

# Comparative Analysis of Self-Reported Wellness Levels of International Students within a University in India.

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## **Abstract**

This study explored the self-reported wellness of postgraduate students studying in an International University located in South Eastern India. From a large university population, with three distinct hostel arrangements, the one hostel with a co-educational population was purposively sampled. A questionnaire based on five dimensions of wellness was administered to predominantly postgraduate students (N=50) with an equal number of males ( $n=25$ ) and females ( $n=25$ ) and ages ranging from 30 to 45 years. The participants represented a diverse range of nationalities, including the majority from Nepal ( $n=16$ ); Ethiopia ( $n=15$ ); Afghanistan ( $n=7$ ); Iran ( $n=5$ ); Guyana ( $n=3$ ); and 1 each from Botswana, Brazil, Rwanda and South Africa ( $n=4$ ). Results from the self-reported height and weight indicated the cohort was predominantly in the normal Body Mass Index range ( $n=32$ ); some overweight ( $n=14$ ); few underweight ( $n=3$ ) and one person obese. All five individual dimensions of emotional, intellectual, physical, social and spiritual were skewed towards 'high' or 'good' levels of wellness. The amalgamated scores provided a comprehensive wellness score with 'highest level' ( $n=29$ ) and 'good' ( $n=21$ ). Implications of this study includes informing future programs to support the wellness and wellbeing of multicultural postgraduate students in international contexts.

**Keywords:** *wholistic wellness, international students, postgraduates*

## **Introduction**

The international education market is a highly valued sector of many economies worldwide. Universities are looking to attract students from international backgrounds to study in their programs. These students represent an infusion of valuable human, social and economic capital to their newfound institutions (OECD, 2006). Taking care of this student population is a key responsibility of all members of each university and this is indicated by the provision of targeted offices such as those termed "international department." These departments are designated to oversee a range of services for this valued and valuable student population. Taking care of university students is a key social and corporate responsibility and for many institutions around the world and there are key indicators that underpin the funding of university placements for the International student population.

One aspect of the 'duty of care' of international students is their health and wellbeing. Understanding the wellness and wellbeing of international students is a

key aspect of developing appropriate support mechanisms. As such, this baseline study of international student wellness was conducted in a large university located in Andhra Pradesh, south eastern coast of India.

## Literature Review

The movement of large numbers of students globally has been identified by Altbach (2004) as indicative of globalisation. Descriptions of the mobility of international students feature heavily on reductionism and positivism (Altbach, 2004), however, these students represent real and individual journeys of often a transformative nature (Ninnes, Aichison & Kalos, 1999). The health and wellness of students from India has been investigated from a range of perspectives both within USA and before and after their study (Mesengi, Msengi, Harris, & Hopson, 2011) and those relocating within the Midwest of United States (Kanekar, Sharma & Atri, 2010). Less in known about the wellness of international students moving into the context of studying in India.

The wellness movement began after the end of World War II largely because society's health needed to change. Advances in medicines and technology meant vaccines and antibiotics reduced the threat of infectious diseases, which until that time, had been the leading cause of death (Seaward, 1997). Instead, chronic and lifestyle illnesses (e.g. heart disease, diabetes, cancer), associated with numerous stressors in life and the workplace, became the primary health concern. This introduced an expanded concept of health as encompassing all aspects of the person (mind, body, spirit) (Foster, Keller, McKee, & Ostry, 2011). This expanded view of health allowed the development of preventive health measures and a focus on optimal health as practitioners address the whole person and consider the causes of lifestyle illnesses rather than just their symptoms.

Several studies indicate that wellness is subjective, and inherently a value judgment about how one feels, and remains problematic as a construct. An accurate definition and measurement remains elusive and problematic (Kelly, 2000 as cited in Foster, Keller, & Boomer, 2007). More recently valid and reliable measurement of wellness has been explored particularly for the adolescent population (Washington, Cuddihy, Barwais & McPhail, 2013). Therefore, for this paper, wellness is conceptualized as a continuum and not as an end state.

