Construction and Standardization of Civic values Inventory for Secondary School Studentsof Mehsana City

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Abstract:
Many people do not have a clear idea of the rapidly diminishing limits of our environment. The basic natural components of the human environment are still regarded as inexhaustible and the attitudes resulting from this point of view are reflected to an alarming degree and indeed often in entire lifestyles. A basic change of people's attitude towards their environment and its natural resources are a necessary and urgent prerequisite for a rational and wise management and improvement programme. Constructive attitude and values towards the environment both in philosophical and pragmatic senses have not yet become an ingredient in everybody is thinking and acting. This remains the basic objective of the present study. The study is an attempt to construct and standardize the Civic Values Inventory for secondary school students of Mehsana city. For those investigators used item analysis techniques and established validity and reliability of the Civic values inventory.

Keywords: *Attitude, Constructive attitude, Civic values*

1. Introduction

The term "Value" comes from the Latin word "Valere" this means, "To be of worth". Values are the guiding principles of life, which are conducive to all-round development. They give direction and firmness to life and bring joy, satisfaction, and peace of life.

The concept of value differs from knowledge e.g. it has normative elements in addition to a cognitive element. "Value" is a broader term, which includes not only moral values but also aesthetic, cultural, intellectual, social, political, and economic values. It is relevant to discuss the relationship between the behavior of man and his environment. Until the last few centuries, man and his environment worked well together. But with science and technology man has tried to destroy the environment. Few environmental problems are pollution, biomagnifications, greenhouse effect and global warming, ozone depletion of natural resources, natural degradation etc. the major challenge facing present day society is the need for developing environmental values to protect our environment.

There is a paramount need to create consciousness of the environment. It must permeate all ages and sections of society beginning with the child. Environmental consciousness should involve teaching in school and colleges. As, a investigator felt that today education lacks the inculcation of the environmental attitude and values due to inadequate environmentally based curriculum, inadequate infrastructure and facilities, inadequate training of teachers, administrators, inadequate student activity related to environment. The school curriculum does not allow for the development of attitude and values to sustain the environment. Thus, it is essential to include certain components that communicate essential values in their totality. Therefore, it is a felt need to study the "civic values" of students. As there is no suitable tool available, the investigators have decided to develop and standardize a scale to measure civic values of secondary school students.

2. Definition of terms

According to C. V. Good dictionary the term “CIVIC VALUES” is separately defined as under. The term "CIVIC" means “An individual or group act designed to perpetuate or advanced community, state or national affairs."

The term "VALUE" means, “any characteristics deemed important because of psychological, social, moral or aesthetic considerations; commonly used, in plural; as in counseling to refer to build, in inner system of beliefs from which one can gain security or support."

For the present study the term, "CIVIC VALUES" is defined as: an individual or groups act based on an inner system of beliefs for betterment of community, state, or national affairs. In present context civic values are studied with respect to;

1.Cleanliness
2.Afforestation
3.Water conservation
4.Electricity conservation
5.Waste management
6.Safety of public property

Further these civic values are operationalized as…

1. Cleanliness: Cleanliness is defined as keeping surrounding such as house, school, and public places free from dust, pollutant, or harmful substance.
2. Afforestation: The process of nurturing and planting more trees along with preventing them from being felled down is called afforestation.
3. Water conservation: Water conservation is defined as careful and optimal use of water with out wastage.
4. Electricity conservation: Electricity conversation is defined as careful and optimal use of electricity with out wastage.
5. Waste management: Waste management is defined as the fruitful/successful use of something or object that can be re utilized / recycled without being discarded.
6. Safety of public property: Safety of public property is defined as taking care and preserving public property.

3. Objectives of the Study

For the present study the following objectives have been formulated.

1. To construct the civic values inventory for secondary school students.
2. To standardize the civic values inventory for secondary school students.
3. To establish the validity and reliability of the civic values inventory.

4. Civic values inventory

There is no ready-made tool available to measure civic values among secondary school student in Gujarati. So, researcher has constructed the civic values inventory. The procedure of construction and standardization of the CVI as follows:

To construct the tool, the investigators used the following techniques and tools:

1.Interview with secondary school students
2.“Civic values” tool prepared by Mr. Modi during his Master’s degree in Education
3.Environmental attitude Inventory (EAI, Milfont & Duckitt, 2005) through Internet
4.Environmental attitude and ecological behavior questionnaire.

After collecting the source materials cited above the investigators proceeded to construct the first draft of civic values inventory having 86 statements of which 49 were positive sentences & remaining 37 were negative statements. Each statement is set of five scales of “Always”, “Frequently”, “Occasionally”, “Rarely”, “Never” and weight of 5,4,3,2,1 is given for positive statements and the score is reversed for the negative statements. all the 86 statements are grouped under six dimensions

viz, cleanliness consists 19, afforestation consists 15, water conservation consists 12, electricity consists 12, waste management consists 16, safety of public property consists 12 statements.

5. Content Validity

Initially, CVI tool was given to eight experts related with education field. Incorporating the changes suggested by the panel, few statement ware modified, few statement were discarded in a CVI. The CVI having 66 statements is ready for item analysis.

