#### **Chief Editor**

Dr. A. Singaraj, M.A., M.Phil., Ph.D. Editor

Mrs.M.Josephin Immaculate Ruba

# **EDITORIAL ADVISORS**

- 1. Prof. Dr.Said I.Shalaby, MD,Ph.D.
  Professor & Vice President
  Tropical Medicine,
  Hepatology & Gastroenterology, NRC,
  Academy of Scientific Research and Technology,
  Cairo, Egypt.
- 2. Dr. Mussie T. Tessema,
  Associate Professor,
  Department of Business Administration,
  Winona State University, MN,
  United States of America,
- 3. Dr. Mengsteab Tesfayohannes,
  Associate Professor,
  Department of Management,
  Sigmund Weis School of Business,
  Susquehanna University,
  Selinsgrove, PENN,
  United States of America,
- 4. Dr. Ahmed Sebihi
  Associate Professor
  Islamic Culture and Social Sciences (ICSS),
  Department of General Education (DGE),
  Gulf Medical University (GMU),
  UAE.
- 5. Dr. Anne Maduka, Assistant Professor, Department of Economics, Anambra State University, Igbariam Campus, Nigeria.
- 6. Dr. D.K. Awasthi, M.SC., Ph.D. Associate Professor Department of Chemistry, Sri J.N.P.G. College, Charbagh, Lucknow, Uttar Pradesh. India
- 7. Dr. Tirtharaj Bhoi, M.A, Ph.D, Assistant Professor, School of Social Science, University of Jammu, Jammu, Jammu & Kashmir, India.
- 8. Dr. Pradeep Kumar Choudhury,
  Assistant Professor,
  Institute for Studies in Industrial Development,
  An ICSSR Research Institute,
  New Delhi- 110070, India.
- Dr. Gyanendra Awasthi, M.Sc., Ph.D., NET
   Associate Professor & HOD
   Department of Biochemistry,
   Dolphin (PG) Institute of Biomedical & Natural
   Sciences,
   Dehradun, Uttarakhand, India.
- 10. Dr. C. Satapathy,
  Director,
  Amity Humanity Foundation,
  Amity Business School, Bhubaneswar,
  Orissa, India.

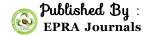


ISSN (Online): 2455-7838 SJIF Impact Factor (2015): 3.476

**EPRA International Journal of** 

# Research & Development

Volume:1, Issue:7, September 2016



**CC** License





SJIF Impact Factor: 3.476

**EPRA International Journal of Research and Development (IJRD)** 

Volume: 1 | Issue: 7 | September | 2016

# DEVELOPING AND VALIDATING COMPREHENSIVE COMMUNICATION ASSESSMENT FOR EARLY CHILDHOOD

# Varun A<sup>1</sup>

<sup>1</sup>PhD Scholar, Center for Early Childhood Education and Development, Ambedkar University, Delhi, India

# Dr Kalpana Venugopla<sup>2</sup>

<sup>2</sup>Associate Professor, Regional Institute of Education, Mysore (NCERT)

#### **ABSTRACT**

The main purpose of this study is to develop and validate a valid measure of communication skill early childhood class room. Through extensive literature review on child language acquisition and learning in various environment, structured activity based questioner were developed from current early childhood concepts and themes. The assessments were developed for developmentally appropriated children. The initial survey questionnaire was developed. Then, think-aloud cross sectional analysis has done to validate the assessment tool were conducted with samples from the school going UKG children from diverse background. The theoretical framework of K. C Shyamala (2012) "Comprehensive Language Assessment for birth to six years (CLAT)" such as communication has three components such as receptive, cognitive and expressive. The data were analyzed by using descriptive statistics, Cronbach-alpha, and split-half. The findings will show subcomponent of receptive, cognitive and expressive were shown reliable and valid. The implications of e survey to gain insight into communication assessment of the child.

