

Spiritual Health Scale 2011: Defining and Measuring 4th Dimension of Health

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ABSTRACT

In the midst of physical comforts provided by the unprecedented developments in all spheres of life, the humanity is at cross roads and looking at something beyond these means. Spirituality has now been identified globally as an important aspect for providing answers to many questions related to health and happiness. The World Health Organization is also keen at looking beyond physical, mental and social dimensions of the health, and the member countries are actively exploring the 4th Dimension of the health i.e. the spiritual health and its impact on the overall health and happiness of an individual. National Institute of Health and Family Welfare (NIHFW), realized this need and initiated a research study in this direction. In this study, an effort was made to define this 4th Dimension of health from a common worldly person's perspective and measure it. 3 Domains, 6 Constructs and 27 Determinants of spiritual health were identified through a scientific process. A statistically reliable and valid Spiritual Health Scale (SHS 2011) containing 114 items has been developed. Construct validity and test-retest reliability has been established for urban educated adult population. The scale is first of its kind in the world to measure the spiritual health of a common worldly person, which is devoid of religious and cultural bias. Its items have universal applicability.

Keywords: Constructs, determinants, domains, items, spiritual health

Introduction

Preceding century has seen unprecedented development in all spheres of life. The development in the field of science and technology has put the man on the moon. The distances on the globe have been reduced by way of fastest modes of transport. The achievements in the fields of medicine can today replace damaged organs in the human body on one hand, and also provide sophisticated tools of diagnosis and means of treating the diseases. On the physical level, the amount of ease which has been experienced by our generation in day to day requirement is unparalleled. The world economic order has seen sure

transition where under-developed countries are coming up in the group of developing nations and there is a marked gap reduction between the haves and have-nots.

This progress in the material world is showing inverse relationship with the health and happiness of the individuals. Today stress, anxiety, loneliness and high levels of aspirations have become the common way of life. Now, in national dailies, it is common to find the news of crime and suicide on the visit of the very front page, on petty issues. Worldwide, there is a constant search for cause of the present physical, mental, social dis-ease and ill-health, which this generation is facing. This quest has led the researchers to find out the causes of the present day chaos. In this endeavour, the world is looking for probable answers in the eroded value system leading to materialism and deepening attachment to self and possessions. WHO is also exploring beyond the physical, mental and social dimensions of health and is keenly looking forward for some answers in the spiritual aspects.

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When we talk of spirituality, it is in reference to common worldly person and her/his effective day-to-day functioning. We are not talking of shunning responsibilities and wandering in jungles. We are neither indulging into the area of religious dogmas, orthodoxy and fanaticism. We are not talking of so called world renouncers, monks, saints, sages or religious philosophers and masters. Perhaps, the time is right when the spirituality needs to be demystified for an ordinary human being by cultivating spiritual practice and temperament which drive him to ensure optimum health, happiness, productivity and creativity. "Whether expressed through religious cult, non-religious practices, music, poetry or worship, spirituality manifests itself in all individuals" Anandarajah.⁽¹⁾ Becoming spiritually healthy is not becoming special, but it is becoming one with everything; learning to become grateful to life around and to consciously explore the meaning of this life. The spiritual aspects are free from religious dogmas and rituals, nonetheless, focus on the humanistic and self-evolutionary perspectives of the major religions of the world.

Rationale

In last more than one decade, there has been scientific search for the relationship of the spirituality with intelligence Wigglesworth;⁽²⁾ with emotions and also well-being. Measurement instruments have been developed to measure spiritual intelligence, which is a spiritual correlate to intelligence quotient and emotional quotient. Like emotional quotient, spiritual quotient is assuming importance in scientific research and philosophical/psychological debates.

Since last two decades, modern system of medicine has started realizing the mind-body axis of the disease and health Dossey.⁽³⁾ Before this, morbidity was related to body and its functions and accordingly, the focus was on the human body and physical surrounding. Perhaps this is the reason that no serious attempt has been made to develop a spiritual health scale, across the globe. The existing standard scales which are to measure spiritual intelligence, spiritual well-being, and spiritual assessment, all are focusing on psychological, managerial or emotional aspect of an individual, having spiritual influence, and not the relationship of spirituality with health. Though the standard tool on spiritual health does not exist, but research studies are available to show relationship between spiritual practices and health.

