

Objective Economic Pressures, Livelihood Strategies, and Subjective-Economic Welfare of Survivor's Families of Sunda Strait Tsunami in Banten

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Abstract

This research is part of umbrella study entitled "The Impact of the 2018 Sunda Strait Tsunami on Family Socio-Economic Vulnerability and Achievement of SDGs Welfare". This study aims to analyze family characteristics, objective economic pressures, livelihood strategies, and subjective-economic welfare for survivors of Sunda Strait Tsunami disaster in Banten. The research method used is a cross-sectional study involving 60 samples selected by simple random sampling. Data collection was carried out in March 2021 (27-month post disaster). Data analysis used descriptive tests, correlation tests, and logistic regression tests. The regression test results showed that the wife's age, husband's age, income per capita, and objective economic pressure had a significant effect on subjective economic welfare. The results of the cumulative probability analysis show that families with low welfare categories have the opportunity to increase their subjective economic welfare by 0.989 times, while families with high welfare have the opportunity to increase their subjective economic welfare 6,632 times compared to families with low welfare categories. Migration of residence from coastal areas to permanent residences in the middle of plantations does not make families change their livelihoods or explore new skills in earning a living to increase income.

Keywords: livelihood strategies, objective economic pressures, subjective-economic welfare, tsunami

Abstrak

Penelitian ini merupakan bagian dari penelitian payung berjudul "Dampak Tsunami Selat Sunda 2018 terhadap Kerentanan Sosial Ekonomi Keluarga dan Pencapaian SDGs Kesejahteraan". Penelitian ini bertujuan untuk menganalisis karakteristik keluarga, tekanan ekonomi objektif, strategi nafkah, dan kesejahteraan subjektif-ekonomi bagi korban bencana Tsunami Selat Sunda di Banten. Metode penelitian yang digunakan adalah *cross sectional study* yang melibatkan 60 contoh yang dipilih secara *simple random sampling*. Pengumpulan data dilakukan pada bulan Maret 2021. Analisis data menggunakan uji deskriptif, uji korelasi, dan uji regresi logistik. Hasil uji regresi menunjukkan bahwa usia istri, usia suami, pendapatan per kapita, dan tekanan ekonomi objektif berpengaruh signifikan terhadap kesejahteraan subjektif-ekonomi. Hasil analisis nilai peluang kumulatif, keluarga dengan kesejahteraan terkategori rendah memiliki peluang meningkatkan kesejahteraan ekonomi subjektifnya sebesar 0.989 kali, sementara keluarga dengan kesejahteraan tinggi berpeluang meningkatkan kesejahteraan ekonomi subjektifnya 6.632 kali dibandingkan keluarga dengan kesejahteraan terkategori rendah. Perpindahan tempat tinggal dari daerah pesisir ke hunian tetap di tengah perkebunan tidak membuat keluarga mengubah mata pencaharian atau mendalami keterampilan baru dalam mencari nafkah untuk meningkatkan pendapatan.

Kata kunci: kesejahteraan subjektif ekonomi, strategi nafkah, tekanan ekonomi objektif, tsunami

Introduction

Indonesia is a country that is prone to natural disasters. Based on BNPB data (2018), throughout 2018, in general, there was an increase in the number of disasters. In 2018, 2.572 natural disasters occurred, 96.8 percent were hydrometeorological natural disasters. Then, in 2018 the remaining 3.2 percent of catastrophes were geological disasters. Although only 83 events (3.2%), geological disasters such as earthquakes and tsunamis caused severe and significant impacts. The active geographical conditions in the Pacific Rim of Fire and the colliding earth plates make Indonesia a country prone to geological disasters such as earthquakes and tsunamis (Nurjanah et al. 2012).