**KEYWORDS:** Communication, Assessment and Early Childhood

# **INTRODUCTION**

Early childhood education (preschool through third standard) concerns a fundamental period of life. Between the ages of three and eight, children develop a series of physical, cognitive, cultural, social, emotional, and regulatory capabilities that will significantly impact their lives (Hyson, 2008). Ann (2004) Child assessment is a developmental and growing component of high-quality early childhood educational programs. Not only is it an important tool in understanding and supporting young children's development, it is essential to document and evaluate program effectiveness. For assessment to be widely used though, it must employ methods that are feasible, sustainable and reasonable with regards to demands on budgets, educators and children. Assessment in early childhood is required as varied ranges of children will learn inside the school. Cognition and language of the child become important aspects to shape the behavior.

ISSN: 2455-7838(Online)

# **DEFINING COMMUNICATION**

Varun (2014) communication is an ability to receive the information and comprehend. It's a fundamental to children's development; children need to be able to understand and be understood. Communication is the foundation of relationships and is essential for learning, play and social interaction. Communicating with babies is the foundation of attachment. If a parent or care giver is responsive to a baby's signals and 'takes turns' in communicating with them from birth onwards, babies develop a secure attachment to the care giver. This attachment underpins learning and development – it helps children thrive. Gopinik (1999), Language

69

www.eprajournals.com Volume: 1/ Issue: 7/ September 2016

includes nonverbal and verbal forms communication. Early forms of nonverbal communication consist of reflexes, eye contact, gaze aversion, and body language. Children later use gestures, such as pointing and shaking their heads to convey feelings and wants. For the present study communication skill is divide into three components namely, receptive skill, cognitive skill, and expressive skill. A number of studies have demonstrated that adult and young language learners are different in the ways that they acquire language and attain fluency (Brown, 2000; Philp, Oliver, & Mackey, 2008; Pinter, 2011). Cognitive and biological factors explain some of these differences. Consequently, teachers of young learners need to have certain qualifications that teachers of adult learners may not need to have (Curtain & Dahlberg, 2010; Johnston, 2009).

# **RECEPTIVE SKILL**

Receptive communication is the process of receiving and understanding a message.

- Ability to Receive the Instruction (Visual /Auditory) The child will receive the instruction from the teacher and will able to give an attempt to perform the task.
- Ability to comprehend the communication (Visual /Auditory) The Child understands the communication between the teacher and the child, with in peer, etc, through auditory or visual mode

#### **COGNITIVE**

Children use imitation, cause and effect, and trial and error to develop their logic and reasoning skills. Children learn these skills through everyday interactions with their parents, caregivers, peers and their enviroment. From very early on, children discover that their own actions and behaviors have an impact on the behaviors and actions of people and objects. For example, children cry to signal needs and their caregivers respond to meet these needs. There cognitive skills are develop by effective use of attention, memory, reasoning, logic, and problem solving, during the process of communication with teachers, peers, parents.

- Attention –The child involve in the process of observing or listening when the instruction has given. Shonkoff, J. & Phillips, (2000) the ability to think, retrieve, and remember information, and to solve problems is dependent on the development of attention, or the ability to focus on something in the environment. Attention regulation is closely related to children's culture, cognitive abilities, and the caregiver-child relationship.
- Memory The child able to store in the mind and able to remember the information when it's needed.

- **Reasoning** The child able to involve in the process of the action of thinking about something in a logical, sensible way
- Problem solving The child able to precede the process of finding solutions to difficult or complex issues as age on set.
- **Planning** The child able involve in the process of making plans for something.
- Organizing The child involve in arranging the thing systematically as for the Instruction.

### EXPRESSIVE SKILL

Expressive communication skills include learning the forms of language, such as verb forms, plural endings, and how to use pronouns, as well as the content of language, which leads to an event being related clearly and appropriately. Hult et al., (2001) Expressive language refers to how children express their needs, wants, and feelings to others through nonverbal and verbal communication. Communication begins at birth and includes reflexive cries, gaze aversion, and body language

- **Grammar** The child able to use the whole system and the structure of the language (which the child uses in the class room) negatives tenses, verb, and preposition.
- Content of the language The child able to use the meaningful language which is relevant to the particular context.
- **Narration** The child able to involve in the action or process of narrating a story, incident which occurred in the past.
- **Description** The child able to express a spoken or written account of a person, object, event or anything which child able to describe.
- **Gesture** The child able express through a movement of part of the body, especially a

#### AIM OF THE STUDY

It's important to meet the challenging demands of validity (accuracy and effectiveness) for young children. It is the balance between reliability and validity that demands the constant attention of behavioral research. The approach grounded in a sound understanding of appropriate methodology. The aim of the present study is how early communication skills can assessed and measured in preschool setting. In such assessment how can reliable and validity can measure in receptive, cognitive and expressive skills.

