PREDICT: Development of A Checklist for Use in A Music Intervention Study for Preschool Children

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Abstract

A research study on the effects of background music intervention with Dikshitar's Nottuswaras on cognitive development, communication and social-emotional learning was undertaken by this researcher. The need for developing an assessment instrument that could not only measure the level of development before the intervention but also be used as an assessment instrument to measure progress was felt. To this end the Preschool Development Indicator Checklist was developed by this author specifically for use in this research study.

Objective:

1.Development of a checklist to measure child development in children in the age group of 3-5 years.

2. To use the checklist for pretest and posttest assessment in a music intervention program with Dikshitar's Nottuswaras in preschool children

Design and Method: A thorough assessment and analysis of available child development assessment instruments was done. The domains to be measured were first finalized and a list of items under each domain was prepared. An appropriate scoring methodology was incorporated to help measure baseline and post intervention scores. The reliability and validity of the checklist was established using standardized methods.

Results: A checklist titled the Preschool Development Indicator Checklist (PREDICT) was developed and used as a pretest posttest assessment instrument (N=30) in a research study on the benefits of background music intervention with Dikshitar's Nottuswaras on preschool children. The PREDICT checklist was found to be a reliable and valid assessment instrument for this particular research study.

* Index Terms—Checklist Development, Early Childhood Development, Music Intervention, Assessment*

INTRODUCTION TO CHECKLIST DEVELOPMENT

(KOTHARI, 2004)

Measurement is critical for any research. For good measurement, we need reliable and valid instruments. In physical science, technological innovations and advancements have enabled development of accurate instrumentation of high precision. This ensures good reliability and validity of tests or experiments conducted for research purposes.[7]

Quantitative research is social science is fraught with complexities due the difficulty to accurately measure human characteristics, traits, behaviours and activities. These arise from mental phenomenon. Unlike physical entities, the mind functions do not follow linear dynamics. But nevertheless, the principles of quantitative methods as prevalent in the physical sciences are applied to psychological science. This means that effort has to go into developing reliable and valid instruments to get as accurate an idea as possible of the mental phenomena.

Psychological phenomena can be individual characteristics or mental states or observable group characteristics, traits and behaviours. Psychological instruments have been developed to capture as accurately as possible these different phenomena. Such instruments are considered to possess high psychometric properties. Psychological instruments with strong psychometric properties enable professionals to get a more precise idea about the target group in a community or an individual person being assessed, so as to inform decisions about interventions – whether it is required or not required, if required what kind, how many, how often, for what duration, etc. Such instruments can also become important tools for quantitative empirical research.

Psychological Instruments

Psychological instruments are tools for measuring psychological phenomena which are abstract. Measuring an abstract phenomenon means assigning a number or numerical value to the phenomenon being determined by certain predetermined or formulated rules. They typically comprise of scales, questionnaires and checklists. These are paper pencil

based or can be computer based. They can be either self-administered or administered by professionals. An instrument would contain a range or a set onto which are mapped the characteristics of the phenomena or domain. Instruments or scales are classified based on their properties of how and what they measure. Nominal scale assigns numbers to labels of events. An ordinal scale places events in an order for example, from highest to lowest. The other forms of scales are interval scale, where a rule is assigned to determine intervals and ratio scale, which can have zero and consists of proportions and allows comparisons between subjects.

Errors in Measurement in Psychology and Social Science

Measurements in the social sciences and psychology cannot be unambiguous and precise because of the nature of human behaviours and the mind. Errors are hence expected and have to be accepted. The kind of errors that are possible are: Respondent error which is a reluctance on the part of a subject to reveal negative feelings or events or may not have full knowledge or admit ignorance which would bias their response. Situational error may occur due to the environment in which measurement is being done as for example a stressful situation or presence of others who may influence the response or inadequate rapport between the subject and the person measuring. Errors can arise due to measurer characteristics, for example, his/her knowledge, feeling at the time of measuring, errors in collecting, tabulating, coding and analyzing. Once the researcher is aware of all possibilities of errors, he/she can minimize these as far as possible.

