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Objective Dimensions on Fishermen's Quality Of Life

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ABSTRACT

The purpose of this study was to find out fishermen's quality of life construct validity used survey by involving 44 fishermen in Cimalaya, Karawang. Data analyzed by correlations test, cronbach's alpha and factor analysis (CFA). The Study results revealed that there were four objective dimensions of fishermen's quality of life that can be seen from the indicators: (1) income with value of 0.455; (2) Marital status with value of 0.545; (3) Health status with value of 0.691; and (4) Social relationship with value of 0.638. Those values were good since they were above 0.4 or had little tolerance to above 0.25. For this reason, the objective dimensions of quality of life can be measured in terms of harmony and ability which is the integration of quality of life.

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INTRODUCTION

The issue of quality of life is important since it is one of the factors in determining whether a country is developed or not. For that reason, various organizations and agencies formed by the government to create citizens' good quality of life. Annual Human Development Index (HDI) presents to determine whether a country is developed or not. Indonesia is also participating in the HDI program.

Beside the HDI program, Indonesia also has its own program to measure the quality of life of its people. In 2001-2015 Indonesia formed the Millennium Development Goal's (MDG's) program, then in 2015 until now it has changed into Sustainable Development Goals (SDG'S). SDG's can generally be seen as efforts to improve the quality and quantity that must be met in order to improve people's welfare.

Indonesia is a maritime country because most of its land is surrounded by sea. Most of Indonesian people who live on the coast make a living as fishermen. Therefore, fishermen's welfare is very important. From the MDG's to SDG's programs, Indonesian government tries to develop its people quality of life, including the fishermen. Fishermen are also the main contributor to the quantity of national fisheries production. However, the social position of fishermen is not good and unequal in the economical transaction process. So as producers, fishermen do not get large share of income. Especially during the current climate change period which is currently quite long due to environmental imbalances. In one to three years (or more) fishermen's social conditions are muffled in all sectors of their lives. Furthermore, this study tried to develop a measuring instrument of quality of life of fishermen.

Quality basically depends on economic and social value and the ability to overcome damaging environmental factors. Quality can also be measured in various fields in order to measure the ability of each field. Quality of life is a key issue in any linear infrastructure projects and become an integral part of the environmental assessment report. The concept of quality of life covers multiple dimensions, including: economic, social, cultural and biophysical. Objectively, it often expresses through some indicators and subjectively, it expresses through people' opinions about their well-being. So, quality of life is a major multidimensional construct combines with evaluation of a living being (man or woman) with authority regarding somatic sensation, physical and cognitive function, mental happiness, and social interaction

Literature Review

Calman expressed the importance of knowing the difference between existing feelings and actual desires, exemplified by comparing a situation between "where one is" and "where one wants to be"(Laratmase, 2016). If the difference between these two is wide, this indicates that one's quality of life is low. While high quality of life is if the difference between the two is small(Ventegodt, Jørgen Andersen, Kandel, & Merrick, 2008). According to Allart, the World Health Organization Quality of Life or WHOQOL defines quality of life as an individual's perception of life in society in the context of the existing culture and value system related to goals, expectations, standards, and concerns (Nurhidayah, Hendrawati, & Hasriyadhi, 2020). Stark and Faulkner 1996 reasoned that for individuals with disabilities quality of life domains can be identified that are valid across the life-span and in which different levels of support are needed, including health care, living environment, family, social/emotional relationships, education, work, and leisure (Morisse, Vandemaele, Claes, Claes, & Vandevelde, 2013).

Quality of life is a multidimensional concept that includes broad areas of psychology utility state and social well-being, perceptions of health and disease, and treatment-symptom

relationships (Post, 2014). Another opinion from Brunner stated that quality of life is the combination of objectively and subjectively indicated wellbeing in multiple domains of life considered salient in one's culture and time, while adhering to universal standards of human rights(Wallander & Koot, 2016). According to Ventegodt, quality of life means a good life. These notions can then be divided into three loosely separate groups, each concerned with an aspect of a good life: 1) the subjective quality of life is how good a life each individual feels he or she has. Each individual personally evaluates how he or she views things and his or her feelings and notions(Ventegodt et al., 2008). Whether an individual is content with life and happy are aspects that reflect the subjective quality of life, 2) the existential quality of life means how good one's life is at a deeper level. It is assumed that the individual has a deeper nature that deserves to be respected and that the individual can live in harmony with(Ventegodt et al., 2008). We might think that a number of needs in our biological nature have to be fulfilled, that these factors — such as conditions of growth — must be optimized, or that we must all live life in accordance with certain spiritual and religious ideals laid down by the nature of our being, and 3) the objective quality of life means how one's life is perceived by the outside world. This view is influenced by the culture in which people live. The objective quality of life reveals itself in a person's ability to adapt to the values of a culture and tells us little about that person's life. Examples may be social status or the status symbols one should have to be a good member of that culture. (Objective is used here in the sense of non-subjective or objective facts. Non-subjective is concerned with the external and easily established conditions of life that many observers can rate identically)(Ventegodt et al., 2008).

Those three aspects of quality of life are grouped together with relevant statements that can be placed on a spectrum from subjective to objective(Carr, Gibson, & Robinson, 2001). The objective aspect of the quality of life associates with external factors that is easy to realize. This includes income, marital status, health status and relationships with other people. The objective quality of life reflects the ability to adapt to the culture in which they live(Han, Park, Kim, Kim, & Park, 2014).