The tsunami disaster in the Sunda Strait on December 22, 2018, hit the beaches around Pandeglang, Serang, and South Lampung. According to the BMKG and the Geological Agency, the tsunami was caused by an underwater landslide caused by the eruption of Mount Anak Krakatau. The tsunami's impact in Pandeglang Regency based on BNPB data (2019), namely, 296 people died, 7.656 people were injured, eight people were missing, and 20.728 people were displaced. One thousand twelve houses were damaged, and hundreds of infrastructures such as roads, schools, places of worship, and tourist facilities were destroyed. Sunarti's research (2020) shows that after two years have passed, the condition of the families of the tsunami survivor has still not recovered, especially for housing. However, currently, the families of the tsunami survivor have occupied permanent residential areas provided by the government. The change of residence due to the earthquake and tsunami will affect the economic situation felt by the family (Oktorie et al. 2019).

The disaster that occurred had a significant impact on the psychological and economic conditions of the community. The high potential of the Indonesian people in their daily life side-by-side with disasters makes disaster risk reduction essential because, according to Rahmayati (2017), natural disasters can have long-term impacts such as physical impacts and non-physical problems for the victims. Sunarti et al. (2021) stated that the effects of a disaster caused changes in several aspects of family life, such as religious aspects (worship), marital relations, micro, and macro-scale social relations, children's education, health, business/work, work costs, and additional costs.

Economic factors are one indicator of the welfare of life. Sunarti et al. (2021) added that disasters cause a decrease in family financial security, such as a decrease in family income and per capita income per month. Disasters make families lose their jobs, even if only temporarily (Prasetyo, 2010). According to Sunarti (2018), families with unstable jobs can create economic pressures and affect family welfare. In addition, low income is also one of the many causes of financial pressure. Elders et al. (1992) explained that the components of economic stress are adjustments to low incomes and changes in income. This causes the family to be increasingly limited in meeting their needs, so they experience financial pressure. Economic pressure is a condition in which families cannot meet basic needs such as clothing, food, and housing (Mistry, Lowe, Benner, & Chien, 2008).

The livelihood strategy is one of the family's efforts to meet the basic needs of the family. Disasters cause families to lose their source of livelihood, property damage, and material loss that is a family asset (Alam & Rahman, 2014). In reality, the family does not depend on only one source of income but needs a variety of sources of income. A livelihood strategy can be carried out by utilizing natural resources, skills, and expertise, social networks that can help improve survival or taking debt to meet consumption and

production needs (Ellis, 2000). In line with Sulastri and Hartoyo's (2014) research, the livelihood strategy is one of the factors that affect subjective well-being. The family can carry out a livelihood strategy to survive and return to normal conditions before the disaster.

The efforts to fulfill family needs from economic pressures and carry out livelihood strategies will help the family survive during disasters. The presence of the family has an essential role in creating a better human being and encourages families to achieve prosperity. Sunarti, Praptiwi, and Muflikhati (2011) stated that family welfare is the main goal and the ultimate goal that the family must acquire. Subjective well-being is a term used to describe overall family life satisfaction by subjective life evaluations (Chen, Murayama, & Kamibeppu, 2014; Diener, Scollon, & Lucas, 2009a).

The results of previous studies found that family characteristics influenced subjective welfare in the form of family size, age of the head of the family, education, income, per capita expenditure, asset value, and length of work (Muflikhati, Hartoyo, Sumarwan, Fahrudin, & Puspitawati, 2010; Rizkillah & Wati, 2021). In addition, Raharjo, Puspitawati, and Krisnatuti (2015) show that economic pressure affects subjective well-being. The correlation test results in other studies also found a relationship between family characteristics, objective economic pressure, livelihood strategies, religiosity, and subjective family welfare (Firdaus & Sunarti, 2009; Sabania & Hartoyo, 2016; Sholikhah, 2017; Rizkillah & Wati, 2021). Therefore, this study aims to analyze the effect of objective economic pressures and livelihood strategies on the subjective-economic welfare of the survivor families of the Banten tsunami disaster in permanent housing in the two post-disaster years.

Methods

Participant

This research is part of umbrella research entitled “The Impact of the 2018 Sunda Strait Earthquake on Family Socio-Economic Vulnerability and Achievement of SDGs Welfare” (Sunarti, 2021a). This research is a quantitative study with the design used in the study is a cross-sectional study, namely research conducted at a specific time with the interview method assisted by a structured questionnaire. The research location is in a permanent residential area, Banyumekar Village, Labuan District, Pandeglang Regency, Banten Province. This research was conducted from February to May 2021, including research preparation activities, data collection, data management, data analysis, and preparation of research reports. Data collection was carried out from March 6 to March 17, 2021. The study population was 112 families of tsunami survivor from Teluk Village and lived in permanent residential areas. The number of sample subjects in this study is 60 families were selected by simple random sampling based on the 2020 Indonesian Collaborative Research Data and local government population data.

