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ANALYSIS OF RELIABILITY OF SUBJECTIVE WELL BEING INVENTORY (SUBI) THROUGH CRONBACH ALPHA IN THE STATE OF BIHAR

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Abstract

Subjective Well Being scales are widely used scales for mental health assessment purposes, clinical diagnosis, monitoring well being trends, Education and Workplace Initiatives, Policy and Social Planning intervention evaluations across cultures and population. Many scales have been developed since then to measure and access SWB across different countries and cultures. As there is plethora of scale to test SWB so it is imperative to test their cultural validity and reliability across samples so that better scales could be selected keeping in mind the characteristics of population in upcoming researches. The selection of tool can be based on population characteristics, research goals, dimensions to be enquired etc. The study has been designed to this end. For this study The Subjective Well Being Inventory (SUBI), developed under the aegis of World Health Organization (WHO) for South East Asia by Dr. H Sell (Regional Advisor, WHO) and Dr. R Nagpal (Counselling Psychologist, Sumantra Kendra, New Delhi) in 1992 was chosen to test its reliability through Cronbach Alpha. The questionnaire contains 40 questions covering 11 dimensions for measuring subjective well being of an individual. The responses to the item varies from 1 to 4. There are 19 positive and 21 negative items. The test results showed acceptable range of Cronbach alpha (.741) for this questionnaire on given sample.

Keywords: Subjective Well Being, SWB, Cronbach Alpha

Introduction and Review of Literature:

Subjective Well Being scales are widely used scales for mental health assessment purposes, clinical diagnosis, monitoring well being trends, Education and Workplace Initiatives, Policy and Social Planning intervention evaluations across cultures and population. Diener (1985, 2010) almost 40 years ago theorized that subjective well being comprised of cognitive and affective dimensions and he went on to develop Satisfaction With Life Scale 13. Ryff (1996, 2025) improved upon this and proposed six dimensions of Psychological Well Being. Likewise many scales have been developed since then to measure and access SWB across different countries and cultures.

Some prominent psychological well being scales are: 1) Ryff's Psychological Well Being Scale: It measures six dimensions of autonomy, personal growth, environmental mastery, purpose in life, positive relations with others and self acceptance. This is a self report measure available in 42 item and 18 item version. 2) Satisfaction with life scale (SWLS): This is a 5 item scale which measures global life satisfaction. This is a likert type, 7 point measure. This is widely used scale of subjective well being. 3) Positive and Negative Affect Schedule (PANAS): This is a 20 item scale measuring positive and negative emotions of joy, enthusiasm, fear and anger. This is basically a measure of emotional well being. 4) Warwick-Edinburgh Mental Well Being (WEMWBS): This is a 14 item scale measuring positive mental health variables such as energy, optimism and clear thinking. This is also a widely used 5 point scale. 5) Flourishing Scale: This is a 8 item test measuring psychological well being comprising of self esteem and social relationship. It taps a holistic view of positive mental health. This is a 7 point scale. 6) WHO-5 Well Being Index: Developed by WHO (World Health Organisation): This is a 5- item questionnaire developed by WHO to access current mental well being using positively worded questions. 7) General well Being Schedule (GWB): This captures inner state of anxiety, depression, positive well being vitality and self control. 8) Subjective Happiness Scale (SHS): This is a 4 item scale measuring global subjective happiness on a 7 point Likert scale. 9) Satisfaction with Life Scale (SWLS): This is a 5 item questionnaire which accesses the cognitive judgement



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aspect of well being. This is a widely used questionnaire. 10) Subjective Well Being Inventory (SUBI): This is a long questionnaire having 40 items and covering 11 dimensions. It has been developed for South Asia.

As there is plethora of scale to test SWB so it is imperative to test their cultural validity and reliability across samples so that better scales could be selected keeping in mind the characteristics of population in upcoming researches. The selection of tool can be based on population characteristics, research goals, dimensions to be enquired etc. The study has been designed to this end.

Objective: To analyze the psychometric properties of Subjective Well Being Inventory (SUBI): Questionnaire for the sample from state of Bihar, India.

Sample: In Tier 3 city (Bihar) a total of 361 samples were collected. This sample of 424 youth was collected from Bhagalpur, Banka, Munger, Begusarai, Khagaria, Purnia, Godda, Madhepura and Saharsa districts of Bihar. Some samples were rejected on the basis of age criteria as they were more than 25 years, which do not fall under 'criteria of inclusion' for age(16-25). So from tier 3 cities, a sample size of 361 was included in the final analysis.

