps them to understand that I am listening



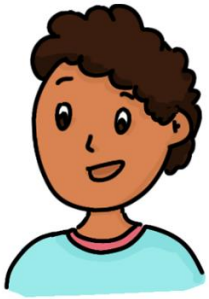
I can also respond to them telling “yes” or “okay” or some other words that indicate I am listening



It is also okay to tell them if I am not comfortable with the topic or situation



I can also ask doubts if I didn't get the idea



This is how people communicates.

I can also try doing like this from next time

Appendix II

BASELINE RECORDING SHEET

Name:	Date: File #	
DOB/ Age:	Clinician:	
Disorder:	Target behavior:	
Goal **Name of the Social Story:**	**Trials**	
	Evoked	**Modelled**
Read social story once to the child		

TREATMENT RECORDING SHEET

Name:	Date: File #:
DOB/ Age:	Clinician:
Disorder	Target Behavior
Goal	
Name of the social story used:	

Clinician's Comments:

Scoring: Correct ✓ Incorrect or No Response X

Discrete Trials														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

PROBE RECORDING SHEET

Name:	Date: File #:
DOB/ Age:	Clinician:
Disorder	Target Behavior
Goal	
Name of the social story used:	
Untrained stimuli used (specify the probe used):	

Scoring: + Correct; - Incorrect or No Response

Untrained Stimuli (UT)									
1	2	3	4	5	6	7	8	9	10