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## ADAPTATION AND PSYCHOMETRIC EVALUATION OF THE VALUES IN ACTION-INVENTORY OF STRENGTH (YOUTH) FOR THE HINDI SPEAKING INDIAN YOUTH IN THE AGE RANGE OF 10 TO 17

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**Abstract:** The present study is aimed at adaptation and psychometric evaluation of the Values in Action-Inventory of strength for the Hindi speaking Indian youth in the age range of 10 to 17. The rationale behind the study was an absence of a comprehensive instrument aimed at assessing and identifying signature strengths for the Indian youth. Strengths training is being successfully applied in the west as an extra curricular part across schools and a similar model here could be successful. This study aims at studying the psychometric properties of the adapted VIA-IS (Youth) especially the correlations and factor structure of the adapted version and in addition, the internal consistency reliability statistics along with Criterion and construct validities. The adapted empirical version of inventory was obtained with 16 original strengths, 8 new hybrid strengths and five virtues from 180 items in Hindi.

**Keyword:** Psychometric Evaluation, Action-Inventory, strength, Adaptation.

### INTRODUCTION:

Positive Psychology, a field concerned with well-being and optimal functioning, aims to broaden the focus of psychology in human performance. It is the scientific study of positive experiences and positive individual traits, and the institutions that facilitate their development. Psychological testing facilitates the field of positive psychology in finding out the extent of individual traits contributing towards the well-being aspects of humans.

Although in its nascent stage, positive psychology is growing by leaps and bounds. The field of positive psychology aims at diversifying the focus of the field of psychology as a whole. Introduced as an initiative of Martin Seligman in 1998, then president of the American psychological association, positive psychology is the scientific study of strengths, well-being, and optimal functioning. It focuses on scientifically studying the positive experiences and positive individual traits, and the institutions that facilitate their development (Duckworth, Steen & Seligman, 2005).

The current research focuses on Values in Action-Inventory of strengths for youth which measures the degree to which respondents endorse each of the 24 strengths of character in the VIA Classification. Character strengths are the psychological ingredients—processes or mechanisms—that define the virtues. In other words, they are distinguishable routes to displaying one or another of the virtues (Peterson & Park, 2003).

Positive psychologists have identified six types of core virtues that appear in all cultures—wisdom and knowledge, courage, humanity, justice, temperance,

transcendence—comprised of 24 character strengths:

1. Wisdom and Knowledge: creativity, curiosity, open-mindedness, love of learning, perspective
2. Courage: bravery, persistence, integrity, vitality
3. Humanity: love, kindness, social intelligence
4. Justice: citizenship, fairness, leadership
5. Temperance: forgiveness and mercy, humility and modesty, prudence and self-regulation
6. Transcendence: appreciation of beauty and excellence, gratitude, hope, humour and spirituality

Having emphasized the importance of study of character in terms of the strengths possessed, we can also go on to say that no adequate measures are present in India to quantify these traits effectively and pervasively. Due to the vast language/cultural disparity between the West and India, it is not productive to utilize the English version of VIA-Youth to a large extent. Hence, the present research is an attempt to develop a Hindi version of VIA-Youth since majority of the Indian population is not well versed in English language. The aim of the research will be to achieve linguistic, conceptual, and normative as well as scale equivalence of the translated inventory with the original set of items.

### METHODOLOGY

The purpose of present study is to develop the Hindi version of VIA-Youth in Indian perspective to be utilized among Indian population. It is premised that the language and cultural version of any measurement tool directly linked with the quality and response rate of the respondents. The

adaptation procedure will consist of the following methodology comprising the sample, tools and procedure described below.

#### **PARTICIPANTS**

The sample for the current study comprises of individuals in the age group of 10 to 17 years as recommended for VIA-IS (Youth). The sample was randomly selected at each stage according to the requirements of the research. In the first phase for the purpose of checking the translation accuracy, a sample size of 128 bilingual (proficient in English and Hindi) subjects was taken in the age group 10 to 17 years. In the second phase 394 subjects in the age group of 10 to 17 is taken with 50 from each age range ( ie., fifty 10 year olds, fifty 11 year olds and so on ). This sample was sourced primarily from schools where a major thrust is on Hindi. An attempt was made to keep 60 subjects in each group according to finally defined age groups. The following variables were taken into account while selection of the sample:-

- 1.Age
- 2.Gender
- 3.Religion (Hindu and Muslim)
- 4.Socio Economic Class

Equal representation was sought of individuals on each variable. The Final sample consisted of N=488 (M=248, F=240 ; Mean age = 13.53 Yrs). The trial sample constituted of 128 subjects and during the course of the study, a total sample of 1015 subjects participated in the study at various stages.

