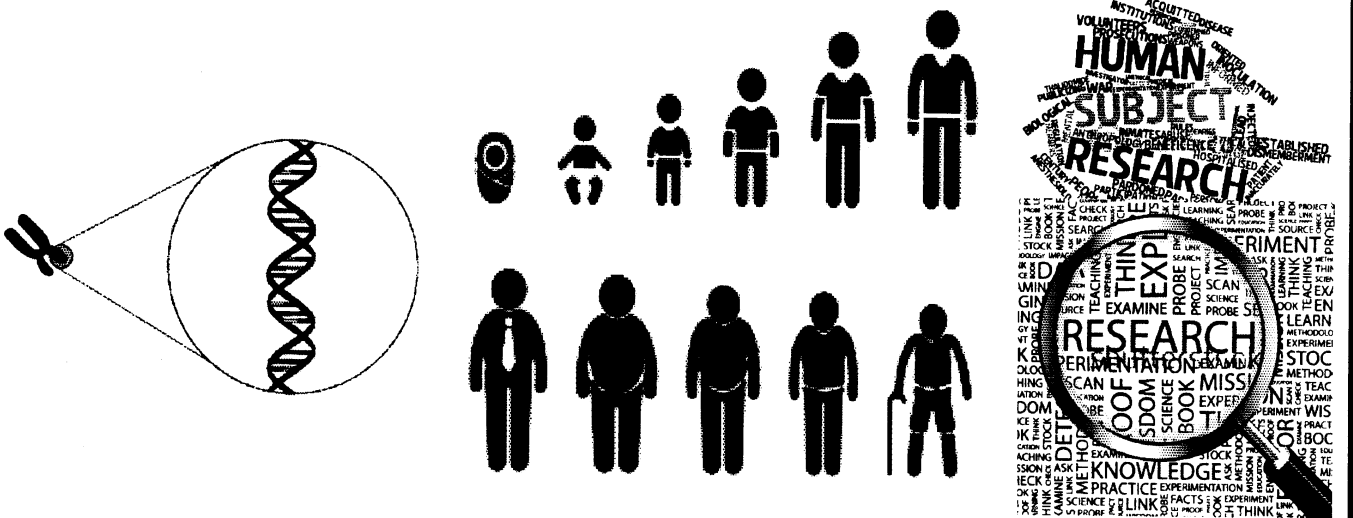# Fundamentals of Human Development

Practical Manual

I B.Sc (Hons) Community Science

Human Development & Studies
College of Community Science
Vasantrao Naik Marathwada Krishi Vidyapeeth
Parbhani- 431402

Practical Manual
B.Sc (Hons) Community Science

Authors
Prof. Vishala Patnam
Dr. Jaya Bangale

Printed by
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Certificate

It is to certify that this is record of the practical work carried

out by _____

Reg. No._____ in the Course of **Fundamentals of Human**

Development, HDS111, 3 (2+1) During I Semester of B.Sc (Hons)

Community Science.

Course Professor   Student

External Examiner   **Head**
   Human Development & Studies
                                   College of Community Science
                                   VNMKV, Parbhani

INDEX

Understanding about Stages of Human Life Span

Objective

To understand about stages of human life span

Human life span starts from the moment of conception (Zygote formation) and it ends at the death of individual. The stages of human life span are mainly divided into three stages i.e Prenatal stage, Perinatal stage and Postnatal stage.

Human Life Span
↓

↓	↓	↓
Prenatal stage	Perinatal stage	Postnatal stage
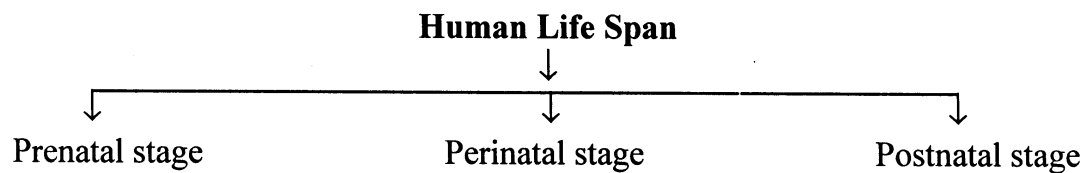
Prenatal stage is divided into 3 sub-stages i.e Zygote, Embryo and Fetus.

Perinatal stage

It includes the time taken from initiation till the completion of delivery. It may lasts from hours to days.

Postnatal stage

It starts at the time of birth and ends at the time of death of an individual. It is a very long stage in human life span. It is divided in to mainly nine sub-stages

Sub-stages of Postnatal Stage

1	Neonatal stage	Birth to 4 weeks
2	Infancy stage	End of 4 weeks to 12 months
3	Toddlerhood stage	1 yr - 2 yrs
4	Early Childhood stage (Pre-school stage)	2 yrs - 6 yrs
5	Late Childhood stage (school Age stage)	6 yrs – 13 yrs or till sexual maturity
6	Adolescence stage (Puberty stage (11yr – 15yr)	13 yrs – 18 yrs
7	Early Adulthood stage	18 yrs – 40 yrs
8	Middle Adulthood stage	40 yrs – 60 yrs
9	Late Adulthood stage (Senior citizens)	60 yrs – till death

Note: Collect pictures relating to all the stages of human life span and stick it

Prenatal Stage

Perinatal Stage

Postnatal Stage

Learning outcome

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Understanding about Human Wholesome Development

Objectives

● To understand about the domains of wholesome development of individuals

● To analyze one's own development based on social feedback

Introduction

Human wholesome development is based on heredity and environment. Heredity fixes the optimum level of development, while environment helps the individuals to develop to that level, Conducive environment enhances development of individuals while non-conducive environment hampers development of individuals. There are total 8 components of development. They are Physical, Motor, Intellectual, Emotional, Social, Speech, Language, and Moral development. All these components are inter dependent, interrelated and occur concurrently every moment at various speeds based on the activity individual is involved in. Briefly each component of development is inclusive of the following aspects/ items/domains.