Empirical evidence is available to indicate a direct relation between religious involvement, spirituality and positive health outcomes. Positive values, attitudes, beliefs and strength that one acquires through spiritual practices contribute to health and happiness. Spiritual

practices have a positive correlation with survival, low blood pressure, less remission time from depression, less number of cigarettes smoked per day per week, less severe medical illness, better quality of life, cooperativeness, etc. Bansal *et al.*⁽⁴⁾

Researchers suggest a positive relation between spiritual practices and positive health outcomes, like greater self-confidence, assertiveness and fewer symptoms of anxiety and depression. Evidence shows that spiritual well-being is positively related with self-ratings of physical health and vitality. Spiritual wellness is positively related with adjustment to dialysis treatment and cancer induced pain. Edward.⁽⁵⁾ Studies in USA indicate a positive correlation between patients' spiritual/religious commitments and health outcomes. Physicians do consider such factors in their medical care practice. A formal tool called HOPE has been designed for the purpose. Anandarajah G. *et al.*⁽¹⁾

Research indicates a close relationship between love for God or feeling of being loved by some Higher Reality with greater self-esteem, higher levels of self-efficacy, sense of mastery, less depression, less physical disability and greater self-rated health. The John Templeton Foundation, USA has invested on more than 24 research studies on forgiveness Levin.⁽⁶⁾ 'Unconditional love is the most powerful stimulant of the immune system – the truth is; love heals' Siegel.⁽⁷⁾ In Siegel's remarkable programme for cancer patients, he facilitated them in experiencing love with other emotions like forgiveness which "mobilize the immune system"

Rahul *et al.*⁽⁸⁾ in their cross-sectional study on "Spirituality and health: a knowledge, attitude and practice study among doctors of North India", found that 65.65% had a strong or very strong belief in the spiritual dimension of health; 55.22% believed in the preventive role of spirituality; 80% believed in the curative role of spirituality and a similar proportion held the view that spirituality has an important role in day-to-day patient care. The most significant finding was that 93.48% of the doctors believe that a spiritual person deals better with stress.

Ayurveda, an ancient healing system of India also has the central philosophy that physical health cannot be achieved without emotional, mental and spiritual health.

Existing Assessment Instruments

The efforts made in the earlier decades provide assessment instruments outside India to measure spirituality. The tools available are:

- i. "Spiritual Well-Being Scale, SWBS" Ellison.⁽⁹⁾ The scale is focusing on religious well-being, reflecting on one's perception and feeling of God, at the same

time claiming to be an instrument to measure the spiritual well-being of an atheist. It reflects the inbuilt contradiction in the scale.

- ii. "Spirituality Assessment Scale", SAS Beazley.⁽¹⁰⁾ This scale is limited to the organizational situations and dealing with impact of the individual's spirituality on the growth of the organization and not on the growth of the individual.
- iii. "Spiritual Assessment Inventory, SAI" Edward.⁽⁵⁾ It measures spiritual maturity and quality of life but the approach is limited in terms of Judeo-Christian emphasis.
- iv. "Index of Core Spiritual Experiences, INSPIRIT" Kass.⁽¹¹⁾ This scale has limited value having no application for an atheist. It is relevant only for the believers.
- v. "Independent Spirituality Assessment Scale" Rojas.⁽¹²⁾ The tool, however, is limited to serve the empirical research needs of the management and other disciplines.
- vi. "Myers-Briggs Type Indicator MBTI", Richardson.⁽¹³⁾ MBTI basically focuses on the already actualized and transcendent individuals, but its validity for the common worldly person, who is in the process of evolving spiritually, is questionable.

However, no standard instrument is available on measurement of spirituality, as such, neither in India nor outside India so far which focuses on a common worldly person and is devoid of religious and cultural bias.

Perspective and Quest: World Health Organisation (WHO)

When WHO talks about health, it refers to 3 dimensions of health:

- i. Physical
- ii. Mental and
- iii. Social dimensions.

