## TEST OF PRAGMATICS

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### DECLARATION

This dissertation entitled TEST Of PRAGMATICS is the result of my own study under the guidance of Dr. Prathibha Karanth, Professor and Head of the Department of Speech Pathology, All India Institute of Speech and Hearing, Mysore, and has not been submitted earlier at any University for any other Diploma or Degree.

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# TABLE OF CONTENTS

		Page No		No.
1.	Introduction	1	-	3
2.	Review of Literature	4	-	39
3.	Methodology	40	-	56
4.	Results and Discussion	57	-	65
5.	Summary and Conclusion	66	_	68
6.	References	69	_	71
7.	Appendix			
	Appendix - A			
	Appendix - 1a			
	Appendix - 1b			
	Appendix - 2			
	Appendix - 3			
	Appendix - 4			

#### INTRODUCTION

Human language can be characterized as (1; symbolic, (2) representative of categories of reality events, (3) arbitrary, (4) systematic, (5) coded, (6) vocal-most usual form of the symbol is auditory-vocal, even when not speech, (7) used to communicate ideas, (8) a means of relationship with others and (9) a behavioral process, based on definitions of Sapir, 1921; Hill, 1958; Lenneberg, 1973; and Bloom and Lahey, 1978 (Cited in Woolfolk and Lynch,1982). The study of language on the whole can be divided into 3 dimensions as given by Bloom and Lahey, 1978. (Cited in Woolfolk and Lynch,1982;.

- 1. Form
- 2. Content
- 3. Use

Language form can be described in terms of phonology, morphology and syntax. Phonology is the study of sound systems which we use in speaking. Morphology is the study of minimal meaningful units of language and the minimal grammatically pertinent units of language. Syntax is the study of how strings of words combine to form meaningful sentences. A basic function of this organizational process is to show what is related to what in the sentence.

Language content is the study of meaning. If there were no meaning, no content, there would be no point in using language. Meaning is the bridge between the thoughts and ideas of individual and the sequence of vocal sounds they produce to symbolize those thoughts and ideas.

Language use has two major aspects:

- 1. Functions of language the reason why people speak, it can intrapersonal or interpersonal communication, and
- 2. The influence of linguistic and non-linguistic context that determines how individuals understand and choose among alternative forms of language for reaching the same or different goals.

The above three components of language begin to develop as essentially separate threads of development in the first year of infancy and are progressively co-ordinated until children induce the relationship between their own resources and needs on the one hand and the integration of content, form and use of the language in the environment, on the other hand. Language develops as a result of interaction between the child and the context. As infants process information

about the world, they are influenced by the factors of movement and change - both their own movements and those of other objects and persons. Children learn to perceive information about the regularities and consistencies in the context and form concepts based on identity and equivalence relations among objects and movements. The success messages depends on the very delicate interplay among the individual needs, expectancies and capacities in relation to the needs, expectancies and capacities of others, all of whom are in situations in which they have a greater or lesser control over the course of events according to many different circumstances. The importance of studying this pragmatic aspect of language development and the assessment pragmatic abilities in language disordered children has gained importance in recent years.

The current study attempts to develop a pragmatic test in Tamil. In the following chapter a brief review of literature on different aspects of pragmatics, its development and its assessment has been given, followed by chapters where the actual study attempted has been described in detail.

#### REVIEW OF LITERATURE

Speech pathologists have been involved in the assessment of children's language since the 1950's. The intervening years have seen great diversity in the theory and practice of language assessment as the views about the nature of language changed giving way to new procedures for sampling for categorizing deviations from describing language and normal language. During the decade of 1950's two approaches language assessment was developing. They are the normative approach and pathological approach. The normative approach by Johnson, Darley and Spriesterbach, 1952 (Cited in Lund and Duchan, 1988.) focused on measures such as mean length of utterance, parts of speech used, sentence structures, ratings of verbal output, size of vocabulary and mean structural complexity score. They studied the performance on these measures at different ages in normal But direction is given for using children. no information in assessing an individual child's language. pathological approach by Myklebust (1954) was based on the medical model. According to the model, disordered language was considered as one of a cluster of symptoms that could the clinician to diagnosing the problem - ie. determining the etiology or cause. The treatment efforts would be directed towards alleviating the cause or condition rather than further examining the symptoms. But there is no chance to the clinician for identifying or understanding receptive and expressive language disorders.

The decade of 1960's in language assessment for speech pathologist was influenced by the impact of the behavioristic movement in America and the behavioral approach was given by Schiefelbusch '.1963). In this framework, language response was viewed as under the control of both stimulus reinforcement. It also included the mental associations which an organism can make to a stimulus. The discriminating stimulus became the main focus. Changing the stimuli or reinforcement in the environment the became means of remediating language disorders. The language behavior or responses were classified according to the conditions that prompted them. Responses that function as demands and reguests were called Mands and those that are controlled by a discriminative stimulus were called as Tacts. The actual response was not generally described. In the cognitive approach by Miller, Chapman, Barnston and Reichle (1980;, the sensory motor stage from birth to two years were identified as precursors to language learning in normals. Stresses on the experiences and concepts (cognitive knowledge) that are presumed to be pre-reguisites to emergence of language. The auditory processing models by Kirk and McCarthy

considers language reception as primary and fundamental to language learning. The general format for conceptualization is that the auditory stimulus is first received, perceived, categorized into meaning and stored and retrieved later for future processing. So primary speech sound discrimination, auditory memory, seguencing, auditory closure, figure ground discrimination are tested. The emphasis is on the different modalities or channels available for language learning and on the transmission of information from one person to another. The expressive aspect of language is completely neglected.

During the early 1960's using the analytic techniques and terminology of descriptive linguistics, researchers in child language began to formulate grammar or rules that both described and attempted to explain child language. brings us to the linguistic approach to language assessment. With the approach language was no longer talked of responses pulled from a response repertoire. The syntactic approach consider the phrase structure that makes up the sentences we hear, can be derived from a more abstract underlying structure through a series of changes governed by 16 proposed that children are born with knowledge of the underlying structure and that they learn how the deep structures apply to particular surface structures in the course of their exposure to language. But it did not focus on the meaning carried by these sentences. The semantic assessment by MacDonaid, 1978; McLean and Synster McLean, 1978. (Cited in Lund and Duchan,1988) derived a model for the meanings of words, phrases and sentences and in the difference between language meaning and meaning for things in the world in general. Here the emphasis is on the meaning expressed as utterances are produced and not on the change in the meaning for the same utterance in different environments or contexts.

When the semantic and structural analysis of language did not provide an adequate and complete account of language and its development, it led to the realization that sentences derive their meanings from the contexts in which they occur. The same word or sentence means something different different occasions. This realization led to move away from thinking about language knowledge as a fixed set of meanings as listed in a dictionary to an examination of how context influences meaning and how language functions differently for speakers at different times. This contextual influence is the study of language from pragmatic perspective. It has come to be the most recent movement in linguistics and psychology. Since, the present study is an attempt to assess pragmatic skills, this aspect of language will be dealt in greater detail.

It is clear that a child in addition to learning the phonologic, syntactic and semantic rules of language, must also master the rules that underlie how language is used for the purpose of communication. And the rules governing the use of language in a social context is known as pragmatics, as given by Bates, 197c (Cited in Roth and Spekman, 1984a). The acguisition of these rules reguires a complex integration ot linguistic, cognitive and social knowledge. Pragmatics is a term originally used by Pierce, 1932 (Cited in Woolfolk and was further Lynch, 1982; and it elaborated by Morris (1946,p.31) who defined it as "the relationship between signs and their human users". For a complete understanding of language and its development it is essential to understand the fact that "language is a social event carried out by human beings in realistic communicative contexts" Benigni, Bretherton, Camaioni and Volterra, 1977, p. 31). Crystal (1981,p.5), says pragmatics is a loosely used term in linguistics which refers to "the study contemporary language from the point of view of the user, especially the choices he makes, and the constraints he encounters in using language in social interaction and the efforts his use of language has other participants in an of on act

communication". Watzlawick, Beavin, Helmick and Jackson, (1967,p.420), defines pragmatics as the behavioral effects of communication". This implies that communication involves complex interaction between the participants. It may also result in the imposing of a behavior, as with a command. The command refers to what sort of message is to be taken by the listener, which itself refers to the relationship between the communicants.

The notion of pragmatics in language refers to the identification and description of factors and rules that affect the structure and use of the linguistic code. The particular choice of structures— their length, complexity, grammaticality— and the fluency— and style— (casual or formal) with which structures are used, are influenced by factors within the individual and his environment. But it is not easy to make an exhaustive list of all the factors which have to be taken into account within the linguistic code. So also, it is difficult to distinguish one social force— from another and it is not known as to how these intangibles can be correlated with the formal features of language.

#### DEVELOPMENT OF PRAGMATICS

The use of language begins as Leopold, 1939. (Cited in Woolfolk and Lynch,1982.) noted, with the intention to

communicate. Such intention may be closely identified in children between birth and eight to ten months. Halliday, 1975. (Cited in Woolfolk and Lynch,1982.) studied the functions of language in a child prior to the onset of words. His subject Nigel, used four identifiable functions before he used words. These included - demanding (give me), regulating (do that;, interacting (I see you;, and personal (that's nice;.

Nigel's language progressed through three identifiable phases:

- 1. Preverbal phase 0 to 15 months.
- 2. True verbal language: 16 to 18 months. Nigel learnt to use grammar and also began to engage in verbal dialogue. He learnt to recite rhymes and social routines, tell stories and provide information.
- Adult system where the speaker controls, devices for humour, sarcasm and indirect reguest.