Physical Development- Individual's height, weight, circumferences of head, chest and mid-arm, body proportion, teeth, features etc. Based on body build, people are categorized as ectomorph, endomorph and mesomorph.

Motor Development- Movements and activities of hands, legs, trunk, neck, body language etc,.

Intellectual Development- Perceiving, thinking, understanding, analyzing, relating, reforming, memory, questioning , answering etc. It is developing of common sense too. It occurs when there is integration between 5 sensory functions - Listening, observing, touching, smelling and tasting.

Emotional Development – Responding to stimuli, expression of emotions, understanding emotions in social context, learning to control, manage, express emotions suitable to one's age and situations in a socially acceptable way.

Social Development- Personal interactions with people around. Learning to get along with different nature, age, values, people, making friendship, able to do work with others, cooperating, coordinating, supporting, expanding social circle etc. Based on social competency people are divided into 3 types- Extrovert, introvert and ambient.

Components of wholesome development
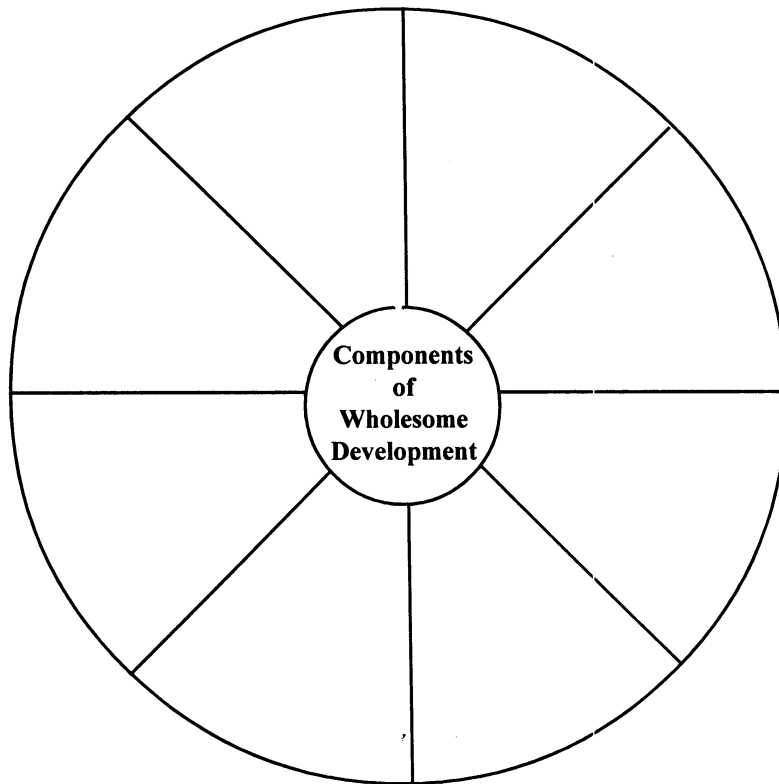
Speech Development- Pre-speech forms like crying, coo...coo sound, babbling, gestures etc,. Speech is inclusive of pronunciation, articulation, voice quality, voice modulation, loudness and so on.

Language Development- learning to speak words, understanding different meaning of words, learning sentence formation, grammar, semantics, pragmatics and increasing vocabulary. Learning more than 2- 4 languages like Marathi, Hindi, English, and Sanskrit ... Language development and intellectual development are very inter dependent.

Moral Development- Learning to differentiate between right and wrong. Learning to repeat good acts and resisting doing bad acts. It depends mostly on what type of social environment provided to children

Experiment

Just try to understand yourself in light of social feedback- your own rating and peer ratings based on general observations and experiences. The ratings should be on 5 point scale: Excellent(5), Very Good (4), Good (3) Okey (2) and Poor (1).

Components of Wholesome Development	Ratings	
	Self	Peers
Physical Development		
Motor Development		
Intellectual Development		
Emotional Development		
Social Development		
Speech Development		
Language Development		
Moral Development		

Interpretation

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Learning outcome

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Assessment of Growth of Children and Adolescents

Objectives

- To learn about the standard procedure for taking anthropometric measurements of children and adolescents

- To know the significance of anthropometric measurements in assessing growth, gross nutritional and health status of children and adolescents

- To learn the techniques of assessment of growth quotient of children and adolescents

Requirements

Plastic scale	Calculator
Growth norms	Children /Adolescents -different age groups
Measuring non stretchable rubber tape	Digital weighing machine
Anthropometric scale	Note book and pen

Anthropometry

Anthropometry means scientific method of taking body measurements. The measurements of body weight, height and head circumference are important parameters for assessing growth (GQ), gross nutritional and health status of infants, children and adults.

Weight

Children's /adolescent's weight measurement is taken by using digital weighing machine.

Height

Anthropometric Tape/Rod (for height)

Make the child to remove foot wear and help him/her to stand straight with heels, buttocks and shoulders touching the smooth surface of the anthropometric tape / rod. Child should keep feet together. Arms should be in hanging position. The child must look straight at eye level. The lever of anthropometric rod/a plastic scale on measuring tape need to be kept on child's head pressing it gently for making a contact with top of child's head. Remove child and record the measurement in cm without parallax error.