#### **PROCEDURE**

The study was descriptive in nature.

#### **SAMPLE**

Random sampling technique was adopted for the study. Children from UKG class from were considered for the study.

# Setting and participants:-

The participants in this study (N=87) were school going UKG children enrolled in private, public run schools from Mysore Dist of Karnataka, India. Children were from different lingual and socioeconomic back ground. Majority of them were Kannada language speaker and minority were Tamil, Hindi, Tulu and Malayalam speaker. However the medium of instruction were the children participate were Kannada and English. As regional language is kannada every children able to understand and comprehend and express in the regional language.

#### Tool:-

Comprehensive Communication Assessment Tool (CCAT) was constructed and standardized by the

investigator. It's aimed to study the communication behavior of the preschool children particularly inside the classroom which is culture/lingo free tool. The technical adequacy (reliability, validity) assessments for young children is widely recognized as lower than that of measures for older children, in large part because children's competencies are fairly unstable, situationally dependent and maturation (La Paro & Pianta, 2001). Furthermore, because children's competencies depend largely on the quality of their experiences in educational settings, it makes sense to assess, for accountability purposes, the quality of those settings-in short, to have accountability standards for classrooms (Pianta,

Table 1: Blue print of Comprehensive communication Assessment

Communication Skills	Components	Item No in tool	
Receptive communication	Ability to receive the information	1,2,3,4,5,6	
-	Ability to comprehend	7,8,9,10,11,12	
Cognitive communication	Attention	1,2	
	Memory	3,4	
	Reasoning	5,6	
	Problem solving	7,8	
	Planning	9,10	
	Organizing	11,12	
Expressive Communication	Grammar (Negatives, Tenses, Verb, Preposition)	1,2,3,4	
_	The content of the language	5,6	
	Narration	7,8	
	Description	9,10	
	Gesture	11,12	

# Item formulation:-

The formulation of items for the receptive skill, cognitive skill and expressive skill constructed based on literature related in language and communication behavior studies, early childhood, developmental psychology and other investigation in the field of education. The investigator framed items related to receptive a skill which has Ability to receive the information, ability to comprehend in receptive skill. For cognitive it was attention, memory, and reasoning, problem solving, planning and organizing and for expressive which has grammar, content of the language, description, narration and gestures. Comprehensive language assessment tool for children (3-6 years) Navitha U. & K.C. Shyamala (2012) was adopted to frame the items. The tool consists of twelve items in each respective skill.

#### **Item Selection:-**

The blue print (table 1) was prepared having a list of 44 items in receptive, 46 items in cognitive and 56 in expressive skill. Then the investigator dispersed it to experts in the field education, linguistic, early childhood education from different organization their feedback and suggestions. After getting the opinion from the experts appropriate suggestions and feedbacks were added.

# ANALYSIS AND DISCUSSION

After the survey the items were analysis by item analysis method and other validity technique to see the reliability and validity of the tool. The combined items mean is 1.327 for all 129 items. And the correlation between the each item is .430 which means each item have very strong correlation between on another in the receptive, cognitive and expressive sub scale.

www.eprajournals.com Volume: 1/ Issue: 7/ September 2016

71

Table 2: Summary Item Statistics of Comprehensives communication Assessment							
	Mean	Minimum	Maximum	Range	Maximum /	Variance	N of
				_	Minimum		Items
Item Means	1.327	.310	3.368	3.057	10.852	1.048	129
Inter-Item Correlations	.430	137	1.000	1.137	-7.298	.036	129

