

A Cluster-Path Analysis of Determining Worldwide Life Satisfaction Index

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Abstract

Life satisfaction reflects the extent to which basic needs are met and the extent to which a variety of other goals are viewed as attainable. From this perspective, increase of life satisfaction is directly dependent on accomplishing more goals. Cluster analysis of the secondary data from 135 countries revealed that countries with high life satisfaction index were those with high job and standard of living satisfaction supplemented with high exercise of freedom but with less concerned on security. On the contrary, countries with low life satisfaction index is categorized as countries with an average job and security satisfaction but were least satisfied with their standard of living. This study further confirmed that life satisfaction is conceived as the degree to which an individual judges the overall quality of his life-as-a-whole particularly on the aspect of job satisfaction and standard of living.

Keywords: *life satisfaction index, job and security, standard of living, cluster analysis, path analysis*

1.0 Introduction

Life-satisfaction is one of the indicators of ‘apparent’ quality of life. It indicates how well people thrive (Veenhoven, 1996) and is often considered a desirable goal, in and of itself, stemming from the Aristotelian ethical model of happiness where correct actions lead to individual well-being, with happiness representing the supreme good (Beutell, 2006). In a more modern context, life satisfaction is believed to

be inherent to features such as social relationships, health, work related conditions, personal welfare, liberty, moral values and personality traits (Frijins, 2010).

The most elementary use of life-satisfaction data is to estimate apparent quality of life within a country or a specific social group. High satisfaction suggests that the quality of life, in the population concerned, is good. Low satisfaction marks serious shortcomings of some kind. This is consistent with Bradley

& Corwyn (2004) who said that life satisfaction reflects both the extent to which basic needs are met and the extent to which a variety of other goals are viewed as attainable. From this perspective, it seems only reasonable that by accomplishing more goals, satisfaction with life

will also increase. Thus, if average satisfaction levels increase, this suggests that the quality of life in the country or social group will be improved. When satisfaction declines, this indicates possible problems.

For Beutell (2006), life satisfaction is related to better physical, and mental health, longevity, and other outcomes that are considered positive in nature. It is also well-described by various factors like job or daily activities, social contacts and family, health, and income (Kapteyn, Smith & Soest, 2009). Moreover, life satisfaction can also be attributed to the giving of primary importance to freedom, that is, the capability to achieve individual and collective ends (Sen, 2002). All of these can be deduced to the notion that life satisfaction is conceived as the degree to which an individual judges the overall quality of his life-as-a-whole favourably (Veenhoven, 1996) and can be understood as the result of satisfaction among the many domains

of life (Cummins, 2003; Salvatore & Muñoz Sastre, 2001; Van Praag & Ferrer-i-Carbonell, 2004).

While there were enough studies on self-satisfaction from various sectors worldwide, a specific consideration of the effect of some variables to its achievement is quite more important. It has become a necessary measure that is increasingly considered as important in formulating policy goal among these countries (Tiefenbach & Kohlbacher, 2013). Thus, identification of factors significantly affecting life satisfaction among these countries is deemed necessary to craft policies that would facilitate the realization of a better society and the quality of life that their constituents really desired.

2.0 Framework, Design and Method of the Study

This study attempted to define a framework that would explain the overall life satisfaction of countries around the world. The framework begins with an assertion that life's total satisfaction is a function of satisfaction among the many domains of life.

The following data were obtained from the Human Development Report 2014 published by United Nations Development

Programme which can also be downloaded online at <http://hdr.undp.org>. Involved in the study were data of 135 countries around the world over the last seven years (2007-2013):

1. Over-all Life Satisfaction Index
2. Domains of Life Satisfaction
 - 2.1. Quality Education
 - 2.2. Quality Health Care
 - 2.3. Standard of Living
 - 2.4. Job
 - 2.5. Security
 - 2.6. Freedom of Choice

A cluster analysis was made to classify countries with high, medium and low life satisfaction index. Moreover, a path analysis illustrated the direct and indirect effect of each of the domains to the over-all life satisfaction index.

3.0 Result and Discussion

Recent years have seen renewed interest on the role of life satisfaction index among countries worldwide. The idea, in fact, received a growing agreement that it should be included as a significant indicator of success in

the program implementation of the government (Forgeard, Jayawickreme, Kern & Seligman, 2011). Thus, various literature considered government programs on education, health, type of job, standard of living and security as major factors that contribute to the attainment of high level life satisfaction (Voicu & Pop, 2011; Kapteyn, Smith & Soest, 2009; Abdallah, Thompson & Marks, 2008) among various countries globally.