Head circumference

For taking head circumference

- Remove the head coverings and hair pins or clips if any on child's head. Let the child / adolescent stands in front of you if it is convenient

- Unwind the measuring tape and pass it around the child's / adolescent's head from back to a side. Make sure that the tape is placed at the occipital region at the back and just above supra orbital ridges at front of child's / adolescent's head

- Note down the reading at the meeting point of the measuring tape only in cm

Anthropometric measurements of individual	Utility of anthropometric measurements in assessment of
Weight (kg)	1 Growth 2 Gross Nutritional status 3 General Health status 4 Physiological changes/abnormities, if any
Height (cm)	1 Growth 2 Gross Nutritional status 3 General Health status 4 Physiological changes/abnormities, if any
Head Circumference (cm)	1 Growth 2 Nutritional and 3 Health status

Procedure of Assessment of Growth Quotient (GQ)

$$\text{Percentage of Weight} = \frac{\text{Child's actual weight}}{\text{Standard weight of child to that age}} \times 100$$

$$\text{Percentage of Height} = \frac{\text{Child's actual height}}{\text{Standard height of child to that age}} \times 100$$

$$\text{Percentage of Head Circumference} = \frac{\text{Child's actual head circumference}}{\text{Standard head circumference of child to that age}} \times 100$$

$$GQ = \frac{\text{Weight \% + Height \%+ Head Circumference \%}}{3}$$

GQ ranges	Remarks
95-105	Excellent
90-95	Very Good
85-90	Good
80-85	Fair /okay
Below 80	Poor & needs immediate care
Above 110	Obese & needs immediate care

Model Case Study

Growth Quotient (GQ)

Child's Name	Sex	Age	Height (cm)	Weight (kg)	Head circumference (cm)
Namdev	Male	3.6 yrs	93	18	48

Dare of birth : 22.07.2014

Age : 3 yrs 6 months

Family background

Father's occupation : Teacher

Mother's occupation : Teacher

Type of family : Nuclear

Blood type and group : A +

Child's body measurements	Norms for 3.6 yrs boy
Ht - 93.0 cm	99.0 cm
Wt - 18.0 kg	15.0 kg
Hc - 48.0 cm	50.5 cm

Using GQ Formula $\dfrac{Wt\% + Ht\% + Hc\%}{3}$

$$Wt\% = \dfrac{18}{15} \times 100 = 120$$

$$Ht\% = \dfrac{93}{99} \times 100 = 94$$

$$Hc\% = \dfrac{48}{50} \times 100 = 96$$

$$GQ = \dfrac{120 + 94 + 96}{3} = \dfrac{310}{3} = 103.33 \qquad \textbf{Therefore his GQ = 103}$$

Conclusion

Namdev's growth (Physical development) is Excellent as his GQ is 103. If his GQ goes above 110, he will fall in obese category. Advise him to do exercise regularly and also to take care of his food intake.

Learning outcome

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Educational Video Film on Stimulatory Home Environment for Infants and Toddlers

Objective

To view the educational video film on Stimulatory Home Environment (SHE) for Infants and Toddlers for knowing how to utilize materials and family members to provide SHE for Infants and toddlers

Film

It is developed by Prof. Vishala Patnam, Child Development Expert and Prof. Ramana Desetty. Financial support to it was given by VNMKV and ICAR Developmental Grant. It focuses on what type of stimulants and stimulatory activities need to be provided to infants and toddlers. They can be provided very easily to create conducive learning environment for enhancing their wholesome development.

Pen down 20 stimulatory materials suitable to infants and toddlers from this film

1	11
2	12
3	13
4	14
5	15
6	16
7	17
8	18
9	19
10	20

Write down 10 stimulatory activities from this film suitable to infants and toddlers

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____

Learning outcome

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Assessment of Home Environment Provided to Children By Families

Objectives

- To get oriented to Parental Inventory for Assessing Home Environment of Child

- To learn the technique of assessment of home environment provided to child in his/ her families and its interpretation

Requirements

Parental Inventory for Assessing Home Environment of Child
Pencil , a family having a 2 yrs / 3 yrs old child

Introduction

Home Environment plays an important role in wholesome development of young children as they spend most of their wakeful hrs at one's own home as compared to the older children. Fifty percent of the adult's development takes place in the first four years of child's life. Therefore it is essential to provide stimulatory physical as well as social environment to young children with utmost care.

Utility and Description of Home Environment Inventory

Parental Inventory for Assessing Home Environment of Child developed by Prof. Vishala Patnam, et al , Child Development Scientist, is very helpful for assessing the magnitude of the quality of the stimulatory environment provided at home to the child. If the child's home environment is recorded to be deficient in any of the components of inventory, the family can make sincere efforts on a priority to fill up those deficient items in the interest of child's wholesome development. This inventory has a list of 100 statements related to the home environment provided to young children (2 - 4 yrs) It has more objective and quantifiable items. However, certain items involve some level of subjective interpretation of observation of play material, activities, response of family members and also by interviewing them .

Major Components of the Home Environment Inventory are

1   Stimulatory learning material and activities provided to the child (50 items)
2   Physical environment of home (7 items)
3   Acceptance of child and interactions of parents/family with the child (9 items)
4   Stimulatory activities provided to the child for nurturing academic capabilities (9 items)
5   Efforts taken for socialization of the child (25 items)

Instructions

➢   First develop good rapport with the family of the child, whose home environment has to be assessed.

➢   The tester (person assessing HE) must be vigilant in observing things formally and informally in child's family.

➢   The observations must be focused on the items mentioned in the home environment inventory.

➢   The observations must be focused on the items mentioned in the home environment inventory.

➢   In addition to the observations the tester need to interview family members for getting information about them and other details required for filling up the home environment inventory.

➢   The observed items need to be tick marked in the inventory.

➢   The items which are not observed or did not happen need to be crossed in the inventory.

➢   The total tick marked items need to be counted.

➢   Each tick marked item gets 1 point.

➢   The raw score is the total tick marked items multiplied by 1 point.

➢   The raw score must be compared with the the scores given for the categories mentioned in the table given below for analyzing/assessing the quality of home environment provided to the child.