Measurements

Objective Economic Pressures are physically economic problems that happen in the family. Including income per capita, work position as the main breadwinner, income and expenditure ratio, debt and asset ratio, the potential for job loss, credit/loan installment payments per unit of time, housing costs, and expenses. Care

for critically ill family members. The measurement of objective economic pressure refers to the Sunarti (2021b) instrument based on nine indicators (a total of nine questions) with answer choices 0-2 (the answer choices are adjusted to the question indicator). This variable has a Cronbach's alpha value of less than alpha (<0.6).

Then, the livelihood strategy is an effort to find a living source carried out by individuals or families to maintain life by searching for information and skills. The livelihood strategy is measured using an instrument that refers to the Ellis (2000) livelihood model theory developed in Sholikhah (2017). The livelihood strategy was measured by ten closed questions and using a score of 0-1 (0=No, 1=Yes) with a Cronbach's alpha value of 0.719. Subjective-economic welfare was measured using an instrument referred to by Sunarti (2021b). Subjective-economic well-being is a subject's happiness and satisfaction with the perceived physical-economic condition. Subjective-economic well-being is measured by assessing the level of satisfaction felt by the family using a semantic scale starting from 1 (low) to 7 (high) with a total of 10 questions. This variable has a Cronbach's alpha value of 0.793.

Analysis

Processing and analyzing data using Microsoft Excel 2013 and SPSS for Windows 24 application programs. Processing is carried out through editing, coding, scoring, data entry, cleaning, analysis, and data interpretation processes. Data processing was carried out using descriptive and inferential analysis. Descriptive analysis was used to identify family characteristics, objective economic pressures, livelihood strategies, and subjective-economic family welfare. The inferential statistical analysis includes correlation and regression tests. Inferential analysis used a correlation test to determine the relationship between family characteristics, objective economic pressure, livelihood strategies, and subjective-economic family welfare. Inferential analysis through the regression test was carried out using the ordinal logistic regression test. This test was conducted to determine the effect of the variables of family characteristics, objective economic pressure, and livelihood strategies on the subjective-economic welfare of the family.

Findings

Family Characteristics

The results showed that more than half of the wife's age was in early adulthood (58.3%), with an average age of 40 years. Almost half of the husband's age was in the middle majority (46.7%) with an average age of 46 years. The length of education taken by the wife and husband is in graduating from elementary school. The average size of instruction taken by husband and wife is 6 and 5 years. Most of the husbands (75%) work as fishermen, and almost half of the wives (46.7%) are housewives and traders (43.3%). The subject's family, on average, had been married for 20 years and had the youngest child on average 9 years old. Almost half of the subject's families (45%) are at the launching stage (families with adult and married children) for the stage of family development. Then, more than half of the families (66.7%) are classified as small families (≤ 4 people) with an average family size of 4 family members. The average family of the subject has a total family income of Rp.

3,277,917 per month and an average income per capita per month of Rp. 897,088. More than half of the subject's families (56.7%) are in the non-poor category based on the BPS poverty line of Pandeglang Regency in 2020. The results of the distribution of family characteristics also show the skills possessed in earning a living, and the most widely owned skills are fishing abilities (86.7%), trading skills (66.7%), and cooking skills (58.3%). Skills rarely possessed include SPG skills and computer operation skills (0%). As well as other skills spread, only a tiny part is owned by the subject's family.