Holism, as a multi-dimensional perspective of wellness emerged from the approach used by scientists to study complex phenomena such as organisms and ecosystems. Such a shift in thinking about health is more holistic and relational (Richards & Bergin, 2005). Larson (1999) states that the World Health organization (WHO, 1986) was the first to introduce a holistic definition of health as "a state of

complete physical, mental, and social well-being and not merely the absence of disease and infirmity”, and many subsequent conceptualizations of wellness include this central concept. WHO (1986) further clarified the definition, noting that to reach a state of health “an individual or a group must be able to realize aspirations and satisfy needs, and to change or cope with the environment” (p. 126), while Bouchard, Shephard and Stephens (1994), suggest that “positive health pertains to the capacity to enjoy life and withstand challenges”(p. 23).

In connection to the concepts of WHO, Dunn (2011) emphasized wellness as one beyond the state of non-sickness. A ‘well’ person is satisfied at work, is spiritually fulfilled, enjoys leisure time, is physically fit, is socially involved, and has a positive emotional mental outlook. He or she is ‘happy and fulfilled’. The way one perceives each of the dimensions of wellness affects their total outlook.

Marsh, Craven and McInerney (2006), use the term self-perceptions to describe these feelings. Many researchers believe that self-perceptions about wellness are more important than actual circumstances or a person’s actual state of being. Greenberg (1985) defined wellness as the integration of the five dimensions and high level of wellness as the balance between them, but utilized the term mental wellness in place of intellectual wellness. Hettler (1984) included an occupational dimension and emphasised wellness as the process of becoming aware of wellness and actively making choices towards optimal living.

Self-perceptions play a vital role in the measurement of individual wellness. The present study, therefore, is an attempt to assess the wellness levels of the selected international students of Andhra University, Visakhapatnam India. Thus, the purpose of this study was to investigate self-perceived wellness, across five dimensions, in relation to age, Body Mass Index (BMI), gender, religion, and comprehensive wellness of international students in Andhra University, South India. There is potential for the findings of this study to provide some important cues for both counsellors and university staff about relevant variables that enhance international student’s wellness. Furthermore, the findings have the potential to contribute to new offerings that aim to develop wellness programs to help students achieve optimal functioning. For instance, Travis (2005) suggests that an individual with a high level of wellness is characterized by “taking responsibility for his/her life and being consciously engaged in the experience.” (p.17)

The Energy system model posits twelve dimensions, including: Self-responsibility and Love, Breathing, Sensing, Eating, Moving, Feeling, Thinking, Playing and Working, Communication, Intimacy, Finding Meaning, and Transcending. These dimensions correspond loosely to “energy” inputs and outputs

and implicitly reflect the notion of wellness as a balance of energy states encompassed in each dimension. Although the Wellness Inventory was analysed in a study and found to have an overall reliability quotient of 0.93, only eight of the 12 scales had acceptable reliability values (Palombi, 1992).

**Wellness Models**

Health educator Eberst (1984) developed a model of holistic health in which the author represented it, using an object known as the Rubik’s cube toy (Figure 1) in order to make the construct accessible to children. His three dimensional model shows each face of the cube as a single dimension comprising of sub-elements. The six dimensions were defined within each category of: (i) Social - living in groups and interacting with others; (ii) Spiritual - the animating force, activating principles and sense of significance; (iii) Emotion - personal feelings arising subjectively rather than through conscious effort; (iv) Mental (“knowing and cognition”) - functioning of the intellectual mind; (v) Vocational - participation, effort, role in some form of productive or creative activity; and (vi) Physical - functioning of the human body.

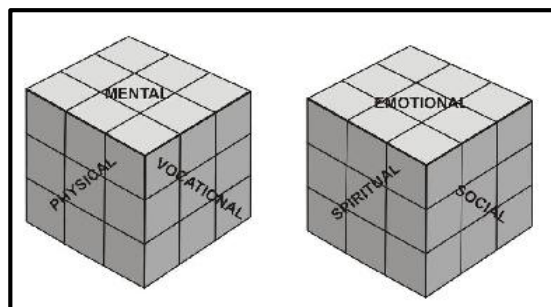


Figure 1. Cube Model of Health (Eberst, 1984).

