

MEASURING LIFE SATISFACTION IN VIETNAM

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ABSTRACT

The paper focuses on developing life satisfaction scale in order to measure subjective quality of life in Vietnam. The first finding of the study is life satisfaction scale in Vietnam including overall life satisfaction scale and 6 domain-life satisfaction scales, namely: economic conditions, social relationships, residence, family and health, environment quality, and leisure. The second finding is that leisure satisfaction and social relationships satisfaction do not affect overall life satisfaction, meanwhile the satisfaction with remaining aspects has significant relation with overall life satisfaction. These results are somewhat consistent with some previous studies and the current Vietnamese context.

Keywords: quality of life, subjective wellbeing, life satisfaction, domain-life satisfaction

1. INTRODUCTION

Improving the quality of people's life are key contents in the human development strategy at the global as well as the national level. This objective is put at the forefront in the socio-economic development strategy, which is regularly discussed in the agendas in many countries around the world, including Vietnam.

For many years, quality of life has been a topic widely studied in the world. Studies focus on identifying the concept and construct of quality of life, measuring the quality of life or finding the connection between the quality of life and related issues...

Literature review shows that most studies in the world have combined both subjective and objective aspects in measuring the quality of life (see Felce & Perry, 1995; Cummins, 2000; Schalock, 2000; Hagerty et al., 2001; Costanza et al., 2007; Stiglitz et al., 2009 ...). In particular, the objective aspect of the concept is often measured based on social indicators reflecting the objective living conditions, the subjective aspect is often assessed by the subjective wellbeing. According to Cobb (2000), based on Jeremy Bentham's traditional utilitarianism, quality of life is related to the satisfaction of the desires of individuals and the good society is defined as one that provides the maximum satisfaction or positive experiences for its citizens. Therefore, it is

considered as one of the factors to determine a good life and an important measure in measuring quality of life (Veenhoven,1996; Diener & Suh, 1997; Cobb, 2000...).

Based on classic works of scholars and experiences of international organizations and countries worldwide, Nguyen Thi Xuan Mai (2018) concludes that quality of life in Vietnam needs to be measured by both objective and subjective factors. Of which, the objective quality of life in Vietnam is measured by socio-economic indicators in order to reflect at extent to what the needs of people's living conditions are met or can be met. In general, these indicators can be obtained quite easily from official and available sources of information. However, how to measure the subjective aspect of this concept, often through life satisfaction, is still a big unanswered question. So far, Vietnam has not had an official national survey to collect information for evaluation.

The purpose of this study is to develop the satisfaction with life scale in order to measure quality of life in Vietnam. It is expected to enrich our understanding of satisfaction with life and the relationship between global life satisfaction and domain-life satisfaction in Vietnam where the research topic has still received modest attention. The paper includes 4 parts: Section 2 provides theoretical background; Section 3 present research methodology; results and discussion are presented in Section 4; Section 5 concludes and raises some future researches.

2. THEORETICAL BACKGROUND

2.1. Subjective wellbeing

As mentioned above, most studies have combined both subjective and objective aspects in evaluating quality of life. In these studies, the subjective aspect of the quality of life is often assessed by the subjective wellbeing.

According to Diener et al. (2009), subjective wellbeing is defined as a person's cognitive and affective evaluation of his/her life. These evaluations include emotional reactions to events as well as cognitive judgments of satisfaction. Therefore, someone achieves a subjective wellbeing when he/she experiences pleasant emotions, low levels of negative mood and high satisfaction with life. There are three ways to measure subjective wellbeing: evaluation measure; experience measure; and 'eudemonic' measure (Dolan & Metcalfe 2012).

Evaluation measure focuses on assessments of life or domains of life, such as satisfaction with life overall and satisfaction with domains of life including health, education, work, housing, social life, time use... The main reason why this measure has been used most often is because of its prevalence in international and national surveys (Waldron, 2010), and because of its comprehensibility and appeal to policy makers (Donovan and Halpern, 2002) (quoted in Dolan &

Metcalfe, 2012). Happiness is sometimes used instead of life satisfaction in many international surveys (Waldron, 2010) because of understanding factors relating to life satisfaction is crucial to understanding what makes individuals happy (Erdogan et al., 2012).

In experience measurement, the most important thing is each person's feelings. Diener & Suh (1997) said that they could be pleasant emotions such as joy, pride... or unpleasant emotions such as sadness, anxiety... This study also provides evidences that these emotions are somewhat independent, so they need to be measured separately. Different from the above two categories, 'eudemonic' measures often relate to psychological needs, including the purpose and meaning of life as well as other concepts such as autonomy, control and connectedness ... (Ryff, 1989) (quoted in Dolan & Metcalfe, 2012).