#### **TOOLS USED**

##### **1.Values in Action Inventory of Strengths for Youth, (Park, N., and Peterson, C., 2003)**

The values in Action- Inventory of strength for Youth' isa 198-item scale intended for use by young people (ages 10-17). It is a face-valid self-report questionnaire that uses 5-point Likert-style items to measure the degree to which respondents endorse each of the 24 strengths of character in the VIA Classification. It takes approximately 45 minutes to complete. Scales have satisfactory alphas (>.70) and substantial test-retest correlations (>.70). The VIA-Youth has been validated against self- and other-nomination of character strengths and correlates with measures of subjective well-being, happiness, and school grades.

##### **2.Satisfaction with Life Scale for Children (Diener, Emmons, Larsen, & Griffin, 1985)**

The Satisfaction With Life Scale for children (SWLS) is a measure of life satisfaction developed by Ed Diener and colleagues (Diener, Emmons, Larsen, & Griffin, 1985). Life satisfaction is one factor in the more general construct of subjective well-being. The SWLS-C is a short, 5-item instrument designed to measure global cognitive judgments of one's lives (Gadermann, A. M., Schonert-Reichl, K. A., & Zumbo, B. D. ,2010). The scale usually requires only about one minute of respondent time.

#### **METHODOLOGY USED FOR ADAPTATION**

The adaptation process is far more complex than a mere literal translation of words. A panel of five professional translators was formed comprising of one professor of Psychology and four experts of the languages (both Hindi as well as English). Decentering method was used to ensure cultural relevance and back translation by a different panel ensured equivalence. After the consensus was reached, to ensure clarity, the Hindi version was back-translated to English by a language expert as well as a group of five children (ages 15-17). The resultant English version was found to be highly comparable to the original version. The next stage involved administering the inventory to the same subject in both languages ie., Hindi as well as English to further affirm the accuracy of translation. Once the adaptation of the VIA-IS (Youth) was arrived at, it was tested on a representative sample. The subjects were randomly selected with a target size of 128 from bilingual population.

#### **RELIABILITY, VALIDITY AND FACTOR ANALYSIS**

Equally spaced on age variable, 394 subjects was randomly selected from the target population between 10 to 17 years with equal representation given to both genders. The Hindi version was administered twice on these subjects with a gap of four weeks. 400 subjects had been initially selected but due to their absence on the second administration the data of six subjects was discarded. Test retest reliability was found for results (n=394) with a gap of 4 weeks. Cronbach Alphas were computed at strength and virtue level seperately on a different sample of subjects.

At the next stage a sample size of 488 with similar properties as above was taken. Out of the initial 500 taken, 12 students were excluded due to incomplete response sheets. (N=488, M=248, F=240 ; Mean age = 13.53 Yrs). The VIA-IS Youth (Hindi) was administered on this sample along with Satisfaction With Life Scale-Children. In addition to this a list containing all the 24 strengths along with their brief explanation was given to the parents and they were asked to tick five strengths that they felt that their child distinctly possessed.

Various psychometric analyses were now performed. For all the 24 strengths , mean and standard deviations were calculated followed by Cronbach alpha and the transformation of scores into T-scores.

Finally the scores were subjected to Principal Component Factor Analysis through SPSS (version 20) . Further Analysis involved rotation of data with Varimax rotation. Individual item loadings were checked and strengths' inter-correlation observed.

#### **RESULTS**

##### **1.Bilingual Parity : Hindi – English**

The Strengths were moderate to highly correlated over the two version with a correlation coefficient ranging between 0.50 to 0.81. At the level of virtues the correlation coefficients between Hindi-English formats was ranging from .58 to .75

##### **2. Test Retest Reliability**

The test re-test correlation coefficients were found

to be robust i.e., more than .60 except three for the inter-strength correlations and between .60 to .71 for the inter-virtue correlation coefficients.

### 3. Prevalence Of Strengths And Virtues In The Sample

At the next level a random sample of students (N=488; M=248, F=240) between the age of 11 and 17 years was taken from schools in Gurgaon and Faridabad (Haryana) with mean age = 13.53 Yrs. The means and standard deviations was calculated strength wise and virtue wise.

It was observed that Kindness was the top strength endorsed by both the genders and while three strengths (Kindness, Judgment and Social Intelligence) was present in top strengths for both genders, Gratitude and citizenship were present for males and spirituality and love were present in Females' signature strengths. When we look at the age wise distribution, kindness again seems to be consistently reflected in top five strengths while others show some amount of transition. However, overall, structure of the signature strengths doesn't change distinctively. Humanity and Wisdom were found to be the two top virtues where as kindness, perspective, social intelligence, citizenship and fairness were amongst the top signature strengths.