In this context, WHO is talking not only absence of the disease, but complete well-being on these dimensions. In 1946, WHO has defined health as:

"A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

World Health Organisation has already realized the need of the 4th dimension of health, i.e. the spiritual health to be considered as an important element of health. In the words of Derek Yach⁽¹⁴⁾ (World Health Assembly May, 1998): "From the inception, it was felt that the 4th Dimension of health was missing from its definition. The special group of the WHO Executive Board (1998) proposed that the Preamble of the Constitution should be amended as follows":

"Health is a dynamic state of complete physical, mental, spiritual and social well being and not merely the absence of disease or infirmity."

4th dimension - spiritual health

Beyond the health triangle

WHO's quest to integrate spiritual health in the development agenda of United Nations and in the core value system of peoples' life can be easily discerned in the words of Stuckelberger:⁽¹³⁾ "Addressing the scientific link between religion, spirituality and health has too often been a 'forgotten subject' or avoided for irrational, emotional or 'political' reasons. It is time for the scientific community to integrate religious and spiritual factors, which have guided human behavior over centuries, into health and human sciences."

Research Question: Measuring the 4th Dimension of Health

National Institute of Health and Family Welfare, New Delhi, an apex body of health in India, involved in 'Post Graduate Public Health Teaching, Training and Research', realized this need and initiated a research study in this direction. In this study, an effort has been made to define this 4th Dimension of health, evolve its various Domains, Constructs and Determinants and develop a statistically reliable and valid spiritual health scale (SHS 2011).

General objective was:

- To develop a self-administered spiritual health scale.

Specific objectives were:

- To evolve a suggested and an operational definition of spiritual health.
- To identify Domains and Constructs of spiritual health.
- To identify spiritual Determinants of health;
- To develop a Spiritual Health Scale.
- To test Reliability and Validity of the Scale on Urban Educated Adult (UEA) population.

Review of Existing Definitions of Spiritual Health

Perusal of the definitions on spirituality and spiritual health, reveal at one place that it is the spirituality which is the core of the life and in some other, the emphasis is on faith or meaning and direction in life. While in another, the focus is on integrating with the spiritual belief system of some sort.

The investigators and the team of experts were of the opinion that the purpose of this study would be better served by suggesting a definition, more precise and comprehensive.

Suggested definition of spiritual health

Spiritual health is a: State of being where an individual is able to deal with day-to-day life in a manner which leads to the realization of one's full potential; meaning and purpose of life; and happiness from within.

A need was felt to evolve an operational definition on the basis of the suggested definition above in order to make it compatible to the development of personality framework. The three (3) aspects in the suggested definition namely, "Realization of one's Full Potential"; "Meaning and Purpose of Life"; and "Happiness From Within" correspond to the three (3) domains of the operational definition given below.

Operational definition of spiritual health

Spiritual health is a state of health reflected through three domains-

Self-Evolution, Self-Actualization and Transcendence.

Defining Three (3) Domains of Spiritual Health

- Self-evolution has been defined as a state of Becoming where the individual is analyzing and applying the self in terms of thoughts and actions with respect to the wider perspective and nurturance-art.
- Self-actualization has been defined as reaching to a state of *Being* where the individual is consciously aware and responds to the situation, events, people and environment with engineering from within and Deeper Meaning-Purpose of Life.
- Transcendence has been defined as a state of inner happiness and behaving accordingly through universal love-sublimating jealousy and considering oneself as a part of the supreme (beyond self).

Study Design

The study was a descriptive study. For generation and construction of the items and subsequent development of the Spiritual Health Scale (SHS 2011), the investigators adopted the following descriptive procedure:

Steps for generation and construction of (SHS 2011)

Identifying parameters of spiritual health

Based on the related literature; tools available on measurement of spiritual health and spirituality; universal humanistic principles of major religions of the world; views of the experts and consultants working in the area of spirituality, technical advisors and insight of the investigators, 32 parameters of spiritual health were selected at three levels of psychological functioning-cognitive, affective and behavioral. A check-list of the parameters was prepared and got filled by 24 urban educated adults (UEA) from various fields. These included scientists, IT specialists, physicist, behavioural

and social scientists, demographer, communication expert, engineers, public health experts, clinicians, housewives, bureaucrat, manager, environmental specialist, health economists, film-cum-media expert, education administrators, singer, and a poet. 98 per cent of the respondents agreed that those were the parameters of spiritual health.