Although Stiglitz et al. (2009) suggest that it is necessary to measure each aspect of subjective wellbeing separately, but in fact, measures of evaluation, namely, satisfaction with life are often measured, especially when related to researches on quality of life. Pavot & Diener (1993) points out that among the aspects of the subjective wellbeing, satisfaction with life is defined as a separate structure that expresses cognitive judgment of quality of the whole life. Ventegodt et al. (2003) thinks that subjective quality of life is a good life that each individual feel. Based on distinguishing the different aspects of subjective quality of life including wellbeing, happiness, satisfaction with life and meaning in life, the study concludes, most quality of life theories focus on satisfaction with life. Therefore, researchers prefer it to more emotionally and intuitively attained concepts. According to Veenhoven (1996), satisfaction with life is one of the indicators of apparent quality of life because it indicates how well people thrive.

2.2. Life satisfaction

There are many different definitions of life satisfaction. Andrew (1974) states life satisfaction symbolizing an overarching criterion or ultimate outcome of human experience. Meanwhile, life satisfaction is characterized, in agreement with the cognitive theory, as "individual's cognitive judgment about comparisons based on the compatibility of their own living conditions with the standards" (Diener et al, 1985). According to Veenhoven (1996), life satisfaction is the degree to which a person positively evaluates the overall quality of his/her life as a whole. Sousa & Lyubomirsky (2001) says life satisfaction is a contentment with or acceptance of one's life circumstances, or the fulfillment of one's wants and needs for one's life as a whole.

In general, there are two main theoretical approaches in studying life satisfaction: 1) top-down approach: satisfaction with life as an influencer of satisfaction with domains of life; 2) bottom-up approach, satisfaction with life as a result of satisfaction in the many domains of life.

Based on these two approaches, the researchers have distinguished between life-domain satisfaction and global life (life as a whole) satisfaction. The former refers to the satisfaction with specific aspects of personal life, such as family, work, income... while the latter is broader, expressed through a personal comprehensive judgment. Although the debate about which approach to follow is still ongoing, many people believe that global life satisfaction and life-domain satisfaction are closely related (Andrew & Whitey, 1976; Veenhoven, 1996; Pavot & Diener, 2008).

Most researchers choose to assess life satisfaction through self-report which require respondents to indicate the extent to which they are satisfied with their lives. They believe that self-report is the most direct and most accurate way to measure it (Sousa & Lyubomirsky, 2001). Typically, a rating scale, e.g. from 1 to 5, 7 or 10 will be used, where a score of 1 indicates the highest level of dissatisfaction.

2.2.1. Measuring global life satisfaction

The global life satisfaction measure can be captured by single-item scale which consists of a single question or multi-item scale which require participants to respond to multiple items.

One of the famous single-item scales is Delighted-Terrible Scale given by Andrews & Withey (1976). This scale asked participants to answer the question "How do you feel about your life as a whole?" by choosing one of seven response options ranging from "terrible" to "delighted". Another famous framed single-item measure used to assess respondents' satisfaction with life is the Cantril ladder. Respondents were asked to rate their lives in comparison to the best and worst possible lives they could imagine, on a scale of zero (worst possible life) to ten (best possible life). The question is: "On which step of the ladder would you say you personally feel you stand at this time?". This scale is being adopted in the Gallup World Poll at the moment. In the World Values Survey, there is one question to measure global life satisfaction: "All things considered, how satisfied are you with your life as a whole these days?" It is answered on a 10-point satisfaction scale.

According to Sousa & Lyubomirsky (2001), although single-item scales have adequate convergent validity and satisfactory reliability, researchers prefer to use multi-item scales because they allow for the assessment of internal consistency as well as the identification of errors associated with wording and measurement. Besides that, Diener (1984) has argued that multi-item scales have demonstrated greater reliability and validity overall than single-item scales. Additionally, single-item scales may be more susceptible to social desirability biases than multi-item ones because the latter request a wider range of information with more specificity.

Among multi-item scales, Satisfaction with Life Scale (SWLS) developed by Diener et al. (1985) is most widely used in studies on subjective wellbeing (Larsen & Eid, 2008). This scale has been translated into many languages and is applied in many countries around the world when measuring life satisfaction (Pavot & Diener, 2008).

