

CONSTRUCTION AND STANDARDIZATION OF ACHIEVEMENT IN HINDI

Parveen¹ & Asha yadav², Ph. D.

¹Research Scholar, Guru Kashi University, Talwandi Sabo, Punjab, India

²Assistant professor, Guru Kashi University, Talwandi Sabo, Punjab, India

Abstract

This paper presents the details of the development and standardization of the test of achievement in Hindi for 8th class under Punjab School Education Board. The sample initially consisted on 50 students. The total items of first draft consists of 135. After discussion with experts items were reduced to 15. After item analysis the 70 test items were reduced. The final draft was prepare with 50 items. The split – half reliability was found to be .98. Validity was established by content validity method.

Keywords:- Construction, standardization, Achievement test, Hindi.



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

Introduction:- Teaching learning process without evaluation are the prime requirement of any learning process. Achievement tests are one of the means of evaluation. The need was felt to construct an achievement test of in Hindi assessing the achievement of the students in the subject at the elementary stage i.e. 8th level, as there was lack of suitable achievement test in Hindi among the existing tests.

According to B. K. Sahu (2004) achievement test means to measure the actual level of attainment. In plain words, "Achievement test assesses the achievement of students regarding their learning up to a fixed point in a set time".

According to Gronlund, N.E (1977) defined an achievement test as "a systematic procedure for determining the amount a student has learned through instruction".

In the present research, an achievement test on Hindi subject is developed on the selected concepts for the study i.e. pronoun, adjective, essay and story from the 8th standard Hindi syllabus of Punjab School Education Board.

For planning of the achievement test, the following points were taken into account:-

- 1. Specifications of the course content**
- 2. Design**
- 3. Preparation of the blue print**

1. Specifications of the course content:-

The first important step was to specify the course content. According to the prescribed syllabus of Hindi subject for 8th class of Punjab School Education Board the following five topics were selected which are recorded in table.

Table: 1

Sr. No	Topics
1.	Guru Nanak Dev ji (Essay)
2.	Pradushan Ki Samasya (Essay)
3.	Visheshan (Grammar)
4.	Sarvanam (Grammar)
5.	Ekta Mein Bal Hai (Story)

2. Design

It indicates as to whether there are any options in the question paper, and if so, what their nature is. The design, in fact, is termed as an instrument which reflects major policy decisions of the examining agency, whether it is a board or an individual.

Types of questions:-

It was decided to include objective type, fill in blanks, write or wrong and short type questions in the test.

Design of Achievement test:-

For the present study, the design for achievement test was given below:

Design

Subject: Hindi

Class: 8th

The distribution of questions over the different dimensions of the question paper was as shown in table.

Table: 2 Unit wise distribution and number of questions in the achievement test in

Hindi:

Sr.No	Units	No of Question
1.	Guru Nanak Dev ji (Essay)	25
2.	Pradushan Ki Samasya (Essay)	30
3.	Visheshan (Grammar)	30
4.	Sarvanam (Grammar)	25
5.	Ekta Mein Bal Hai (Story)	25
Total		135

Table: 3 Objective wise distribution and number of questions in achievement test in Hindi:

Sr. No	Objective	No. of Questions
1.	Knowledge	60
2.	Understanding	50
3.	Application	25
Total		135

3. Preparation of the blue print

Preparation of the blue print helped the investigator to have an objective based achievement test giving due weight to objectives, content and forms of questions more than the required number of items was included in the test under each objective and content unit. This was done to get enough items for final test.

Table: 4 First draft of blue print for achievement test

Objective		Knowledge				Understanding				Application				Total Q.	Marks
Units	Topic	v/x	FB	OT	SQ	v/x	FB	OT	SQ	v/x	FB	OT	SQ		
Essay	Guru Nanak Dev ji	2(1)	2(1)	6(1)	0	2(1)	2(1)	6(1)	0	1(1)	1(1)	3(1)	0	25(1)	25
Essay	Pollutions ki Samasya	7(1)	2(1)	0	6(1)	2(1)	2(1)	0	6(1)	1(1)	1(1)	0	3(1)	30 (1)	30
Grammar	Visheshan	3(1)	2(1)	0	10(1)	1(1)	2(1)	0	8(1)	1(1)	1(1)	0	2(1)	30 (1)	30
Grammar	Sarvanam	2(1)	2(1)	0	5(1)	2(1)	2(1)	0	5(1)	1(1)	1(1)	0	5(1)	25(1)	25
Story	Ekta mein bal hai	3(1)	2(1)	0	5(1)	3(1)	2(1)	0	5(1)	2(1)	1(1)	0	2(1)	25(1)	25
Total		17	10	6	26	10	10	6	24	6	5	3	12	135	135

Preparing of the test

Revision of items in view of suggestions received from the subject experts:-

After incorporating the suggestions of teachers in Hindi, the preliminary draft of the achievement test was reframed. Some items were modified and finally 15 items were dropped and 120 items were retained.

