

## **CONSTRUCTION OF ACHIEVEMENT TEST TO ASSESS AWARENESS ABOUT FUNDAMENTAL DUTIES OF CONSTITUTION**

**Naveeda Khanum\***

**Dr. Jagannath K. Dange\*\***

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**Abstract:** The paper presents the details of the construction and standardization of the test of achievement in Awareness about Fundamental Duties of Indian constitution to IX class students of Loyola English school and Priyadarshini English School, of Shimoga district, Karnataka state. The test initially consisted of 27 items. In order to improve the items, comments of the experts were obtained along with their suggestions and opinions. All the experts positively commented on all the items. So, after the opinions obtained from experts, test contained 27 items in the first draft. After the item analysis the final draft was reduced to 24 items. The reliability of the test through cronbach's alpha test of reliability was found to be 0.746 and the test is valid.

**Key Words:** Reliability, Validity, Achievement Test, awareness, fundamental duties, Constitution.

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\* **Lecturer DIET Shimoga, Research scholar, Department of P.G. Studies and Research in Education, Kuvempu University Shankaraghatta-577451. Shimoga- Karnataka**

\*\* **Assistant Professor, Department of P.G. Studies and Research in Education, Kuvempu University Shankaraghatta-577451. Shimoga- Karnataka. India**

## Introduction

Tradition and temper of India taught through the ages laid greater emphasis on duties. Right flows only from duties well performed .Duty is inalienable part of right .what is duty for one is another person's right and respect of human life and not to injure another person. Duties are required to regenerate and reconstruct the nation. It is an irony that more than 99%of the citizens of India do not even know about the existence of this article in the constitution (national commission report, 2001). Therefore awareness about fundamental duties must gain momentum. Vasudha Dhagamwar, Syed S. Hameed, and Justice Shri Shiv Dayal. (2001).National commission to review the working of the constitution: have focussed about the need of developing awareness about citizens' duties to Indians along with explanation of each duty, which are in "Article 51A- Fundamental Duties. They are of the view that the article 52 –A has the potential to regenerate and reconstruct the nation. The report says Fundamental Duties have remained in the Constitution Book and have not come out to reach even the class of people who handle the Constitution. The report also puts stress that as a nation-building measure, teaching Fundamental Duties in every educational institution and as a measure of in-service training everywhere was necessary as these cannot be inculcated in our citizens unless these are brought into their minds and living process through teaching and education. Sen Tanmay and Sinha. (2011).In their write up about fundamental duties, An Analysis in the Indian Context, suggest that legislative steps to be taken for the enforcement of fundamental duties. Secondly fundamental duties should be discharged by all who enjoy the rights. People should be sensitized and awareness should be developed about fundamental duties.Mudgal Mukal. ( ). In the Law and Culture has focused about the different art forms and their importance. The researcher has established a link between law and culture. Some of the rights and duties are discussed. The culture ,tradition and values of a society not only form the foundation of the laws that governs but changes in values and tradition with the passage of time also influence and bring about fresh legislation reflecting the society under linking the ever present link between law and culture. Naik Saidul. (2014). In Fundamental Duties, its Significance and Draw backs interpreted all the 11 fundamental duties .The significance and problems associated in its implementation are presented in detail. It contains citation of prevention act regarding any kind of disrespect to National Anthem & National

Flag. It also focuses about the provisions in the existing criminal laws to ensure that the activities which encourage enmity between different groups of people on grounds of religion, race, place of birth, residence, language, etc. are adequately punished. Writings, speeches, gestures, activities, exercise, drills, etc. aimed at creating a feeling of insecurity or ill-will among the members of other communities, etc. have been prohibited under Section 153A of the Indian Penal Code (IPC). IPC related to discrimination on the basis of caste, class are discussed. Considering the significance and need the investigator Constructed awareness test about fundamental duties of Indian constitution.

The achievement test is regarded as controlling process for teaching -learning activities. It helps in evaluating the effectiveness of teaching instructions. It also provides the feedback to the students as well as to the teachers. In an achievement test the main emphasis is given on content coverage or course. The achievement test has the focus on the realization of objectives of teaching and learning. The teaching objectives are assessed in terms of terminal behaviours of the students. The number of achievement tests have been constructed and standardized by various educationists in different fields to measure the academic level of the students. The investigator scrutinized and critically reviewed the existing stock available for testing achievement of IX class students in awareness about fundamental duties of constitution. The investigator did not find any appropriate test as per the content part and objectives taken for the present study. Hence it was decided to construct and standardize an achievement test on the selected topics of social science for IX class from the syllabus of Karnataka state social science.

**Construction of the Achievement Test:** Construction of the achievement test was carried out in three phases (Kumar Naresh .2016)

- ❖ Planning Phase
- ❖ Construction Phase
- ❖ Standardization Phase

**Planning Phase:** The following points were taken into consideration during the planning phase:

- ❖ Whom to administer?
- ❖ What to measure?
- ❖ Stage of test administration

An achievement test was meant for students of age groups 14-16 years studying in class IX of Loyala English School and Priyadarshini English School.