Questionnaire Used: The Subjective Well Being Inventory (SUBI): The questionnaire is developed under the aegis of World Health Organisation (WHO) for South East Asia by Dr. H Sell (Regional Advisor,WHO) and Dr. R Nagpal (Counselling Psychologist, Sumantra Kendra, New Delhi) in 1992. The questionnaire contains 40 questions covering 11 dimensions for measuring subjective well being of an individual. The 11 different dimensions of SUBI scale are: Social support, Transcendence, Inadequate mental mastery, General well Being-positive affect, Expectation-Achievement congruence, Confidence in coping, Family group support, Primary group concern, Perceived ill health, Deficiency in social contacts, General well Being-Negative affect. The responses to the items varies from 1 to 4. There are 19 positive and 21 negative items. While scoring, 19 positive items are to be reversed.

Table 1.
Demographic details of the sample in the state of Bihar

	Percentage	N
Male	39.3%	142
Female	60.7%	219
Total	100%	361
Education(Post Graduate)	3.6%	13
Education(Graduate)	66.2%	239
Education(Intermediate)	30.2%	109

A total of 361 sample was collected from different cities of Bihar and after applying the two criteria of Inclusion: a) youth belonging to 16 – 25 years. b) people using Social Networking Sites (SNS) were used. was used. The demographic details like age, gender and qualification was collected from the sample. In the sample ($n=361$) 39.3%142 were males(39.3%), 219 were females (60.7%). 109 persons (30.2%) of sample was 12th pass, 239 persons (66.2%) were graduate and 13 persons (3.6%) were post-graduate.

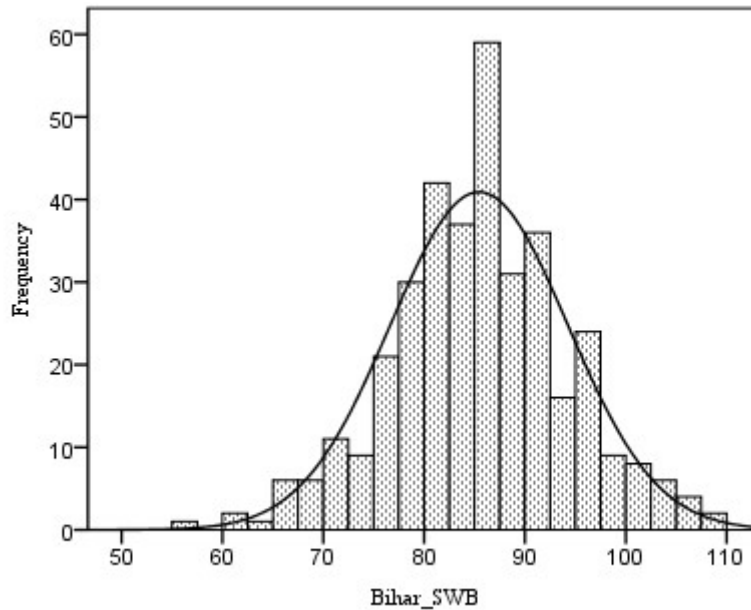


Figure 4.13. Frequency distribution of Subjective well Being (Bihar)

Cronbach Alpha is an important test to check the reliability of scales. It takes care of internal consistency, amongst questions wherein cohesiveness of items are being tested. Good Alpha values indicate better internal consistency. The values of Alpha range from 0-1. Values less than .5 are not acceptable, while values greater than .7 are considered acceptable. Values more than .9 are considered excellent.

Table 2			
<i>Cronbach alpha for Subjective Well Being Inventory in the state of Bihar</i>			
Scale		Cronbach alpha	Acceptable range of Cronbach alpha
Subjective Well Being Inventory		.741	>.70

The Cronbach alpha for samples collected for Subjective Well Being Inventory (.741) were in an acceptable range for the whole questionnaire, meaning the test has good internal consistency and is fit for the sample of Bihar. It is important to mention here that the sample has mostly been collected from tier 3 cities of Bihar so the test result could be applicable on tier 3 cities across Hindi speaking belt of North India. So the questionnaires can successfully be administered on the given set of the sample with its complete set of items.

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