

Subjective well-being among fishermen's families: the effects of economic pressure, coping strategies, vulnerability, and social support

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Abstract. Fishermen's families often experience economic pressure due to unstable income, which heightens their vulnerability. To achieve subjective family well-being, these families need effective coping strategies and strong social support. This study examines the effects of family characteristics, economic pressure, coping strategies, social support, and vulnerability on the subjective well-being of fishermen's families. A cross-sectional design was employed, involving 105 intact fishermen's families with school-aged children purposively selected from Muara Angke Fishing Village, North Jakarta. Data were analyzed using descriptive, correlational, and path analyses. The findings indicate that fishermen's families face economic pressure, particularly reflected in low savings ownership and difficulty maintaining housing conditions. Per capita income had a significant positive effect on subjective well-being and a significant negative effect on economic pressure, coping strategies, and family vulnerability. Objective economic pressure significantly increased coping strategies and family vulnerability, while subjective economic pressure had a significant negative effect on social support and subjective well-being, and a positive effect on family vulnerability. Coping strategies positively influenced social support, which in turn reduced family vulnerability and enhanced subjective well-being. Fishermen's families are advised to diversify income sources, practice sound financial management, maintain assets, and strengthen social networks to enhance resilience and well-being.

1 Introduction

Fisherman families represent one of the groups most vulnerable to economic and social dynamics due to their primary occupation's strong dependence on natural factors. Irregular income caused by weather conditions, lean seasons, and limited access to economic resources often leads these families to experience high levels of economic pressure. The amount of catch obtained at sea, which is influenced by seasonal changes, results in unstable income and consequently causes economic difficulties [1]. Such income instability generates

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economic pressure and vulnerability among fisherman families [2]. This economic pressure affects not only the families' financial conditions but also their psychological stability, social relationship, and overall subjective well-being [3]. Fisherman families need to develop adaptive coping strategies and build strong social support networks from their extended families, neighbors, and even the government to cope with economic pressures. Coping strategies and social support play an important role in reducing family vulnerability, which refers to a condition in which families experience an imbalance in carrying out their functions, roles, and responsibilities [4]. Coping strategies, as a means of livelihood and fulfillment of basic needs such as food availability, are crucial factors in determining the level of vulnerability experienced by fisherman families [5]. High levels of vulnerability can disrupt the balance of family life and reduce subjective well-being, which refers to the family's perception of satisfaction and happiness in meeting their daily needs. Previous studies have shown that economic pressure has a significant negative effect on family subjective well-being [4, 6, 7]. Social support has a significant positive effect on family resilience and well-being [8, 9]. However, studies that simultaneously analyze the influence of economic pressure, coping strategies, social support, family vulnerability, and subjective well-being among fisherman families remain limited particularly among intact fisherman families with school-aged children. Based on this background and the identified issues, this study aims to analyze the influence of family characteristics, economic pressure, coping strategies, social support, and vulnerability on the subjective well-being of fisherman families. The findings of this study are expected to provide practical recommendations for fisherman families and policymakers to enhance family resilience and well-being.

2 Research methods

2.1 Design, location, and sample of research

This study is a quantitative explanatory research, which involves the collection of numerical data from a population or sample to identify correlation or causal influences among research variables. The study employed a cross-sectional design, meaning that data were collected at a single point in time. The research was conducted in the Fisherman Village of Muara Angke, Pluit Subdistrict, Penjaringan District, North Jakarta. The research location was selected using purposive sampling, considering that the Muara Angke Port is one of the main coastal areas in North Jakarta, with a total of 25,903 fishermen recorded in 2021. Data collection was carried out in December 2024, coinciding with the lean fishing season, a period characterized by a decline in fish catch due to unfavorable weather conditions. The population of this study consisted of intact fisherman families with school-aged children residing in the Fisherman Village of Muara Angke, Pluit Subdistrict, Penjaringan District, North Jakarta. The sample comprised 105 intact fisherman families with school-aged children, with the wives serving as respondents. The sampling technique used was purposive sampling, as the sample selection was adjusted to the research objectives and specific inclusion criteria.

2.2 Variable and data collection

The variables in this study include: (1) family characteristics; (2) economic pressure; (3) coping strategies; (4) social support; (5) family vulnerability; and (6) family subjective well-being. Family characteristics include the husband's age, the wife's age, the husband's years of education, the wife's years of education, the husband's occupation, the wife's occupation, per capita income, and family size. Family economic pressure was measured using the *Family*

Economic Pressure Instrument (TEKEN-GA) developed by Sunarti (2021) [4]. Family economic pressure consists of objective economic pressure and subjective economic pressure. Objective economic pressure refers to the condition of financial strain experienced by the family, measured concretely based on economic indicators such as the amount of per capita income, the ratio between income and expenditure, the husband's employment status, and the ratio between assets and debt. Objective economic pressure consists of nine statement items with answer choices of 0, 1, and 2, with a Cronbach's Alpha value of 0.658. Subjective economic pressure refers to the pressure of financial conditions measured based on the family's perception of economic hardship. Subjective economic pressure consists of ten statement items using a 1–7 Likert scale (low difficulty–high difficulty) with a Cronbach's Alpha value of 0.721.

Coping strategies refer to the actions or efforts undertaken by individuals and families as a unit in managing, adapting to, and dealing with stressors. Coping strategies were measured using an instrument modified by Djakiman *et al.* (2024) [7]. Coping strategies consist of four dimensions, namely: emotion-focused economic coping strategies, problem-focused economic coping strategies, emotion-focused socio-psychological coping strategies, and problem-focused socio-psychological coping strategies. The coping strategy instrument consists of 20 statement items, with each dimension comprising five statement items measured using a 1–4 Likert scale (1 = Never; 2 = Rarely; 3 = Often; 4 = Always). The Cronbach's Alpha value of the coping strategy instrument is 0.600.