Objective Economic Pressures, Livelihood Strategies, and Subjective- Economic Welfare of Families

Based on the research, less than three-fourths of the subject's families are in moderate objective economic pressure with an average index of 0.48 and a percentage of 68.3 percent. The objective economic pressure, which consists of nine indicators, shows that this can happen because 56.7 percent of families have a per capita income per month that exceeds the poverty line (Rp 489,775.5), but the majority of the subject's families (91.7%) have savings (cash funds). Less than 6 months of family needs and 83.3 percent of families stated that family income was less than expenditure. In addition, 75 percent of families have the potential to lose their jobs because they have unstable jobs (freelancing, odd jobs). In addition, 43.3 percent of families have debt, but less than 50 percent of the value of family assets, all of the subject's families do not have the burden of housing costs, and more than three-fourths of the subject's families (78.3%) do not have the responsibility of caring for family members with the severe disease.

The results showed the category of the subject's family livelihood strategy. More than three-fourths of the subject's families (73.3%) have low-income strategies, and only a tiny proportion have medium (15%) and high (11.7%) livelihood strategies. The livelihood strategy contains dimensions related to information seeking and skills in earning a living. Most of the subject's families (95%) use their abilities to make a living and are ready to do whatever work is available (91.7%). More than half of the subject's families (73.3%) saw or looked for business opportunities to earn a living, and 65 percent of the subject's families also built good social relationships to get work opportunities. However, the skills that the subject family possessed were minimal. The ability to find job information is only carried out by 35 percent of the subject's family and only 20 percent who try to apply for jobs outside of fishing or crew work.

The study results based on the subjective economic welfare category showed that half of the subject's families were categorized as having low subjective economic welfare with an index of 0.58. This can be known through indicators of family economic subjective welfare. More than three-quarters of the subject's families (78.3%) expressed dissatisfaction with their savings. Then, 33.3 percent expressed dissatisfaction with the assets or assets owned. They were feeling quite satisfied (28.3%) with the clothes owned and used, the ability to finance family health services, and family income.

Relationship between Family Characteristics, Objective Economic Pressure, Livelihood Strategy, and Subjective Welfare of Family Economy

Table 1 shows the relationship between family characteristics, objective economic pressure, livelihood strategies, and subjective family economic well-being. A significant negative relationship is established by the association of husband's age with objective economic pressure, age of the youngest child with a livelihood strategy, and objective economic pressure with subjective family economic well-being. At the same time, a significant positive relationship is shown by the relationship of family size with objective economic pressure, length of education of wife and husband with livelihood strategy, and relationship of objective economic pressure with livelihood strategy.

Table 1. Distribution of correlation coefficients between family characteristics, objective economic pressure, livelihood strategies, and subjective-economic family welfare

Variable	Objective Economic Pressure	Livelihood Strategies	Subjective-Economic Welfare
Characteristics			
Age of wife	-0.102	-0.203	-0.024
Age of husband	-0.329*	-0.191	0.114
Length of wife's education	0.066	0.259*	0.030
Length of husband's education	0.043	0.262*	0.035
Length of marriage	-0.014	-0.181	0.043
Age of the smallest child	-0.150	-0.271*	0.086
Family size	0.432**	0.066	-0.202
Total Family Income	0.045	0.032	-0.038
Income per Capita	-0.164	0.020	0.085
Objective Economic Pressure		0.209*	-0.278*
Livelihood Strategies	0.209*		-0.020
Subjective-Economic Welfare	-0.278*	-0.020	

Note: *significant at $p < 0.05$; ** significant at $p < 0.01$

The Influence of Family Characteristics, Objective Economic Pressure, and Livelihood Strategies on Family Economic Subjective Welfare

The effect test was tested using the ordinal logistic method. The data is tested first to meet the assumptions needed to generate conclusions, and the validity can be proven. The first test carried out is the G test, which aims to determine whether there is a relationship between the independent and dependent variables.

Table 2. G-Test results

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	108.652			
Final	88.892	19.760	11	0.049

Table 2 is the result of the G test carried out. Obtained a significance value of $0.049 < 0.050$, meaning that at least one independent variable affects Y (Subjective-Economic Welfare) at a significant level of 5 percent. In addition to meeting the assumptions of the G test, the next test that needs to be done is the goodness of fit test, which aims to determine the suitability of the model and the feasibility of the model to be used. The test result data can be seen in Table 3.