Case Study   **Date:**

1 **Child's full name**   : _____

2 **Date of birth**   : _____

3 **Age**   : _____ **Gender :** _____

4 **Address**   : _____

    _____

5 **Type of family**   : _____

6 **Size of family**   : _____

7 **Family monthly income :** _____

Raw Scores Obtained for Various Components of Home Environment

S.No.	Components of Home Environment	Obtained Scores
1	Stimulatory learning material and activities provided to the child	
2	Physical environment	
3	Acceptance of child and interactions of parents/family with the child	
4	Stimulatory activities provided to the child for nurturing academic capabilities	
5	Efforts taken for socialization of the child	
	Total score obtained	100

The total of items tick marked (observed/ happened) in all the five components of home environment (raw score of 1+2+3+4+5) is ————————— out of 100 items.

Levels of Quality of Home Environment

Raw Score	Quality of Home Environment
Above 86	Excellent
69-85	Very Good
53-68	Good
36-52	Fair
< 35	Poor

Interpretation / Assessment of Home Environment

_____

_____

_____

_____

_____

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Learning outcome

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Assessment of Motor Development of Infants with Bayley Scale of Infant Development (BSID)

Objectives

- To get oriented to BSID –Motor Developmental Scale
- To observe the process of administering BSID- Motor Developmental Scale on an infant for assessing her/his motor development

Utility and Description of BSID

The Bayley scales of infant development (BSID) are helpful for assessing the development of infants. The primary value of the test is to diagnose developmental delay/disorder if any at an early stage and based on it to plan and execute effective intervention for easy correction. BSID consists of three scales (Motor, Mental and Social behaviour) .

Motor scale

It covers neuro-muscular maturity in the form of body control and coordination in movements . The test items of the earlier period refer to simple tasks and handling of objects.

Suitable to 1 month to 30 months old infants & toddlers

Approximate time requirement is – 20-40 minutes

Requirements

BSID kit

Stop watch

¼ size white papers & pencil

List of few Test Materials

Hand bell	Cubes or blocks
A small bright colour ball	Pen torch
Pellets	A small attractive toy
A cup with saucer	Tea spoons (2)
A whistling doll with joined limbs	Round box
A stick (about 10" -11" long with a very small toy bunny)	
Paper	Pink form board
Blue form board	Rattle
Red ring	Mirror
Crayons	Yellow Pegs board
Blue Box	Picture books
Wheel toy	Toy chair
Stair case/steps 10"	Picture cards
Walking board	Three cups to cover

Instructions

Before Administering the BSID – Motor Scale

- ❖ Clean the test materials to prevent infection to infants & toddlers.
- ❖ Arrange the test materials as per the Motor scale & chronological age of infant /toddler.
- ❖ Keep the test materials out of infant's vision and reach for not distracting infant / toddler..
- ❖ Make sure that primary care giver remains with infant till the test is accomplished for getting maximum cooperation and response of infant.

While administering the BSID

- ❖ Develop the rapport with infant /toddler before presenting Motor scale items.
- ❖ Keep the individual record form ready for the motor scale and fill up the background information on it.
- ❖ Make sure of the exact chronological age of infant / toddler and fix it before administering scale items.

- ❖ Start presenting test items from easy one to difficult ones.
- ❖ Give positive feedback in order to encourage and motivate infant / toddler to do the scale items well.
- ❖ Stop testing infant / toddler if not in good mood or bored. Later on continue testing infant whenever she/he get into good mood.
- ❖ Mark each passed/completed item as infant / toddler performed it, mark if he/she failed to perform it and mark for the omitted items if any by over sight.
- ❖ Stop administering the test items if infant / toddler fails to perform 3 items consecutively.
- ❖ Remember to thank and appreciate infant or toddler and his / her care giver for their co-operation

Scoring Procedure

Carefully record the completed motor scale items and also underline last scale item performed by the infant / toddler and note down the corresponding age placement (50th percentile) which in turn denotes the motor age of infant / toddler. Use the formulae given below to calculate Motor quotient of infant / toddler.

$$\text{Motor quotient} = \frac{\text{Motor age}}{\text{Chronological age}} \times 100$$

Motor Development Scale for Infants and Toddlers

Name _____ Age _____

Gender _____ Date _____

Tester's name _____ Time taken _____ minutes

S.No.	Description of motor scale items	Test Performance ☐ ☐ ☐	Age placement (50th percentile)
1	Lifts head at the shoulder		.5
2	Postural adjustment when held at shoulder		.5
3	Arms thrust in play		.5
4	Legs thrust in play		.5
5	Lateral head movements		.5
6	Turns from side to back		.6
7	Head erect and vertical, movement of head		.6
8	Crawls		.8
9	Retains red ring in hand		.8
10	Head erect and steady		1.4
11	Sits with support		1.7
12	Dorsal suspension –lifts head		1.9
13	In prone position elevates self by arms		1.9
14	Holds head steady		2.2
15	Hands predominantly opens		2.5
16	Sits with slight support		2.8
17	Holds cube : Ulner Palmar		3.0
18	Turns from back to a side		3.4
19	Head balanced		3.5
20	Makes effort to sit		4.2
21	Partial thumb opposition		4.7
22	Pulls to sitting position		4.9
23	Sits alone momentarily		4.97
24	Rotates wrist		4.9
25	Unilateral reaching out to things		5.1
26	Rolls from back to stomach		5.4
27	Attempts to secure pellet in hand		5.6
28	Sits alone (thirty seconds or more)		5.7
29	Pulls to standing position		6.1