The SWLS consists of five items: 1) In most ways my life is close to my ideal, 2) The conditions of my life are excellent, 3) I am satisfied with my life, 4) So far I have gotten the important things I want in life, and 5) If I could live my life over, I would change almost nothing. Then respondents were asked to rate their level of agreement on a seven-point scale (1=strongly disagree, 7= strongly agree). Because these items are oriented in a positive direction so their points can be added to the total score of the scale. Score on the SWLS can be interpreted in term of absolute and relative life satisfaction, namely: score from 5 to 9 are indicative of being extremely dissatisfied with life; from 10 to 14 are substantially dissatisfied with their lives; scores between 15 and 19 represents slightly dissatisfied with life; a score of 20 represents the neutral point on the scale; scores between 21 and 25 represents slightly satisfied; scores between 26 and 30 represents satisfied; and scores between 31 and 35 represents extremely satisfied (Pavot & Diener, 2008).

Pavot et al. (1991) demonstrated that SWLS was a valid and reliable measure, suited for use with a wide range of age groups and applications. It also saves interview time and resources compared to many other measures. In addition, this study also provides a strong evidence that the subjective wellbeing is a relatively global and stable phenomenon, not simply a momentary assessment based on fleeting influences. The language used in this scale is relatively broad and not specific, allowing respondents to represent their subjective assessment on satisfaction with life in general. Diener et al. (2012) concludes, SWLS is stable under unchanging conditions but are sensitive to changes in people's living conditions, such as, among countries with differences in objective living conditions, among groups who live in different living circumstances or have different genetic and physiological characteristics.

However, Beuningen (2012) notes that, SWLS has some serious shortcomings, namely: it suffers from data collection mode effects (face-to-face interview, telephone interview and web-based interview); it can be misinterpreted by a specific group of respondents, such as, low level of educational qualification. Therefore, SWLS has no clear added value as an alternative of the single-item measure. Diener et al. (2012) also says, SWLS can be influenced by factors such as question order, current mood, and mode of presentation, but in most cases these can be controlled.

Many studies have been done to test or retest the scale characteristics such as reliability, validity, stability over time and space, and the correlation between SWLS and other related scales (see

Pavot & Diener, 1993; Fujita & Diener, 2005; Pavot & Diener, 2008; Diener et al., 2012...). Although there are still some drawbacks, this scale is still widely used around the world especially when interest in using life satisfaction measures for policy has increased in recent years.

2.2.2. Measuring life-domain satisfaction

Domain satisfactions relate to individual satisfaction with different domains of life. Domain satisfaction has been found to be a valid and reliable measure of subjective wellbeing (Andrews and Withey, 1976; Krueger & Schkade, 2008), and in some cases more reliable than measures of global life satisfaction (Lucas & Donnellan, 2012). The use of various domain satisfaction questions has become prominent since the analysis of job satisfaction in labour economics (Freeman, 1978; Clark and Oswald, 1996) (quoted in Dolan & Metcalfe, 2012). However, measurement of life-domain satisfaction is more complicated.

Life satisfaction has also been shown to differ across countries in ways that can also be explained by differences in freedoms, social capital and trust (Halpern, 2010). Based on the bottom-up approach, researchers have suggested various aspects of life that are thought to be related to overall satisfaction with life. However, there is currently no agreement on which aspects (Easterlin & Sawangfa, 2007). Rojas (2006) argues that the enumeration and demarcation of the domains of life is arbitrary. Thus, they can be possible partitions of a human life or the selected partition depends on the researcher's objectives. However, the number of life domains must be manageable and domains should refer to the way people think about their lives.

Based on meta-study of literature, Cummins (1996) suggests that health, safety, emotional wellbeing, material wellbeing, productivity, community, and intimacy are the seven most important life domains. Headey and Wearing (1992) use leisure, marriage, work, standard of living, friendships, sex life, and health. Argyle (2001) suggests domains such as money, health, work and employment, social relationships, leisure, housing, and education. Praage et al. (2003) concludes that general satisfaction may be considered as an aggregate of the six domain satisfactions, namely, job, finance, house, health, leisure and environment. Based on factorial analysis, Rojas (2006) determines seven main life domains, include: health, economic, job, family, friendship, personal, and community environment. In general, most studies on this topic seem to agree on the four most important aspects of life: financial situation, family life, health and work.

Based on these above works, many studies developed life-domain satisfaction scales. So far, many scales are still widely used by international organizations or countries to measure life satisfaction, subjective wellbeing, happiness or quality of life.

The Life Satisfaction Questionnaire (LiSat) developed by Fugl-Meyer as an instrument to assess life satisfaction. The LiSat-9 is a nine-item measure including one question about general life satisfaction and eight questions about life satisfaction for the specific domains of vocational situation, financial situation, leisure situation, contacts with friends and acquaintances, sexual life, self-care management, family life, and relationship with partner. The LiSat-11 has two extra items asking about the level of satisfaction of the individual's physical health and psychological health respectively. This questionnaire is used quite commonly in the health field (see Boonstra et al, 2012; Post et al, 2012).