Tests of Good Measurement

It is important to evaluate the goodness or soundness of a measuring tool in order to make sure that the instrument is a good one. There are three important considerations to know that an instrument is good or sound: (1) Validity (2) Reliability (3) Practicality

(1) Test of Validity:

Validity means how good a testing or measuring instrument or the extent or degree to which the instrument measures what the researcher actually wishes to measure. Based on what is measured, Validity can be of three types:

Content Validity:
This is the degree or extent to which the measuring instrument adequately covers the topic or events under study. This is primarily judgmental and intuitive. It can also be done by consulting peers, professionals or experts in the topic or area. It will be more robust if the sample under study is representative.

Criterion-Related Validity:
This is based on the researcher's ability to predict or estimate the existence of a current condition. This accordingly comprises of Predictive Validity, Concurrent Validity and Construct Validity. This can be assured by comparing the devised measuring instrument with explanatory constructs of a sound theory. These are based on relevance, freedom from bias, availability and reliability of the criterion.

(2) Test of Reliability

A measuring instrument or test or tool is reliable if the measurements provided are consistent. A reliable instrument may not always be valid and a valid instrument may not always be reliable. There are two aspects of reliability that are useful: Stability and Equivalence.

Stability:
Stability is ensured by repeated measurements of the same person with the same instrument. This can be further ensured by standardizing the conditions under which an event is measured as much as possible.

Equivalence:
Equivalence can be ensured by two investigators using and measuring with the same instrument and then comparing their results for consistency. Trained and motivated investigators and careful formulation of guide and directions for measurement with no variation from group to group can ensure equivalence.

(3) Test of Practicality

The measuring instrument must be practical and simple to use. This can be ensured by making sure that when developing the instrument, the following are considered:

Economy:

Economy has to be ensured in terms of not only the cost of the instrument and developing it but also the time, being able to do the job as quickly as possible without wasting much time without compromising on the aspects of reliability and validity.

Convenience:

The instrument must be easy to understand and administer. Due attention should be given to clarity and layout of the instrument and using examples if necessary.

Interpretability:

This is important so that a person other than the researcher who developed the instrument is able to understand the instrument. This can be ensured by giving clear and good instructions for administration, providing scoring keys where required, guides of using and interpreting and providing evidence of reliability.

Instrument Construction Techniques

The development of an instrument is a staged process. The first step is concept development where the researcher comes to a good understanding of the major concepts that pertain to the study.

The second step involves the researcher to specify the dimensions of the concepts. Here the researcher uses an intuitive approach to identify the broad categories or divisions of the concept.

The third step is for the researcher to develop indicators for measuring each of the dimensional concepts in the form of specific questions, scale, etc. taking into consideration as many alternatives as possible.

The fourth and final step is combining the various indicators into the formation of an index. This can be achieved by obtaining an overall index for several dimensions. In order to achieve this, scale values are provided to individual responses and then combining or summing up the corresponding scores.

The development of scale can be done by differ methodological approaches:

(1) Arbitrary approach:

This type of scale development is the most widely used. It is based on assumption of the researcher that it is measuring what it is supposed to measure. Here the development of the scale or measuring instrument happens on an *ad hoc* basis.

(2) Consensus approach:

In this method experts or a panel of peers or judges are asked to evaluate on the relevance of the items of the instrument.

(3) Item analysis approach:

Here an instrument is developed and administered to a group of respondents. Calculations of total scores for each is done. Items are then analyzed individually to see if they discriminate between persons and objects with those scoring high and those scoring low.

(4) Cumulative scales Approach:

Here the scales are chosen based on the items conforming to a ranking system with discriminating power either in the ascending or descending order.

(5) Factor Analysis Approach:

Here the scale is developed and tested on the basis of inter-correlations between items within a dimension which indicates a common factor accounting for their relationship. Factor analysis can be used to determine this.

Measuring Child Development

Child development is a complex process.[8] There are several dimensions to a child's growth and development. There is an interplay of several factors. There is physical growth and maturity predominantly determined by biological factors. Mental or psychological development dependent on environmental, biological and psychological factors. Social development depends on a complex interaction between all factors.

Therefore, the task of measuring child development has to take into consideration all the factors and dimensions. The task stretches the researcher's ability to utilize all the processes and methods delineated and discussed above in order to have a reasonably valid, reliable and practical instrument for measuring psychosocial development of children.[5]

II. RATIONALE FOR CHECKLIST DEVELOPMENT

There are a vast number of assessment instruments available to assess child development especially for preschool children in the age group of three to five years. Some of them are useful as developmental screening tools and others are useful to measure levels of intelligence, cognition and communication skills. Several of these assessment scales measure individual domains and only a few of them comprehensively measure all domains of development including social-emotional development. There are also practical difficulties in using them due to the time required for individual assessments and their application in the Indian context. Most of these instruments may not be suitable to measure the effects of a music intervention program.