### 4. Internal Consistency

Chronbach's Alpha's, calculated amongst the items was found to be high amongst items of related strengths from .81 to .88 at the virtue level and moderate to high ranging from .46 to .65 for the strengths

### 5. CONSTRUCT VALIDITY

Having obtained moderate, acceptable levels of reliability and validity, the results were now subjected to Principal Component Factor Analysis through SPSS (version 20). Further analysis involved rotation of data with Varimax rotation. Inter-strength and virtue correlations were also worked out.

### 6. RECONSTRUCTION OF THE CONSTRUCT

Further factor analysis of the strengths thus obtained reveal a five factor structure. The scores on each of the emergent factors were calculated and converted into T-scores for equivalence before subjecting them to Principal Component Analysis. The emergent virtues were named according to the contributing factors or strengths. An attempt was made to keep the name of virtues as representative as possible of the emergent strengths.

### DISCUSSION

In the present study, the Cronbach's Alphas were found to range from moderate to high levels for strengths and higher levels for virtues. Three criteria were used to ascertain validity: correlation between the English version of the scale and the Hindi scale, correlational with the scorers on Satisfaction with Life Scale – Children and the degree of agreement between the test scores and parental nominations. Moderate correlations on all counts were found. Although the obtained validity is moderate, it may be due to the want of an authentic external criterion, as suggested/ recommended by the theorist. Rather, they say that having strengths is in

itself satisfying as there is no need of seeking tangible material benefits out of that (Peterson & Seligman, 2004).

It was noted, the 18 items failed to load significantly on any of the factors. Although the resolution of attenuation paradox (Loevinger, 1954) lies in the elimination of both low and high discriminating items that maximizes validity while optimizing reliability, an important consideration is to remember that factor analysis does not provide solutions. It can give us information but appropriate usage of that information would largely depend on the depth of knowledge of this tool. Therefore, simple elimination of these 18 items would not serve the purpose. It needs to be seen whether the items are culturally appropriate, or relevant to the youth of India. Also, point of consideration is whether these items can be, if found otherwise, adapted, reframed, or replaced.

Another significant observation regarding the data is its correlation with the SWLS scores. The virtue that originated mostly with Satisfaction with Life Scale scores was that of transcendence. It is a common observation, that in the Indian context, a spiritual person scoring high on hope, gratitude and other transcendental strengths is bound to be more content and satisfied with life in line with the popular spiritual teachings of the country.

Despite the differences, the adaptation, in line with the original theory, does allow the comparison of character strengths across individuals as well as within individuals and helps in identification of signature strengths regardless of where he or she may stand compared to others.

When we look at the signature strengths distribution for males and females, there are minor differences between the endorsed strengths: the highest for males being kindness, citizenship, judgment, social intelligence and gratitude and for females being kindness, judgment, spirituality, love, social intelligence. Traditionally speaking women in Indian context have been seen to be more spiritual and possess higher levels of humanity, strengths of love, kindness and social intelligence.

It was seen that as the age increased the strengths is endorsed got more evenly distributed rather than being skewed in favour of certain strengths such as citizenship, fairness, judgment and social intelligence. Although the top ranking strengths are more or less the same, but for older children other strengths such as spirituality, love of learning, creativity and curiosity get a significant representation as well. One of the reasons for this could be that the younger children being constantly barraged with what is and what is not a desirable strength are more inclined towards endorsing items which mirror these expectations. With age, however, the ideas about what is of value and what is not change and a deeper understanding of self emerges leading to distinctive individual differences in terms of the strengths endorsed. Interestingly, in opposition to the original observations, the older children tended to inflate their self-ratings of character strengths rather than the younger ones. This could be rooted in the adolescent increase in egocentrism and loss of connect with society at large.

After, the detailed analysis of age-wise, gender-wise signature strength distribution, the next logical step is that of principal component factor analysis through SPSS (version 20). The items contributing to the strengths found

after rotating the principal component matrix were seen to be very different from the original rational-theoretical structure. The factors were named using the Psychometric principle of naming after the variable with highest loading. Thus, we see that the adapted inventory shows a considerable overlap with the original strength structure in terms of the loadings and 16 of the original strength description have been retained. The rest eight strengths show a considerable overlap amongst each other reflecting different dimensions of temperance and transcendence.

Eventually a shorter version of the survey could be arrived at though not by elimination of items but by collapsing the scales following factor analyses indicating redundancy. This looks plausible considering that rather than getting 24 distinct factors or strengths as proposed by the theoretical structure the factor analyses in the current research yielded five underlying virtues. As emphasized time and again, various researchers in this field have reported 4 to 5 and in some cases one underlying factors; it does raise questions regarding the suitability of measuring virtues as a whole rather than the proposed constituent strengths.