The Quality of Life Interview (QoLI) covers the eight life domains of living situation, family, social relations, leisure, work, safety, finances, and physical health. The sections on each life domain are organized so that information is first obtained about objective quality of life and then about level of satisfaction in that life area, the subjective quality of life rating. The interview also contains a global measure of life satisfaction. The full version of QoLI contains 143 items while the brief version only includes 74 items. QoLI is often used to evaluate quality of life for patients, such as persons with severe mental illness (see Lehman et al., 1995).

The Personal Wellbeing Index was created from the Comprehensive Quality of Life Scale (ComQol) (International Wellbeing Group, 2013). This index comprises a set of questions of the form: How satisfied are you with: 1) your standard of living, 2) your health, 3) what you are achieving in life, 4) your personal relations, 5) how safe you feel, 6) feeling part of your community, 7) your future security, and 8) your spirituality or religion (optional domain). Respondents give their answers over the 11-point satisfaction scale, indicating the two response anchors of '0=No satisfaction at all/ 10=completely satisfied'. This instrument is used to measure Subjective Wellbeing in Australia.

All of the above studies are a solid theoretical basis in developing the scale of satisfaction with life in Vietnam.

3. RESEARCH METHODOLOGY

This study combines both qualitative and quantitative methods in developing satisfaction with life scale in Vietnam.

According to Nguyen Thi Xuan Mai (2018), objective dimensions of quality of life in Vietnam include economic conditions, housing conditions, education, health, family relationship, participating community, nature environment, social environment, governance and political voice; and subjective ones is life satisfaction. Therefore, when measuring life satisfaction, we should consider life-domain satisfaction in addition to evaluating life satisfaction as a whole.

According to Rojas (2006), some aspects of life refer to a similar life-functioning domain, thus satisfaction in these facets is highly correlated. So, this author suggests using factor analysis to reduce the number of dimensions and to demarcate the domains of life.

We first conducted in-depth interviews with experts to determine how to assess life satisfaction and which life domains will be included. The results of literature review and in-depth interviews with experts show that, life satisfaction as a whole should be measured by using Diener's SWLS because of its strength as mentioned above. Meanwhile, to measure life-domain satisfaction, some aspects of life are proposed:

Economic Conditions: satisfaction with income, with household income and with expenditure level.

Job: satisfaction with job, with relationships at work, with time for work, with educational level, and with current without working status (if not working).

Residence: satisfaction with housing conditions, with infrastructure in place of residence, with security situation in place of residence and with relationships with neighbors.

Personal health: satisfaction with physical health, with mental health, and with quality of medical service

Family relationship: satisfaction with marital status, relationship with family members and with time for family

Social relationship: satisfaction with relationship with friends, with time for friend relation, with other social relationship, and with connections with the community.

Leisure: satisfaction with leisure activities and satisfaction with time for leisure

Environment: satisfaction with air quality, with water quality, and with city beauty

Generally, the first 7 domains among them are also the most considered domains in these studied mentioned before. The last domain, environment quality, has been proved to have influence on people's sense of subjective wellbeing (Silva et al., 2012). In Vietnam, environment quality, especially, air quality and water quality, is one of the greatest concerns in recent years (CECODES, VFF-CRT, RTA & UNDP, 2019).

Some experts referred to domain of governance. In fact, this domain is consistent with the theoretical framework of quality of life in Vietnam as Nguyen Thi Xuan Mai (2018) proposed. However, according to OECD (2013), governance is an important dimension of wellbeing but

the range of concepts covered by political voice, governance and civil and political rights is very broad; the issue of how best to collect information on satisfaction with governance, political voice and civil and political rights therefore remains a big question. Hence, in this study, we will not include governance as one of life domains.

Data for the quantitative analysis were collected by using a structured questionnaire which gathered information regarding all these above variables. Satisfaction with general life includes 5 items as Diener (1985) proposed. The following question was asked to measure satisfaction with many aspects of life: "How are you satisfied with...?" Likert scale with 7-point is used, where 1 represent "totally dissatisfied" and 7 represent "totally satisfied".

The survey was conducted in Hanoi, the capital of Vietnam, with respondents aged 18 and over. 381 questionnaires were properly completed. However, only 317 observations are used in this analysis because 64 respondents who are retirees, students and unemployed cannot report a satisfaction in all domains of life.

Demographic profile of respondents is presented in Table 1 below.