Some of these scales also have Indian adaptations such as the Vineland Social Maturity Scale and the Developmental Screening Test (DST) by Bharath Raj. The Indian adaptation of these scales has helped to a certain level in making it

accessible and economically viable for assessments of children in India. Many of the scales for preschool children are more of screening instruments. They may or may not be useful for pretest and posttest intervention studies.

There are separate scales for each area of development such as expressive language, receptive language, cognitive development and so on. With the lack of resources and limited manpower available, it would be difficult to do assessments with multiple scales for each area of development such as cognitive development, speech language and communication skills and social-emotional development.

There are a number of comprehensive scales such as the Battelle Development Inventory, Bayley's Scale of Infant Development, The Denver II and the Development Abilities Scale that are used by Indian pediatricians. These again are more of developmental screening instruments that may not be useful as repeated measures of pretest posttest intervention studies done over a short period of time.

In a review study on use of developmental inventories for measuring pretest, posttest difference (Marsha Black, 2004)[2] it was pointed out that since development inventories are mostly useful for assessing development in different domains in children at a given point of time they may not be useful to assess the effects of interventions over a period of time. This is because most developmental inventories are more of screening instruments. Many of the items are scored as pass or fail items with a cutoff point. This may not be helpful in measuring differences over time. This also will not help to know if the change in the children is because of the intervention.

In another paper by the same author that contains a review of commonly used assessment instruments for preschool children with respect to the HIPPY program there is a listing of instruments with information on the type of use either as a screening instrument or as a pretest posttest measure. There are very few instruments mentioned that can be used to measure baseline scores and progress after an intervention. This again are instruments that address individual domains such as receptive language, expressive language or cognitive abilities.[3]

There are also very few assessment scales developed in India specifically for preschool children. One of the scales for preschoolers that is available both in Hindi and English is Hema Pandey's cognitive abilities test. This again is a scale that measures only cognitive development. Apart from this there are very few scales that also include social-emotional development.

The other aspect is the length of the scale and the amount of time required to do detailed assessments. If this has to be done with a number of different assessments for each child, it would take at least a week or more to complete even with a small sample. This may not be very practical as many of the school managements would not allow their teachers and the children in the midst of a busy school day to spend a large of time to conduct the assessment.

In a review study (Bedford et al, 2013)[1] on the usefulness of measures in children in the age group of two to two and a half years, it was found that only the ASQ and the PEDS were useful. There have been no such studies on these scales with respect to Indian Children. The scales are mostly used by psychologists and pediatricians that are computer based and who see children on a case to case basis.

This being said most of the child development inventories do not include the social emotional development domain. This again has to be done separately. There is the Vineland Social Emotional Scale but as of now there is no Indian adaptation of the same. Many of the scales for socio-emotional development are recently developed. They are different from each other based on the different definitions of social and emotional development. Items on empathy are also not included in many of these standardized scales.

There are separate assessment scales to measure just the empathy quotient. This leads to practical difficulties in completing separate assessments for each of the domains, plus the cost of procuring the scales and the logistics of administering all these different assessments to a group of children. As mentioned earlier many of the instruments are screening instruments and cannot be used to monitor progress.

To address these issues an assessment checklist titled the Preschool Development Indicator Checklist (PREDICT) was developed by this researcher for pretest and posttest assessment of preschool children for a background music intervention program with Dikshitar's Nottuswaras.

Dikshitar's Nottuswaras are Carnatic classical music (South Indian classical music) compositions by Muthuswami Dikshitar, a well-known saint composer who lived in the 18th century. The Nottuswaras are based on English melodies and hence can be considered a fusion of Western classical music and Carnatic classical music.