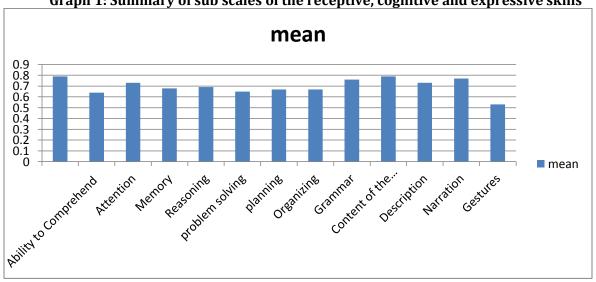
# **Item Analysis:-**

It is item analysis statistical technique which is used for selecting and rejecting the items of a test on this basis of their difficulty value and discriminative power. In the present test construction the list of items were 31, 56 and 46 was administered on a larger group of preschool children of 5 to 6 years. This group consisted of different schools, on the basis of received scores by taking top 10% and bottom 10% examinees, the difficulty value and the discriminating were rejected. This leads to elimination a complex and simple items in respective skills.

Table 3: Item Analysis summary of communication skills

1 able 3: Item Analysis summary of communication skills				
Communication skill				
sub components	mean	SD	N	
Ability to Receive the				
Information	.79	.387	87	
Ability to Comprehend	.64	.459	87	
Attention	.73	.396	87	
Memory	.68	.412	87	
Reasoning	.69	.403	87	
problem solving	.65	.444	87	
planning	.67	.432	87	
Organizing	.67	.432	87	
Grammar	.76	.376	87	
Content of the language				
	.79	.369	87	
Description	.73	.312	87	
Narration	.77	.333	87	
Gestures	.53	.568	87	

Graph 1: Summary of sub scales of the receptive, cognitive and expressive skills



www.eprajournals.com Volume: 1/ Issue: 7/ September 2016

72

# Reliability of the tool:-

The scale was administered on the sample of 87 children from different preschool children in around Mysore. Again the same scale was administered on the sample after a gap of one month for ascertaining 'test-retest' reliability or reliability statics. Then ANOVA with Friedman's Test and Turkey's Test for Non additive was calculated by taking the scores of .854 for receptive skill as reliable items, for cognitive it was.868 for reliable items and

for expressive it was 896 for reliable items. A high 'test-retest' reliability or coefficient of stability shows there in low variable error in the sets of obtained scores. Brown (1998 & 2001), Cronbach alpha has used to estimate the proportion of variance that is systematic or consistent in a set of test scores. It can range from 00.0 (if no variance is consistent) to 1.00 (if all variance is consistent) with all values between 00.0 and 1.00 also being possible.

Table 4: Reliability Statistics of communication skill

Type of skill	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
Receptive skill	.845	.845	31
Cognitive	.868	.868	56
Expressive	.895	.896	42

The Cronbach alpha and split-half reliability were used for establishing reliability in this study since computing internal consistency is the appropriate reliability estimate when items have three or more possible responses (Furr & Bacharach, 2008) receptive skills has .845 with 31 items found to reliable, cognitive skill has .868 with 56 items and found to reliable and expressive skill has .895 found to be reliable. The next step was the content validity.

# Validity of the tool:-

Validity of this study refers to the degree to which the instrument measures what it has been designed to measure (Dörnyei & Taguchi, 2010). The face validity method was employed to validate the Receptive, Cognitive and Expressive skill in the tool. The face validity of this scale was established by discussing the statements /questioner/content of the tool with five experts in the field of linguistic, education and early childhood education. On the basis of their suggestions and feedbacks the face validity of the scale was established.

# Scoring procedure:-

The options for the answering all twelve and its sub item were given in 'yes' and 'no' pattern in receptive and expressive skills. For positive behaviors of receptive skill and cognitive skill score of '1' has used for scoring. And NR (non responsive) and negative behavior of receptive skill score of '0' which is 'no' has used for scoring. The highest score for the scale is 31 and lowest score is '0'. The options for the answering all twelve and its sub items were given as 'Excellent', 'Good', 'Adequate', 'Fair' and 'Inadequate' pattern. For excellent expressive skill the score was '3', for fair expressive skill the score was '3', for fair expressive skill the score was '2', and for inadequate expressive skill the score was '1'.