Table 1: Characteristics of sample

Characteristics	Count	Proportion (%)
Total	317	100.0
Gender		
Male	150	47.3
Female	167	52.7
Age group (Years)		
18-<30	116	36.6
30-<45	144	45.4
45-<60	46	14.5
60+	11	3.5
Level of education		
Junior high school or less	27	8.5
High school and Professional high school	97	30.6
College	40	12.6
Undergraduate	122	38.5
Graduate	31	9.8
Marital status		
Single	48	15.1
Married	246	77.6

Divorced/Separated/Widowed	23	7.3
Housing status		
Your own house	141	44.5
Parents or children' house	106	33.4
Rental house	60	18.9
Others	10	3.2
Urban/ Rural		
Urban	219	69.1
Rural	98	30.9
Monthly income (Mil. VNDs)		
<3	21	6.6
3-<5	68	21.4
5-<8	82	25.9
8-<12	61	19.2
12-<15	36	11.4
>=15	49	15.5

Source: Author's calculation.

4. RESULTS AND DISCUSSIONS

4.1. Factor analysis results

With the list of aspects of life proposed above, we use factor analysis to reduce the number of dimensions as well as identify the domains of life.

We first conducted Exploratory Factor Analysis (EFA) using Principal Component Analysis and Varimax rotation with a criterion of eigenvalue greater than 1.0 to examine the dimensionality of the multiple measures. Then, the reliability was assessed for each dimension using Cronbach coefficient alpha.

EFA was run on all the 31 items. The result shows that 7 factors are extracted with total variance of 68.63%. There is no item having factor loading lower than 0.4. All of scales have acceptable alpha reliability coefficients (>0.8) in which no item has correlation with total less than 0.3. The results are presented as follows.

Table 2: Factor loadings for Items

Items	Factor loading
<hr/> Factor 1 (Alpha = .907)	
So far I have gotten the important things I want in life	.858
If I could live my life over, I would change almost nothing	.758
I am satisfied with my life	.713
The conditions of my life are excellent	.684
In most ways my life is close to my ideal	.630
<hr/> Factor 2 (Alpha = .868)	
I am satisfied with my job	.766
I am satisfied with my income	.700
I am satisfied with my household income	.652
I am satisfied with my relations at work	.633
I am satisfied with time for my work	.592
I am satisfied with my expenditure level	.580
I am satisfied with my educational level	.501
<hr/> Factor 3 (Alpha = .839)	
I am satisfied with relationship with my friends	.793
I am satisfied with time for my friend relation	.772
I am satisfied with other social relationship	.765
I am satisfied with my connections with the community	.518
<hr/> Factor 4 (Alpha = .851)	

I am satisfied with security situation in place of my residence	.732
I am satisfied with infrastructure in place of my residence	.657
I am satisfied with quality of medical service	.629
I am satisfied with my housing conditions	.621
I am satisfied with relationships with my neighbors	.514
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Factor 5 (Alpha = .806)	
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I am satisfied with relationship with my family members	.674
I am satisfied with my marital status	.672
I am satisfied with my physical health	.666
I am satisfied with my mental health	.617
I am satisfied with time for my family	.413
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Factor 6 (Alpha = .834)	
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I am satisfied with air quality	.787
I am satisfied with city beauty	.741
I am satisfied with water quality	.733
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Factor 7 (Alpha = .907)	
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I am satisfied with time for my leisure	.869
I am satisfied with my leisure activities	.804

Source: Author's calculation.

The items in factor 1, factor 3, factor 4, factor 6 and factor 7 are essentially as expected. However, factor 2 is a combination of aspects of economic conditions and job. Numerous studies all over the world have demonstrated a strong correlation among education, work and income. All three elements are the basis for creating good economic conditions that affect life satisfaction.

Factor 5 is not as expected because it is a combination of 2 items in aspect of health and 3 items in aspect of family relationships. In countries with a strong family tradition such as Vietnam, family members often have the responsibility of caring and supporting each other. In fact, family relationships provide resources that can help an individual cope with stress, engage in healthier behaviors, and enhance self-esteem, leading to higher wellbeing (Thomas et al., 2017). However, poor relationship quality can be a source of stress and worse mental health. Carr & Springer (2010) also consider that being married, especially happily married, is associated with better mental health and physical health. So, this combination seems to be reasonable.

Finally, seven factors were distinguished on the basis of the factorial analyses, namely:

Factor 1: Satisfaction with life as a whole

Factor 2: Satisfaction with economic conditions

Factor 3: Satisfaction with social relationships

Factor 4: Satisfaction with residence

Factor 5: Satisfaction with family and health

Factor 6: Satisfaction with environment quality

Factor 7: Satisfaction with leisure

4.2. Regression results

Table 3 presents the descriptive statistics and correlation among satisfaction with life as a whole and satisfaction with domains of life. The mean scores indicate that respondents were highest satisfied with their family and health, closely followed by their social relationships, their residence, leisure and their economic conditions. The domain of environment quality receives the lowest satisfaction. This result may reflect quite accurately the current Vietnamese context because three of the top five issues of greatest concern in 2018 in Vietnam are poverty, job and environment (CECODES, VFF-CRT, RTA & UNDP, 2019).