III. DEVELOPMENT OF THE PRESCHOOL DEVELOPMENT INDICATOR CHECKLIST

The Oregon Assessment for three to four-year-old children in developmentally appropriate classrooms was sought to be used as a pretest, posttest measure in this project. This seemed like

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an ideal measurement instrument as the items could be scored and all the domains such as communication, cognition, play, self-help skills and self-concept were included. After a careful study of this scale it was concluded that this may not be suitable for assessing Indian children in a rural preschool from poor socio-economic status backgrounds.[9]

Although the Oregon assessment is an instrument designed for use in the Head Start program which caters to children from socially disadvantaged backgrounds, they are provided with proper materials, facilities and infrastructure. This is not the case when comes to either public funded preschool programs or rural schools in India. The teachers in these kinds of schools do not have access to the same level of training and facilities as the Head Start programs. Some of the items in the questionnaire cannot be applied to Indian children in a rural setting.

The scale was also difficult to procure in India which is also one of the reasons for not using this scale. There were some other free to use scales available which did have the social-emotional component. The items from the predict checklist were adapted to suit the current study and the Indian context after a thorough study of the available and accessible free to use scales online. The main construct that these scales sought to measure was done.

The main purpose of the scale as to whether it was to be used as a screening instrument, developmental inventory or to monitor progress was analyzed. The suitability of the scale firstly as a measure to map changes before and after the intervention, adaptability to the kind of preschool population where the intervention was being done and whether it could be applied to Indian children had to be looked into.

After analyzing all these factors, it was decided to create a checklist that could both be used as an initial development assessment tool and could also be used as a pretest, posttest measure. A set of questions for each of the domains such as cognitive development, communication, self-help skills, motor development and social emotional development was created.

The items in the PREDICT are based on a pooling and adaptation of the items from various standardized scales including the Early Learning Observation and Rating Scale[4], the Oregon Assessment for 3-5 years children, The Early Childhood Development Checklist for 3-5 years and other such assessment instruments

The examples of what to observe or record in the child have not been specifically mentioned as it would make the scale very lengthy. Since the assessments were meant to be done by this researcher and another assessor who both have previous experience in clinical evaluation and assessment of children,

the scoring could be done with school based observations, inputs from teachers, examples of school work, observation of children during play time, lunch time and in the classroom. The rating system has also been changed to make it more suitable for a pretest posttest intervention study design. This particular scale was developed specifically for use in this study for administration by this researcher.

IV. SALIENT FEATURES OF THE PREDICT CHECKLIST

The PREDICT checklist is a developmental indicator to be used in preschool children in the age group of three to five years. The PREDICT checklist has five components to represent the higher brain functions. The first component is cognitive development, the second is communication skills, the third is self-help skills, the fourth is motor development and the fifth is social-emotional development.

Each component is further divided into sub heading representing the different aspects with questions under each subheading. The cognitive development component includes attention, memory, problem solving ability, literacy and numeracy. The communication skills component has two subheadings receptive language ability and expressive language ability. The self-help skills component has a single question that covers all the self-help skills such as eating dressing and toilet training. The motor development component has two sub headings namely fine motor development and gross motor development. The social-emotional development component has six sub headings, self-awareness, self-management, social awareness, relationship skills, responsible decision making and empathy. Apart from covering all aspects of early childhood brain development, this checklist has a major focus on all areas of social-emotional development including empathy.

There are forty questions in the PREDICT checklist. The questions were generalized to each area under each subheading such as attention, concentration and so on with a scoring system from one to five. The scoring was based on the skill level in that area with a score of five being excellent, four being good, three being fair, two being borderline and one being needs attention. The generalization of questions also serves the purpose of being used as a loose framework to be adapted and modified for requirements with different kinds of curriculums at a later stage. The sample PREDICT form is given in APPENDIX A.

V. RELIABILITY AND VALIDITY OF THE PREDICT CHECKLIST

The PREDICT checklist was administered along with other standardized assessment scales to preschool children (N=30) in

the age group of three to five year who were participants in a research study on the effects of background music intervention with Dikshitar's Nottuswaras on Cognitive Development, Communication and Social-Emotional learning. The music intervention involved background music exposure to a selected set of Dikshitar's Nottuswaras for a period of 16 weeks during assembly time and at lunchtime. The children were assessed before the start of the intervention (baseline) and after the intervention (after 16 weeks).