Table 3. Goodness of fit test results

	Chi-Square	df	Sig.
Pearson	107.408	107	0.471
Deviance	108.652	107	0.437

Table 3 shows that the Goodness of fit test results indicates the model's suitability with the data. Sig value. $0.471 > 0.05$ indicates that the resulting model is following the empirical data or the model is feasible to use. Therefore, ordinal logistic regression analysis can be performed. In addition to using the Goodness of fit test, a coefficient of determination or R-square is also needed, which shows the model's ability to describe diversity. The regression used is logistic regression. To determine the determination value, approached using Pseudo R-square because the exact value of R-square in logistic regression cannot be calculated as ordinary multiple linear regression. The results of calculating the R-square value are shown in Table 4.

Table 4. Pseudo r-square

Type R-Square	Value
Cox and Snell	0.218
Nagelkerke	0.250
McFadden	0.120

From the calculation results in Table 4, the R-square value of 25.0 percent means that the variance of Y that the model can explain is 25 percent. Other factors outside the model explain the remaining 75 percent. It means that the actual model of this model still has the potential to be developed again. The next step is to do the Wald test to determine which independent variables affect the dependent variable used. The data from the Wald test are shown in Table 5.

Table 5. Parameter estimation results

		Estimate	Std. Error	Wald	df	Sig.
Threshold	[Y=1.00]	2.685	2.523	1.133	1	0.287
	[Y=2.00]	4.564	2.571	3.151	1	0.076
Location	X1. Age of wife	-0.155	0.062	6.134	1	0.013
	X2. Age of husband	0.118	0.058	4.183	1	0.041
	X3. Length of wife's education	0.301	0.160	3.509	1	0.061
	X4. Length of husband's education	-0.073	0.116	0.400	1	0.527
	X5. Length of marriage	-0.003	0.058	0.002	1	0.965
	X6. Age of the smallest child	0.069	0.061	1.276	1	0.259
	X7. Family size	0.471	0.295	2.558	1	0.110
	X8. Total Family Income	-4.465E-7	2.735E-7	2.665	1	0.103
	X9. Income per Capita	1.967E-6	9.918E-7	3.933	1	0.047
	X10. Objective Economic Pressure Index	-0.038	0.019	3.825	1	0.048
	X11. Livelihood Strategy Index	-0.002	0.012	0.017	1	0.896

Based on the results of the Wald test, it is known that the factors that influence Y (subjective-economic welfare) are the wife's age, husband's age, per capita income, and objective economic pressure. The wife's age has a negative effect on Y (subjective-economic welfare) of -0.155, which is significant at the 5 percent level of significance. Objective economic pressure also has a significant negative effect on Y (subjective-economic welfare) of -0.038 at the 5 percent significance level. Inversely proportional to the husband's age factor and the family income per capita factor. Husband's age has a significant positive effect on Y (subjective-economic welfare) of 0.118 at a 5 percent real level and family income per capita, which affects 1.967E-6 on Y (subjective-economic welfare) at a 5 percent significant level. If the combined value of the significant variables increases by one unit, the opportunity to increase the subjective-economic welfare of families belonging to the low subjective-economic welfare group is 0.989 times. The same is true for families belonging to the medium subjective-economic welfare group; if the combined value of the significant variables increases by one unit, the chance to increase the family's subjective-economic welfare is 0.009 times. In this study, the odds ratio shows the level of the tendency of the reference category, namely the subjective-economic welfare of the high category of the family, to increase their welfare as a control variable. The resulting odds ratio value is $e^{-0.155 + 0.118 + 1.967 - 0.038} = \mathbf{ex(1.892) = 6.632}$. This means that every one-unit increase in the value of the combination of influential variables (wife's age, husband's age, income per capita, and objective economic pressure) will tend to increase the odds ratio of subjective-economic welfare in the high category by 6.632 times greater than the other categories.