Evolving the definition and constructs of spiritual health

These 32 parameters of spiritual health became the base for evolving the suggested definition for the study. It focused on: realization of one's full potential; meaning and purpose of life; and happiness from within. This was coupled with evolving the operational definition of the spiritual health in terms of 3 domains-self-evolution, self-actualization, and transcendence; and the 6 constructs within the domains-wider perspective, nurturance-art, engineering from within, deeper meaning-purpose of life, universal love-sublimating jealousy and considering oneself as a part of the supreme.

Identifying the spiritual determinants of health

Based on the 6 constructs, an exhaustive list of 110 Determinants of spiritual health were developed. These were developed at the 3 levels of psychological functioning - cognitive, affective and behavioral with respect to each construct. After a review by the expert group and the investigators, 110 determinants were reduced to 80 determinants because of inability to evolve operational definitions for some determinants. Another review was necessitated of the 80 determinants and were again reduced to 65 to capture a balance among cognitive, affective and behavioural levels. The group of experts was of the opinion that there was repetition among these 65 determinants also and the central idea of the spiritual health could be captured by lesser number of determinants. The experts also reviewed the 5 determinants out of these 65 namely, 'morality', 'sexual need', 'death readiness', 'food' and 'non-violence' but it was decided to drop these 5 also and 27 determinants of spiritual health were finalized for the study.

Defining constructs of spiritual health

The 6 constructs identified within 3 domains of spiritual health have been defined. Wider perspective as holistic approach to life; nurturance-art: as self enhancement and growth; engineering from within: as internal locus of control; deeper meaning-purpose of life: as understand beyond mundane and attach value to life; universal love-sublimating jealousy: as unconditional love and managing jealousy; considering oneself as a part of the supreme: as perception that the individual is the part of the whole.

Defining determinants of spiritual health

Determinants in this study are the underlying aspects

within the scope of the 6 Constructs of the study. Total of twenty seven (27) spiritual Determinants of health have been identified for this study, which includes:

1. Commitment: (being responsible in all situations);
2. Introspection: (understanding oneself deeply);
3. Honesty: (being fair to self and to others);
4. Creativity: (giving expression to one's potential);
5. Contemplation: (thinking about higher issues of life);
6. Prayer: (seeking recourse in the Supreme);
7. Philanthropy: (supporting the deserving);
8. Extending Self: (expressing concern for social causes beyond self);
9. Empathy: (behaving beyond sympathy);
10. Yoga and Exercise: (being concerned for total health);
11. Questioning Injustice: (asserting for right cause);
12. Aesthetics: (admiring and indulging in different forms of art);
13. Value for Time: (catching every moment);
14. Being away from Comparisons: (not indulging in unhealthy evaluation);
15. Human Values: (expressing concern for human dignity and welfare);
16. Courage: (dealing with sufferings and problems boldly);
17. Managing Ego: (awareness of thought and action);
18. Humour: (inculcating joy in life);
19. Involvement with Detachment: (performing without attachment);
20. Sixth Sense: (listening to one's inner self);
21. Virtues: (growing positively);
22. Sensitivity: (responding to people and environment with sense of welfare)
23. Purpose for One's Life: (understanding one's being);
24. Compassion: (getting into miseries of others);
25. Pure Feelings: (showing unconditional love);
26. Faith in the Supreme: (surrendering to the Divine);
27. Selfless Action: (working in the name of the Supreme).

Generation of items for the scale

The next step in the study was to generate the items to capture the 27 determinants as operationally defined. The items were subjected to couple of revisions by the experts and the investigators. During the discussion, it was considered that the items need to be framed in both positive and negative directions to get the authentic responses. The number of items varied under each determinant depending upon the need to capture the theme of the determinant. A list of 140 items was constructed.

Trial of the scale on urban educated adults

The items were finally mixed up (Positive and Negative) and a 5 point Likert Scale was prepared for the trial run. It was self administered to 102 persons comprising of wide range of urban adult educated population which were taken by incidental sampling. Based upon its trial-run, the deficiencies pointed out by the target group in respect of comprehension of the items, discussion was held including certain respondents and experts. Consequently some were dropped and others were suitably modified.