All these domains of life are positively correlated at the significant level of 0.01 and some are relatively high. Correlations are relatively low for the relationship between the leisure domain and all the other domains; the social relationships and the environment quality domain. Positive correlations indicate that satisfactions tend to come together in all domains. It means that, in general, if a person is satisfied in some domains he/she is also satisfied in the others; and vice versa.

Life satisfaction as a whole is positively correlated to satisfaction in all domains of life; however, not all correlations are equally important. In particular, life satisfaction as a whole has a lowest correlation with leisure satisfaction, followed by social relationship satisfaction.

Table 3: Descriptive Statistics and Correlations

	Mean	S.D.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Factor 1	4.32	1.15	1	.653**	.501**	.646**	.559**	.518**	.409**
Factor 2	4.64	0.94		1	.525**	.666**	.530**	.515**	.489**
Factor 3	5.00	0.93			1	.606**	.601**	.429**	.497**
Factor 4	4.79	0.97				1	.626**	.557**	.476**
Factor 5	5.29	0.83					1	.512**	.455**
Factor 6	4.20	1.19						1	.361**
Factor 7	4.67	1.16							1

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Author's calculation.

The regression results are presented in Table 4. The multiple regression model with satisfaction with life as a whole as dependent variable was found to be significant, accounting for 52.8% of the variance in the data. However, unlike expected, only 4 out of 6 domains of life were found to be significant predictors of satisfaction with life as a whole. In particular, satisfaction with economic conditions has the greatest impact on overall satisfaction, followed by satisfaction with residence, satisfaction with family and health, and finally satisfaction with environment quality. Satisfaction with leisure and satisfaction with social relationship are considered to have no effect on satisfaction with life as a whole.

Table 4: Regression results

Independent variables	Unstandardized Coefficients	Std. Error	Standardized Coefficients	Sig.	VIF
Constant	-.742	.306		.016	

Factor 2	.403	.068	.329	.000	2.056
Factor 3	.051	.067	.041	.446	1.941
Factor 4	.289	.072	.244	.000	2.494
Factor 5	.200	.076	.144	.009	2.021
Factor 6	.116	.047	.120	.015	1.611
Factor 7	.002	.047	.002	.960	1.508

Dependent variable: Factor 1; $R^2=0.537$; adjusted $R^2=0.528$; $F=59.924$, $Sig=0.000$.

Source: Author's calculation.

In fact, these results partly reflect Vietnam's current conditions. As a transitional economy, Vietnam is focusing most of resources on economic development. For the Vietnamese people, how to ensure material living conditions is still a constant question. Therefore, issues related to culture and entertainment tend not to be taken seriously. In addition, Vietnamese people have a strong respect for blood, so they usually care about their family relationships and pay little attention to other social relationships.

In general, these results are quite similar to Nguyen Thi Xuan Mai (2018) which points out 5 most important components affecting the quality of life in Vietnam, respectively: economic conditions, housing conditions, health, education and family relationship. This study also indicates that, participating community is one of two dimensions having least important in assessing quality of life in Vietnam. Results from 2014 rural household survey also indicate that when asked about the most important factors for being happy, 47.4% of surveyed households choose health, 28.1% choose having high income and 11.3% desire to have a stable life; only 1.9% choose having good friends/ neighbors (CIEM, IPSARD, ILSSA & DERG, 2015).

5. CONCLUSIONS

In Viet Nam, quality of life and improving quality of people's life are issues that have been raised in national agendas for many years. However, measuring this construct is currently facing many difficulties. While objective quality of life can be measured relatively easily with information from official and available sources, subjective quality of life which is often measured by satisfaction with life has no proper measuring instrument.

This study combines qualitative and quantitative methods in order to develop life satisfaction scale in Vietnam. EFA results show that life satisfaction scale includes overall life satisfaction

scale and 6 domain-life satisfaction scales, namely: economic conditions, social relationships, residence, family and health, environment quality, and leisure. The study also investigates the relationship between overall life satisfaction with domain-life satisfactions. However, regression results show that 4 out of 6 above domains affect overall life satisfaction, except leisure and social relationships. This result is somewhat consistent with some previous studies and the current Vietnamese context.

Limitations of the study are the small sample size and the survey was only conducted in Hanoi. Although Hanoi is considered to be the second biggest city in Vietnam with diverse cultural and demographic characteristics, the representation of this sample is still low. Therefore, in the future, it is necessary to increase the sample size and conduct surveys at the national level to improve the representation as well as the interpretation of the model. In addition, it is necessary to develop a plan to organize periodic statistical surveys to collect information on assessing people's satisfaction with overall life and life domains.