Achievement in awareness about Fundamental duties of Indian constitution was measured. The test aimed at measuring the Knowledge, Understanding and Application aspects of the students in 11 duties of constitution of India.

Keeping in mind the above said aspects, planning for construction and standardization of the achievement test was done. Further it involved the following two steps:

- ❖ **Identification of Contents**
- ❖ **Identification of Objectives**

**Identification of Contents:** For the present achievement test, the contents were taken from social science text of class IX. To delimit the area of research, the investigator had taken only 11 duties from the lesson Our Constitution. Through discussion with subject experts who had been teaching social science

**Identification of Objectives:** Keeping in mind the contents, objectives were identified by the investigator for the construction of the achievement test in fundamental duties from Social Science for IX class. Objectives were mainly meant for to test the Knowledge, Understanding and Application aspects of the students.

**Construction Phase:** The construction of the test was carried out with adequate planning. Bloom's Taxonomy Objectives formed the basis for the blue print of the test. The blue print of the test was developed in which topic wise weightage was given to each category of educational objectives and number of items for each category of objectives.

**TABLE-1 CATEGORIES OF TEST ITEMS**

Domain Topic	Dimensions	Knowledge	Understand ing	Application	Total
11 Fundamental Duties of Indian Constitution	• Consciousness.	07	07	03	27
	• Obligation	02	01	07	

**Types of Items in the Test:** Total 27 items were prepared in the preliminary draft of the test. All the items were multiple-choice items. Multiple-choice question (MCQ) comprises of a stem with a question line underneath it, followed often by a number of 3 to 5 alternatives. Cizek & Oday (1994) explains that one of the alternatives is the correct or appropriate response known as the key, while the others are described as distracters. A salient characteristic of distracters is that all options shall present credible answers and if possible none shall be incorrect (Saudi Commission for Health Specialties, 2015). Distracters are set to attract students who do not know the correct answer while students who know the correct answer are supposed to ignore them. Tests using MCQs can be used to examine student difficulties if the incorrect options are designed to reveal common misconceptions and they can provide a more comprehensive sampling of the subject material because of wider coverage. They are objective and easily adapted for computer delivery. Moreover, this type of test is often more valid and reliable than essay tests because discrimination between performance levels is easier to determine and scoring consistency is virtually guaranteed when carried out by machine (Hotiu, 2006). However, some instructors believe that MCQs are “multiple-guess” items or that MCQs are only capable of testing factual information and so are less appropriate for testing higher-order cognitive skills. An item in MCQs is a single test element, which might be a multiple-choice question (University of Washington, 2015). Multiple-choice question (MCQ) is an efficient tool for evaluation; however, this efficiency solely rests up on the quality of MCQ which is best assessed by item and test analysis (Al-Ariqi Y.I, Dange K.J. & Mohsin M.2017.)

### **Standardisation of the Test**

**Pilot Survey:** Before individual try out, it was thought essential to have a pre try-out of the test. For this purpose the investigator prepared ten copies of the test and was given to the students to check the language ambiguity and difficulty level of the test. All the students were able to complete the test.

**Preliminary Draft:** Preliminary draft is necessary in the construction of the test in its final form because in its absence it will be impossible to know how good the test is. While making the preliminary draft of the test, the existing tests in the concerned areas were consulted. New and original test items were prepared to assess the desirable objectives of the blue print. 27 test items of suitable difficulty were compiled. Rough idea of the difficulty of the items was obtained by

trying out the items on a small group of students as discussed in pilot survey. The items were then edited along with carefully worded instructions, which indicated briefly the nature and purpose of the test. The final manuscript of the preliminary draft was then submitted to different experts for their opinions and criticism, especially to those who have experience of tool standardization and who were teaching social science to IX class in the Secondary Schools of Shimoga District of Karnataka. The experts consist of university professors, secondary schoolteachers of social science, principals of teacher Education College, teacher educators, and retired subject inspector.

In order to improve the items, comments of the experts were obtained along with their suggestions and opinions. All the experts positively commented on all the items. So, after the opinions obtained from experts, test contained 27 items in first draft. The investigator personally visited the schools for the administration of Preliminary draft of the achievement test. Before the administration of the preliminary draft proper arrangement of sitting was made, instructions were given carefully and way of giving answer was demonstrated at blackboard. Time factor was also considered by the investigator. Various problems faced by the students were noted by the investigator.

**Formulation of Instructions and Initial Information Regarding Questionnaire:** The entire set of questions and initial information regarding questionnaire was prepared for the convenience of the selected sample. In this information, nature and type of questions were explained. A scoring key in order to find right and wrong answers was also prepared.