Similar studies were also undertaken by several other authors (e.g. Adams, Bezner & Steinhardt, 1997; Diener, 2009; Hettler, 1980; Myers & Sweeney, 2005; Ryan & Deci, 2001; Ryff & Singer, 2000; and, Travis & Ryan, 2004) relative to multiple dimensions of wellness

Table 1: Dimensions of Wellness

Wellness Dimensions	1	2	3	4	5	6	7	8	9	10
Adams et al., 1997	x	x	x	x	x	x				
Diener et al., 2009	x	x	x	x	x	x	x	x	x	
Hettler, 1980	x	x	x	x	x					
Myers & Sweeney, 2005	x	x	x	x	x	x	x	x	x	
Ryan and Deci, 2001	x	x					x			

## Significance

This study has the potential to contribute to our broader understanding of emotional, intellectual, physical, social, and spiritual health and compare it to the Body Mass Index of the students. Given the multicultural background of the graduate school enrolment there was an opportunity to explore if there were trends aligned with nationalities and religious affiliations. International students represent important resources both culturally, academically and financially to universities worldwide. Ascertaining how to protect and care for these individuals represent an important aspect of the duty of care of universities.

## Methodology

This study was positioned in the interpretivist paradigm, as the nature of the investigation was most aligned with the epistemology of people's perspective on reality and knowledge being determined by people's interpretation of the world (Guba & Lincoln, 1994). In order to investigate the trends in wellness on a multidimensional scale, a range of participants' self-perceptions would inform the data (Cohen, Manion & Morrison, 2018; Crowl, 1993).

The data were collected via a survey employed to collect the wellness of a range of students from various countries of origin, different age groups, while living in co-educational environments and studying at the postgraduate level.

## Context of the Study

Andhra University is one of the oldest universities, located in the State of Andhra Pradesh, South India and offers opportunities for study and research in diverse fields. International students from as many as 16 countries and as far away as Africa, study in this university and reside in the hostels. The student population of the university at the time of the study was approximately 12,500. Approximately 224 international students reside in three hostels located at the Andhra University, South India and, only one co-educational hostel.

The research method enabled the researcher to collect data from a purposive sample of participants in order to make potential prudent inferences to a broader population (Cohen, Manion & Morrison, 2018). The research objectives include:

- (i) To assess the levels of the wellness dimensions of multicultural international students.
- (ii) To determine the comprehensive wellness of international students

The structured questionnaire "Wellness Self-Perceptions" was used to collect information on various dimensions of wellness from the specific on-campus student

population. This instrument was originally designed by Corbin, Gregory, Lindsey and William (Adams, Bezner, Drabbs, Zambarano & Steinhardt, 2000) to measure perceived wellness that correlate with various health indexes (Adams, Bezner, & Steinhardt, 1997). Many international students study in Andhra University. Across the university the student enrolment was approximately 12,500.

### **Participants**

There were 50 participants in this study, 25 males and 25 females. The age profile included: 35 participants below 30 years of age: 11 were between 30-40 years of age and 4 above 40 years of age. There were approximately 150 students living in the co-educational hostel and there were also several other hostels of a similar number of students. Therefore, the participants represent 33% of the total hostel population which is considered the acceptable return for survey research to be representative of the broader population. The other hostels were single sex groupings and therefore were not included in this study.

### **Nationality**

There were 16 respondents from Nepal (32%), 15 from Ethiopia (30%), 7 from Afghanistan (14%), 5 of the students from Iran (10%), 3 from Guyana (6%) and 1 each from Botswana (2%), Brazil (2%), Rawanda (2%) and South Africa (2%).

### **Program of Study**

Of the total respondents, 34 were pursuing a Master Degree (68%), 14 pursuing a PhD (28%) and 2 pursuing an Undergraduate course (4%).

### **Religious Affiliation**

Christianity and Hinduism religious affiliation shared the equal majority of 36% of the respondents (n=18), and the remaining identify as Islam n=14 (28%). These noted religious affiliations account for 40 of the 50 participants with the remaining 10 participants choosing not to provide a response for this question.

