

Development and Validation of Well-being Index

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Abstract

Well-being is a positive perception and usually related to satisfaction allied with emotion and determined by social variables in economics, socio-cultural, environment and health. The determination and validation of indexes of well-being applicable to Filipinos is the intention of the study. The study utilized the descriptive research design with the total population of five thousand one hundred five (N=5, 105) and a sample size (n = 1000) of one thousand household heads in Malaybalay City, Philippines. Survey questionnaires used in the study were validated utilizing the Delphi technique and the reliability test was done using Cronbach Alpha. The top three indicators that yield the greater optimal weights are the better indicators of well-being among Filipinos. The result of the study shows that the better indicators for well-being are housing, income and community.

Keywords: Well-being, health, income, housing, community

Introduction

Well-being is a positive perception and usually related to satisfaction allied with emotion. There are different factors that affect this perception. Well-being is generally associated with conditions of life and dictated by society. The identification of specific factors that comprise the index helps in expanding our understanding of well-being and how people behave in a given situation. Hence, well-being is multi-dimensional and is conditioned with the different experiences of a given society. This study claims that even with the multidimensionality of well-being, there is a need to capture the determinants applicable for the people in Malaybalay City.

Literatures provide diverse multi-dimensional indices of well-being depending

on the environment where the individual resides. White, Gaines, and Jha (2012) cited that aspects of well-being also influence poverty. The relationship on this concept was identified in a “Well-being and Poverty Pathway” research done in Zambia and India. It was done to assess the rural communities’ well-being. The Organization for Economic Co-operation and Development (OECD) studied 36 countries excluding the Philippines for the purpose of promoting policies that will improve the economic and social well-being of people around the world (Boarini, Comola, De Keulenaer, Manchin, & Smith, 2012). Rath, Harter, and Harter, (2010) in their book, “Well-Being” cited five essential elements to include career, social, financial, physical and

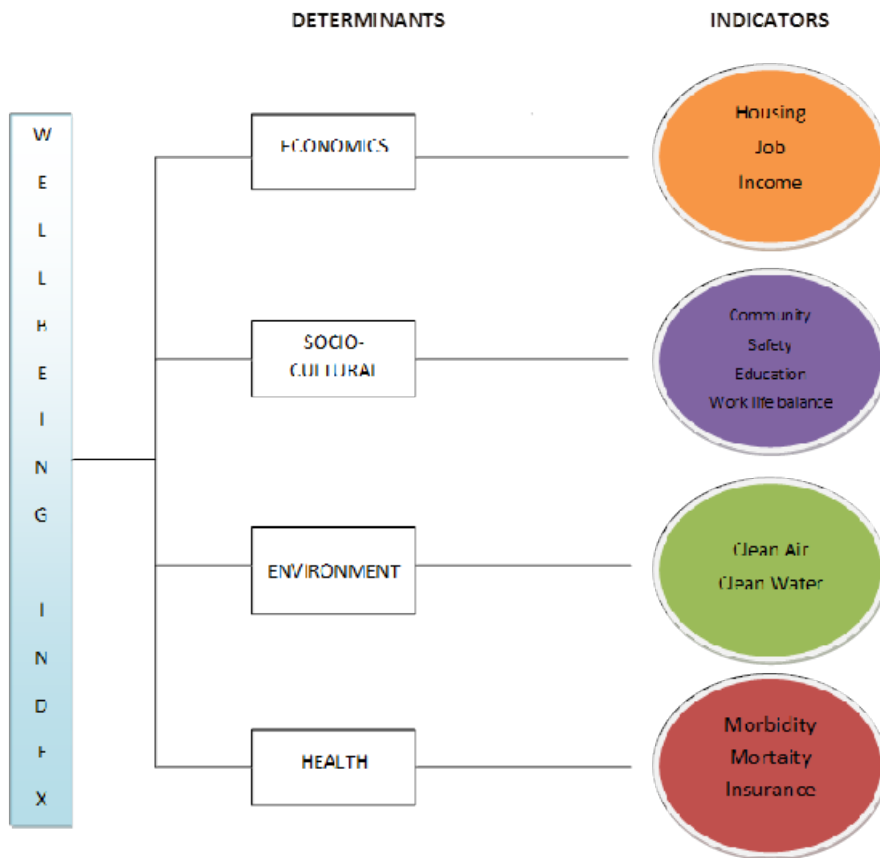


Figure 1. Schematic diagram of the Well-being Index.

community.