S. No.	Description of motor scale items	Test Performance			Age placement (50th percentile)
30	Sits alone steadily				6.2
31	Sits alone- good coordination				6.5
32	Complete thumb opposition (Radial- digital)				6.5
33	Early stepping movements				6.6
34	Scoops pellets				6.6
35	Pre-walking progression				6.9
36	Pellet partial finger prehension				7.4
37	Raises self to sitting position				8.2
38	Combines cubes or spoons : midline				8.4
39	Stepping movements				8.4
40	Stands up by holding the furniture				8.5
41	Fine grasping of pellets				8.6
42	Does pat-a-cake; midline skill				9.4
43	Walks with help				9.7
44	Sits down				9.7
45	Stands alone				10.8
46	Aufstehn –I				12.3
47	Walks alone				12.5
48	Throws a ball				12.6
49	Walks sideways (moves)				13.4
50	Walks backwards (movement)				14.1
51	Stands on right foot with help				14.6
52	Walks on left foot with help				14.7
53	Walks upstairs with help				15.7
54	Walks down stairs with help				16.5
55	Tries to stand on a walking board/drawn lines on floor				18.9
56	Aufstehn II				20.4
57	Walks downstairs alone				23.9
58	Walks upstairs				24.4
59	Walks with one foot on board / drawn lines on floor				26.1
60	Stands on left foot alone				26.5
61	Stands on right foot alone				26.6
62	Walks on line : General directions				26.6
63	Stands on walking board with both feet				26.8
64	Jumps on floor, with both feet				28.7
65	Walks on tiptoes				29.5
66	Jumps from a low level chair				29.9+
67	Aufstehn III				29.9+

The serial number of the last item done properly................

The corresponding motor age placement of the last item performed by infant / toddler_____

$$\text{Motor quotient} = \frac{\text{Motor age}}{\text{Chronological age}} \times 100$$

Assessment Report

_____

_____

_____

_____

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Learning outcome

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_____

Assessment of IQ of Children With Raven's Coloured Progressive Matrices

Objective

To get oriented to Raven's coloured progressive matrices (RCPM) test, administration, scoring and interpretation for assessing child's intellectual development

Introduction

RCPM is used for assessing intellectual development/ mental age as well as perceptual capabilities of children for clinical work. It can work satisfactorily with normal children in addition to children who do not speak any language, children suffering from physical disabilities, cerebral palsy, aphasia, hearing/ speech problems etc. The RCPM makes it possible to explore the psychological significance of observable discrepancies between a person's present capacities for productive thinking and his/her recall of information. RCPM is designed to accurately assess a person's present clarity of observation and level of intellectual development

Requirements

RCPM booklet	Manual
Record form	Pencil

Instructions for administering RCPM test

First through preliminary interview, collect information about child's background and fill up the record form. The tester need to open the booklet for giving clear instructions to the client about A set of problems and say that " Look at this picture". A part of it is cut. That piece is mixed up, and is present in the six options given below. You have to choose the right option either by showing it or saying the option number. The problems are arranged from simple to complex type. You are required to complete A set problems, move to Ab set problems and later move to B set problems. If you require break, feel free to take it. There is no time limit but you have to respond as fast as possible. Compare the replies/responses of the client with the scoring key provided in the manual and calculate the right responses. These responses (raw score) need to be converted into mental age as per the table given in the manual.

$$IQ = \frac{\text{Mental age}}{\text{Chronological age}} \times 100$$

Record Form
Coloured Progressive Matrices

Model Case Study

1 Child's name : Sameer

2 Date of birth : 22.09.2010

3 Age : 7 yrs

4 Family background

        Father's occupation   : Clerk

        Mother's Occupation : Teacher

        Type of Family   : Nuclear

        Blood type and group : B +

Record Form

S.No.	A		S.No.	AB		S.No.	B	
	Response	Score		Response	Score		Response	Score
1	4	1	1	4	1	1	2	1
2	5	1	2	5	1	2	6	1
3	2	0	3	1	1	3	3	0
4	2	1	4	6	1	4	2	1
5	6	1	5	2	1	5	1	1
6	5	0	6	4	0	6	3	1
7	6	1	7	2	0	7	6	0
8	2	1	8	4	1	8	6	1
9	1	1	9	6	1	9	4	1
10	3	1	10	2	0	10	5	0
11	2	0	11	2	0	11	4	0
12	5	1	12	2	1	12	4	0
	Total	09		Total	08		Total	07

Total raw score is (A + AB + B) = 09 + 08 + 07 = 24

$$IQ = \frac{\text{Mental age}}{\text{Chronological age}} \times 100$$

$$IQ = \frac{10 \text{ yrs}}{7 \text{ yrs}} \times 100$$

$$IQ = 121$$

IQ range is 120 - 130

Interpretation / Assessment Report

Mstr Sameer's IQ range is 120 -130, which means his intellectual development is very superior.

Coloured Progressive Matrices

Case Study

1 Child's name : _____

2 Date of birth : _____

3 Age : _____ yrs

4 Family background

      Father's occupation   : _____

      Mother's Occupation   : _____

      Type of Family   : _____

      Blood type and group : _____

S.No.	A Response	A Score	S.No.	AB Response	AB Score	S.No.	B Response	B Score
1			1			1		
2			2			2		
3			3			3		
4			4			4		
5			5			5		
6			6			6		
7			7			7		
8			8			8		
9			9			9		
10			10			10		
11			11			11		
12			12			12		
	Total			Total			Total	

Total raw score is (A + AB + B) = _____

$$IQ = \frac{\text{Mental age}}{\text{Chronological age}} \times 100$$

$$IQ = \frac{\text{...... yrs}}{\text{...... yrs}} \times 100$$

$$IQ = \underline{\hspace{3cm}}$$

IQ range is \underline{\hspace{2cm}}

Interpretation/ Assessment Report

_____

_____

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_____

Learning outcome

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_____

_____

Assessment of Social Maturity of Children with Vineland Social Maturity Scale for Children (VSMS)

Objective

- To understand VSMS by getting oriented to the process of administration, scoring and interpretation of VSMS.