Woolfolk and Lynch (1982; gave the following stages of pragmatic development in child language.

Between 2 to 10 months there is development of eye contact and gaze exchange used to regulate joint attention on an activity, a pre-reguisite to learning reference. Eye contact, smiling and attention indicates that the child takes notice of someone or something. Pointing plus vocalization suggests demand for someone or something.

Between 10 and 16 months, the regulatory function of language is strong. Gestures of giving, pointing and showing, draw attention to what is warranted. Non-verbal turn taking in play, lays the foundation for conversation. Early words are used to express instrumental (I want), regulatory (Do what I tell you), interactional (hi; and several other functions.

Between 18 and 30 months symbolic play, use of imaginative speech, beginning of discourse, answering guestions, use of descriptions, expressing some feeling, dieictic use of pronouns and ability to change topics are seen.

Between 3 and 4 years, switching of code when speaking to a baby, recognition of two words, increased ability to maintain conversation beyond several turns, especially if monitored by an adult develops.

Between 4 and 5 years, metalinguistic use of language antonym, synonym, rhyming words and indirect reguests emerge.

Grade school age- here at least 3 language codes develops. Can tell puns and stories and follows most rules of discourse.

High school age - artistic use of language begins.

Understands jokes, sarcasm and social etiquette, but not necessarily debate and parliamentary rules.

Muma (1978/ gave the developmental stages in proxemics, an important aspect of pragmatics. It is the proximity or physical distance one has while interacting with another. The developmental stages are as follows.

From birth to 3 years - intimate stage - where children learn the closeness of communication with their mothers, other members of their family and caretakers. They touch, desire hugging and profit from "close" communication.

Between 3 years to 7 years - personal stage - where children talk, but much of their activity is self centred (egocentric), and they have not acguired an understanding of socialization to any great extent.

From 7 years to older - social and public stage - where they become more social, learn how to behave in social settings and can understand social relationship. Older children acquire an awareness of a "public" type of communication, particularly if the school settings offers the opportunity for performing in a public situation.

# TAXONOMY TO CATEGORIZE THE PRAGMATIC ASPECT OF LANGUAGE FUNCTION

Different authors give different taxonomies to categorize the pragmatic aspect of language function. This diversity in the pragmatic classification according to Klecan-Aker and Lopez (1984) is because of -

- 1. Varying purposes of the individual authors, their data and their philosophical points of view.
- 2. Varying degree to which discourse and social levels are considered.
  - eg. Utterance level which classifies speaker's intent independent of the utterance's function in relation to the prior utterance (asserting, prompting).

Related utterance which categorizes the purpose of an utterance with respect to the previous utterance (labelling may be an answer to a question;.

3. Some systems differentiate categories on the basis of message content while others are more concerned with the syntactic forms.

There are different levels at which the pragmatic or communication skills can be analyzed and any one message can be classified differentIaly depending upon the level of analysis selected. Roth and Spekman (1984a) and McCormick and Shiefelbusch, 1984. (Cited in Hess, 1984.) gave three major levels of pragmatic analysis.

- 1. Performatives/communicative intentions.
- 2. Presuppositions.
- 3. Conversational postulates and social organization of discourse.

Apart from these three levels, other areas of pragmatic functions are:

- 4. Propositions.
- 5. Presumptions.

To analyze communication behavior at any one of these levels, the

- 6. Functions of language and
- 7. The context in which an interaction occurs must be considered.

Thus, a comprehensive framework for assessing pragmatic abilities can be represented as follows:

1. Performative/communicative intention: It refers to the
 speech act, the act that the speaker, intends to carry out
 with his sentence - declaring, commanding, promising,
 asking questions. The focal point of speech act theory is
 the "locutionary act" which is the speech itself. The
 speaker's reason for communicating is analyzed separately
 from the locutionary act and is called as the
 "illocutionary act". The effect of the utterance on the
 listener is called as "prelocutionary act".

Eg. Speaker : "Beware of the dog" -> locutionary act.

Purpose : "Warn the listener inot to enter the yard)

-> illocutionary act.

Listener's : Staying out of the yard -> perlocutionary

action act.

Children have been found to use a wide variety of intentions. Few categories of intentions requests, responses, greeting, protesting, descriptions, acknowledgements, attention statements, conversational devices, and performatives. As the age advances, the range of intentions gets more refined and more sophisticated. Children also use different systems to convey their communicative intentions. Selection of a particular coding system will depend on the linguistic sophistication of a child. So a child may use gestural, paralinguistic and/or linguistic means to code intention. A child who is at the single word stage may encode certain intentions linguistically although relying on gestural means for conveying others. Failure to look at both forms may result in an inaccurate examination of a child's communicative abilities. For eg. child's pattern linguistic limitation rather may reflect a than restricted range of intentions. So, the linquistic structures used to convey an intention should be analyzed. For a young child classification system of semantic relations can be employed and for a more syntactically advanced child, messages can be coded for sentence types declaratives, negatives and imperatives;. leg. The degree of explicitness with which an intention is

expressed, from the most to least explicit and also the usage of directives that expect initiation as opposed to cessation of a behavior can be examined ieg. "Will you open the door"? vs. "Must you open the door"?) ^Leonard, Fulmer, Wilcox and Davis, 1978).

The different ranges of intentions and forms of intentions at different stages of language development are:

At the preverbal stage - the different communicative intentions are attention seeking, requesting, greetings, transferring, protesting/rejecting, responding/acknowledging, and informing, as given by Bates and Halliday, 1975; Coggins and Carpenter, 1981.(Cited in Roth and Spekman, 1984 a).

At the single word stage - the different communicative intentions are naming, commenting, requesting object, requesting action, requesting information, responding, protesting/rejecting, attention seeking and greetings (Dale, 1980; and Halliday, 1975).

At multiword stage - the intentions are requesting information, requesting action, responsing to requests, stating or commenting, regulating conversational behavior and other performatives as given by Dore, 1978. (Cited in Roth and Spekman, 1984 a).

The directive forms which develop are direct imperative, imbedded imperative, permission directive, personal need/desire statement, question directive and hint, given by Ervin-Tripp,1977. (Cited in Roth and Spekman, 1984 a).

2. Presuppositions: It can be defined as descriptions of what the speaker has chosen not to encode, the topic he chooses to highlight. It focuses on the ability of children to take the perspective of their communicative partner - role It allows to analyze the topic - comment taking. relationship inherent in every communicative Topicalization itself is viewed by Bates as an active process in which the speaker chooses which aspect of an array upon which to focus. What he eventually chooses is considered the comment, highlighted against a topic. In any communicative process, the speaker must infer information about their partners and the context in order to determine the appropriate context and form of message; likewise listener's must infer a speaker's intent rather than rely exclusively on a literal interpretation of what said. That is to say information which is not was necessarily explicit in a message but which must be shared by the communication partners if a message is understood. Shared information knowledge can or be established between interlocutors in several ways: Ву mutually monitoring same shared aspect of the physical setting or by sharing some general knowledge of the speech situation itself or of one's communicative partner (eg. age, status) or by mutually monitoring the preceding discourse.

The role taking skills necessary Tor communicative success inferred typically can be from the linguistic, paralinguistic and extralinguistic modifications that a child oakes when communicating with different partners, in different for different purposes and situations. Because there are currently no formalized coding systems available that addresses different aspects of role taking, the clinician will want be sensitive to to the informativeness of a child's messages as well as to variables related to social context.

Studies have shown that children even at the one word stage, tend to comment on those aspects of environment that are maximaly informative or communicative (Skarakis and Greenfield, 1982). So, the clinician should be sensitive to what the child chooses to talk about given situation-is the information novel or is it a is already given or comment on what known? Is the information coded gesturally or linguistically?

the different referents were clearly established for the listener? Does the child give information only about the objects present in the environment or about those not present also.

In addition to examining message information presuppositional abilities may be reflected in linguistic devices, including deictics, indirect/direct reference forms and other forms of cohesion. Of themselves, deictic terms are empty of meaning. Their interpretation depends upon knowing something about the communication act in which they play a role as given by Fiilmore, 1975. (Cited in Roth and Spekman, 1984 a).

Eg. of Deictics - persona, pronounces like "1 and you", demonstrative pronouns like "this" and "that", adverb of location like "here" and "there", adverb of time like "before", "after", "now" and "then", verb like "come", "go" and "bring".

The use of indirect/direct reference (a/the) is also contextually determined, if some one wishes to comment on a particular referent that is not contextually present, has not been mentioned previously, and about which the listener cannot be assumed to know, a competent speaker

will typically use a form of indirect reference (ie. a) as an introduction. Once introduced, the referent can be presupposed or assumed to be shared by the interlocutors and then may be referred to with a more definite form, such as "the" or a pronoun. Deictics and indirect/direct reference can refer to referents that are external or internal to the discourse, but there are other cohesive devices that function to establish relations that are entirely within the discourse. These include substitution, ellipsis and conjunction as given by Halliday and Hasan, 1976 (Cited in Roth and Spekman, 1984 a.).

The sensitivity of the child to the partner variables such as age, status, level of familiarity, cognitive level, linguistic level and shared past experience and how the child changes his speech in the degree of politeness, intimacy and linguistic form, pitch and intonation is very important to be considered for evaluation as given by Camaini, 1977 and Gleason, 1973. (Cited in Roth and Spekman, 1984 a).