This study tried to classify countries into three clusters and, together with the various domains of life satisfaction, categorically labelled them as countries with high (cluster 1, $n=62$, $M=6.27$), medium (cluster 2, $n=13$, $M=5.39$) and low (cluster 3, $n=60$, $M=4.64$) life satisfaction index. It is interesting to note that there are as many countries in the cluster with high and low life satisfaction index and only few in the cluster with medium life satisfaction index. This manifests a large disparity of life satisfaction experiences among countries around the world. This disparity can be attributed to the degree as to how various domains which significantly

Table 1. Cluster Analysis of Life Satisfaction Index

Variables	Cluster 1 ($n=62$)	Cluster 2 ($n=13$)	Cluster 3 ($n=60$)	Grand Centroid
Quality Education	72.87	52.92	52.98	62.11
Health Quality	72.15	42.08	42.67	56.15
Standard of Living	75.31	65.39	38.60	58.04
Job	84.97	75.35	62.07	73.87
Security	67.71	59.62	56.98	62.16
Freedom of Choice	80.44	69.23	55.98	68.49
Life Satisfaction Index	6.27	5.39	4.64	5.46

explain life satisfaction index is prioritized by the government (Cummins, 2003). Here, the role of the government towards providing satisfying services to human, social and natural capital explains the degree of life satisfaction at the country level (Abdallah, Thompson & Marks, 2008). This suggests that government services provided to natural, human and socio-political capitals are all found to be strong predictors of life satisfaction.

More specifically, the three clusters showed that the various explanatory domains have positive linear relationship with the overall life satisfaction index. Result shows that overall life satisfaction index among three clusters, though significantly different at various satisfaction level, are largely explained by the contentment of the type of job the constituents have. This shows a strong and direct relationship between job satisfaction and the over-all life satisfaction index. Thus, the happier people are within their job, the more satisfied they are said to be (Parvin & Kabir, 2011; Ahn, 2005).

In a more specific manner, countries with high and medium life satisfaction index considered freedom of choice and standard of living as second contributory factors for the overall life satisfaction index. In contrary, countries with low life satisfaction index attributed more

their life satisfaction to their security. This shows that while countries with high and medium life satisfactory index are highly satisfied with their job and freedom of choice due to high standard of living,

countries with low life satisfaction index were excessively less satisfied with it.

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Generally, countries with high life satisfaction index are characterized with high job and standard of living satisfaction supplemented with high exercise of freedom with less concerned on security. This is also true with countries with medium life satisfaction index. On the contrary, countries with low life satisfaction index is categorized as countries with an average job and security satisfaction but were least satisfied with their standard of living.

The degree to which these domains are affecting the overall life satisfaction level was further illustrated using path analysis. It reflected the indirect overall effect of the various independent variables to life satisfaction.

Result showed that the degree of satisfaction on the standard of living contributed the most ($\beta=1.06$) to the overall life satisfaction of 135 countries around the world. The standard of living, however, can be attributed to the satisfaction of the constituents on the job they presently have which also highly explains life satisfaction index ($\beta=0.94$). This shows that standard of living among countries worldwide was highly dependent on the type of job the constituents have.

It can also be notified that quality of health services ($\beta=0.67$) contributed more to life satisfaction index when it is accompanied with standard of living and freedom of

choice. This simply suggests that the exercise of freedom and the standard of living strengthens the relationship between quality of health services and life satisfaction. This was also true to the quality of education ($\beta=0.59$). The degree of satisfaction of the quality of education would generally contribute high life satisfaction index when associated together with standard of living and the exercise of the freedom to choose.

4.0 Conclusion

High life satisfaction manifests the countries satisfaction level of the government services they provide to their constituent. At the theoretical level, this study confirmed that life satisfaction is conceived as the degree to which an individual judges the overall quality of his life-as-a-whole. In a more particular case, job satisfaction and standard of living explain greatly the level of life

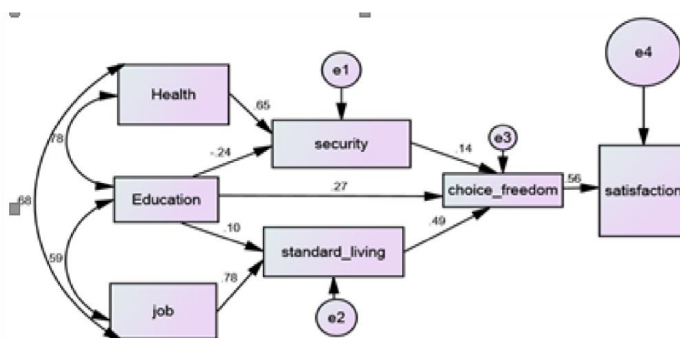


Figure 1. Path Analysis of Life Satisfaction Index

satisfaction index among countries worldwide.

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Modeling