Preparation of directions to the test

Appropriate directions to test were prepared, in a clear and concise way so that the students could understand them easily. As test was divided into four sections viz: write/wrong, fill in

blanks, multiple choice questions and fourth part divided into sub part into ten parts short type questions.

Clear instructions were given at the beginning of the test. For the first section the students were asked to write to write/wrong the correct response in the answer sheet. For second section the students were asked to write correct answer fill in the blanks. For the third section the student were chose correct response in multiple choice question in the given answer sheet. For the fourth section:-

Part1 Chose correct visheshan

Part2 Visheshan chune

Part3 Write the type of visheshan

Part4 Chose correct sarvanam

Part5 Chose prashn vachak sarvanam and anishchay vachak sarvanam

Part6 Vachan badlo

Part7 Write vilom shabad

Marking scheme for achievement test

The marking was done using scoring key already prepared by the investigator; one mark is for a correct answer and zero mark for an incorrect answer.

Try out of the test

The try -out of first draft was conducted on a sample of 50 students of VIII grade in Hindi subject studying in D.A.V.Sen.Sec. School in Shri Muktsar Sahib, who have already covered the content of the test. Enough time was given to all students to enable them to complete the test. The scoring was done according to the scoring key prepared in advance for this purpose.

Item analysis

After scoring the test item analysis was carried out. Item analysis helped to identify items with high decimating power and optimum difficult level. "The procedure used to judge the quality of an item is called an analysis".

1. The test papers were arranged in decreasing order i.e. from highest to lowest score.
2. The criterion of taking 27% cases in upper and lower groups in 14 students from upper group and 14 students from lower group was taken.
3. The number of pupils in the upper and lower group who selected each alternative for each test item was tabulated.

Item analysis is done to establish the suitability of an item for inclusion in the final test. The quality of each item is ascertained by analyzing two important characteristics of the item, i.e. difficulty value and discriminating power, item difficulty is the mean item score, which stands for the empirical probability that the target population will pass the item (Likert, 1997). For calculating the difficulty value (DV) and discrimination power (DP) the following formulas' were used:

- $$PH = \frac{R/(W-1)}{R+W} \qquad PL = \frac{R/(W-1)}{R+W}$$

R= No. of Right response

W= No. of wrong response

PH = Proportion of correct response to the item from the higher group

PL = Proportion of correct response to the item from the lower group

- Difficulty value (DV) = (PH + PL)/2
- Discriminating power (DP) = (PH -PL)/2

The major reason for measuring the item difficulty was to choose items of the difficulty level. The criterion given by Ebel (1966) says that the items the difficulty value above .70 and below .10 should be rejected, as they are very easy and very difficulty respectively. The items having discrimination value more than .20 and less than .80 should be retained and others are rejected. Indicates item is not discriminating, so should be deleted from the test. The analysis of the items is given below table.

Table: 5

Item No.	Item Difficulty (DV)	Item Discrimination (DP)	Remarks
1.	0.36	0	Dropped
2.	0.82	-0.47	Dropped
3.	0.68	0.72	Retained
4.	0.18	0.12	Dropped
5.	0.12	0.09	Dropped
6.	0.55	0.77	Retained
7.	0.10	0.03	Dropped
8.	0.16	0	Dropped
9.	0.14	0.05	Dropped
10.	0.10	0	Dropped
11.	0	0	Dropped
12.	0.59	0.69	Retained
13.	0.59	0.69	Retained
14.	0.49	0.75	Retained
15.	0.66	0.54	Retained
16.	0	0	Dropped

17.	0	0	Dropped
18.	0	0	Dropped
19.	0	0	Dropped
20.	0.93	0	Dropped
21.	0.93	0	Dropped
22.	0.59	0.69	Retained
23.	0	0	Dropped
24.	0.59	0.69	Retained
25.	0	0	Dropped
26.	0.93	0	Dropped
27.	0.24	0	Dropped
28.	0.59	0.69	Retained
29.	0.47	0.78	Retained
30.	0.20	0.08	Dropped
31.	0.63	0.47	Retained
32.	0.25	0.28	Retained
33.	0.55	0.77	Retained
34.	0	0	Dropped
35.	0.50	0.78	Retained
36.	0	0	Dropped
37.	0.51	0.80	Retained
38.	0	0	Dropped
39.	0.32	0.15	Dropped
40.	0.93	0	Dropped
41.	0	0	Dropped
42.	0.93	0	Dropped
43.	0	0	Dropped
44.	0.13	0.22	Retained
45.	0.59	0.69	Retained
46.	0	0	Dropped
47.	0	0	Dropped
48.	0	0	Dropped
49.	0.59	0.69	Retained
50.	0	0	Dropped
51.	0.23	0.33	Retained
52.	0	0	Dropped
53.	0.10	0.03	Dropped
54.	0.24	0	Dropped
55.	0.59	0.69	Retained
56.	0.52	0.80	Retained
57.	0.18	0.23	Retained
58.	0.55	0.77	Retained
59.	0	0	Dropped
60.	0	0	Dropped
61.	0	0	Dropped
62.	0	0	Dropped
63.	0.55	0.77	Retained
64.	0	0	Dropped
65.	0.49	0.79	Retained
66.	0	0	Dropped
67.	0.14	0.20	Retained
68.	0.55	0.77	Retained
69.	0.90	0.07	Dropped