Degree of explicitness of the message should be considered. The child should make modifications that reflect awareness of the channel available for

communication and feedback. As the number of channels and the means Tor communicating are reduced (eg. face to face conversation vs. telephone conversations) there is an increased burden on the speaker to compensate for this reduction of information by making the language used as clear and explicit as possible. This depends on the speaker's ability to assess the listener's information needs. The child also should recognize that rules governing behavior may change in difficult social environments such as home, playground and classroom.

3. Conversational postulates and social organization of discourse: The comprehension and production of discourse and conversation reguires abilities to relate utterances to each other over time (discourse) and to related utterances between among speaker (conversation;. and McCormick and Schiefelbusch, 1984. (Cited in Roth and Spekman, 1984 a; identified several aspects pragmatics of discourse and conversation like temporal spacing of pauses, asking guestions, handling digression, shifting topics, taking turns, entering and initiating conversations, leaving or terminating conversations. involves a child functioning within both speaker and listener roles and the ability to alternatively assume the responsibilities of each. Partners must address one

another, agree upon a topic, take turns developing it and make their contributions intelligible, relevant, truthful, unambiguous and appropriate to the situation and the partner. Whenever there is a communication breakdown, the interlocutors must be adept to initiate, maintain, terminate and shift topics.

- 4. Propositions: Bates, 1976. (Cited in Miller, 1978) describes it as the ability to use appropriate syntactic devices to signal underlying semantic meaning.
- 5. Presumptions: According to McCormick and Schiefelbusch 1984 (Cited in Hess, 1984) they are judgements about the capacity and needs of the listener in different social contexts. Competent communicators decide which of the many possible forms Tor a message will best serve the desired function, considering the participants and the context of the particular exchange. The speaker must know how to take into account information about what the listener already knows and does not know about the particular topic of exchange as well as information about the context.
- 6. Functions of language: It may be classified as communicative and non-communicative function. Language

that is directed to а listener and relies upon interpersonal relation is called dialogue and has According to Rees, 1978 (Cited in communicative function. Woolfolk and Lynch, 1982) communicative functions are to greet, to regulate, to exchange information, to express feelings and also for imaginative function like those used in games and fantasy and in metalinguistic function. Some language is not directed to a listener and has no communicative function, although it social, such language is known as monologue. A monologue that form of speech that occurs when the speaker ignores the presence of another person and directs the speech to himself according to Piaget, 1955 (Cited in

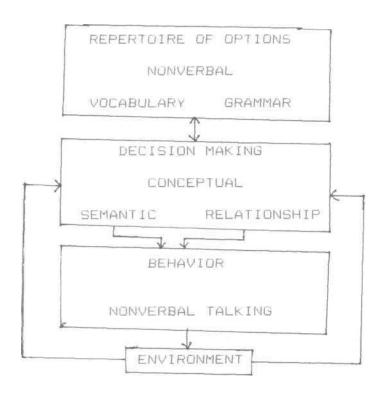
7. Context of language: Lund and Duchan, 1983 (Cited in Hess, 1984) discusssed the dramatic effects of four contexts on the ways language is cued and interpreted. They are (i) the situational context which reguires responsiveness to the physical setting, the speech event itself, the relationship between speech event and topic, (ii) the intentional context which reguires knowledge of both possible speaker intentions and the agenda, (iii) the reguires a physical perspective listener context deictic purpose; the background perspective associated

Woolfolk and Lynch, 1982.

with presuppositions and knowledge of role relationships which impact the linguistic code selected, (iv) the linguistic context requires knowledge and the abilities with linguistic cohesion devices, ellipsis and contrastive stress; and use of meanings established in previous utterances.

Woolfolk and Lynch (1982) give another context that social context which influence the form of language performance and comprehension. It includes the listener's relationship with the speaker, the shared intentions between them, the role of participants in communication acts and the presuppositions that the participants bring to the communication. These contextual variables influence the pragmatics of selection (production and comprehension) or interpretation context as well as form and style.

Hubbell (1981) gave a model of pragmatics which emphasizes mainly on the environmental or context in which communicative decisions are made. Environment is an all inclusive term for whatever is present in the communication situation, including listener's and all other stimuli.



In this model, decision affects behavior, which affects the environment. At the same time, the environment affects both conceptual - semantic and relationship decisions. Performatory acts are represented by the links between decision making and feedback from the environment. The environment can vary in how responsive it is, thus influencing the degree and efficiency with which decisions involve new learning. It is of great clinical importance that listener's themselves can be representative environments. The model highlights four areas that are at the heart of intervention. They are child's repertoire, conceptual semantic decision, relationship decision and environment. Communication behavior is where we can see

the dynamic ties among these four. In order to change the behavior we need to change all the four or combination of three.

ASSESSMENT/EVALUATION OF PRAGMATIC ASPECT OF LANGUAGE FUNCTION:

Assessment of pragmatic skills is very important while evaluating any speech-language disordered population for the following reasons - Children may have command over a number of pragmatic functions at a time when their vocabulary and syntax are limited as given by Dore, 1975; Ingram, Greenfield and Smith, 1976 (Cited in Dale, 1980). Ingram, based on several distinct investigations suggests a rapid expansion of the range of pragmatic functions during the one word and very early two word phrases. Halliday, 1975; Greenfield and Smith, 1976 (Cited in Dale, 1980) on the basis of intensive studies of one and two children respectively state that a relatively universal sequence of emergence of functions can be observed. There is also evidence that pragmatic development is an independent dimension development. Snyder, 1978 (Cited in Dale, 1980) studied language impaired children and found that they were more syntactically. delayed pragmatically than they were Moreover, pragmatic development is often hypothesized to be

the aspect of language most closely tied to cognitive development as given by Bates, 1976 (Cited in Dale 1980). Thus, pragmatic measures might be much more fruitful for investigating the relationship of language and cognitive development than the measures of syntax and vocabulary.

Assessment of pragmatic language function aids in fulfilling two major objectives of assessment ie. to determine the effectiveness of a child as a communicator and to provide recommendations regarding appropriate intervention strategy.

#### 1. General assessment Guidelines and Considerations:

Assessment can be done using structured elicitation tasks or low structured observation. There are studies supporting and criticizing both the methods. Klecan-Aker and Lopez (1984) state that a structured setting may not be able to assess all the language functions which children might use in a spontaneous conversation. Children also respond to guestions of unknown adult researchers by a stubborn refusal to utter anything other than monosyllables. They may apparently produce illogical or inappropriate response as a result of misperception of the artificial testing context in which guestions are presented. Coggins, Olswang and

Guthrie(1987) did a longitudinal study to examine effectiveness of low structured observation and structured elicitation tasks, to obtain communicative intents thirtyfive children, who were in their sensory-motor stage. The subjects, nine months of age at the onset of the study were observed under the two experimental conditions for a period of fifteen months. The results indicate that low structured observational method appeared to be an inefficient means for obtaining requests from young children. method, objects are easily accessible and mothers generally follow their child's lead and provide too few opportunities for the child to encode intentional request. On the other hand, the elicitation procedures were used successfully by experimenters to elicit intentional requests children who did not produce them spontaneously. best means for sampling requests is through structured tasks where the eliciting context provides specific response opportunities and tangible reinforces. It was also found that directly eliciting a behavior of interest had relatively little effect on comments until late in the second year. This could be because, the elicitation tasks obligate the experimenter to control and manipulate the material and direct the child's attention, whereas children seem most likely to comment on objects, actions and events that they find interesting. Children also tend to comment or share information in a clinical setting, when their communicative partner is their mother or familiar adult rather than a stranger. Thus, a familiar adult interacting and responding naturally to the child's attempt to share information, appears to be the combination most likely to yield a representative sample of children's ability to encode an intentional comment.

Roth and Spekman (1984 b) opine that, to assess a child's functional use of language, meaningful contexts, familiar settings, age appropriate and motivating activities should be sought instead of atypical situations with specific isolated components of linguistic Considering the varying demands of different communicative interactions, the author gives ways for accomplishing variety of contexts, that is by either varying the communication partners like observing the interaction with peers, other age group children, familiar and unfamiliar adults or by varying the constraints of the physical setting that is face to face interactions, and telephone conversations. The topic, task and size of the interacting group can also be manipulated.

The goal of data collection is to obtain a sample of behavior that is representative of the full range of capabilities. Although it is ideal to assess a child's

performance in naturalistic settings, it has its own limitations, for instance such data is always limited by what a child produces. The absence of a particular communicative intent or failure to initiate a new topic cannot necessarily and conclusively say that such skill is not part of a child's repertoire. Although a child may evidence a particular communicative behavior, it may not be demonstrated with sufficient frequency to assess it adequately. To compensate for these problems it is necessary to supplement naturalistic observations with more structured evocation procedures. But care should be taken to see/check whether or not a specific task actually measures the skill area interest before it is used as a clinical tool.

To perform multiple analysis of a communicative behavior, a permanent auditory and visual record is necessary since videotaping is expensive and time consuming, alternatives like checklist, rating scales, use of multiple observers (each focusing on different behavioral component) ongoing behavioral descriptions and audiotaping should be done. Since these observations are subject to variability careful interpretation is required.

### 2. Activities/Procedures to Assess Communicative Intentions:

A variety of activities and procedures were employed to obtain various communicative intentions. Eg. Requests of objects have been evoked by exposing children to enticing objects. Requests for action were obtained with a variety of interesting topics which could not be opened or used by the child without adult assistance (Cited in Roth and Spekman, 1984 b,.