- To learn to assess social maturity of children by administering VSMS

Description

The Vineland's Social Maturity scale (Indian Adaptation by Malin A.J.) measures eight types of social capacities of an individual. It is suitable to newborn to 15 yrs old children. One can estimate social age (SA) and social quotient (SQ) of birth to 15 yrs old children. This SQ is highly correlated with IQ. The eight social areas are measured by this scale are Self help general (SHG) Self help eating (SHE), Self help dressing (SHD), Self direction (SD), Occupation (OCC), Communication (COM), Locomotion (LOM) and Socialization (SCC). VSM scale has total 89 test items. These are made into sub groups based on child's age range.

Age Group of Children

Birth - 15 yrs old children.

Instructions for Data Collection and Recording

- The tester must observe child's abilities through observation for a day based on the VSMS items and also by interviewing family members.

- He/ She may interview child's parents / caregivers for supplementing the information obtained through observation of the child.

- The tester must record child's responses on VSMS record sheet .

- Mark the items ☑ as pass or completed by the child and cross ☒ the items that are not completed by the child .

- Tester must given half credit if he/ she presume that child could have passed the item if the opportunity was given.

- Tester can convert half credit to full credit if it lies between two passed items of the check list of VSMS.

Scoring

Note down the last passed test item correctly and see the corresponding social age in the table of the manual.

Assessment Report of Social Maturity of Child

S.No	Social Areas	SA	SQ
1	Self help General		
2	Self help Eating		
3	Self help Dressing		
4	Self Direction		
5	Occupation		
6	Communication		
7	Locomotion		
8	Socialization		

Underline the last item passed by the child on VSMS

Calculate the corresponding social age of child based on passed item

$$\text{Social Quotient (SQ)} = \frac{\text{Social Age (SA)}}{\text{Chronological Age (CA)}} \times 100$$

Client's SQ is ....

Model Case study

Name : Aarav   **Age :** 1.6 yrs   **Gender :** Male

Height : 82 cm   **Weight :** 12 kg

Residential Area : Parbhani   **Address :** Ramakrishna Nagar, Parbhani

Maternal Age : 26 yrs ,   **Education :** MA   **Occupation :** Teacher

Paternal Age : 28 yrs   **Education :** BA   **Occupation :** Clerk

Family type : Extended

Last item passed on VSMS is : 38, Corresponding SA is : 2.6 yrs

$$\text{Social Quotient (SQ)} = \frac{2.6}{1.6} \times 100 = 162.5$$

Assessment Report : Mstr Aarav's SQ range is 160 - 170, which means his social development and competency is extraordinary or excellent

Case study

1 Name : _____

2 Age : _____

3 Gender :_____

4 Height : ____ cm , Weight: ____ kg

5 Residential Area : _____

6 Address : _____

7 Maternal Age : ____ yrs   Education : ____   Occupation : ____

   Paternal Age   : ____ yrs   Education : ____   Occupation : ____

8 Family type : _____

Last item passed on VSMS is : _____ , Corresponding SA is : _____ yrs

$$\text{Social Quotient (SQ)} = \frac{\cdots}{\cdots} \times 100 = \text{_____}$$

Client's SQ is ....

Assessment Report

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Learning outcome

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Vineland Social Maturity Scale for Children
(Check List)

S.No.	Items	Marking ✓ or ☒
Birth - 12 months		
1	Laughs	
2	Balances Head	
3	Grabs object with reach	
4	Reaches for familiar persons	
5	Rolls over (unassisted)	
6	Reaches for nearby objects	
7	Occupies self unattended	
8	Sits unsupported	
9	Pulls self upright	
10	"Talks" imitates sounds	
11	Drinks with thumb and finger	
12	Moves about on floor (creeping, crawling)	
13	Grabs with thumb and finger	
14	Demands personal attention	
15	Stands alone	
16	Does not drool	
17	Follows simple instructions	
12-24 Months		
18	Walks about room unattended	
19	Marks with pencil or crayon on paper	
20	Masticates (chews)solid or semi- solid food	
21	Removes shoes or sandals, pulls off socks	
22	Transfers objects	
23	Overcomes simple obstacles	
24	Fetches or carries familiar objects.	
25	Drinks from cup or glass unassisted.	
26	Walks or uses a go-card for walking	
27	Plays with other children	
28	Eats with own hands	
29	Goes about house or yard.	
30	Discriminates edible substances from not edibles.	
31	Uses names of familiar objects	
32	Walks up stairs unassisted.	

S.No.	Items	Marking ✓ or ✗
33.	Unwraps sweets, chocolates.	
34.	Talks in short sentences.	
24-36 Months		
35	Signals to go to toilet.	
36	Initiates own play activities	
37	Removes shirt or frock if unbuttoned	
38	Eats with spoon/hands	
39	Gets drink (water) unassisted	
40	Dries own hands	
41	Avoids simple hazard	
42	Puts on shirt or frock unassisted (need not button)	
43	Can do paper folding	
44	Relates experiences	
36-48 Months		
45	Walks down stair one step at a time	
46	Plays co-operatively at kindergarten level	
47	Buttons shirts or frock	
48	Helps at little household task	
49	Perform" for other	
50	Washes hands unaided	
4-5 Years		
51	Cares for self at toilet	
52	Washes face unassisted	
53	Goes about neighborhood unattended	
54	Dresses self except for tying	
55	Uses pencil or crayon or or chalk for drawing	
56	Plays competitive exercise games	
5-6 Years		
57	Uses hoops, flies kites, or uses knife	
58	Prints (writes) simple words	
59	Plays simple games which require taking turns	
60	Is trusted with money	
61	Goes to school unattended	
6-7 Years		
62	Mixes rice "Properly" unassisted	
63	Uses pencil or chalk for writing	
64	Bathes self assisted	

