

# Analysis of Validity Coefficient for Factor Scores against Teacher Ratings in Spiritual Intelligence

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**Abstract** - The verbal test which has been described in the present material is part of the total battery which consists of both verbal and non-verbal tests. The verbal test of creativity includes four subtests namely consequences test, unusualness test, similarity test and product improvement test.

The total time required for administering the test is 48 minutes in addition to the time necessary for giving instructions, passing out tests booklets to children and collecting them back.

In the present investigation the Likert's (1932) Amethod has been followed which is more convenient as far as administrative, economic and time facilities are concerned. The investigator prepared 39 statements which are related to religion. The statements of the scale have the following features:

- i) All the statements are related to religion.
- ii) All the statements are to be marked on a live point rating scale.
- iii) The statements are simple, specific and clear.
- iv) The statements are in the form of opinions rather than a narration of facts.

Appropriate instructions have been given in the scale.

The following scoring scheme was used for scoring the attitudes responses:

	SA	A	I	D	SD
Favourable Statements	5	4	3	2	1
Unfavourable Statements	1	2	3	4	5

Where SA stands for strongly agree; A stands for agree; I stands for indifferent; D stands for disagree and SD stands for strongly disagree.

**Key Words:** administrative, economic, time facilities, investigator.

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## INTRODUCTION

The results of discoveries in many different fields of knowledge suggest that Spinoza's views may be closer to the truth. The universe and human beings, within it, along with mind and matter, may all be connected in a holistic way. If we believe this theory, there are ethical and moral consequences. Anything, that we do, whether bad or good, has an effect on everything in

the universe. Perhaps such a philosophy could lead to a more caring approach to each other and to the world, as well as to the universe as a whole. It may not be unreasonable to speculate that there is a moral order in the universe which rises to the level of ethical behavior in human beings, just as we have been long accustomed to uncovering the physical laws and order in the universe. The practical outcome of the fragmentation and separation that has prevailed is that

the world is seen in a utilitarian way shaping human motivation in relation to the environment, to the prosecution of anyone or anything regarded as separate. Research on long time meditators shows that their mental training involves a temporal, integrative mechanism in the brain, as well as a heightened capacity for compassion. It appears that we have a built —in integrative capacity, which in not well developed in most of us, but which may be enhanced through contemplative practice.

## REVIEW OF LITERATURE

We long for what Eliot (Gardner, 2001) called 'a further union, a deeper communication'. But we find little resource to achieve this objective within our ego-bound selves, or within the existing symbols or institutions of our culture. SQ is the intelligence that rests in that deep part of the self that is connected to wisdom from beyond the ego, or conscious mind. It is the intelligence with which we not only recognize existing values, but with which we creatively discover new ones. SQ is not culture-dependent or value-dependent. It does not follow from existing values but rather creates the very possibility of having values in the first place. SQ is, thus, prior to all specific values and to any given culture. SQ makes religion possible (perhaps even necessary); but SQ does not depend upon religion.

According to Wolman (2001), Spiritual Intelligence is the human capacity to ask ultimate questions about the meaning of life and to experience simultaneously the seamless connection between each of us and the world in which we live. According to Sisk and Torrance (2001), Spiritual Intelligence is the ability to use a multi-sensory approach to problem solving and to learn to listen to your inner voice. According to Vaughan (1998), Spiritual Intelligence suggests wisdom and compassion; understanding and inner peace; love and freedom; depth and breadth of vision.

According to Emmons (1999), 'Spiritual Intelligence is a framework for identifying and organizing the skills and abilities needed for adaptive use of spirituality'. Emmons described five components of Spiritual Intelligence: The capacity to transcend the physical and material, The ability to experience heightened states of consciousness, The ability to sanctify everyday experiences, The ability to utilize spiritual resources to solve problems, and The capacity to be virtuous.

## MATERIAL AND METHOD

Creativity test is prepared and standardized by Dr. Baqer Mehdi in 1971. This battery is meant to identify

creative talent at stages of education except pre-primary and primary. The theoretical framework for the preparation of the test battery was provided by empirical studies on the nature of creativity. Especially useful in clarifying the concept of creativity has been the distinction. Guilford has made between two types of thinking abilities, namely, convergent thinking and divergent thinking. Guilford defines divergent thinking as a kind of mental operation in which we think in different directions, sometimes searching, sometimes seeking variety.

It goes without saying that all psychological tests whether verbal or non- verbal are culturally loaded and as such are not wholly applicable to a different culture. The need for developing tests which would be specifically relevant to a given culture is therefore obvious. The present battery is an attempt to meet this need.

## RELIABILITY OF THE TEST

The test retest reliabilities of the factor scores and also the total score were obtained on a small sample (N=31).