To evoke imperatives and declaratives, Dale (1980) gave the following procedure: For declarative tasks, experimenter may put a brightly colored block in a child's pail, then took it out and gave it to the child, and gestured or helped the child to put it in the pail. Then another block was presented. If the child would not spontaneously place the block in the pail, the experimenter assisted, and then presented а third block, when the child had spontaneously placed three blocks in the pail, a doll was presented. For imperative tasks, the experimenter presented the child an attractive toy packaged so the child required assistance. To elicit request responses, the child may be given taped together scissors, pencils with broken points, a puzzle with missing piece and paint without brushes.

Shulman (1986) gave the test of pragmatic skills to assess three through eight year old children's use of language to signify, conversational intent. A set of four guided play interactions (tasks; serve as the medium through which these pragmatic behaviors are assessed. All tasks are administered to the child regardless of their chronological age. Each task is administered using the materials and dialogue (examiner probes; provided. The probes are included to assist the clinician in eliciting appropriate conversational intentions from the child.

To assess comprehension of intentions Leonard, Wilcox, Fulmer and Davis, 1978 (Cited in Roth and Spekman, 1984 b). gave directives to listeners which can be used. Eg. "Can you open the door?" for which the listener complied with the reguest or performed an action other than the one reguested. Comprehension was measured by asking the subjects to make judgements regarding the appropriateness of the listener's response. A child's failure to comply could have been due to lack of comprehension of the directive form or to an inability to make metalinguistic judgements. In summary, the clinical assessment of communicative intent involves getting some idea of the types and forms of intentions comprehended expressed, non-verbal and paralinguistic means and for communicating intent and the social conventions that govern interpretation and selection of particular linguistic and non-verbal forms of intention.

### 3. Activities/Procedures to Assess Presuppositions:

Myers, Myers and Abramoski, 1981 (Cited in Roth and Spekman, 1984 b) presented kindergarten and third grade children with paired pictures to examine their strategies for understanding and expressing new vs. old information. Each picture pair was identical except for an obvious detail leg. cat standing on chair, cat lying on chair). For the receptive task, the children were asked to choose the better of two words presented by the examiner to describe the second picture in the context of the first. Expressively they were instructed to say a single word that best described the second picture.

Wallach and Lee,1981 (Cited in Roth and Spekman, 1984b) create different situations in which children have to play a role. Eg. A child is asked to pretend that he and a friend are waiting for a bus to go to the zoo. Buses with three different routes stop at the corner. The child does not know which bus to take, but his friend knows. The child sees the bus coming. What should he say? Appropriate utterances include "Is this the right one"? or "Should i take this

bus"? Similalrly, if he is asked to pretend that he is alone in the same situation, then the appropriate utterances would be directed towards the bus driver like "Will this bus go to zoo?" etc. In other words the child has to make different assumptions about shared knowledge and make his messages more explicit.

Roth and Spekman '1984 b) state that referential tasks are used to assess the presuppositional abilities. One child (speaker; is responsible for describing something so that a partner can either select the object described or construct the pattern. This referential task provides an opportunity to examine the role taking abilities. The communication roles can be altered by having a child initially act as a speaker and subsequently assume the listener role. When the child is in speaker's role, the clinician can assess the child's amount and clarity of information. When the child is in the listener's role, the clinician can assess the child's ability to deal appropriately with the information provided. The topic of conversation can be manipulated by introducing different materials and problem solving activities. Eg. A verbal problem solving task for normal and disordered preschool children that reguires two players. players' are seated opposite one another at a table and separated by a game device. The device is a large structure

containing ten small toys and lever which а can be manipulated to pick up and move the toys. The children are exposed to different views of the apparatus. The speaker seens four different toys displayed in a row in front of him/her. Above each toy is a bucket. The listener sees all ten toys, four of which are identical to those seen by the The remaining six are similar but not identical. The listener has access to the lever and sees the tops of the buckets. Both the speaker and the listener see the same four bulb lights, one above each bucket. The speaker's job is to describe to the listener the toys to be selected and their correct placement. The listener's job is to manipulate the lever to pick up and deposit the toys described. When the is deposited into the correct correct toys bucket, the lit corresponding light bulb is through a mechanism controlled by the examiner. The game permits face to face communication. A wide variety of role-taking skills can be evaluated with this kind of problem solving activity. selection of materials will be based on the child's level of Variations can be made in the task in terms of functioning. the communication partner (in terms of age, cognitive level and degree of familiarity) in the channels available for communication and the guantity and guality of feedback to the child.

### 4. Activities/Procedures to Assess Conversations and Discourse:

Ninio and Bruner, 1978 (Cited in Roth and Spekman, 1984 b.) state that social routines such as peekaboo, give and take games, book reading tasks, greeting and farewell rituals can be extremely useful. Dale (1980) is of the opinion that parent-child play interaction is a useful source to assess pragmatic abilities. Roth and Spekman (1984 b) state that simulated situations and role playing tasks can be employed to examine a child's ability to initiate conversations in different contexts for different purposes. Making telephone call, seeking assistance in a store, asking directions to a particular location serve as good formats. Shulman (1986) gave a language sampling supplement analysis of conversation. They analyzed it based on child's ability to take turns, his/her dominance while speaking, his/her ability to maintain and shift a topic. He considers that a free play situation would give a good sample or the child's verbal and non-verbal behaviors which can be analyzed. Lastly, the selection of specific assessment activities will be determined by the child's chronological age, general cognitive sophistication and language comprehension level.

Assessment in the area of pragmatics is still very much in the experimental stages and our knowledge of normal developmental sequences is far from complete. Concerns raised about a child's functioning in one or more areas must be followed up with series of phases that attempt to identify the underlying difficulties that may be contributing to the communicative problems observed. Thus, the pragmatic abilities of a child must be evaluated within the context of linguistic, cognitive and social development.

There are not many studies avaiable on pragmatics in Indian languages. Further, there are hardly any pragmatic tests available in any of the Indian language. This study will aim at evaluating children's use of language to signify coversational intent in Tamil. It will be based on the test design given by Shulman (1986; in his Test of Pragmatic Skills. The reason for basing this test on Shulman's Test of Pragmatics are:-

i) Though there are different assessment procedures for pragmatics skills given by different authors none of them give a concrete and standard method of eliciting the response be it in terms of materials used, probes used ito obtain appropriate conversational intent) or context studied. This test not only assesses pragmatic

skills in different contexts but also the materials and the probes used are constant, rendering the test more objective and reliable.

- ii) Many of the pragmatic assessment procedures do not give a quantitative result or outcome. But this test uses a five point rating scale to give more accurate and quantitative outcome. This would contribute to better inter-professional communication which is very essential for successful rehabilitation of the child.
- iii) The test would also help to quantify the improvement seen after therapy, in pragmatic skills. Thus it can be used to evaluate the efficacy of therapy.
- iv) Since it is more objective, it has a better face validity.

To conclude, it is evident that to date there are limited resources for determining how children verbally adapt to various communicative context. We know far more about the actual codes used in communication than we do about how these codes change according to the communicative contexts. Limited information is available on how children perceive different interaction contexts. So, this study is an attempt to develop a screening test of pragmatic skills in Tamil.

#### METHODOLOGY

Language may be used to serve a variety of functions including naming, reasoning, requesting and denying. The function that a speaker expects a message to serve, may be termed as the communicative or conversational intention. It is this intention of the speaker rather than the specific syntactic structure or the semantics that enables the speaker and the listener to maintain a conversation. 50, it becomes crucial for a child to be able to structure and interpret the conversational setting in order to appropriately carry out the communication both linguistically and socially.

There are limited linguistic measures that are sensitive to the above functional pragmatic communication development of children. Most of the tests available study syntactic or semantic measures which are appropriate for the analysis of the conversational intentions of the children.

The aim of the present study was to construct a pragmatic test in Tamil which would serve as a clinical tool to identify the pragmatically disordered children. This best is based on the test design given by Shulman in the "Test of Pragmatic Skills" which consists of four tasks with examiner probes.

# Test Design:

The test of pragmatic skills assesses 3 year through 6 year old children's use of language to signify conversational intent. A set of four guided play interactions (tasks) serve as the medium through which these pragmatic behaviors are assessed. All tasks are administered to the child regardless of chronological age. Each task is administered using the materials and dialogue (examiner probes) provided. Examiner probes are included to assist the clinician in eliciting appropriate conversational intentions from the child. The test is designed to provide information on ten categories of communicative intentions expressed by the children. They are:

- (1) Requesting information
- (2) Requesting action
- (3) Rejection/Denial
- (4) Naming/Labeling
- (5) Answering/Responding
- (6) Informing
- (7) Reasoning
- (8) Summoning/calling
- (9) Greeting
- (10) Closing conversation

In order to provide an effective and comprehensive description of the child's language, and thereby providing an effective diagnosis which will facilitate effective treatment, the author suggests implementation of additional assessment instruments to determine the child's receptive and expressive language abilities at the syntactic and semantic levels of communication development.

### Test method:

This test is typically administered on the floor in order to create a "non-testing" environment for the child. It uses guided play, naturalistic social interaction and contextual cues, which makes it a formal and conversational/naturalistic pragmatic assessment tool. The effects of changing communicative contexts on the child's ability to demonstrate conversational intent represents a novel feature of the test.