Discussion

Most permanent residents from Teluk Village make a living as fishermen because they live close to the sea and coast and their fishing skills. The majority of the population did not and graduated from elementary school/equivalent, and Rp's average total family income. 3,327,666.7 per month showed that fishers' families were identical with poverty. This aligns with Fahmi's research (2011) which states that fishing families are synonymous with poverty because of low education and limited income. The income of the fishers' family is obtained from the results of one fishing trip and is influenced by climatic conditions. This causes fishers to be included in unstable jobs. Sunarti (2012) states that families with unstable jobs have more significant family pressures (including economic, social, and psychological) than families with stable employment. According to Sunarti (2018), unstable jobs have a lower average income. Sunarti (2020) added that the financial condition that tends to be down is the long-term impact of the tsunami disaster. Furthermore, the results of research based on family size, the average age of wife and husband, length of the marriage, age of the youngest child, and stage of family development are in line with Munadhiroh's research (2017) which states that children from coastal families prefer to work to help people. Their parents go to sea or get married rather than continuing their education. The decision to choose marriage aims to reduce the burden on parents in terms of the economy, as soon as possible to get additional labor for the family.

Two years after the tsunami struck, the objective economic pressure of the subject's family was categorized as moderate (0.4-0.69). The *paila* season (famine) and the COVID-19 pandemic have disrupted fishing and trade activities. The subject's family are survivors of the Sunda Strait tsunami disaster, and based on Sunarti's (2020)

research, economically, the lives of these survivors' families have not fully recovered. The COVID-19 pandemic is one of the disasters that the subject's family faces. The increasing cost of living in various aspects is a challenge that families must meet. Sunarti, Sumarno, Murdiyanto, & Hadiano (2009) stated that the family's economic strategy is usually carried out to survive in a crisis economic condition. Agistian's research (2019) found that the livelihood strategy adopted by the displaced families of the Sunda Strait tsunami survivor's was classified as low because the family relied heavily on the assistance provided by donors so that activities to earn a living were not carried out. The results of research in the field indicate that the current subject's family livelihood strategy is still in the low category. The subject's family still relies on donors, volunteers, and government assistance. Half of the subject's families are categorized as having low subjective economic welfare with an index of 0.58. Utami (2009) states that when a person is unhappy or only experiences little affection, that person will feel dissatisfied in his life and leading to low subjective well-being. Diener et al. (2009b) states that subjective well-being is often an indicator of one's life satisfaction.

Correlation test results show that the husband's age has a significant negative relationship with objective economic pressure. According to Astuti, Hartoyo, & Muflikhati (2016), age is related to activities or experiences and life cycles in married life. Then, family size is significantly positively related to objective economic pressure. This is in line with Firdaus and Sunarti's (2009) research, which states that economic pressure can be influenced by the number of family members and the husband's age. Wang et al. (2012) stated that the disaster caused the standard and quality of life to decline; this made the family experience economic pressure and needed a strategy to deal with these conditions.

The length of education of the wife and husband has a significant positive relationship with the livelihood strategy. This is in line with Widodo's research (2011) which states that the practice of livelihood strategies requires family capital. Family capital includes education level and skills, resources, and interactions in society. Human capital available in the family is still included in the category of productive age so that there is an opportunity to be empowered in earning a living. Widodo (2011) also states that the limited level of education in fishers' family capital and lack of adequate work skills cause family capital to be unable to access more decent work opportunities. There is a significant negative relationship between the age of the youngest child and the livelihood strategy. According to Haan (2000), to get out of challenging conditions, families will change their livelihood strategies by using the sources of livelihood they have, one of which is human capital. The youngest child's increasing age gives the family the additional human capital to become a workforce. It allows the family to engineer a source of income, where the child can replace the work done by the primary breadwinner (Scoones, 1998).

Objective economic pressures are significantly positively related to livelihood strategies. Research by Gupta (2007) and Astuti et al. (2016) mentions that economic pressure influences family coping strategies to increase income. Mooser (2005) in Sabania and Hartoyo (2016) states that livelihood strategies are related to vulnerability and low family assets. According to Fofana and Ness (2009); Sabania and Hartoyo (2016), low assets are a characteristic of economic pressure in the family, making families try to carry out various strategies or engineering a living to survive. The correlation test results showed that the objective economic pressure was significantly negatively related to the subjective economic well-being of the family. Families with

lower objective economic pressures have more potential to prosper than families with high objective economic pressures. Firdaus and Sunarti (2009) stated that economic pressure could cause poverty in families, so it is closely related to family welfare. The larger the family, the higher the economic pressure, and the lower the family's interest. Sunarti (2015) explains that various family vulnerabilities are a consequence of the inability to build attachments, homeownership, and economic pressure. This is in line with Robila's (2006) research which states that economic pressure is negatively related to family life satisfaction. When families experience economic pressures in their lives, families will feel less happy and cannot optimize family welfare (Puspitawati, Azizah, Mulyana, & Rahmah 2019).