# Norms of the scale:-

scale was administered on a representative sample of 87 children preschool going children in the age of 5-6year in around Mysore. As per norms scale if divided into ability to receive the information and ability to comprehend. The items 1, 2, 3, 4, 5, 6 refers the ability to receive the information and 7, 8, 9, 10, 11, 12 ability to comprehend the information. The respondent who scores positive have receptive skill and NR and negative have less receptive skill. And in cognitive the norms were the items 1 & 2 for attention, 3 & 4 memory, 5 & 6 for reasoning 7 & 8 problem solving, 9 & 10 planning, 11 & 12 organizing refers the. The respondent who scores positive have receptive skill and NR and negative have less cognitive skill. In expressive skill, as per the analysis the per norms scale if divided the items 1, 2, 3 & 4 for grammar, content of the language, 5& 6 for narration, 7 & 8 for description and 9 & 10 for gestures.

#### **CONCLUSION**

This study defined each12 item of three domains of communication development which served as a basis for an original survey from the child assessment I developed and validated through a number of rigorous validation procedures. All of the subscales and the communication skills (Receptive skill, Cognitive skill and Expressive skill) were found to be reliable. Reliability was found to be related to subscale length to a greater degree on some domain of communication than others. Due to subscale length, receptive skill had the lowest reliability at .845, which is

Acceptable considering that the present survey is still at its piloting stage. In terms of reliability, some subscales with fewer items (i.e., Ability to receive information and Ability to comprehend will need more items added to establish reliability of these sub-domains and indeed applied to the next version of the survey. There are some

73

limitations on this research needs to address in the future. Firstly, the number of participants in the lower in number of the survey and it was not possible to complete a confirmatory factor analysis to substantiate the survey's construct validity. It would be desirable to examine construct validity through factor analysis with sufficient number of participants. Secondly, this survey is designed to collect data on measurement of the communication skills, and so the results solely rely on the product of the communication skills in the particular development of the language component. And we couldn't control the maturation of the child. The limitations of selfjudgments of one's accomplishments have been studied in social and behaviour psychology (Heath, Dehoek, & Locatelli, 2012). Therefore, future research will benefit from the addition of school observation data to obtain the whole picture of the child communication behavior in around the environment.

#### REFERENCE

- 1. Brown, H. D. (2000). Principles of language learning and teaching (4th ed.). New York: Longman.
- Brown, J. D. (2001). Using surveys in language programs. Cambridge: Cambridge University Press.
- Dörnyei, Z., & Taguchi, T. (2010). Questionnaires in second language research: construction, administration, and processing (2nd ed.). NY: Routledge

- Furr, M. R., & Bacharch, V. R. (2008).
   Psychometrics: An introduction. LA: Sage Publications.
- 5. Hulit, Lloyd M. & Howard, Merle R. (2002). Born to Talk, Volume 1. Boston, Mass.: Allyn & Bacon http://illinoisearlylearning.org/guidelines/domains/domain3/expressive-com.htm
- 6. Hyson, M. (2008). Enthusiastic and engaged learners. New York: Teachers College Press.
- 7. Gopnik, A., Meltzoff, A.N., & Kuhl, P.K. (1999). The scientist in the crib. New York: Perennial http://illinoisearlylearning.org/guidelines/domains/domain3/receptive-com.htm
- 8. Jung In Kim (2015). Developing and Validating a Survey of Korean Early Childhood English Teachers' Knowledge. Published by Canadian Center of Science and Education Published by Canadian Center of Science and Education, English Language Teaching, Vol. 8, N: 12
- 9. Shonkoff, J. & Phillips, D. (Eds.). (2000). From neurons to neighborhoods: The science of early childhood development. Washington, D.C.: National Academy Press http://illinoisearlylearning.org/guidelines/sections/selfreg/attention.htm
- Varun. A(2014). Thematic Approach for effective communication in ECCE, International Journal of Education and Psychological Research (IJEPR) Volume 3, Issue 3, September 2014
- 11. http://illinoisearlylearning.org/guidelines/domains/domain4/logic.htm

74

www.eprajournals.com Volume: 1/ Issue: 7/ September 2016