In the adult version (Choubisa& Singh,2010) also, it is said that, there might be a Central virtue that controls the overall profiling of the strengths and virtues and their overt expression, something on the lines of Seligman's authentic happiness (Seligman, 2002). It might be because the strengths in our sample that we see an overrepresentation of the strengths of transcendence and temperance across the 24 factors. A great deal of emphasis has been laid on 'correct' moral development of children from all arenas: the school, the society and the parents. The national policy on education (1986) stress on the need for a radical reconstruction of the education system, to improve its quality at all stages, and gave much greater attention to science and technology, the cultivation of moral values and a closer relation between education and the life of the people. The result is the engraining of good morals and values from an early age as a part of the school curriculum. The idea of sadachar or good conduct is deeply engrained in our collective consciousness. Good character has always been ethically valued and socially approved. This good character is an amalgamation of the goodness drawing heavily on all strengths hence resulting in the shared goodness reflected in common variance and the emergence of single principle component. This was also reflected in the present study, during the second order factor analysis where one factor was emerging prior to the rotation.

#### CONCLUSION & SUGGESTIONS

The purpose of the current applied research was twofold; product refinement as well as critical psychometric evaluation of the same with a focus on the premise of ubiquitousness of strengths and virtues as proposed by positive psychology. The data obtained in the current study, on the Hindi adaptation of Values in Action Inventory of Strengths for youth shows that kindness as a strength has been endorsed across age groups and genders. Males, in general, in the age-group of 10 to 17 years exhibited kindness, judgment, social intelligence, citizenship and creativity to be their signature strengths. In contrast, females in the same age group, displayed judgment, kindness, love, love of learning

and spirituality to be their signature strengths. Kindness was seen to be consistently the most endorsed strength across age groups as well although the distribution of the signature strengths gets more uniform with age. It can be safely said that a major transition in terms of the strength structure was not seen across the age-group's understudy. This could be due to the fact that the subject in question are in a transitional stage of development wherein the cultural factors are fairly different from their counterparts in the western societies. True social cultural transition, in Indian context mostly takes place towards the latter part of schooling and mostly towards the initial years of higher education and vocational training.

A very crucial proposed application of VIA-IS (youth) is in the field of applied research for the valuation of prevention or intervention programs for positive youth development and welfare. As apparent from the National Policy on education (1986) character building is one of the foremost goals of education in our country as it is elsewhere. Although the interest in youth development and character education is on the rise, there is very little empirical data for the same. Theoretically speaking, number of logical conclusions can be made regarding the efficacy of certain character strengths in positive youth development. However, the entire exercise remains weak in absence of strong empirical backing. The availability of character measures would allow such interventions to be properly evaluated and the role of character strengths in them accurately assessed. Eventually, with increasing empirical data, we might one day be able to modify the theoretical constructs to explain the results in applications across the field of youth development.

Although, there are obvious advantages of the inventory, we have seen in the analysis of the results that the constructs that emerge on analyzing the data are fairly different from the original theoretical rational model. The inventory itself presents certain difficulties owing to its sheer length of 198 items. The younger population needs constant supervision to avoid break off effects due to wandering attention. There is an ongoing debate regarding the length of the test though the number of strengths being measured is high leading to overall high number of items. Each strength has items between 7 to 9 only, therefore, it would be unreasonable to cut down items since they would not effectively sample the strength in question.

As for the utility, the authors themselves have emphasized that this measure cannot be seen as a single measure of good character. It gives a fairly comprehensive idea of the strength structure or the profile of the individual but it definitely needs to be supplemented with other data. There are also rising concerns about social desirability affecting the results of the inventory.

Finally, positive psychologists across the board agree that although VIA classification are ubiquitously valued there still remains a need to test this cross nationally and cross culturally. As apparent from the data obtained in the study there seems to be a five factor model rather than the six factor model originally suggested.

Way forward from this point involves deeper analysis and wider study with the instrument in question. There is a need for psychometrically re-evaluating the original as well as the adapted version on a wider sample. A

sequential-longitudinal design study could be used to effectively observe the evolving strengths structure in the Indian youth. A proposed design could be to choose three groups of subjects at the age of 10, 12, and 14 years and to study them for the next three years. The three mentioned age ranges could be thought of as a transitional periods.

Another notable issue in the current inventory is the age range specified. In the Indian context, there are varying definition of youth but for developmental purposes it is safe to say that rather than a cut off age of 17, it should extend to higher education and prevocational phase of growth as well.

Another suggestion that comes to the fore is cultural filtration of the items thereby making it more relevant to the current cultural context and perhaps arriving at a more compact version of the inventory.

In conclusion, it can be said that the approach put forth by the field of positive psychology in terms of the importance of the strengths within, is worthy of attention as well as application. However, there still remains a huge gap between the theoretical rational model and the empirical evidence that is coming in from cultures across the world. Once this gap is bridged, the strength based education model based on strength measurement and evaluation, promises to be phenomenally successful in promoting well-being of the individual and the society at large.

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