RELIABILTY

The reliability of the PREDICT checklist was assessed with the same test being administered by the same assessor which gave us the TEST-RETEST reliability. The same test was administered by a different assessor which helped assess the INTER-RATER reliability. The internal consistency of the scale as a whole and item wise was measured with the reliability test with all the items and each item separately. The statistical tests for internal consistency, test-retest reliability, and inter-rater reliability were run on SPSS.[6]

INTERNAL CONSISTENCY

TABLE 1.1

CRONBACH'S ALPHA
Reliability Statistics

Cronbach's Alpha	N of Items
.897	40

TABLE 1.2

CRONBACH'S ALPHA-ITEM WISE

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	128.7333	215.099	.468	.895
2	129.3333	205.471	.474	.894
3	129.0000	210.897	.468	.894
4	129.1667	208.833	.530	.893
5	128.5667	223.978	-.175	.899
6	129.0333	205.275	.643	.891
7	129.7333	209.513	.626	.892
8	129.7333	209.513	.626	.892
9	128.7333	215.857	.599	.895

10	129.1667	204.282	.657	.891
11	129.3667	201.482	.643	.891
12	129.0333	208.861	.677	.892
13	129.1333	204.671	.703	.890
14	128.9667	208.723	.692	.892
15	128.8000	217.959	.299	.896
16	129.1333	206.120	.611	.892
17	129.7333	209.789	.570	.893
18	128.8000	213.614	.433	.895
19	129.7000	211.941	.479	.894
20	128.9667	206.861	.583	.892
21	128.8667	219.568	.114	.899
22	128.7667	218.875	.171	.898
23	129.1667	210.144	.503	.894
24	129.3000	206.493	.589	.892
25	128.7000	222.769	-.025	.900
26	128.7000	222.769	-.025	.900
27	128.7000	222.769	-.025	.900
28	128.5667	222.392	.026	.898
29	128.7667	224.806	-.124	.901
30	129.8667	205.913	.557	.892
31	129.8000	208.510	.349	.897
32	129.5667	212.254	.304	.897
33	129.6667	209.195	.388	.896
34	130.4000	213.214	.323	.896
35	129.1667	213.868	.391	.895
36	129.2000	216.855	.250	.897
37	129.5333	220.533	.046	.901
38	130.2667	204.616	.604	.892
39	129.8333	203.109	.489	.894
40	130.4333	211.840	.270	.898

The results of the test of reliability (Table 1.1-1.2) of the PREDICT show that there is a high level of internal consistency for all the items taken as a whole of the checklist as can be seen by the Cronbach's Alpha score of .897. The Cronbach's Alpha score for individual items also reflect similar scores except for a few items where the Cronbach's Alpha increases if the item is deleted. These items measure different constructs and need to be retained as statistical tests are based on numbers and subjective choices or effects may not be reflected correctly in statistical analysis. This means that there is a good level of internal consistency in the PREDICT checklist.

TEST-RETEST RELIABILITY

TABLE 1.3
Correlations

		TIME1R	TIME2R
TIME1R	Pearson Correlation	1	.856
	Sig. (2-tailed)		.000
	N	30	30
TIME2R	Pearson Correlation	.856	1

Sig. (2-tailed)		.000	
N		30	30

**. Correlation is significant at the 0.01 level (2-tailed).

The results of the analysis of the TEST-RETEST reliability (Table 1.3) found that there was high level of test-retest reliability as could be seen by the PEARSON Correlation of .856. The p value is less than .001 and therefore it can be concluded that the PREDICT checklist has good test-retest reliability

INTER-RATER RELIABILITY

TABLE 1.4
Correlations

		RATER1	RATER2
	Pearson Correlation	1	.998**
RATER1	Sig. (2-tailed)		.000
	N	30	30
	Pearson Correlation	.998**	1
RATER2	Sig. (2-tailed)	.000	
	N	30	30

**. Correlation is significant at the 0.01 level (2-tailed).

The results of the analysis of the INTER-RATER reliability (Table 1.4) found that there was high level of inter-rater reliability as could be seen by the PEARSON Correlation of .998. The p value is less than .001 and therefore it can be concluded that the PREDICT checklist has good inter-rater reliability.

VALIDITY OF THE PREDICT CHECKLIST

CONTENT VALIDITY

The content validity of the PREDICT was done by getting experts in the field of child development to go through the items in the PREDICT checklist and evaluate if the questions are relevant to each of the domains of development to be measured, whether the checklist covers all the skill areas adequately, whether the checklist gives a fair idea of the skills to be measured, whether the items are clearly understood and whether they would recommend the use of this checklist for assessment in this particular research study. The PREDICT checklist was validated by experts in the field of Child Development, Psychology and Education. All the experts gave the opinion that the PREDICT could be used as an assessment instrument for this particular research study. An Expert Validation form was created for this purpose.