Every country tries to improve its people's quality of life. Indonesia also does the same by managing a program called the Sustainable Development Goals (SDG). The one objective indicator of quality of life is people's income because in order to improve the living standard, a higher income is needed. If income has been standardized, the people's marital statuses indicator will be more organized. Another indicator is the health status. It is very important that people in developing countries to be aware about the importance of health. And the last indicator is social relationship. However, people in urban areas experience a very large gap social relationship. It is different in rural areas.

METHODS

The method used in this study was a development method with factor analysis approach in order to test the construct validity. Factor analysis was for reducing a large number of variables to a small number of factors, with each factor representing a set of variables that are moderately or highly correlated with each other. Factor analysis was reducing large numbers to small numbers on factors, with factors that easily refer to a set of variables that are medium or high related to other variables.

The construct of fishermen's quality of life was this study's variable which was the synthesis of the definitions, concepts and theories of fishermen's quality of life that had been discussed and analyzed in the literature review above. Construct was described in conceptual and operational definition which included the dimensions and indicators of the measured

variable. The construct variable was variable which in collecting the data (the instruments) required theories and concepts that were translated into indicators needed to compile statement items that will be measured to calculate the fishermen's quality of life.

RESULTS AND DISCUSSION

The measuring instrument for the fishermen's quality of life was in the form of scale that was developed by referring to a number of theories about the nature of the quality of life that had been deduced. It produced that quality of life is a person's feeling about his/her conditions (objective quality).

The content validity test used rational judgment, where a group of panelists was asked to score each statement, whether the statement items were in accordance with the dimensions and indicators of quality of life; and whether the language used in each statement was suitable for fishermen. Furthermore, they were asked to determine point value on each statement according to psychological continuum.

Empirical validity was carried out through one panel and three trials using factor analysis to test the construct validity; and Cronbach's Alpha coefficient to measure the reliability of measuring instruments in the form of internal consistency.

In the empirical validity test, it was necessary to test the construct validity to find the number of factors by using statistical factor analysis technique through exploratory approach. For this reason, the first phase of empirical validity was to test the validity and reliability which was carried out twice. The first test consisted of 44 statement items, 1 item was invalid with item number 36. The second test consisted of 43 statement items.

However, since the number of factors derived from the data was in accordance with the number of theoretical factors, in the second and first trials, the reliability of the instrument needed to be tested through internal consistency, using Cronbach's Alpha. The computational result of the correlation between 44 statement items (inter-item correlations) produced Alpha coefficient of 0.886.

Internal consistent reliability of the instrument using Cronbach's alpha formula obtained instrument reliability of 0.886 which meant that the instrument being tested was reliable with degrees of freedom (df)=n-2=38, 0.3120.

The second phase of empirical validity of the fishermen's quality of life measuring instrument involved 40 fishermen in Cimalaya, Karawang Regency.

As explained in the first empirical validity phase, that 1 item of the statement was invalid, so the item was revised. In the implementation of this trial, the scale used consisted of 44 statement items, which was the revision results of the first phase of empirical validity.

As in the first empirical validity phase, the first thing to do in the second phase was to test the construct to find the number of factors by using statistical techniques of factor analysis through exploratory approach.

The computation result of 40 data sets (variables) produced data description in the form of correlation metrics, which will then be used as computational reference to obtain initial solution. The correlation matrix used for analysis had been tested through Barlett's test of spherecity with chi-squared coefficient of 185.743 (computational results showed this coefficient was significant at the 0.0000 level). The result of this test provided information that this correlation metric was not an identity matrix so it was appropriate to be used as a reference in computing factor analysis. Furthermore, it was also necessary to clarify the correlation between pairs of variables in the matrix, where the correlation between one pair of variables must be explained

through other variables. This clarity can be identified through the Kaiser-Meyer-Olkin (KMO) index, which was the result of comparison between the correlation and the partial correlation coefficient. The initial computation of the result of the second empirical validity phase had KMO index of 0.815 and was included in the good category.

The measuring instrument of 44 statement items was the first blurry analysis by the group of five panelists. In the first empirical validity, an analysis was carried out involving 44 statements, with the results of which 4 factors were successfully extracted according to the theory. In the second empirical validity using 40 statements, the analysis was carried out and produced a number of requirements such as 11 factors were able to be extracted according to theory, the KMO of 0.810 Barlett's coefficient of 55 Goodness of Fit of the Factor Model with coefficient of 3016.766 and coefficient consistency internal with the Alpha coefficient of 0.899.

The development of measuring tools for the fishermen's quality of life was carried out using two measuring instruments. The validation phase was done through the panel using the first blurry analysis using 44 statement items. The first empirical validation was using the second blurry analysis using 43 statement items and the second empirical validation was using the second blurry analysis using 44 statement items.

After going through the panel phase and twice empirical validity, it resulted in change in each statement item number. The change in the item number was caused by the rotation procedure in the calculation of factor analysis which caused change in the position of item number according to the related factor. In addition, there was a change in the item number between the item number in the calculation and the item number in the measuring instrument presented to the respondent. Therefore, the item numbers needed to be sorted so it did not interfere the respondents' responses while working on this measuring instrument.

CONCLUSION

The conclusions of this study were as follows: (1) the development of fishermen's quality of life measurement tool can be used effectively; (2) some fishermen still felt un-prosperous with the current situation. So it can be concluded that if the development of measuring instruments with factor analysis approach can be calculated, then this approach needed to be considered to be used. It can improve the fishermen's quality of life.

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