**The Tryout:** At this stage the preliminary draft was administered on a sample of 50 students of IX class selected from English medium, State syllabus school

**The time limit was generous at the tryout stage. The test was so timed that nearly 95 percent subjects in the sample completed the test.**

**Scoring of the Response Sheet:** After the administration of the test on 50 students of IX class, the response sheets were taken back and scored with the help of scoring key.

**Item Analysis:** After scoring the test items, item analysis was carried out. Two kinds of information namely item difficulty and discriminating power of items were computed. Item difficulty means the proportion or percentage of the examinees who have answered the item correctly. And item discrimination power means ability of an item on the basis of which the discrimination is made between superiors and inferiors. In this test the investigator used Kelly's (1939) method to calculate the item difficulty value and discriminating power. Kelley demonstrated that when extreme groups, each consisting of 27% of the total group were used, the ratio of the difference in abilities of the group to the standard error of their difference, that is the degree of uncertainty about the size of real difference was found to be maximum. Kelley (1939) showed that by taking upper and lower groups of 27% of total sample, one could say with the greater confidence that those in upper group were superior in ability measured by the test of those in the lower group. (Kumar N. 2016.)

The formula to calculate **D.P**=  $\frac{R_u - R_l}{0.5N}$

The formula to calculate **D.V**=  $\frac{R_u + R_l}{N}$

Where  $R_u$  = Number of right responses of the upper group.  $R_l$  = Number of right responses of the lower group.  $N$  = Total number of students in both the groups. The D.V. and D.P. for each item thus computed and have been given in the table no. 2

**Table 2: Difficulty Value (D.V.) and Discriminative Power (D.P.) of Total Items (N=27)**

Item No	Upper Group	Lower Group	Difficulty Value	Discriminative Value	Decision
2	8	4	30.76	0.46	Accepted
3	6	0	46.15	0.23	To be to improved
4	13	6	53.84	0.73	Accepted
5	13	8	38.46	0.8	Accepted
6	13	7	46.15	0.76	Accepted
7	12	2	76.92	0.53	Accepted
8	10	9	7.6*	0.73	Rejected
9	11	5	46.15	0.61	Accepted

10	12	4	61.5	0.61	Accepted
11	13	8	38.46	0.8	Accepted
12	11	6	38.46	0.65	Accepted
13	12	7	38.46	0.73	Accepted
14	12	7	38.46	0.73	Accepted
15	8	4	30.76	0.46	Accepted
16	12	8	30.76	0.76	Accepted
17	12	6	46.15	0.69	Accepted
18	9	1	61.5	0.38	Accepted
19	8	7	7.6*	0.57	Rejected
20	8	2	46.15	0.38	Accepted
21	9	7	15.38*	0.61	Rejected
22	13	8	38.46	0.8	Accepted
23	12	6	46.15	0.69	Accepted
24	12	10	15.38	0.84	Rejected
25	10	3	53.38	0.5	Accepted
26	11	8	23.07	0.73	Accepted
27	12	2	76.92	0.92	Accepted

For the selection of items, the criteria recommended by Ebel (1966) were used. The test items which are above 0.4 D.P value are accepted and the items with D.P value above 0.2 and below 0.4 were modified and considered.

By following the criteria of D.V. given by Kelly (1939), the items having difficulty value between 0.75 and above and below 0.25 were rejected. Items having D.V. between 0.50 to 0.75 were accepted as such. The items whose difficulty values were between 0.25 to 0.49 were accepted after revision and modification. On the basis of D.P. and D.V., out of 27 items, 24 items were accepted and 3 items were rejected.

### **Establishing reliability of the test**

Reliability is the consistency of the instrument in measuring whatever it measure (Wiersma & Just, 2009).the reliability of awareness about fundamental duties of constitution was estimated



using Cronbach Alpha and was found to be 0.75 .Cronbach Alpha reliability coefficient normally ranges between 0 and 1.The closer Cronbach Alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale

$$\alpha = \frac{rk}{[1+(k-1)r]}$$

Where k is the number of items considered and r is the mean of the inter-item correlation, the size of the Alpha determined by both the number of items in the r the mean inter item correlations. George and Mallery (2003) rules of thumb were followed for determining the acceptability of the test with respect to the value of Cronbach Alpha.

Since the Cronbach Alpha coefficient of the awareness about fundamental duties of Indian constitution is 0.746 the test was found to have acceptable measure of reliability .Finally the test was consisted of 24 items.

**Conclusion:** The study was carried out to construct and produce a reliable and valid Achievement Test in social science the test was standardized on the sample of 50 students studying in IX class of English medium School; Shimoga District, Karnataka state. Two research questions which centred on validity and reliability were drawn to guide the study. Theoretical and empirical literature related to the study was reviewed. The reliability of the test was determined through cronbach's Alpha test of reliability which was 0.746. Hence, the constructed Achievement Test in social science has a high reliability and validity. The test can be used by the teachers to assess student's achievement in awareness about fundamental Duties of Constitution when they have covered the content areas of IX class.

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