### **Questionnaire**

The questionnaire instrument was adopted after a thorough profiling of a range of instruments reported in the literature. The instrument was designed to gather biographical data, such as: age, gender, level of schooling, height, weight and religion. The domains of wellness incorporated in the survey included: emotional; intellectual; physical; social; and spiritual. There were three statements included in each domain and the participants were encouraged to self-evaluate this statement relative to a four-point scale spanning from *Strongly Agree* (4); *Agree* (3); *Disagree* (2); to *Strongly Disagree* (1). Data were collected in situ by the first author.

## Analysis

The wellness questionnaire responses were analysed using descriptive statistics and a wellness rating was interpreted based on the following scoring procedure. For each of the five domains of wellness, there were three questions. Therefore, there were 15 questions in total. For each of the fifteen questions, the allocation of numbers was based on the level of agreement with the statement/question. As such, the highest score possible would be for a participant to Strongly Agree (4 points) with each of the 15 questions which allowed for a cumulative score of 60. Similarly, if a participant identified Agree, then there would be 3 marks allocated; and so forth for Disagree (2); and, Strongly Disagree (1 point).

The height and weight data were subject to the formulae to determine the Body Mass Index. The standard calculation for BMI is  $\text{kg/m}^2$ . These were self-reported measures and therefore come with the identified criticism of under reporting of weight and over reporting of height (Gorber, Tremblay, Moher & Gorber, 2007). However, they remain a general guide to physical body composition and proxy for physical health status.

## Results

The wellness of the participants can first be described in terms of their physical wellness. The body mass index profile will be included initially and the five dimensions of wellness and a comprehensive scale will conclude this section.

### Body Mass Index

The Body Mass Index profile of the participants in this study include the majority were within the normal BMI range ( $n=32$ ). The next most prevalent group were overweight ( $n=14$ ); followed by underweight ( $n=3$ ) and one person was obese ( $n=1$ ). This profile is representative of the normal distribution one would expect in the general population (Penman & Johnson, 2006).

### Emotional Wellness

The emotional dimension emphasizes an awareness and acceptance of one's feelings. It reflects the degree to which individuals feel positive and enthusiastic about themselves and life. This dimension involves the capacity to manage feelings and behaviours, accept oneself unconditionally, assess limitations, develop autonomy and cope with stress (Denham, 2006).

For this study, the most prevalent wellness was 'good' ( $n=25$ ) followed by 'high level' wellness ( $n=22$ ) and successively by marginal wellness ( $n=3$ ).

### **Intellectual Wellness**

The intellectual dimension promotes the use of one's mind to create a greater understanding and appreciation of oneself and others. It involves one's ability to think creatively and rationally. Intellectual wellness is the utilisation of human resources and learning resources to expand knowledge and improve skills.

The results for this study identifies the most prevalent level of intellectual wellness was 'high-level' ( $n=41$ ) followed by 'good' ( $n=8$ ) and 'marginal wellness' ( $n=1$ ). This result may be explained by the high proportion of the participants studying at the postgraduate level, which would reinforce their prior performance and perceived capacity for intellectual achievement.

### **Physical Wellness**

Foster, Keller and Boomer (2007) defined physical wellness as encompassing the degree to which one maintains and improves cardiovascular fitness, flexibility, and strength. Aligned with these fitness, parameters are the factors of balance, harmony and awareness and monitoring of the body, feelings, and tensions are included.

The results for the dimension of physical wellness included the most prevalent of: 'high level wellness' ( $n=27$ ); followed closely by 'good wellness' ( $n=21$ ); and, marginal physical wellness ( $n=2$ ).

### **Social Wellness**

The social dimension of wellness emphasizes the creation and maintenance of healthy relationships. It enhances interdependence with others and nature, and encourages the pursuit of harmony within the family. This dimension furthers positive contributions to one's human and physical environment for the common welfare of one's community.

The results for the social wellness was: 'high level' ( $n=41$ ); 'good' ( $n=8$ ); followed by 'low-level' ( $n=1$ ).

### **Spiritual Wellness**

The spiritual dimension involves seeking meaning and purpose in human existence. It involves developing a strong sense of personal values and ethics. This dimension includes the development of an appreciation for the depth and expanse of life and natural forces that exist in the universe.