6. Item Analysis

Next step in the standardization of a CVI is the item analysis. In order to find out the t-value and co-efficient of co-relation, the tool was administered in two secondary school of Mehsana city. The total 120 secondary school students consist of 8^{th}, 9^{th}, and 10^{th} standard. The civic values inventory scores were found out and they were valued in descending order. Then 27% of the subjects (high) with highest total scores and 27% the subjects (low) with the lowest total scores were shorted out for the purpose of item selection. The t- value and coefficient of co-relation were computed. The following table shows the original serial number of the statements, t-value, and coefficient of co-relation and nature of the statement.

Table 1: The statistics of Item Analysis

Rank Number	Original Serial Number	t-value	r	Nature of the statement
1	59	6.88	0.53	Positive
2	18	5.54	0.46	Positive
3	63	5.44	0.55	Negative
4	24	5.39	0.47	Negative
5	54	5.19	0.58	Positive
6	35	4.91	0.44	Positive
7	61	4.89	0.37	Positive
8	6	4.83	0.37	Negative
9	23	4.75	0.45	Negative
10	26	4.63	0.50	Positive
11	21	4.45	0.49	Positive
12	52	4.44	0.41	Positive
13	40	4.40	0.42	Positive
14	9	4.39	0.46	Positive
15	43	4.22	0.43	Positive
16	31	4.21	0.43	Positive
17	36	4.20	0.37	Negative
18	28	3.98	0.47	Positive
19	44	3.95	0.27	Positive
20	39	3.94	0.32	Positive
21	49	3.93	0.44	Positive
22	27	3.92	0.44	Positive
23	53	3.91	0.42	Positive
24	50	3.80	0.26	Positive
25	62	3.76	0.46	Negative
26	41	3.71	0.43	Positive
27	47	3.70	0.37	Positive
28	37	3.65	0.49	Negative
29	29	3.63	0.26	Positive
30	5	3.58	0.42	Negative

Rank Number	Original Serial Number	t-value	r	Nature of the statement
31	58	3.56	0.33	Negative
32	25	3.56	0.32	Positive
33	64	3.55	0.38	Positive
34	16	3.54	0.33	Negative
35	30	3.48	0.48	Positive
36	10	3.45	0.34	Positive
37	45	3.42	0.36	Negative
38	38	3.40	0.35	Positive
39	60	3.26	0.36	Negative
40	17	3.09	0.33	Positive
41	1	3.07	0.29	Negative
42	12	2.99	0.32	Negative
43	48	2.98	0.51	Negative
44	34	2.97	0.44	Negative
45	57	2.94	0.27	Positive
46	19	2.92	0.41	Positive
47	46	2.89	0.25	Positive
48	3	2.88	0.25	Positive
49	33	2.84	0.25	Positive
50	42	2.83	0.33	Positive
51	20	2.79	0.31	Positive
52	22	2.74	0.30	Positive
53	11	2.67	0.39	Negative
54	66	2.13	0.25	Negative
55	51	2.07	0.25	Negative
56	14	1.85	0.17	Negative
57	8	1.74	0.16	Negative
58	65	1.71	0.18	Negative
59	15	1.65	0.31	Negative
60	2	1.54	0.25	Negative
61	55	1.19	0.09	Positive
62	7	0.93	0.18	Positive
63	32	0.86	0.06	Negative
64	13	0.48	0.13	Negative
65	56	-0.263	0.06	Negative
66	4	-0.27	0.08	Negative

Those items with the t-value of 1.96 or more were retained. If the t-value of the item was found less than 1.96, then those items were discarded. The final form of the civic values inventory has 55 items. With this the final tools were readied for the next process of standardization. The coefficient of correlation of retained items is 0.25 and more, it indicts the items of the civic values inventory are reliable. In the civic values inventory, 19 items are negative and 36 items are positive.

7. Reliability of the Inventory

The reliability of the civic values inventory was established by the spilt-half method and test-retest method.

In the spilt-half method, the inventory was divided in to two equivalent halves. One half consisted of all the odd number items and the other half of the even number items. The scores for each half for each subject were computed. Using sprearman-Brown Prophency formula the coefficient of correlation was computed.

In the test-retest method, the civic values inventory was given and repeated on the same group after interval of 3 weeks and the coefficient of correlation was computed between the first and second sets of the score. The reliability coefficient for both the tools ware calculated. The table no. 2 shows the reliability coefficients of the civic values inventory, which indicts both the tools found to be reliable.

Table 2: Reliability Coefficient of the Civic Values Inventory

Sr.	Method Used	No. of Students	Reliability coefficient
1	Spilt-half Method	59	0.87
2	Test-Retest Method	54	0.67

8. Significance of the Study

Environment being the heritage for all the enormity of the task is such that no government anywhere can address itself to all problems. It must be movement of the people, by the people and for the people. A society or a country is nothing but an extension of individuals. Hence very dynamic program on environmental education is needed in all sectors of the society. Special emphasis is needed on children because educating a child is educating generations. Present system of education should be modified that that student should come out with better attitude and values to take proper step to conserve resources and physical environment in sustaining life.

This study and civic values inventory consider those situations, which are familiar to learner in his home, school, and community. This would help learner to solve the immediate environment problems. This civic values inventory could help to inculcate values among students to create better society. The same tool will help the researchers in field of education doing further research.

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