Finally a scale of 127 items was developed.

Sample

Technique and size

A stratified random sample was used for study. Three (3) strata consisting of *health professionals; non-health professionals; other graduates and above* were chosen, which largely represented the urban educated adult community in Delhi from different settings like offices, residential colonies and educational institutions. From each strata, a list of 120 people was prepared and out of which, randomly every 4th individual was chosen. The scale was administered to the selected sample - 30 health professionals, 30 non-health professionals, 30 other graduates and above were included in the sample. Total sample consisted of 90 respondents out of which only 84 respondents filled the scale.

Discussion

The scale was validated and reliability was established for the urban educated adults including, graduates and above in the age group of 25-60 years. Urban slums were not included.

Reliability of the scale (SHS 2011) was statistically established by computing Kappa coefficients for all 127 items in 4 rounds of administration of the Spiritual health scale. (95% confidence interval lying in the range between 0.10 to 0.85). All values were statistically significant.

In order to obtain relatively unbiased response from the respondents, both positive and negative items with respect to each determinant were developed. The number of items varied, depending upon the nature of the determinants. Equal number of positive and negative items could not be sustained during the trial run phase. Also equal number of items representing the 3 levels of psychological functioning: cognitive, affective and behavioral could not be retained during trial run phase. Based on the feedback received during the trial run regarding the understanding and comprehension of the items, the direction of the items and their language was modified to make those comprehensible to the respondents. Even after modifications done during the trial phase, 27 out of total 127 items did not show internal consistency on Kappa's coefficients. The experts and the investigators felt that those 27 items could not be ignored, being important in capturing the spiritual health. The restructuring exercise and re-administration of these 27 items was done again. Thus, the scale (SHS 2011) was administered in 4 rounds after a gap of 25 days in each round. Finally Kappa values which were computed to establish test-retest reliability on each of 127 items constructed for the scale were significant. All 127 items of the scale showed test-retest reliability.

The scale has content validity based on the study of related literature, standard assessment instruments available outside India for measuring spirituality, universal humanistic principles of major religions of the world, views of experts, consultants working in the area of spiritual health and contemplation of the investigators.

Construct validity of the scale was statistically established applying factor analysis using extraction method: Principal component analysis, rotation method: Varimax with Kaiser normalization and component scores. Factor analysis of the 127 items of the scale initially revealed 9 clusters which got clubbed into 6 factors as per statistical norms. Factor 1 had 47 items, factor 2 had 14 items, factor 3 had 25 items, factor 4 had 17 items, factor 5 had 6 items and factor 6 had 5 items.

The 6 factors identified as constructs prior to the factor analysis found place under the 3 domains of spiritual health based on the items and the determinants. Factor 1 on wider perspective and factor 2 on nurturance-Art captured the domain-self-evolution; factors 3 and 4 on engineering from within and deeper meaning-purpose of life captured the domain self-actualization and factors 5 and 6 on universal love-sublimating jealousy and considering oneself as a part of the supreme captured the domain-transcendence. The 27 determinants found place corresponding to each domain containing one pair of factors. The original placement of some items against the constructs got redistributed after factor analysis.

18 iterations of SHS 2011

Rotation converged in 18 iterations during the process of factor analysis. The 18 items of the scale are exclusive to a given factor, at the same time inclusive to other factors. These items captured more than one factor. Most of the items among these are finding place under factor 1 probably because the theme of the factor 1 is *Wider Perspective*, which focuses on holistic approach to health.

13 Items found redundant

The factor analysis also revealed that a cluster of 13 items could not lie in any of the factors. These 13 items were found redundant and had to be deleted.

Hence the final scale contains only 114 items for self-administration.

Pearson's inter-correlation

An analysis of the statistical treatment given to the responses of the subjects against items in 3 domains revealed statistically high inter-correlations among the 3 domains of spiritual health viz. self-evolution, self-actualization and transcendence.

Correlation coefficients derived from 2-tailed Pearson's correlation is significant at .01 level between self-actualization and self-evolution; significant at .01 level between self-actualization and transcendence and significant at .01 level between self-evolution and transcendence.