**TABLE NO.1**

### TEST-RETEST RELIABILITIES OF FACTOR SCORES AND THE TOTAL CREATIVITY SCORE N = 31

Fluency	Flexibilities	Originality	Total creativity score
.945	.921	.896	.959

As will be seen, both the factor score and the total creativity score reliabilities are considerably high ranging from 0.896 to 0.959. These values are highly satisfactory. The reliability of the total creativity score, which came out to be 0.959, is again quite high Inter-score reliabilities for the factor scores in one study were found to range from 0.653 to 0.981.

## VALIDITY OF THE TEST

The validity coefficients against the teacher ratings for each factor are given in table 3.7

**TABLE 2**

### VALIDITY COEFFICIENT FOR FACTOR SCORES AGAINST TEACHER RATINGS N=300.

Fluency	Flexibilities	Originality	Total creativity
			score
.40	.32	.34	.39

All correlations are significant beyond 0.01 level.

The validity coefficients for factor scores and the total creativity score are high enough (sig. beyond .01 level) to place confidence in the use of the •test. Higher correlations with teacher ratings are usually not obtained due to the unreliability of the ratings.

## PROCEDURE FOR SCORING

As there is no right or wrong responses for the test, much care has to be exercised at the time of scoring. The following points have to be kept in mind while scoring.

(i) Each item is to be scored for fluency, flexibility and originality. The definitions of these terms are given below:-

**Fluency:-** Fluency is represented by the number of relevant and unrepeatd ideas which the tested produces. Relevancy is judged on the basis of the appropriateness of the response when considered in relation to the test problem.

**Flexibility:-** Flexibility is represented by a person's ability to produce ideas which differ in approach or thought trend. All ideas which fall under one category of approach or thought trend are treated as one for purposes of flexibility scoring

**Originality :-** It is represented by uncommonness of a given response. Responses given by less than 5% of the group are treated as original.

(ii) The scores may be directly entered on the Answer Sheet by closely following the scoring guide.

(iii) If the scorer comes across responses which are not mentioned in the scoring guide, he should briefly mention them on the backside of the answer sheet and score them for originality after all the test scripts have been scored.

## INSTRUCTIONS FOR SCORING

1. **Scoring for Fluency:-** In scoring for fluency the scorer should go through the responses to the item in question carefully and strike off those which are irrelevant and/or have been repeated. He should then count the remaining number of responses and

enter this number as the fluency score.

2. **Scoring for Flexibility:-** In scoring for flexibility, the scorer should first acquaint himself with the categories of responses given for each item in the scoring guide. He should note in bracket against each response the alphabet serial of the category to which it belongs. If the response is such that it belongs to an entirely new category he should give it a new alphabet serial and note it down in bracket against, the response in question. The flexibility score will be the total number of different alphabet serial used.

3. **Scoring for Originality :-** Originality scoring is done on the basis of statistical, uncommonness of responses. If a response has been given by 1% to 99% of the testees, then the responses will get an originality weight of 5; If a response has been given by 1% to 1.99% of the testees, then the response will get an originality weight of 4; If a response has been given by 2% to 2.99% of the testees, then the response will get an originality weight of 3; If a response has been given by 3% to 3.99% of the testees, then the response will get an originality weight of 2 and if response has been given by 4% to 4.99% of the testees, then the response will get an originality weight of 1. Responses given by 5% or more of the testees will get an originality weight of zero. Statistical Analysis of data The following statistical techniques are employed to analyze the data obtained from the study.

1. Descriptive statistics like mean, S.D. and correlation etc.
2. The pictorial bar graph for comparison.
3. One way analysis.
4. Inter correlations.

## RELIGIOUS ATTITUDE SCALE

In the present investigation the Likert's (1932) Amethod has been followed which is more convenient as far as administrative, economic and time facilities are concerned. The investigator prepared 39 statements which are related to religion. The statements of the scale have the following features:

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## CONCLUSION

The higher the score, the higher is the inclination towards religion. The religious attitude inventory was administered to the sample of 400 students selected for the try-out stage as described earlier under the caption of 'sample' in the present study. All the statements were rated on a 5-point scale mentioned earlier. Items for the final draft of the Inventory were selected out of the preliminary draft on the basis of two criteria. The first criterion pertained to discrimination between upper and lower groups the upper and lower groups on religious attitude were selected on the basis of top 27% and bottom 27% students respectively on their total scores on religious attitude scale. The second criterion ensured significant item total correlation. The Items for the final draft of the religious attitude scale fulfilled the requirements of both the criteria referred to above.

For finding out item-discrimination, the t-ratios were calculated for the high and low groups on the attitude scores and are given in table 1. This reveals that t-ratios were significant for 26 items out of the total of 39 items. These items were considered probable for the final version of the attitude scale.

Table 2 gives the Item-total correlation for the statements on religious attitude scale.

The items for which the differences between high and low groups of students on the religious attitude scale were significant and for which the item- total correlations were also significant, were selected for the final version of the scale. These items were 26 in number.

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