This study chose to look into the well-being indices utilizing several variables. This will aid policy makers in managing government programs for the betterment of the life of its people.

Conceptual Framework

The well-being of people can be inferred into five main determinants: economic, social, political, cultural and health. Looking into the different factors as posited by Boarini et al. (2012) and Rath et al. (2010), the researchers posited the interrelatedness of the following different factors in establishing well-being for Filipinos which can be gleaned in Figure 1.

The schematic diagram explains how the researchers identified the different determinants

and indicators in the development of the wellbeing index as:

Economic

Well-being factor under economic connotes meeting the basic need such as living in satisfactory housing conditions and meeting the basic need of shelter. Housing provides a place to sleep and rest for people to feel safe and have privacy. Majority of the countries under the OECD project revealed that they were satisfied with their housing conditions.

The Gallup-Healthways Well-Being Index (2011) released a state report that good living conditions (e.g., housing, employment) are fundamental to well-being.

Indicators of Well-being in Canada (2012) likewise confirmed that a safe and comfortable

place to live is fundamental to people's sense of well-being. Thus, the government's focus is for every Canadian household to have access to housing at a cost they can afford.

Satisfying the basic need of the net-adjusted disposable income of households across OECD job or employment member countries is \$22,387, while the wealth income is \$36,238 a year. These values are adjusted by Purchasing Power Parities (PPPs). PPPs reflect the differences in cost of living for a comparable amount of goods and services consumed by households. Income is an important means in achieving higher living standards and thus greater well-being is needed. Higher economic wealth may also improve access to quality education, healthcare, and housing.

Job, on the other hand, is beneficial to stay connected with society. OECD study revealed that OECD member countries with high level employment rate and job security indicated positive well-being and more politically stable and healthier society. Likewise, work builds self-esteem and develops skills and competencies.

Finding a suitable balance between work and daily living is a challenge that all workers face. Such that some couples would like to have (more) children, but do not see how they could afford to stop working. Other parents are happy with the number of children in their family, but would like to work more. This is a challenge to governments because if parents cannot achieve their desired work/life balance, not only is their welfare lowered but so is development in the country. If parents have to choose between earning money and looking after their children, the result is that there will be too few babies and too little employment.

Social

Humans are social creatures. The frequency of our contact with others and the quality of our personal relationships are crucial determinants of our well-being. Studies show that time spent with friends is associated with a higher average level of positive feelings and a lower average level of negative feelings than time spent in

other ways. Thus, people with frequent contact with other people tend to be more satisfied with their lives than those who do not.

In relation to education, this variable plays a key role in providing individuals with the knowledge, skills and competences needed to participate effectively in society and in the economy. In addition, education may improve people's lives in such areas as health, civic participation, political interest and happiness. Studies show that educated individuals live longer, participate more actively in politics and in the community where they live, commit fewer crimes and rely less on social assistance.

On the other hand, good health brings many benefits, including enhanced access to education, an increase in productivity and wealth, reduced health care costs, good social relations, and a longer life. OECD (2011) analysis suggests that health care spending growth has contributed to the improvement in life expectancy along with other important determinants such as rising living standards, environmental improvements, lifestyle changes and education.

In addition, the Centers for Disease Control and Prevention studied Health Related Quality of Life. Result showed that health improves social, economic and personal development fundamental to well-being (Herrman et al., 2005; Ottawa Charter for Health Promotion, 1986; Breslow, 2006). Individuals with high levels of well-being are more productive at work and are more likely to contribute to their communities.

Furthermore, personal security is a core element for the well-being of individuals, and largely reflects the risks of people being physically assaulted or falling victim to other types of crime. The biggest impact of crime on people's well-being appears to be through the feeling of vulnerability that it causes.