Determining weightage through regression analysis

A regression analysis of the 3 domains-self-evolution, self-actualization and transcendence revealed weights of 0.45, 0.36 and 0.35 respectively.

The weights obtained by the 3 domains through regression analysis indicates that the domain of self-evolution was found to be more adaptable at cognitive, affective and behavioural levels of functioning by the respondents whereas self-actualization was found to be comparatively lesser and the transcendence was still lesser.

The highest weight obtained by the domain of self-evolution could be possibly because it focuses relatively on grosser aspects of life - physical, mental and social. This weightage will be given to calculate the spiritual health score of an individual (composite Score), hence is inbuilt in the scoring key for the scale (SHS 2011).

Spiritual health scale: Cognitive, affective and behavioural determinants

The set of determinants identified for the spiritual health scale (SHS 2011) have been evolved at 3 levels of psychological functioning: cognitive (thinking level), affective (feeling level) and behavioral (action level). These levels revealed a close inter-relationship among each other. Such arrangement of the Determinants identified at one level, say thinking level, has its impact at feeling and action level too. It goes without saying that all the 3 levels are never mutually exclusive but impinging on each other, one causing the other and vice-versa.

Relational context

The determinants used within 6 factors (constructs) and established through factor analysis, in the present scale (SHS 2011) for urban educated adults, appear to have proximity with some of the 12 principles of S.Q. Zohar *et al.*⁽¹⁶⁾ mentioned as self-awareness, spontaneity, being vision- and value-led, holism, compassion, celebration of diversity, field independence, humility, tendency to ask fundamental "Why?" questions, ability to reframe, positive use of adversity and sense of vocation. The present scale also has some similarity to one of the sub-scales developed by Ellison⁽⁹⁾ on spiritual well being. This sub-scale on the 'Existential Well Being' focuses on one's sense of meaning and purpose in life and self-

actualization. Some of the indicators of Ellison's sub-scale qualify the factors and determinants of the scale under reference (SHS 2011). The present scale also has some commonality with 'Spiritual Assessment Scale' developed by Beazley⁽¹⁰⁾ focusing on a faith in relation with the transcendence, honesty and service to others. It also has some compatibility with Myers-Briggs Type indicator (MBTI) developed by Richardson⁽¹³⁾ focusing on journey's of life, like spiritual health emphasizing on contemplation, compassion, social action or self-actualization.

Scoring on the scale

Likert type scale was used in the study, where the responses will be sought on 5 points (1-5) ranging from totally disagree to totally agree. Score ≤ 1.9 indicates unrefined spiritual health; 2.9 indicates slightly refined spiritual health; 3.9 indicates moderately refined spiritual health; 4.9 indicates refined spiritual health and score ≥ 5 indicates much refined spiritual health, whichever the direction of the item, positive or negative.

Scoring key

Scoring will be done for each of the items in the scale. The scoring against the 18 items (converged in 18 iterations during factor analysis) will be accordingly computed and added to the score of 114 items. Hence the total number of items for scoring will be 132. Since regression analysis has revealed differential weights for the 3 domains (Self-evolution, self-actualization and transcendence), hence collation of the weight to the obtained score on SHS 2011 with respect to each domain will also be computed. In total, each individual will have 4 scores on spiritual health: 3 scores on each of weighted domains and 1 composite score.

Results

The self-administered SHS 2011 containing 114 Items has been developed. Suggested and operational definitions of spiritual health were evolved. 3 domains, 6 constructs and 27 determinants of spiritual health were identified. Test-retest reliability; content validity; and construct validity have been established for urban educated adult (UEA) population.

Conclusion

The contents of the SHS 2001 have the potential for the universal application, but for this study, the scale has been validated and its reliability has been established only for the urban educated adults. This may require modifications and establishment of reliability and validity for different groups.

Recommendations for Future and Expected Use

Community study

- To administer the scale to urban educated adults to find out the spiritual health scores and their relationship with non-communicable diseases and other health related events.
- To find out the status of spiritual health in various settings, like schools, colleges, workplaces and community at large after necessary modification.

Based on the results of the above mentioned exploration, interventional programmes can be planned.

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