The results for spiritual awareness was 'high level' ( $n=32$ ), and 'good' ( $n=18$ ). This finding is of interest in particular given the high level of affiliation with religions such as Hinduism, Christianity, and Islam.



## Comprehensive Wellness

Comprehensive wellness occurs when a person is in good physical and mental condition, which is the result of an individual's ability to make choices and engage in behaviors that bring about a healthy and fulfilling life. For this study, all five domains previously listed are amalgamated into a composite score which is termed as 'comprehensive wellness'.

The wellness data were derived by assigning an interval measure to a nominal observation (Table 2). This provided a basis of comparison between the various groups – by national origin.

Table 2: Wellness Dimension Scored

Rating Wellness	Wellness Dimension Scores	Comprehensive
High Level Wellness	19 – 12	50 – 60
Good Wellness	8 – 9	40 – 49
Marginal Wellness	6 -7	30 – 39
Low Level Wellness	below 6	below 30

The results of this study identifies that the 'highest level of wellness' for this dimension included the majority of the participants ( $n=29$ ), followed by 'good comprehensive wellness' ( $n=21$ ). This result identifies and suggests that there is sound overall wellness in the international students who participated in this study.

## Limitations

As with most research there are identifiable limitations in the design. For this study, there was a relatively small sample size, which makes it difficult to generalise the findings back to the original populations. Some of the measures were grouped into categories, such as age, rather than specific yearly ages. There were no checks on the self-reported height and weight, which calls into question the accuracy of these data. However, the self-reported Wellness scales needs to be validated with the multi-cultural and multi-national participants. A follow up interview of the participants would have provided greater surety of the wellness data.

## Discussion

The primary purpose of this study was to amalgamate several theoretical frameworks of wellness in order to understand the perceptions of international students of a large university in India. According to Wilson and Cleary (1995), the perceptions of wellness have been found to be powerful predictors of future health outcomes.

In the most parsimonious form, the findings of this study identified the highest level of wellness for this group of participants, which included the same high level for both Social Wellness and Intellectual Wellness at 82%; Spiritual Wellness of 64%; Physical Wellness of 54% and emotional wellness at 44%. This study has provided an initial glimpse into the multi-dimensional measurement of wellness for a variety of postgraduate students studying and living in a co-educational hostel in a large University located in India. The results provide a confirmation of the social, intellectual, spiritual, physical and emotional wellness as generally high which may be representative of a range of national groups who are living and studying together. These findings align with those of Oguz-Duran and Tezer (2009) where self-esteem was reported in alignment with four dimensions of wellness. Similarly, Chow (2005) reported that the higher the grade point average (GPA) of university students, the more the students reported satisfaction with their academic experiences.

In addition, the findings also align with the multidimensional definition of health as a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity (WHO, 1986) as it encompasses social, intellectual, spiritual, physical and emotional wellness domains. These results represent a reinforcement of a multi-dimensional approach to supporting the health and wellness of international students in universities in a range of cultural settings.

The implications of these findings provide a strong case for further research to probe and interrogate the often taken for granted assumptions as to the reasons for such high self-reported levels of wellness. A follow up study with a larger population, followed by a purposive interview procedures would allow for deeper understandings of the role of national origin, gender, religious affiliation and to ascertain the 'So What?' factor in this line of research. Notwithstanding the need for further investigation of these findings, the positive alignment of self-reported wellness may help to support programs designed to support international students studying in not only India but other contexts as well.

Wellness programs supporting students to be connected through a range of offerings including: social group activities; physical and sporting activities; may lead to positive perceptions of their intellectual achievement and lead to develop positive self-perceptions of their own health. The gold standard of the definition of health by WHO is more than the absence of disease, incorporating the social, emotional, physical, intellectual and spiritual dimensions of health as supported by these findings.

University health policies and practices have great potential to promote the well-being of students at the tertiary level of education (Walker & Frazier, 1993). Therefore, a need to further explore the conceptualization of wellness requires additional empirical studies which would allow for further investigation of wellness. The affiliation with religious or spiritual groups is an area of further study to explore if tertiary students who have affiliations with religious groups have a higher level of spiritual wellness. The validity and reliability of the instrument used in this study could also be explored in a range of diverse cultural contexts for applicability across national boundaries.

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