### Administration and scoring:

# Pre-administration guidelines:

Before administering the test, the author emphasizes that the clinician should be familiar with the assessment tasks, categories of conversational intention and scoring

procedures. The clinician should also establish rapport with the child through spontaneous conversation. The test is to be administered on an individual basis in a quiet room, with the child and clinician seated on the floor, mainly to reduce "test anxiety" and to maximize naturalistic social interaction.

# Test Materials:

It consists of -

- (1) Test manual
- (2) Manipulatives kit
- (3) Task score booklet with normative data summary sheet.

## Administration guidelines:

The set of four assessment tasks should be presented in a numerical sequence. The details of the assessment tasks are as follows:

Breakdown of assessment tasks:

Task	Context-type	No.of probes	Type of intentions
	Playing with puppets	10	Greeting Answering/Responding Informing Naming/Labeling Rejection/Denial Requesting information Reasoning Closing conversation
	Playing with panel and sheet of paper	7	Summoning/Calling Requesting information Requesting action Informing Answering/Responding Rejection/Deniel Reasoning Naming/Labeling
	Playing with telephones	9	Greeting Answering/Responding Informing Requesting Information Naming/Labeling Closing conversation
	Playing with blocks	8	Requesting Information Requesting action Rejection/Denial Naming/Labeling Answering/Responding Informing.

Total 34

The examiner probes should be read verbatim, to maintain consistency in administration and also to elicit appropriate conversational intentions. If child fails to respond after the initial trial of any examiner probe, it may be repeated only once.

Eg. Of probes.

Context: 2 puppets are engaged in a conversation about a favorite television show.

Probes: 1. I'd like you to meet two ot my friends. (Clinician says this to the child and displays the 2 puppets)

(Waits for child's response).

- 2. Let's play with them! Which one do you want? (Waits for child to select the puppets, after which the clinician will present the probes).
- 3. Let's talk! Hi! (Wait for child's response).
- 4. How are you today? (Wait for child's response).

## Scoring :

The responses are scored on a rating scale ranging from 0 to 5 according to the appropriateness and linguistic sophistication of the child's responses to probes.

No.	Score	Description						
1.	0	No response.						
2.	1	Contextually inappropriate response.						
3.	2	Contextually appropriate non-verbal/gestural response only.						
4 .	3	Contextually appropriate one word response without elaboration.						
5.	4	Contextually appropriate one word response with minimal elboration.						
6.	5	Contextually appropriate response with extensive elaboration.						

Since the elicitation of conversational intention is of primary importance here the clinician should first judge the child's responses in terms of conversational context appropriateness; and then in terms of response length.

For data analysis and interpretation purposes, the mean raw score for individual tasks (1, 2, 3 and 4) which is total score for each task and the "Mean composite score" is determined. To calculate the "Mean composite score (MOS), add the four raw scores (of the 4 individual tasks) and divided by 4.

To determine the child's percentile rank, from the Table provided for the same in the normative data, locate the appropriate chronological age group and the value that is closest to the child's MCS. Note the corresponding percentile value.

## Normative data summary sheet:

After identifying the child's particular chronological age group, the clinician should plot the child's MCS and individual task scores on this sheet. In doing, so, the clinician can visually determine how well or how poorly the child has performed in relation to normal children of the

same age group. The clinician can also observe the presence or absence of a deficit in using language to signify conversational intent. The clinician can also determine those conversational intentions that were absent from the child's repertoire or those in which he scored less by referring the specific task score sheets. They can be recommended for clinical treatment.

## Standardization:

The standardization sample consisted of 65U Anglo middle class children between the ages of 3 year to 8 year 11 months with a minimum of 100 children under each age range.

All subjects were free from any speech, language or hearing deficits as determined by results of screening test for auditory comprehension for language. All of them were "normal achieving" children and had reached the multiword stage of expressive and receptive language development. The number of male and female subjects was approximately egual. They were selected from 4 geographic regions - North-East, North-Central, South and West.

## Item analysis:

The 34 probes and associated pilot study data were subjected to quantitative methods for examining and

controlling item difficulty (proportion of subjects who responded appropriately to an item). The results of item analysis revealed difficulty values ranging from 50% to 90%. Due to the nature of the test, each examiner probe could conceivably yield more than one contextually appropriate ("correct"; response. This is because, given what an examiner says and the communicative context, a child can interpret the examiner's utterance in more than one way and, in turn, select from a variety of contextually appropriate responses.

### Normative data:

The mean performance data across individual tasks, the mean composite scores and the percentile ranks corresponding to MCS are provided.

### Reliability of the test:

It was examined by using test-retest-reilability and inter-examiner reliability.

Test-Retest-Rellability: The test was administered by the same examiner to the same children on two occasions approximately three weeks apart. The Pearson product moment coefficient of correlation yielded a test-retest-reliability co-efficient of 0.96, indicating that the test is consistent

and stable in evaluating children's pragmatic skills, over a short period of time.

### Inter-examiner reliability:

The rating scale was subjected to a test of interexaminer reliability which yielded a combined correlation coefficient of 0.92.....

### Content and construct validity:

The test has incorporated a variety of speech acts and a variety of guided play contexts which elicits the conversational intentions. The test's theoretical bases substantiate and describe its construct and content validity.

## Concurrent validity:

Attempts were made to establish concurrent validity. Since no other validated pragmatic assessment instruments were available for comparison, clinical judgements were used to examine this. Two clinicians were asked to evaluate the language sample transcripts of two standardization subjects whose chronological ages were 3 year 2 months and 8 year 9 months. Rating scale was used to score the subject's response. Correlation co-efficients were used to

quantitatively determine concurrent vaJidity inherent in clinician judgements which yielded 0.65 and 0.64 for each clinician respectively.

### Predictive validity:

No formal procedures were undertaken to quantitatively describe predictive validity. But the author hypothesizes that scores from the test can be used to predict young children's use of early discourse rules.

### Methodology of the present study:

The study was conducted in following steps:

- (1) Construction of the test
- (2) Establishment of norms.

### 1. Construction of the\_test:

The test consists of 4 tasks, each task consisting of several examiner probes which examines a range of intentions. The probes were translated into Tamil from Shulman's test.

A pilot study was carried out using the above materials, tasks and probes. One subject from each age group (3 year to

7.11 year) was included in the study. All the subjects had Tamil as their mother tongue and all of them spoke Tamil at The subjects had average or above average performance "The Tamil version of the test was administered at school. using the same procedure as given by Shulman in his test. was found that subjects responded well to all tasks except Task-1 ie. playing with puppets, where the probes were about a favorite T.V. show. The subjects either gave one word or inappropriate or no response for this task. This could be because of lack of interest/exposure to T.V. shows. more familiar topic to all age groups le conversation about a favorite game was taken up as the task. This was again administered to the same group of subjects and it elicited a good response. So, for the present study it was decided that for Task-1, that is playing with puppets, the probes would be about a favorite game. The changes made in Task-1 with reference to Shulman's original test are given in Table-A.

Table A listing the probes used on Task-1 iTwo puppets engaged in conversation ) in the current study with reference to Shulman's original test. (Ne/.(:  $pa^c$ ).

Probes used in the pre- sent study	Probes used in Shulman's test
1. Let's talk! Hello!	Lets talk! Hi.
2. How are you?	How are you to-day?
3. Do you like to play?	I like to watch TV
4 Tell me which is your favorite game.	Tell me what your favorite TV show is?
5. I don't know about that game. Tell me about it.	I've never watched that show. Tell me about it.
6. How many people can play that game?	Who are good guys on your favorite TV show?
7. Do you know what my favorite game is?	Do you know what my favorite TV show is?
8. I like to play	I like
9. You spoke well with me. Bye-Bye.	Thank you for talking with me. Bye-Bye.

It was also observed during the pilot study that the subjects responded better if they had a better rapport with the test administrator and if there are not much distractors in the room both in terms of people and materials. These factors were also considered while carrying out the original study.

The details or the probes in Tamil are given in Appendix 1a and 1b.

### lest materials:

- A 1. Two puppets
  - Pencil, paper and picture (of circle, square and plus).
  - 3. Two toy telephones
  - 4. Ten wooden blocks.
- B Booklet of probes, task scores sheet (Given in Appendix-2).
- 2. Establishment of norms:

The test was administered to twenty-five normal children in the age range of 3 to 8 years of Madras city. Five children were tested in each of the five age groups.

The subjects selected were those:

- a) Whose mother tongue was Tamil
- b) Who did not show any physical or sensory deformities,
- c) Whose speech and language was appropriate tor the age (as reported by parents or concerned teachers).

## Procedure for the administration of the test:

As a first step, the teacher or parents of the children were interviewed to obtain information regarding the child's

mother tongue, physical abilities and speech and language appropriateness. They were also told about the purpose of study in brief. The name, class and the the exact chronological age of the child was noted along with date of birth. As a second step, the child was conversed with, made Then, the four to feel comfortable, and rapport was built. assessment tasks were presented in a sequence. The probes were read verbatim, to maintain consistency in administration to elicit appropriate conversational intention. Each probe was repeated only once. The conversation between the tester and the child during the process of the entire test was audio-taped and any gestural/non-verbal responses of the child were noted down, in a response sheet which is given in the Appendix 2. The subject was motivated to do his/her best by giving verbal reinforcement such as "Good", "You are smart" etc. generously. The subject was given reasonable amount of time to respond to each probe. However, if he/she did not respond, the examiner shifted to the next probe.

Scoring: The child's responses were rated on a six point rating scale.

- 0 No response
- 1 Contextually inappropriate response
- 2 Contextually appropriate non-verbal or gestural response only.