In general, studies on life satisfaction, happiness or quality of life... are still relatively new topics in Vietnam. Most of these studies are limited because of unavailable data. In the future, we should further develop studies on these topics. This is a solid basis for achieving the goal of continuous improvement of the quality of life, helping policy makers to make appropriate, feasible policies and above all fulfilling our commitment to the world on building a sustainable development nation.

REFERENCES

1. Andrews, F. M., (1974). 'Social indicators of perceived life quality', *Social Indicators Research*, 1(3), 279-299.
2. Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being: Americans' perceptions of life quality*, Springer Science & Business Media, New York.
3. Argyle, M. (2001). *The Psychology of Happiness*, 2nd edition, Routledge.
4. Beuningen, Jacqueline van (2012). *The Satisfaction With Life Scale Examining Construct validity*. Statistics Netherlands. The Hague/Heerlen, 2012. ISSN: 1572-0314.
5. Boonstra, A.M., Reneman, M.F., Stewart, R.E. and Balk, G.A. (2012). 'Life satisfaction questionnaire (Lisat-9): reliability and validity for patients with acquired brain injury'. *International Journal of Rehabilitation Research*, 35(2), pp.153-160.
6. Carr, D. and Springer, K.W. (2010). 'Advances in families and health research in the 21st century'. *Journal of Marriage and Family*, 72(3), pp.743-761.
7. CECODES, VFF-CRT, RTA & UNDP (2019). *The 2018 Viet Nam Governance and Public Administration Performance Index (PAPI): Measuring Citizens' Experiences*. A Joint Policy Research Paper by the Centre for Community Support and Development Studies

- (CECODES), Centre for Research and Training of the Viet Nam Fatherland Front (VFF-CRT), Real-Time Analytics, and United Nations Development Programme (UNDP). Ha Noi, Viet Nam.
8. CIEM, ILSSA & IPSARD (2015). *Characteristics of the Vietnamese Rural Economy: Evidence from a 2014 Rural Household Survey in 12 Provinces of Vietnam*. Hong Duc Publishing House.
 9. Cobb, C. W. (2000). *Measurement tools and the quality of life*, Paper presented at the San Francisco: Redefining Progress.
 10. Cummins, R. A., (2000). 'Objective and subjective quality of life: An interactive model', *Social Indicators Research*, 52(1), 55-72.
 11. Costanza, R., Fisher, B., Ali, S., Beer, C., Bond, L., Boumans, R., . . . Farley, J., (2007). 'Quality of life: An approach integrating opportunities, human needs, and subjective well-being', *Ecological economics*, 61(2-3), 267-276.
 12. Cummins, R.A. (1996), 'The Domains of Life Satisfaction: An Attempt to Order Chaos', *Social Indicators Research*, 38, pp. 303-332.
 13. Diener, E. (1984). 'Subjective well-being'. *Psychological Bulletin*, 95, 542-575. doi:10.1037/0033-2909.95.3.542.
 14. Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). 'The Satisfaction with Life Scale'. *Journal of Personality Assessment*, 49, 71-75.
 15. Diener, E., & Suh, E., (1997). 'Measuring quality of life: Economic, social, and subjective indicators', *Social Indicators Research*, 40(1), 189-216.
 16. Diener, E., Wirtz, D., Biswas-Diener, R., Tov, W., Kim-Prieto, C., Choi, D.W. and Oishi, S. (2009). New measures of well-being. In *Assessing well-being* (pp. 247-266). Springer, Dordrecht.
 17. Diener, E., Inglehart, R. & Tay, L. (2012). 'Theory and Validity of Life Satisfaction Scales'. *Social Indicators Research*. July 2012. DOI: 10.1007/s11205-012-0076-y.
 18. Dolan, Paul & Metcalfe, Robert (2012). 'Measuring subjective wellbeing: recommendations on measures for use by national governments', *Journal of social policy*, 41 (2), pp. 409-427.
 19. Easterlin, R.A. and Sawangfa, O. (2007). *Happiness and domain satisfaction: theory and evidence*. IZA Discussion Papers 2584. Institute for the Study of Labor (IZA), Bonn.
 20. Erdogan, B., Bauer, T.N., Truxillo, D.M. and Mansfield, L.R. (2012). 'Whistle while you work: A review of the life satisfaction literature'. *Journal of Management*, 38(4), pp.1038-1083.
 21. Felce, D., & Perry, J. (1995). 'Quality of life: Its definition and measurement', *Research in developmental disabilities*, 16(1), 51-74.