S.No.	Items	Marking ✓ or X
65	Goes to bed unassisted	
7-8 Years		
66	Can differentiate between A.M. & P.M.	
67	Helps himself during meals	
68	Understands and keeps family secrets	
69	Participates in pre-adolescent play	
70	Combs or brushes hair	
8-9 Years		
71	Uses tools or utensils	
72	Does routine household tasks	
73	Reads on own initiative	
74	Bathes self unaided	
9-10 Years		
75	Cares for self at meals	
76	Makes minor purchase	
77	Goes about home town freely	
10-11 years		
78	Distinguishes between friends and playmates	
79	Makes independent choice of shops	
80	Does small remunerative work; makes articles	
81	Follows local current events	
11-12 Years		
82	Plays bit difficult games	
83	Can care for self or other if allowed to do it	
84	Enjoys reading books, newspapers, magazines	
12· 3 Years		
85	Plays bit difficult games	
86	Takes complete care of dressing and grooming	
87	Buys own clothing, accessories and material required	
88	Engages in social group activities	
89	Performs responsible routine chores at home and school	

Common Vocational and Recreational Interests of Adolescents

Objective

To study the common vocational and recreational interests of adolescents

Method

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Table 1 Common Vocational Interests Reported by the Adolescents

S.No.	Vocational Interests	Percentage of adolescents	
		Girls (n_____)	Boys (n_____)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Discussion

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Table 2 Common Recreational Interests Reported by the Adolescents

S.No.	Recreational Interests	Percentage of adolescents	
		Girls (n_____)	Boys (n_____)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Discussion

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Learning outcome

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Assessment of Emotional Maturity of Adolescents with Emotional Maturity Scale

Objectives

- To learn about how to administer Emotional Maturity scale, score and interpret the results
- To assess the emotional maturity of adolescents

Description of Emotional Maturity Scale

The Emotional Maturity Scale is developed by Yashvir Singh and Mahesh Bhargava. This scale consists of five broad factors of emotionality as mentioned below

1 Emotional Instability

The characteristics of this factor are lack of capacity to dispose problems, irritability, needing constant help for ones day today activities, stubbornness and temper tantrums.

2 Emotional Regression

The characteristics of this factor are feeling of inferiority, restlessness, hostility, aggressiveness and self-centeredness.

3 Social Maladjustment

The characteristics of this factor are lack of social adaptability, hatredness, boasting, lying and shirking of the responsibilities.

4 Personality Disintegration

The characteristics of this factor are phobias, rationalization, pessimism, immorality etc .

5 Lack of Independence

The characteristics of this factor are dependency and unreliability

EMS is a self reporting scale on a five point scale. There are total 48 statements. The statements of the scale are in question form demanding information for each statement in any of the five options i.e. very much (5), much (4), undecided (3), probably (2) and never (1) i.e. 5 point rating scale of scores need to be done by using its manual. Interpretations of scores need to be done by using its manual.

Categories of Emotional Maturity Score

Range of scores	Interpretation of emotionality
50-80	Extremely stable
81-88	Moderately stable
89-106	Unstable
107-140	Extremely unstable

Model Case Study

1. Name : Namrata
2. Age : 18 yrs
3. Area of residence: Parbhani
4. Family background

   Father's education M.Com,   Ocupation :   Bank officer

   Mother's education B.Sc.,B.Ed   Occupation : Teacher
5. Type of Family : Nuclear
6. SES: Middle

Total Emotional Maturity Score 67

Interpretation / Assessment Report

Ms. Namrata's Emotional Maturity Score is 67, which means she is emotionally extremely stable.

Case Study

1. Name : _____

2. Age : _____ yrs

3. Area of residence: _____

4. Family background

   Father's education: _____   Occupation : _____

   Mother's education _____   Occupation : _____

5. Type of Family : _____

6. SES : _____

Interpretation / Assessment Report

_____ _____

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_____ _____

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_____ _____

_____ _____

_____ _____

Learning outcome

_____ _____

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_____ _____

A Case Study of Adolescents on Gender Inequality Experienced by Them in Their Families

Objective

To conduct a case study of adolescents on gender inequalities experienced by them in their families

Brief report of one's own unforgettable life experiences in family with regard to the gender inequality

1 Name : _____

2 Age : _____ yrs

3 Area of residence: _____

4 Family background

Father's education: _____   Occupation : _____

Mother's education _____   Occupation : _____

5 Type of Family : _____

6 SES: _____

S.No.	Unforgettable experiences in family with regard to the gender inequality
1	
2	
3	

S.No.	Unforgettable experiences in family with regard to the gender inequality
4	
5	
6	
7	
8	
9	
10	

Learning outcome

Video Film on Gender Discrimination and Ill Effects of Female Infanticide

Objective

To view educational film Matrubhoomi :   A Nation Without Women, for understanding the ill effects of female infanticide and gender discrimination on family and society

Introduction

The film on **Matrubhoomi : A Nation Without Women** is of Boney Kapoor and Shreedevi Kapoor. It is produced by Nicoles Blany, Patric Sobelmam and Punkej Kharabanda. It is written and directed by Manish Jha. It is a SMG-Ex Nihilo production. According to UNFPA and Ministry of Health and Family Welfare, in the last 100 yrs, more than 50 million girls were killed from the Indian population due to the malpractices related to gender discrimination and female feticide/infanticide.