- 3 contextually appropriate one word response without elaboration.
- 4 Contextually appropriate response with minimal elaboration (two or three words).
- 5 Contextually appropriate response with extensive elaboration (more than three words;.

The subject was rated during the process of test administration and this was counterchecked with the audio recording later on.

### Difficulties during test administration and scoring:

- 1. It takes a long time to build rapport with the younger age groups (3 years to 5 years).
- 2. Noting down the minute details of the non-verbal responses except the most obvious ones which were seen along with or without the verbal responses was found to be difficult. This was because it was difficult to attend fully to both non-verbal and verbal response simultaneously and also keep up the conversation. This can be overcome by video recording the entire conversation, so that the non-verbal responses can also be evaluated later on, after the test is completed.

The details of the analysis of the data, thus obtained is presented in the next section.

#### RESULTS AND DISCUSSION

The test of pragmatics was administered to 25 children in the age range of 3 year to 8 year. They were divided into five groups with one year interval. Five children were tested in each group. The test was scored cm a rating scale ranging from 0 through 5.

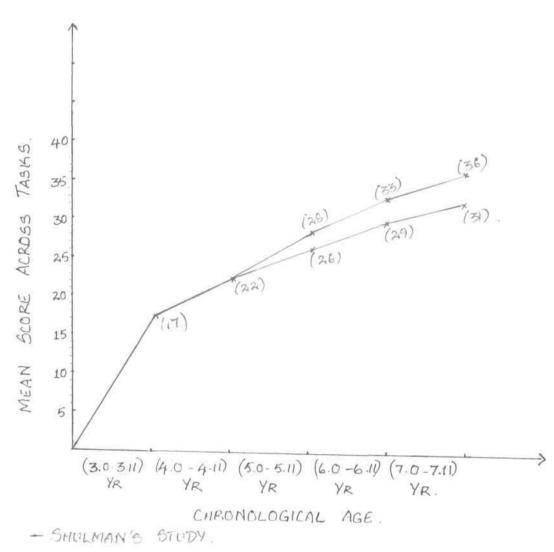
Given the methodological difficulties and small sample size, the test was not subjected to any statistical measures. However, mean and standard deviation of the scores obtained for each of the five age groups were calculated.

The details of the results are as follows:

TABLE-1: Mean composite scores (MCS) and Standard deviation (SD) for all groups of subjects across all tasks combined.

Chronological age group	N	MCS	SD
3.0 - 3.11	5	17	3.56
4.0 - 4.11	5	22	3.06
5.0 - 5.11	5	26	1.62
G.U - 6.11	5	29	1.64
7.0 - 7.11	5	31	2.09

The results, as in lable-1 for all tasks combined indicate that there is an increase in the development of communicative intent from age 3 years to 8 years. This



- PRESENT STUDY.

FIG 1: COMPARISON OF THE MEAN SCORES OF SHULMAN'S STUDY AND THE PRESENT STUDY.

result is in agreement with the stages of pragmatic development identified by Woolfolk and Lynch (1982/,

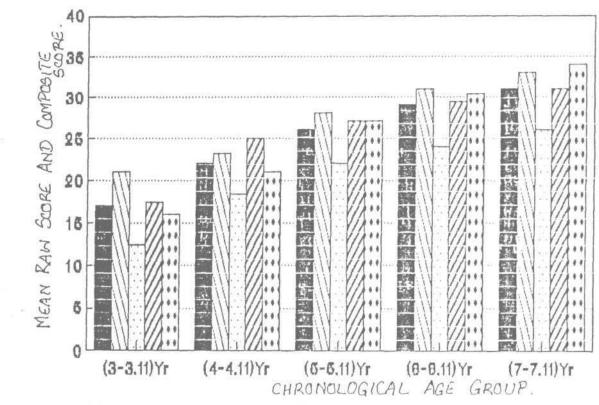
TA8LE-II: Comparison of the mean scores across all tasks combined between Shulman's and the present study.

Chronological		N Mo		ls.	SD	
age group	P.S.	S.S	P.S.	у. у.	P.S.	s.s
3.0 - 3.11	5	110	17	17	3.56	8.29
4.0 - 4.11	5	1 14	22	22	3.06	9.15
5.0 - 5.11	5	103	26	28	1.62	8.24
6.0 - 6.11	5	109	29	33	1.64	6.44
7.0 - 7.11	5	1 10	31	36	2.09	5.81

PS - indicate present study

SS - indicate Shulman's study.

Comparison of the results of the present study with Shulman's (1986) study as shown in Table-II and fig.j indicate that in both, there is an increase in the development of communicative abilities from age 3 year to 8 year. But in Shulman's study, the communicative abilities improves considerably even after 5 years of age unlike the present study, where the improvement is not much iSee Fig.1). could be due to the fact that (i) In America (where Shulman's study was taken up; children start going to school only by 5 year of age, so more and better interaction with the peer groups occurs at that age, thus leading to improvement in the communicative abilities. (ii) In India children start attending school by 3 year of age itself, so the increase is largely in the 3 year to 5 year age level. Further, the



MCS MEAN COMPOSITE SCORE FOR ALL TASKS COMBINED

FIG. 2: SUMMARY SHEET.

educational set up in India, particularly as the child grows older is more rigid with a greater amount of one way interaction in formal set-ups and the comparative lack of conversational initiative on the part of the Indian child, may be attributed to these cultural differences. In general as the age advances the standard deviation scores reduces, which is similar to Shulman's study, indicating greater uniformity of performance with increase in age.

TABLE-III: Mean scores of all tasks for all age groups.

Age	Task-1	fask-2	fask-3	Iask-4
3.0 - 3.11	21	12.4	17.4	16
4.0 - 4.11	23.2	18.4	25	21
5.U - 5.11	28	22	27	27
6.0 - 6.11	31	24	29.4	30.4
7.0 - 7.11	33	26	31	34

Task-1 - Playing with puppets

Task-2 - Playing with pencil and sheet of paper

Task-3 - Playing with telephone

Task-4 - Playing with blocks.

Details of the results of each of the tasks across all age groups studied are shown in Table III and Fig.II. It appear that for Task-1, where the context is playing with puppets, the mean scores are seen to increase with age, that is from 3 years to d years with greater increase between 4 years to 6 years. This improvement between 4 years for years could be because, the task involves probes like "Tell me the details of your favorite game". "How many people play that

game?" etc. which requires complete knowledge about the game and the ability to express the knowledge well. Though a 3 year old might know a game and play it, when asked about the details of it, he may not be able to express well, which the 5 year old and 6 year old are able to do. Between 6 years to 7 years and 7 years to 8 years the increase in scores is not much. This could be because after 6 years, the increase in scores is only in terms of their utterance length (the scores remained the same for any utterance length greater than 4 words; but the information content given in response to probes is not different from the 4 years to & years age group.

For Task-2, where the context is playing with pencil and sheet of paper, the scores increase with age, that is from 3 years through 8 years with greater increase in scores between 3 years to 6 years. This could be because the task involves probes which reguires description of 3 pictures that is circle, square and plus, the concepts for which develop well between 3 years to 6 years. After 6 years le. between 6 years to 8 years, the increase in score is not much because the responses are only more refined, but the content remains the same.

For Task-3, where the context is playing with telephone, again the scores increased with age that is from 3 years through 8 years with greater increase in scores between 4 years to 5 years. This could be because the probes used in this task like "Hello! How are you?" "What did you do today?" "Do you like dogs?" etc. expect the child to respond appropriately and in return address the experimenter in a similar fashion. For eg. for the first probe the response would be "I'm fine" and requesting information back from the experimenter by asking him/her, how he/she is. This ability is seen to develop well by 4 years of age.

For Task-4, where the context is playing with blocks, the scores are seen to increase with age from 3 years to 8 years, but the increase in score was greater from 4 years. This could be because this task involves probes like "Make an Imuga", "Imuga is a home for animals". "Can people live in that home?" "Why do you use staircases?" etc. wherein for the first probe since Imuga is a nonsense word, the child has to say that he does not know what Imuga is, and should reguest the experimenter/clinician to explain about it. Similarly for the probe "Why do you use staircase:'" the child has to give reasons for using it, which would be difficult for a 3 years old, though he might know what a staircase is. But

from 4 years onwards, these abilities of reasoning: develop to a better extent than the 3 years old.

Considering the score between the four tasks, it is clear that Task-2, that is playing with pencil and sheet of paper is the most difficult one las seen from the scores) than other tasks for all age groups i3 years through 8 years). This could be because of two reasons.

ii) The probes used in this task did not initiate the child to start the conversation first before the examiner, as expected. The context for the task was as follows; the examiner displays some pictures of three different shapes and asks the child to draw them, without giving the child a pencil to draw. The expected communicative intent from the child would be rejection to draw and to reguest action/information, that is to ask for a pencil. But none of the subjects who participated in the study came out with both the responses. They just asked for the pencil and some of them did not ever, give this response. Moreover, some more probes like "Oh! Oh'. 1 forgot to give you a pencil" and then asking guestions about the picture like, "Is this a circle?" have to be given in order to initiate and sustain a conversation.

(ii) The majority of probes used in this task are mostly close ended questions like "Is this a circle?" "What is this?", "Which of these pictures do you like the best?" They are most likely to elicit only one word responses, best for one word responses the score in the rating scale is only 3, thereby decreasing the overall scores obtained by subjects. The children did not expand on the response on their own as expected. Whereas, in the other tasks, the probes used were mostly open ended thereby capable of eliciting more elaborate response and thus a higher score. So, use of correction factor in the rating scale for scoring this task alone, would be appropriate. But, for the present study correction factor was not included.