Lastly, relationships with people, education and good health will result to life satisfaction and can be manifested by a personal evaluation of one's health, education, income, personal fulfillment and social conditions. Life satisfaction is always associated with happiness.

Happiness being a subjective feeling describes positive experiences. Thus, an individual experiences well-being.

Cultural

The characteristics of people influence wellbeing. Social habits and how people behave on a given situation are formed through their writings, songs, poems and dances. Different cultures depict different manifestation of wellbeing. WHO quality of life profile revealed that extensive cross national testing across nations is needed to assure applicability of wellbeing within differing cultural context.

Environment

Conditions of the environment dictate the well-being of people. Clean air and water have a positive impact on health. The interrelatedness of the environment to the health conditions of people can be highlighted on the abundance of the natural resources such that almost all natural resources are dependent on clean air and water for economic production and supply. Hence, healthy individuals feel the abundance of clean air and water such that air and water pollution among OECD member countries with their non OECD member neighboring countries are being managed.

In addition, cohesive society is one that is actively involved in civic engagement where citizens have a high degree of confidence in their governmental institutions and public administration. They have high regard of their leaders and believe in the integrity of government to translate programs and projects for the greater advantage of the communities they wish to serve.

Objectives

The main objective of this study is to develop a multidimensional index for well-being. Specifically, it aims to:

1. Identify the dimension in the formulation of well-being index,
2. Determine the weights of the dimensions used in the well-being index,
3. Validate the well-being index as applied in Malaybalay City, and
4. Determine the better indicators for well-being.

Research Design and Methods

The main objective of the study is to establish a well-being index for Filipinos with a study area in Malaybalay City. The study utilized the descriptive research design to define the well-being index patterns of Filipinos. The patterns and weights of the utilization of the different patterns were determined by normative research design.

To define the different dimensions applicable to household heads, data mining was used. The total number of households $N = 5,105$ were sought from the Civil Registry Office and the sample size $n = 1000$ was determined through estimates of an experts' opinion.

In identifying the dimensions and indicators of the well-being index, the researchers reviewed previous studies done which are related to the topic. Theories were broken down to concepts. Concepts were then extracted for the indicators which were used to measure the index. Utilizing the different variables as presented in the conceptual framework, questionnaires/statements on each category of the variable were formulated. With the help of the Delphi technique representatives from the Department of Health, Department of Social Welfare and Development, National Economic Authority, Office of the Senior Citizens Affairs, Philippine Nurses Association, Bukidnon State University Research Unit, and the College of Nursing Faculty were sought to help in the formulation of the statements in the survey tool. These people formed the experts of the identified variables in the study. Three focus group discussion were made before

finalizing the survey tool and categorization depending on the variables included in the study. The questionnaires/statements were pilot tested to ten percent of the household heads/respondents. The responses were tested for validity and reliability. The ten percent tapped in the pilot testing were not included in the actual conduct of the study.

In determining the weights of the different dimensions and to calculate the indices, the optimal weights and aggregate scores of the dimensions as well as the indicators of every dimension were calculated. The weight of each statement in the survey tool was obtained through the minitab statistical tool.

Validation of the well-being index was done with the pilot testing of the statements/questionnaires by 10% (100 respondents from 1000) total number of respondents. The formula utilized in selecting the specific respondents was:

$$K = \frac{N}{n} = \frac{5,105}{1000} = 5.105$$

Where K = sampling interval

N = population

n = sample size

The respondents were selected for every 5th households in the listing of respondents. Questionnaires/statements were validated utilizing the Delphi technique. Reliability test was done using Cronbach Alpha test for reliability. The better indicators in this study are the top three that yield the greater optimal weights in the study.

Results and Discussions

Table 1 shows the demographic data and percentage distribution of age, gender, occupation of respondent, occupation of respondent’s spouse, income and number of dependent children.