The Points/ Issues Understood From Film

1 _____

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2 _____

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3 _____

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4 _____

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10 _____

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Learning outcome

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Common Concerns and Issues of Senior Citizens

Objective

To interview at least 20 senior citizens (10 males and 10 females) for knowing their various concerns and issues encountered in leading life

Various Concerns and Issues of Female Senior Citizens

Concerns and Issues of Female Senior Citizens	Percentage of Female Senior Citizens (n-10)
General health	
Relationships with own children	
Financial	
Any Other	

Findings

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Learning outcome

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Research Designs for Studying Growth of Lab. Pre-Primary School Students

Objectives

- To take body measurements of at least 80 students and assessing their GQ
- To analyze the data on GQ of Lab. Pre-Primary School Students and categorize them based on the GQ ranges

Cross Sectional Child Study Method

Eighty Lab. Pre-Primary School students from each age group 2 - 3 yrs, 3 - 4 yrs, 4 - 5 yrs and 5 - 6 yrs are selected and their physical development is studied.

The background information of the Students

1 Sample size: 80

2 Gender of children: Male _____ Female _____

3 Area of residence : Urban

4 Family type : Nuclear ☐ Extended ☐ Joint ☐

5 Age groups and number: 4 (2- 3 yrs- 10 children, 3-4 yrs-10 children, 4-5 yrs-10 children, 5-6 yrs-10 children)

6 Birth order: First born _____ Middle born _____ Last born _____

7 Food habits: Vegetarians _____ Non-veg_____

8 Study period: _____

Anthropometric Measurements of the Lab. Pre-Primary School Students

Age of students and number	Month and Year for taking measurements	Average Body weight (KG)		Average Body height (cm)		Average head circumference (cm)	
		Male students (10)	Female students (10)	Male students (10)	Female students (10)	Male students (10)	Female students (10)
2 - 3 yrs (20)							
3 - 4 yrs (20)							
4 - 5 yrs (20)							
5 - 6 yrs (20)							

Details about the GQ of Lab. Pre-Primary School Students

GQ ranges	Category of growth	Percentage of Male students (40)	Percentage of Female students (40)
Above 110	Obese & Needs Immediate Care		
95- 105	Excellent		
90 - 95	Very Good		
85 - 90	Good		
80 - 85	Fair		
Below 80	Poor & Needs Immediate Care		

Findings

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Learning outcome

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Growth Quotient (GQ) Assesment Chart

Best Standards for Weight, Height and Head Circumference of Children

Child's Age	Weight (kg)		Height (cm)		Head Circumference (cm)	
	Boys	Girls	Boys	Girls	Boys	Girls
Birth	03.3	03.2	50.5	50.0	34.5	34.5
$\frac{1}{2}$ Yrs	07.8	07.2	67.8	65.9	43.5	39.5
1	10.2	09.5	75.2	74.3	47.0	42.4
1$\frac{1}{2}$	11.5	10.8	82.4	80.9	48.4	44.3
2	12.6	11.9	87.6	86.5	49.2	45.6
2$\frac{1}{2}$	13.6	13.0	92.5	91.5	49.8	46.3
3	14.0	14.0	96.0	95.0	50.0	47.0
3$\frac{1}{2}$	15.0	15.0	99.0	98.0	50.5	47.5
4	16.0	16.0	102.0	101.0	51.0	48.0
4$\frac{1}{2}$	17.0	16.0	105.0	104.0	52.0	50.0
5	18.0	17.0	109.0	108.0	53.0	52.0
5$\frac{1}{2}$	19.0	18.0	112.0	111.0	53.0	52.0
6	20.0	19.0	116.0	114.0	53.0	52.0
6$\frac{1}{2}$	21.0	20.0	118.0	117.0	53.5	52.5
7	22.0	21.0	121.0	120.0	54.0	53.0
7$\frac{1}{2}$	23.0	22.0	124.0	123.0	54.0	53.0
8	25.0	24.0	127.0	126.0	54.0	53.0
8$\frac{1}{2}$	26.0	25.0	129.0	129.0	54.5	54.5
9	28.0	28.0	132.0	132.0	54.5	54.5
9$\frac{1}{2}$	29.0	29.0	134.0	135.0	54.5	54.5
10	31.0	32.0	137.0	138.0	54.5	54.5
10$\frac{1}{2}$	33.0	34.0	140.0	141.0	54.5	54.5
11	35.0	37.0	143.0	144.0	54.5	54.5
11$\frac{1}{2}$	36.0	38.0	146.0	147.0	54.5	54.5
12	39.0	41.0	149.0	151.0	54.5	54.5
12$\frac{1}{2}$	40.0	42.0	152.0	154.0	55.0	55.0
13	45.0	46.0	156.0	157.0	55.0	55.0
13$\frac{1}{2}$	47.0	48.0	159.0	158.0	55.0	55.0
14	50.0	50.0	163.0	160.0	55.0	55.0
14$\frac{1}{2}$	53.0	52.0	163.0	161.0	55.5	55.0
15	56.0	53.0	169.0	162.0	55.5	55.0
15$\frac{1}{2}$	60.0	54.0	171.0	162.0	56.0	55.5
16	62.0	56.0	173.0	163.0	56.0	55.5
16$\frac{1}{2}$	64.0	56.5	174.0	163.0	56.5	55.5
17	66.0	57.0	176.0	163.0	56.5	55.5
17$\frac{1}{2}$	67.0	57.5	176.0	163.0	56.5	56.0
18	69.0	58.0	177.0	164.0	57.0	56.0

GQ formula

$$\frac{\text{Weight \% + Height \% + Head Circumference \%}}{3}$$

GQ Ranges	Remarks
95 - 105	Excellent
90 - 95	Very Good
85 - 90	Good
80 - 85	Just Okay
Below 80	Very Poor Needs immediate care
Above 110	Obese Needs immediate care

Growth Quotient (GQ)

GQ helps in understanding child's growth, nutritional status and physical fitness

Example

$$\text{Percentage of Weight} = \frac{\text{Child's actual weight}}{\text{Standard weight to that age}} \times 100$$

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