Following Task-2, the difficulty of tasks in decreasing order is as follows: Task-4 (playing with blocks), lask-3 (playing with telephones), lask-1 (playing with puppets).

Task-1 (Playing with puppets) is the most easiest of all tasks which could be because, it involves, conversation regarding a favorite game, which all children are familiar with, thus eliciting good score. Task-3 (playing with telephone) is slightly difficult than Task-1 (playing with puppets.' which could be because this task is such that the

child has to assume that he is taiking over a telephone, where face to face conversation is not present, thus poorer scores. Following Task-3 (playing with telephone) Task-4 (playing with blocks.' is more difficult, this could be because it involves conversation about home for animals, which are more abstract for the child to imagine, thus the task is more difficult than lask-3 (playing with telephone;.

TABLE-IV: A comparison of the mean scores corresponding to all groups of subjects across individual assessment tasks between the Current study (CS; and Shulman's study (SS).

Age	Table-I		Task-	Task-II		Task-III		Task-IV	
	CS	SS	CS	SS	CS	5 5	CS	SS	
3.0 - 3.11	21	17	12.4	16	17.4	19	16	14	
4.0 - 4.11	23.2	21	18.4	22	25	24	21	20	
5.0 - 5.11	28	29	22	26	27	3 0	27	28	
6.0 - 6.11	31	34	24	29	29.4	33	30.4	35	
7.0 - 7.11	33	3 6	26	31	31	3 7	3 4	39	

As given in Table-IV, it can be observed that in Tasks 1 and IV - the general trend is reflected ie. Indian children perform better at a lower age level, but fall behind their American counterparts, age 5 onwards - the possible reasons for this phenomenon could be early schooling of Indian children and cultural differences in terms of rigidity of Indian children, in initiating a conversation, which have been discussed in detail earlier.

In Tasks-II and III, the Indian children are performing consistently poorer than their American counterparts across all age groups. The possible reasons for the poor scores on Task-II have already been discussed. As to Task-III, the context of a telephone conversation may have contributed to the overall poor performance as not many Indian children have telephones at home. These two tasks may therefore have to be modified.

To conclude, despite the cultural difference this test can give a measure of the pragmatic abilities of children and the deficit in specific aspects of pragmatics if any present which can be used for planning therapy. Since this test is more objective and can be guantified, it can be used to evaluate prognosis of therapy in pragmatics. Thus, it tests the efficacy of the therapy techniques. However, more socially and culturally appropriate contexts can be included and it should be tested out in the same manner over a large population to get an effective diagnostic measures.

#### SUMMARY AND CONCLUSION

The present study was an attempt to develop a pragmatic test in Tamil. It is based on the pragmatic test given by Shulman (1986). It is expected that the test would detect any deficit in the abilities of children to carry on a social exchange, in realistic communicative contexts.

The test consists of four tasks with a total of 33 probes.

Task-1: Playing with puppets - 9 probes
Task-2: Playing with pencil and sheet of paper - 7 probes
Task-3: Playing with telephone - 8 probes
Task-4: Playing with blocks - 9 probes

The tasks were arranged in the order of difficulty. In order to elicit the appropriate response, the probes were given which served as a vehicle to get the responses. The test was administered to 25 Tamil speaking children in Madras city, all of whom belonged to middle socio economic status, with the age range from 3 years to 8 years (5 subjects in each group).

The data thus obtained was analysed to get the mean and standard deviation for each age group. The results indicate that there is an increase in the development of pragmatic abilities from age 3 years to 8 years. It can also be seen that there is a spurt in the development of communicative

intent between 3 years to 5 years for all tasks after which the development is not very dramatic. It was observed that Task-1 (playing with puppets) is the easiest task (where the conversation is about a favorite game) for all age groups followed by Task-3 (ie. playing with telephone), Task-4 (playing with blocks), and Task-2 (playing with pencil and sheet of paper; Task-2 was found to be the most difficult one rendering minimum scores for all age groups.

It is expected that this present test would be helpful in assessing the acquisition of communicative intent and in the assessing the pragmatically disordered population, thereby helping to plan therapy and evaluate the prognosis of therapy for Tamil speaking children.

#### Limitations:

- (1) It is applicable to only those children whose mother tongue is Tamil and reside in a Tamil speaking environment.
- (2) Age range is limited.
- (3) Number of subjects under each age group is only 5 ie small sample size.

#### Recommendations:

- (1 ) Modifications of Tasks 11 and 111 to make them socially and culturally more appropriate.
- (2) Validity of the present test should be checked by administering it to a large group of normal and some language disordered children.
- (3) Efficacy of the present test should be judged by its use in a speech and hearing clinic.

#### REFERENCES

- Bates, E. Bemgni, C, Bretherton, I., Camaiom, L., and Volterra, V. (1977;. Foundations of language. In E.C.Woolfolk, and J.I. Lynch. An integrative approach to language disorders in children. New York: Grune and Stratton.
- Coggins, T.E., Olswang, L.B., and Guthrie, J.(1987).

  Assessing communicative intents in young children: Low structured observation or elicitation tasks? Journal of Speech and Hearing Disorders, 52, 44-59.
- Crystal, D. (1981). In H. Gayathri. <u>Conversational analysis</u>
  <u>in</u> Aphasia Unpublished Master's Dissertation,
  University of Mysore, Mysore.
- Dale, P.S. (1980;. Is early pragmatic development measurable? Journal of Child Language, 7, 1-12.
- Halliday, M.A.K. (1975). Learning how to mean: Exploration in the development of language. London: Edward Arnold.
- Hess, C.W. (1984). The pragmatics of child language performance, Human Communication Canada, 8, 394-397.
- Hubbell R.D. (1981). <u>Children's</u> language <u>disorders: An</u> integrated <u>approach</u>. New Jersey, <u>Prentice Hall</u>.
- klean-Aker S.J., Lopez,B. (1984). A clinical taxonomy for the categorization of pragmatic language factors in normal preschool children. Journal of Communication Disorders, 17, 121
- Leonard, L.B., Wilcox, M., Fulmer, K.C., and Davis, G.A. (1978). Understanding indirect reguests: An investigation of chidlren's comprehension of pragmatic meanings. <u>Journal</u> of <u>Speech</u> and Hearing Research, 21, 528-537.

- Lund, N.J. and Duchan, J.F. (.1988). Assessing children's language in naturalistic contexts (2nd Ed.), New Jersey. Prentice-Hall.
- Miller, J., Chapman, R., Branston, M., and Reichle, J. (1980). Language comprehension in sensorimotor states V and VI. <u>Journal</u> of <u>Speech and Hearing Research</u>, 23, 284-311.
- Miller, L. (1978). Pragmatics and early childhood disorders:

  Communicative interactions in a half hour sample.

  Journal of Speech and Hearing Disorders, 43,

  419-436.
- Morris, C.W. (1946). In E.C. Woolfolk and J.I. Lynch. An integrative approach to language disorders in children. New York: Grune and Stratton.
- Muma, J.R. (1978). Language handbook Concepts, assessment intevention. New Jersey: Prentice-Hall
- Myklebust, H.R. (1954). Auditory disorders in children: A manual for differential diagnosis. New York:

  Grune and Stratton.
- Roth, F.P and Spekman, N.J. (1984 a). Assessing the pragmatic abilities of chidlren: Part I. Organizational framework and assessment parameters. Journal of Speech and Hearing Disorders, 49, 2-11.
- Roth, P.P., and Spekman, N.J. (1984 Assessing the pragmatic abilities OT children: Part 2. Guidelines, considerations and specific evaluation procedures. Journal of speech and Hearing Disorders, 49, 12-17.
- Schiefelbusch R. (1963) Language studies of mentally retarded children. Journal of Speech and Hearing Disorders, Monograph Supplement, 10,3-7.
- Shulman, B.B. (1986,. Test of pragmatic skill Arizona: Oommuncation skill builders.
- Skarakis, E., and Greenfield, P.M. .1982). "The role of new and old information in the verbal expression of language-disordered children. <u>Journal of Speech and Hearing Research</u>, 25, 463-467.

- Watzlawick, P., Beavin, J.H., Helmick, A.B., and Jackson, D.D. (1967). In L. Miller. Pragmatics and early childhood disorders: Communicative interactions in a half-hour sample. Journal of Speech and Hearing Disorders, 43, 419-436.
- Woolfolk, E.C, and Lynch, J.I.(1982). An integratie approach to language disorders in children. New York: Grune and Stratton.

#### APPENDIX-A

Pre-administration guidelines:

Before administering the test, the clinician should be familiar with the assessment tasks, catagories of conversational intention and scoring procedures. The clinician should also establish rapport with the child through spontaneous conversation. The test is to be administered on an individual basis in a quiet room, with the child and clinician seated on the floor, mainly to reduce "test anxiety" and to maximize naturalistic social interaction.

#### Test Materials:

- 1. Two puppets
- 2. Two toy telephones
- 3. Blocks

Procedure to administer the test:

The four assessment tasks should be tested in a sequence. The probes should be read verbatim, to maintain consistency in administration and also to elicit appropriate converstional intention. Each probe canbe repeated only

once. If the child does not respond to any probe, the clinician, should move on to the next.

The subject should be given reasonable amount of time to respond to each probe and the responses should be rated on a six point rating scale.