70.	0.10	0.03	Dropped
71.	0.16	0.16	Retained
72.	0.05	0.03	Dropped
73.	0.06	0.05	Dropped
74.	0.51	0.80	Retained
75.	0	0	Dropped
76.	0.05	0.03	Dropped
77.	0.04	0.04	Dropped
78.	0.06	0.05	Dropped
79.	0.06	0.05	Dropped
80.	0.10	0.12	Dropped
81.	0.59	0.69	Retained
82.	0.39	0	Dropped
83.	0.28	0.23	Retained
84.	0.86	0	Dropped
85.	0.07	0.09	Dropped
86.	0.14	0.02	Dropped
87.	0.63	0.47	Retained
88.	0.10	0.03	Dropped
89.	0.14	0.05	Dropped
90.	0.28	0.23	Retained
91.	0	0	Dropped
92.	0.05	0	Dropped
93.	0.05	0	Dropped
94.	0.05	0	Dropped
95.	0.01	0	Dropped
96.	0.55	0.77	Retained
97.	0.15	0.20	Retained
98.	0.12	0.08	Dropped
99.	0.38	0.75	Retained
100.	0.49	0.75	Retained
101.	0.51	0.75	Retained
102.	0.14	0.05	Dropped
103.	0.20	0.08	Dropped
104.	0.07	0.02	Dropped
105.	0.28	0.23	Retained
106.	0	0	Dropped
107.	0.10	0.24	Retained
108.	0.49	0.80	Retained
109.	0.45	0.72	Retained
110.	0.05	0.06	Dropped
111.	0.55	0.77	Retained
112.	0.14	0.24	Retained
113.	0.07	0.09	Dropped
114.	0.49	0.75	Retained
115.	0	0	Dropped
116.	0.15	0.20	Retained
117.	0.59	0.69	Retained
118.	0.44	0.75	Retained
119.	0.22	0.35	Retained
120.	0.45	0.72	Retained

Total selected Items 50

Reliability (Split-Half method)

To determine the reliability of the test split-half method was applied. To split the tool odd-even method adopted. All the odd numbered items like (1,3,5,7,9) constituted one part of the test and all the even numbered items like (2,4,6,8) constituted another part of the test, after that worksheet for the computation of reliability was created. Reliability of the tool was calculated coefficient of correlation (r)= .96. From the self-correlation of the half-tests the reliability coefficient of the whole test may be estimated from the formula. (Garrett., H.E, 1971).

Reliability coefficient is .98, which denoted the high reliability of of the questionnaire.

Validity

The test was validated against the criteria of “ content validity”. The content validity is concerned with the logical adequacy of sampling of a specified universe of contents. To determine content validity the test items , the panel consisting of four experts in subject matter. The panel was asked to identify which test items corresponded to which outcome. The panel also completed the test so that scoring key could be verified. The experts agreed with the investigator on the assignment of the test items to objectives 90%. This concurrence of percentage was taken as evidence of content validity.

References

- Eble, R.L. (1966) *Measuring Education Achievement*. New Delhi, Prentice hall of India Pvt.Ltd.
- Eble, R.L. (1972) *Achievement testing*. In *International Encyclopedia of school science*, edited by David .L. Sills, 1. New York: Macmillan company and the free press.
- Garrett,H.E. (1968) *General psychology*. New Delhi; Eurasia Publishing House, (Indian edi) ., 378.
- Gronlund, N.E (1977) *Constructing Achievement tests (2nd ed)*. Englewood cliffs N. J. : Prentice hall.
- Naresh (2016) *Construction and standardization of an achievement test in english grammar*. *International journal of current research and modern education*. 1(2), 241-252.
- Sahu, B.K (2004) *Statistics in Psychology & Education*. New Delhi : Kalyani publishers.
- Sharma, M. & Singh, G. (2015) *Construction and standardization of achievement test in economics*. *International journal of science and research (ijsr)*. ISSN 2319-7064, 4 (12), Pp 2072-2074.