22. Fujita, F., & Diener, E. (2005). 'Life satisfaction set-point: Stability and change'. *Journal of Personality and Social Psychology*, 88, 158-164.
23. Hagerty, M. R., Cummins, R. A., Ferriss, A. L., Land, K., Michalos, A. C., Peterson, M., . . . Vogel, J., (2001). 'Quality of life indexes for national policy: Review and agenda for research', *Social Indicators Research*, 55(1), 1-96.
24. Halpern, D. (2010). *The hidden wealth of nations*. Polity.
25. Headey, B. and Wearing, A.J. (1992). *Understanding happiness: A theory of subjective well-being*. Longman Cheshire.
26. International Wellbeing Group (2013). *Personal Wellbeing Index*, 5th Edition. Melbourne: Australian Centre on Quality of Life, Deakin University.
27. Krueger, A.B. and Schkade, D.A. (2008). 'The reliability of subjective well-being measures'. *Journal of public economics*, 92(8-9), pp.1833-1845.
28. Larsen Randy J. & Eid Michael (2008). 'Ed Diener and the Science of Subjective Well-Being'. *The Science of Subjective Well-Being*. Guilford Publications.
29. Lehman, A.F., Kernan, E. and Postrado, L. (1995). *Toolkit for Evaluating Quality of Life for Persons with Severe Mental Illness: To be Used in Conjunction with the Lehman Quality of Life Interview*. Evaluation Center@ HSRI.
30. Lucas, R.E. and Donnellan, M.B. (2012). Estimating the reliability of single-item life satisfaction measures: Results from four national panel studies. *Social Indicators Research*, 105(3), pp.323-331.
31. Nguyen Thi Xuan Mai (2018). 'Measuring the quality of life in Vietnam'. *Eurasian Journal of Social Sciences*, 6(4), 2018. DOI: 10.15604/ejss.2018.06.04.001. Online ISSN: 2148-0214. Page 1-13.
32. OECD (2013). *OECD guidelines on measuring subjective well-being*. OECD Publishing.
33. Pavot, W. G., Diener, E., Colvin, C. R., & Sandvik, E. (1991). 'Further validation of the Satisfaction with Life Scale: Evidence for the cross-method convergence of well-being measures'. *Journal of Personality Assessment*, 57, 149-161.
34. Pavot, W., & Diener, E., (1993). 'Review of the satisfaction with life scale', *Psychological assessment*, 5(2), 164.
35. Pavot, W. & Diener, E. (2008). 'The Satisfaction With Life Scale and the emerging construct of life satisfaction', *The Journal of Positive Psychology*, 3:2, 137-152, DOI: 10.1080/17439760701756946.
36. Post, M.W., van Leeuwen, C.M., van Koppenhagen, C.F. and de Groot, S. (2012). 'Validity of the Life Satisfaction questions, the Life Satisfaction Questionnaire, and the Satisfaction With Life Scale in persons with spinal cord injury'. *Archives of physical medicine and rehabilitation*, 93(10), pp.1832-1837.

37. Rojas, M. (2006). 'Life satisfaction and satisfaction in domains of life: Is it a simple relationship?'. *Journal of Happiness Studies*, 7(4), pp.467-497.
38. Schalock, R. L., (2000). 'Three decades of quality of life', *Focus on autism and other developmental disabilities*, 15(2), 116-127.
39. Silva, J., F. de Keulenaer and N. Johnstone (2012). "Environmental Quality and Life Satisfaction: Evidence Based on Micro-Data", *OECD Environment Working Papers*, No. 44, OECD Publishing.
40. Sousa, L., & Lyubomirsky, S. (2001). Life satisfaction. In *In J. Worell (Ed.), Encyclopedia of women and gender: Sex similarities and differences and the impact of society on gender.* (Vol. 2, pp. 667-676). California: Academic Press.
41. Stiglitz, J., Sen, A., & Fitoussi, J.-P. (2009). *The measurement of economic performance and social progress revisited*, Paper presented at the Reflections and overview. Commission on the Measurement of Economic Performance and Social Progress, Paris.
42. Thomas, P.A., Liu, H. and Umberson, D. (2017). 'Family relationships and well-being'. *Innovation in aging*, 1(3), p.igx025.
43. Van Praag, B.M., Frijters, P. and Ferrer-i-Carbonell, A. (2003). 'The anatomy of subjective well-being'. *Journal of Economic Behavior & Organization*, 51(1), pp.29-49.
44. Veenhoven, R. (1996). *The study of life-satisfaction*, University Press, Rotterdam.
45. Ventegodt, S., Merrick, J., & Andersen, N. J. (2003). 'Quality of life theory III. Maslow revisited', *The scientific world journal*, 3, 1050-1057.
46. Waldron, S. (2010). Measuring subjective wellbeing in the UK. *Newport: Office for National Statistics*.