- o no response
- 1 contextually inappropriate response
- 2 contextually appropriate non-verbal or gestural respone only
- 3 contextually appropriate on word response without elaboration
- 4 contextually appropriate response with minimal elaboration (two or three words
- 5 contextually appropriate response with extnsive elaboration (more than three words)

The subject should be motivated todo his/her best by giving reinforcements such as "Good", and "you are smart". The entire test administration can be video or audio-taped, to countercheck the ratings later on.

#### APPENDIX la

Task-1

Context: Two puppets engaged in conversation about a favorite game.

Probes

- 1. Let's talk! Hello!
- 2. How are you?
- 3. Do you like to play?
- 4. Tell me which is your favorite game
- 5. 1 don't know about that game.

Tell me about it

- 6. How many people can play this game?
- 7. Do you know what my favorite game is?
- 8. 1 like to play cricket.
- 9. You spoke well with me. Bye-Bye.

Context : Child asked to copy line drawings of 3 different shapes.

Probes 1. I'm going to show you some pictues.

(clinician displays the shapes).

You should see and draw them.

(Clinician hands the task sheet to the child but does not give pencil).

(After a minute, when the child has not requested pencil, the clinician acts surprised and gives the next probe).

- 2. Oh! oh! I forgot to give you a pencil, here, take, the pencil.
- 3. Is this a circle?
- 4. How do you know its not a circle.
  (Clinician points to the cross and gives the next probe).
- 5. What is this?
- 6. Which picture do you like the best?
- 7. Now, turn the paper and draw a ball for me.
  When you're finished, let me know.
  (Clinician turns away from child).

#### Task-3

Context Telephone conversation.

Probes

- 1. Let's talk on those telephone. trring..trring
- 2. Hello! hpow are you?
- 3. What did you do today?
- 4. Today morning I got a pet puppy, do you like dogs?
- 5. What are all the animals that you have seen.
- 6. Which one do you like the best.
- 7. It's been nice talking with you today. I've to go.
- 8. (Probe 8 may not have to be given if the child closes the conversation in 7). Bye Bye.

#### Task-4

Context: Playing with blocks.

Probes: 1. Let's play with these blocks.

- 2. Make me an Imuga.
- 3. Imuga is a home for animals.
- 4. Can people live in that house?
- 5. Now, I'm going to build some steps. 1 need your blocks. Will you give them to me? (Clinician builds stairs. Child observes the clinician's activity).
  - (After building the stairs, clinician breaks them down and returns only one block to the child, intentionally withholding 4 blocks).
- 6. Here's a block. I'd like you to make the same stairs I just made.
- 7. (If the child asks for more blocks, clinician gives one additional block and continues to withhold the remaining blocks).
  - Here have all the blocks (if child requests for all of them).
- 8. Why do you use stair case?
- 9. 7ell me about the stair case in your house?

#### APPENDIX-lb

Task-l

Context : Two puppets engaged in a conversation about a favorite game.

- Probes 1. | Mama pesuvama? halo |. 2./jepadi irke?/
  - 3. unak vilajad pidakjuma?
  - 4. unak jend vilajat vilajad pidakuņu salrija 501.
  - 5. janaku ang vilajat patti onum terijag kondzm . solrija? sol
  - 6. jatana per vilajadvi: ng ang vilajat?
  - 7. janak jang vilajat pidakunu unaku tarijuma?
  - 8. janak kriket vilająt pidikum.
  - 9. samat jenku:d nata pesi:n tata.

#### Task-2

Context : Child asked to copy line drawings of 3 different shapes.

Probes

- 1. na ippa unkite padamkamipan ni ada patt varajnum. varandz mudandzdam jenkite solanum. Sarija.
- 2. aijaijo! na unku pensil koduk marandat ella, ing pensil.
- 3. ig vattama?
- 4. unak jepadi terijum id vattamillenn
- 5. igenna.
- 6. unk igale jed pidot∫irkanı solrija? sol.
- 7. pæ por tirpi akkavakk boll padm varandz kamikrija. mudandzdo solanum.

#### Task-3

Context : Telephone conversation.

Probes

- 1. nama rand perum fo:nle pesi vilajaduvoma..  ${\tt trigg \ trigg....}$
- 2. halo! japadi irka
- 3. inhik ni jenn paninenu solrija? sol.
- 4. innik k**a**lejle n**a o**ru n**a**ikuṭṭi va:ŋginen unk naikuṭṭi pidikumm**a**?
- 5. ni jennann animalsella patirk akkavakk salrija?-sol.
- 6. adal unk jad ramba pidikum?
- 7. jnkitte pesitarrandad romba nalla irudad.

  Janak velai irk fo:n vet∫idren.
- 8. tata

Context : Playing with blocks.

Probes: 1.akkaum niju indmarakattejod vilajaduvoma?

2. idale janak imuga panni kamikrija?

3. imuganna animalsod vi:d

4. nabalalellam and vi:tle irkmudijuma?

5. na ippo padikatt katt poren janak unod marakattejallam veņum ţrija?

6. nan panin madrije ni:jum padikatt kattrija?

7. ind alla kattigum.

8. jadakjallam nam padikatte pajan padtuvom?

9. ung vi:tle padikatt jeng irk?
ad patti solrija? sol.

OPPENDIX - 2

# JA5k-1

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## APPENDIX-2

## SCORE SHEET

## TASK-1

Probes	Observe Tor	Gestural/ non-verbal response		Score			
1.	Greeting		0	1 2	3	4 5	
2.	Answering/Responding		0	1 2	3	4 5	
3.	Informing		0	1 2	3	4 5	
4.	Naming/labelling		0	1 2	3	4 5	
5.	Informing		0	1 2	3	4 5	
	Rejection/Denial						
6.	Answering/Responding		0	1 2	3	4 5	
	Informing						
7.	Reguesting information		0	1 2	3	4 5	
8.	Informing		0	1 2	3	4 5	
9.	Closing conversation		0	1 2	3	4 5	

TASK-2

Prob	es Observe for	Westural/ Non-verbal response	Score					
1.	Responding/Answering		0	1	2	3	4	5
la.	Summoning/calling		0	1	2	3	4	5
	Requesting Information							
	Requesting Action							
2.	Answering/Responding		0	1	2	3	4	5
3.	Rejection/Answering		0	1	2	3	4	5
	Responding/Denial							
4.	Reasoning		0	1	2	3	4	5
5.	Answering/Responding		0	1	2	3	4	5
	Naming/Labelling							
	Rejection/Denial							
6.	Answering/Responding		0	1	2	3	4	5
7.	Informing/Summoning/		0	1	2	3	4	5
	Calling							

Task 3

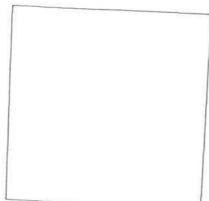
Probes	Observe for	Gestural/ Non-verbal response		boore				
1.	Greeting		0	1	2	3	4	5
2.	Answering/Responding		0	1	2	3	4	5
3.	Informing and		0	1	2	3	4	5
	Reguesting information							
4.	Responding		0	1	2	3	4	5
5.	Informing/Naming		0	1	2	3	4	5
6.	Naming/Labeling		0	1	2	3	4	5
7.	Informing		0	1	2	3	4	5
8.	Closing conversation		0	1	2	3	4	5

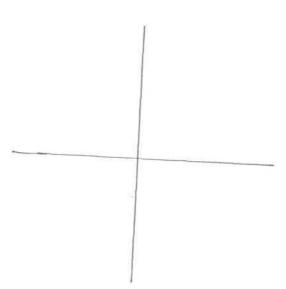
TASK 4

Probes	Observe for	Gestural/ Non-verbal response	Score					
1.	Responding/Answering		0	1	2	3	4	5
2.	Reguesting-Information		0	1	2	3	4	5
	or Action.							
	Rejection/Denial		0	1	2	3	4	5
3.	Requesting Information		0	1	2	3	4	5
	Naming/Labeling							
4 .	Responding/Denial		0	1	2	3	4	5
	Rejecting/Naming							
5.	Answering/Rejection		0	1	2	3	4	5
6.	Informing/Requesting		0	1	2	3	4	5
	Action.							
	Requesting Information							
7.	Informing		0	1	2	3	4	5
8.	Answering/Rejection		0	1	2	3	4	5
	Informing/Denial							
	Reasoning							
9.	Informing/Denial/		0	1	2	3	4	5
	Rejection							

-7°C

APPENDIX-3.





TASK SHEET.

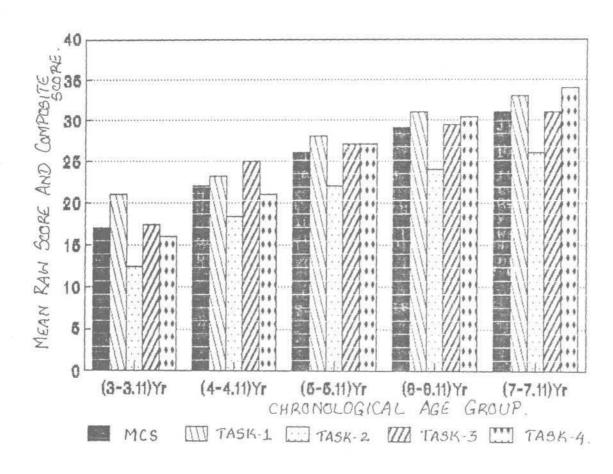


FIG. 2: SUMMARY SHEET.