	CATEGORY	PERCENTAGE n = 1,000
AGE	> 20 – 29 years old	23.50%
	> 30-39 years old	25.26%
	> 40-49 years old	26.72%
	> 50-59 years old	16.64%
	> 60 years old and above	7.88%
SEX	> Male	44.88%
	> Female	55.12%
OCCUPATION (RESPONDER)	> With occupation	77.94%
	> No occupation	22.06%
OCCUPATION (SPOUSE)	> With occupation	69.53%
	> No occupation	30.57%
INCOME	> 10,000 and below	43.22%
	> 10,001 – 20,000	24.06%
	> 20,001 – 30,000	18.73%
	> 30,001 – 40,000	6.63%
	> 40,001 – 50,000	2.02%
	> 50,000 and above	5.33%
NO. OF	> 0-3 dependents	74.17%

Figure 2. Average Wellbeing Index of the respondents.

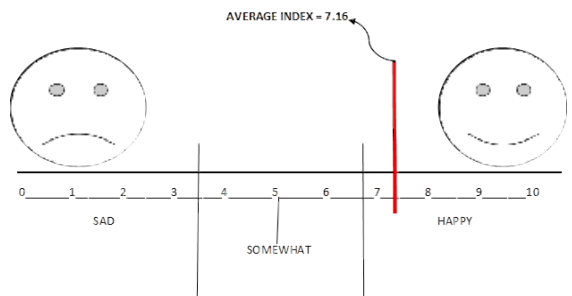


Figure 3. Interpretation of the Well-being Index ranges.

INDEX	INTERPRETATION	
0 - 3.33	SAD/MISERABLE	
3.34 - 6.66	SOMEWHAT	SAD (3.34 - 5.00)
		HAPPY (5.01 - 6.66)
6.67 - 10.00	HAPPY	

DIMENSION	OPTIMAL WEIGHT	RANK	INDICATOR	OPTIMAL WEIGHT	RANK
ECONOMIC	25.32%	2 ND	HOUSING	13.07%	1 ST
			INCOME	12.25%	2 ND
SOCIO-CULTURAL	46.84%	1 ST	COMMUNITY	11.80%	3 RD
			SAFETY	8.57%	9 TH
			EDUCATION	8.98%	7 TH
			CULTURE	9.00%	6 TH
			WORK-LIFE BALANCE	8.49%	10 TH
POLITICAL	9.43%	4 TH	CIVIC ENGAGEMENT	9.43%	5 TH
ENVIRONMENT	8.91%	5 TH	NATURAL ENVIRONMENT	8.91%	8 TH
HEALTH	9.50%	3 RD	HEALTH	9.50%	4 TH

Figure 4. Optimal weight and rank of dimensions and indicators.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.771	0.7105 (Accepted)	33

Figure 5. Result of Cronbach Alpha coefficient for reliability.

Interpretation of Results

The result of the study shows that the better indicators for well-being are housing, income and community. Housing and income indicators were expected to yield a greater optimal weights for they comprise a human's basic need. Income would meet the basic need for food and clothing. Maslow's hierarchy of needs revealed that the physiologic need must be satisfied before one can move to the higher level of the hierarchy (Schultz & Schultz, 2009). Income of the respondents will give the purchasing power to meet the basic needs of food and shelter.

Surprisingly, community which is a non-basic human need ranked the third best indicator. This would indicate the importance that we place on good interpersonal relationship and strong family ties. The act of kindness and being selfless is innate in people. Asians are clannish in nature; the more children they will have, the more secure will they be. In addition, children sustain family ties and family name. Lack of certain human basic needs is often supplemented by the people in the community. It can be inferred therefore, that communities possess the ability to share in spite of financial and material insufficiency. The insufficiency is supplemented by the people in the community.

The soundness of safety as one of the least prioritized aspect of well-being can be related to the selflessness of an individual, compromising self for the sake of others.

Conclusion

Income coupled with community involvement and comfortable housing determines wellbeing among Filipinos. This study strengthened the concept that human beings are very much a social organism as evidenced by the premium placed on community as an indicator of wellbeing.

The number of children determines well-being. The more children a household has, the happier it is. In the Filipino culture, children are expected to help the family. It can be gleaned from the study that the interaction yearned for by the individual can be supplemented by the family members.

The soundness of safety as one of the least prioritized aspects of wellbeing can be related to the selflessness of an individual, compromising self for the sake of others. Lastly, massive advancement of technology and social media has increased the awareness of environmental safety nets among communities.

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