CONSTRUCT VALIDITY

Factor analysis was attempted but since factor analysis such as principal factor analysis is not recommended when the sample size is small, the results may not be very reliable in this case as the number of variables is higher than the number of subjects. The recent psychometric method recommended for small sample size is regularized exploratory factor analysis which requires a different package to be added and hence could not be carried out. Also in measures of child development, certain subjective questions and aspects are part of the checklist which may not be accurately reflected in a statistical test.

VI. CONCLUSION

The PREDICT checklist was found to be a useful instrument in measuring child development as a whole and also in assessing the level of development in the areas of cognitive abilities, communication, self-help skills, motor development and social-emotional development as demonstrated by the results of the pretest and posttest assessments of the preschool children who participated in the music intervention study. The PREDICT was also found to have a high level of internal consistency, test-retest and inter-rater reliability and content validity. Since the PREDICT was used on a small sample size further testing of the checklist needs to be done on a larger sample size to establish it as a potential early childhood development assessment instrument.

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APPENDIX A
PRESCHOOL DEVELOPMENT INDICATOR CHECKLIST (PREDICT)

I. COGNITIVE DEVELOPMENT		IV. MOTOR DEVELOPMENT	
Attention		**Fine Motor Development**	
1. Concentration and Focus	1 2 3 4 5	22. Pencil/Crayon Grip	1 2 3 4 5
2. Task Completion	1 2 3 4 5	23. Writing Alphabets/Numbers	1 2 3 4 5
3. Listening and Responding	1 2 3 4 5	24. Coloring within the lines	1 2 3 4 5
4. Sitting Tolerance	1 2 3 4 5	**Gross Motor Development**	
Memory		25. Walking and Balance	1 2 3 4 5
5. Recall (Immediate/Delayed)	1 2 3 4 5	26. Climbing	1 2 3 4 5
6. Procedural Memory	1 2 3 4 5	27. Jumping/Hopping	1 2 3 4 5
Problem Solving		**V. SOCIAL AND EMOTIONAL DEVELOPMENT**	
7. Independent problem solving	1 2 3 4 5	**Self-Awareness**	
8. Creative problem solving	1 2 3 4 5	28. Aware of his/her own identity	1 2 3 4 5
Literacy		29. Recognizes own feelings and thoughts	1 2 3 4 5
9. Listens to and Understands Stories	1 2 3 4 5	**Self-Management**	
10. Able to retell a story	1 2 3 4 5	30. Able to motivate self	1 2 3 4 5
11. Able to read letters/ own name	1 2 3 4 5	31. Able to adequately express and control feelings and impulses	1 2 3 4 5
Numeracy		**Social Awareness**	
12. Concept of Numbers/Colors/ Shapes/ Size	1 2 3 4 5	32. Understands Social Norms	1 2 3 4 5
13. Counting	1 2 3 4 5	33. Responds suitably in diverse social situations	1 2 3 4 5
14. Matching and Sorting	1 2 3 4 5	34. Aware of risk and is careful	1 2 3 4 5
II. COMMUNICATION DEVELOPMENT		**Relationship Skills**	
Receptive Language Ability		35. Plays and engages cooperatively with peers	1 2 3 4 5
15. Understands oral communication	1 2 3 4 5	36. Able to develop appropriate relationships with different sets of people	1 2 3 4 5
16. Able to understand and follow simple instructions	1 2 3 4 5	**Responsible Decision Making**	
17. Able to understand some abstract concepts	1 2 3 4 5	37. Respectful of others	1 2 3 4 5
Expressive Language Ability		38. Understands consequences of own actions	1 2 3 4 5
18. Communicates effectively in small words/sentences	1 2 3 4 5	**Empathy**	
19. Knowledge of vocabulary and grammar	1 2 3 4 5	39. Understands other's feelings	1 2 3 4 5
20. Able to narrate events or stories in a logical sequence	1 2 3 4 5	40. Able to regulate behavior so as not to distress others	1 2 3 4 5
III. SELF-HELP SKILLS			
21. Able to help self in dressing, eating and toilet	1 2 3 4 5	**TOTAL SCORE**	

KEY: Circle the number that best applies to the child :
1. Needs Attention 2. Borderline 3. Fair 4. Good 5. Excellent

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