The regression test results show that the wife's age, husband's age, income per capita, and objective economic pressure have a significant effect on the subjective welfare of the family economy. Wife's age and objective economic pressure significantly negatively impact subjective economic well-being. This is in line with the research by Setyasalma and Muflikhati (2019), which found that the age of the wife has a significant negative effect on the subjective well-being of the family and the research by Puspitawati (2009) states that the subjective welfare of the family is influenced by the age of the wife, family size, husband's length of education, expenditure per capita, and the value of the family economy. Then, Raharjo et al. (2015) stated that economic pressure affects subjective well-being. According to Sunarti (2018), economic pressure is inversely proportional to family welfare; the higher the economic pressure felt by the family, the lower the level of family welfare. When families experience economic pressures in their lives, families will feel less happy and cannot optimize family welfare (Puspitawati et al. 2019). The regression test results also show that the husband's age and income per capita have a positive regression coefficient with the subjective-economic welfare of the family. In line with Muflikhati et al. (2010), subjective welfare is influenced by family characteristics in family size, age of the head of the family, education, income, per capita expenditure, and asset value. Raharjo et al. (2015), in their research, found that the husband's age had a significant influence on objective and subjective well-being. The more mature and mature the husband's age is, the more the family's welfare will increase. Setyasalma and Muflikhati (2019) also stated that the subjective welfare of the family is influenced by the education of the wife and husband, the husband's occupation, family income, income per capita, and financial management.

This study has several limitations. The research was conducted purposively to the survivor's families who came from Teluk Village and lived in permanent residences so that the results of the study could not be generalized to the entire population of the places, the majority of the residents did not have adequate communication tools, so it was challenging to find the respondents or finds a replacement for them based on available data, the location of the permanent residences is challenging to access and makes research to be carried out quickly and effectively has an impact on the interview answers that can be used as a complement to the discussion to be limited.

Conclusion and Recommendation

Conclusion

The results of the descriptive test showed that half of the subject's family was in the moderate category related to the family's objective economic pressure, less than

three-quarters of the subject's family had a low-category livelihood strategy, and half of the subject's family was in the low category for subjective-economic welfare. Husband's age has a significant negative relationship with objective economic pressure, and family size shows a significant positive relationship with objective economic pressure. The length of education of the wife and the length of education of the husband showed a significant positive relationship with the livelihood strategy. In contrast, the age of the youngest child showed a significant negative relationship with the livelihood strategy. There is a significant positive relationship between objective economic pressure and livelihood strategies. A significant negative relationship between objective economic pressure and subjective family economic well-being is also found. The results of the regression test show that the wife's age and objective economic pressure affect the subjective economic well-being of the family in a significantly negative way. Then, the husband's age and family income per capita has a significant positive effect on the subjective welfare of the family economy. Based on the cumulative probability value of 60 respondents, it is known that the opportunity to increase the subjective-economic welfare of the family in the low category is 0.989 times, and the option for the medium category is 0.009 times. In contrast, the chance for the high category based on the odds ratio value is 6.632 times higher than other categories.

Recommendation

Suggestions for families to increase their information-seeking efforts, explore new skills, and seek job opportunities through social networks to have better livelihood strategies. Setting aside a small portion of savings and making financial arrangements is an effort to minimize the economic pressure felt by the family. The government and related agencies should provide optimal assistance to the survivor's family, conduct a review of permanent housing locations to find the available natural resources, provide skills training classes, and information on job opportunities. Suggestions for further research are expected to involve husbands in the interview process so that both perceptions can be considered. The development of studies of economic pressures and livelihood strategies on family welfare still needs to be done, considering that many Indonesians tend to have few skills and are monotonous in their work.

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