Social support refers to assistance in the form of information, material resources, or behaviors obtained through social relationships with extended family, neighbors, or the government. Social support was measured using an instrument modified by Sunarti *et al.*, (2005) [10]. Social support consists of three dimensions: support from extended family, neighbors, and the government. Each dimension comprises three types of support, namely emotional, instrumental, and informational support. The social support instrument consists of 36 statement items, including 11 items measuring social support from extended family, 16 items measuring social support from neighbors, and 9 items measuring social support from the government. The response options were measured using a 0–4 Likert scale (0 = Never; 1 = Rarely; 2 = Sometimes; 3 = Often; 4 = Always). The Cronbach's Alpha value of the social support instrument is 0.902.

Family vulnerability refers to any deficiencies that are predicted to cause suboptimal functioning or disruptions in the roles, functions, and tasks of individuals or families. Family vulnerability was measured using the *Family Vulnerability Detection Instrument (SIREN-GA)* developed by Sunarti, (2021) [4]. The family vulnerability instrument consists of 24 statement items comprising three dimensions: physical-economic vulnerability (7 items), social vulnerability (10 items), and psychological vulnerability (7 items). The responses were measured using dichotomous choices (1 = Yes and 0 = No). The Cronbach's Alpha value of the family vulnerability instrument is 0.650.

Subjective family well-being refers to the family's perception in assessing their satisfaction or happiness regarding the fulfillment of family needs. Subjective family well-being was measured using the *Family Well-Being Instrument (SEJAHTERA-GA)* developed by Sunarti (2021) [4]. The instrument consists of 30 statement items that include three dimensions: subjective well-being in the economic aspect, subjective well-being in the social aspect, and subjective well-being in the psychological aspect. Each dimension consists of 10 statement items measured using a 1–7 Likert scale (low satisfaction–high satisfaction). The Cronbach's Alpha value of the subjective family well-being instrument is 0.879.

2.3 Data analysis

Data analysis was carried out using the *Statistical Package for the Social Sciences (SPSS)* and *Smart Partial Least Squares (SmartPLS)*. The data were analyzed using descriptive analysis, correlation analysis, and influence analysis. Descriptive analysis (minimum and maximum values, mean, and percentage) was used to identify family characteristics, economic pressure, coping strategies, social support, family vulnerability, and subjective well-being. Correlation analysis was used to examine the correlation among family characteristics, economic pressure, coping strategies, social support, and family vulnerability with subjective well-being. Influence analysis was conducted to analyze the effects of family characteristics, economic pressure, coping strategies, social support, and family vulnerability on subjective well-being. Structural Equation Modeling (SEM) analysis was performed to test the effects among variables using a *second-order* technique with an *embedded two-stage* approach. The *second-order* technique was applied to variables with complex indicators. Meanwhile, the *embedded two-stage* approach was used as an alternative to the *repeated indicator* approach, which may produce incorrect. Composite Reliability and Average Variance Extracted (AVE) values at the variable level variable.

3 Results

3.1 Fishermen's families characteristic

The family characteristics of the samples in this study were measured based on the husband's and wife's age, years of education, occupation, per capita income, and family size. The largest percentage of husbands was in the middle adulthood category (63.8%), while the largest percentage of wives was in the early adulthood category (52.4%). The average age of husbands (45.11 years) and wives (41.06 years) in the sample families falls within the middle adulthood category (41 to 60 years old). The largest percentage of husbands (63.8%) and wives (64.8%) had completed elementary school (6 years of education). The average years of education for husbands (6.26 years) and wives (6.11 years) also fall into the elementary school graduate category (6 years). Husbands' occupations were categorized into two types: fishermen laborers who owned boats (51.4%) and fishermen laborers who did not own boats (48.6%). Meanwhile, wives' occupations were categorized based on employment status, with 72.4% of wives working and 27.6% not working. The results show that most wives worked as shell peelers. The families' per capita income ranged from Rp150,000.00 to Rp5,000,000.00, with an average of Rp1,088,314.00. A total of 40.0 percent of fisherman families were classified as poor, while 60.0 percent were classified as non-poor based on the poverty line in North Jakarta, which was Rp712,835.00. The largest proportion, amounting to 48.6 percent, belonged to the medium-sized family category (5 to 7 members).

3.2 Family economic pressure

Figure 1 shows that the largest percentage of sample families experienced low levels of objective economic pressure (43.8%), with an average index score of 0.38. The data indicate that the largest percentage of families had per capita income above the poverty line (60%), owned their own houses (72.4%), and did not have family members with severe illnesses requiring long-term care (75.2%). These findings suggest, however, that 40% of the families still had per capita income below the poverty line, indicating the persistence of economic inequality among fisherman families. The lowest percentage was found in the indicator of cash savings exceeding six months of household needs (4.8%), indicating that most sample

families either did not have any savings or had savings for less than six months of household expenses. Meanwhile, the largest percentage of subjective economic pressure among sample families was in the moderate category (45.7%), with an average index score of 0.39. The highest percentage was found in the indicator of purchasing daily food needs (65.03%), indicating that the majority of families felt significant difficulty in purchasing daily food necessities. The lowest percentage was found in the indicator of paying for life skills costs (31.16%), suggesting that most families did not feel difficulty in covering life skills expenses.

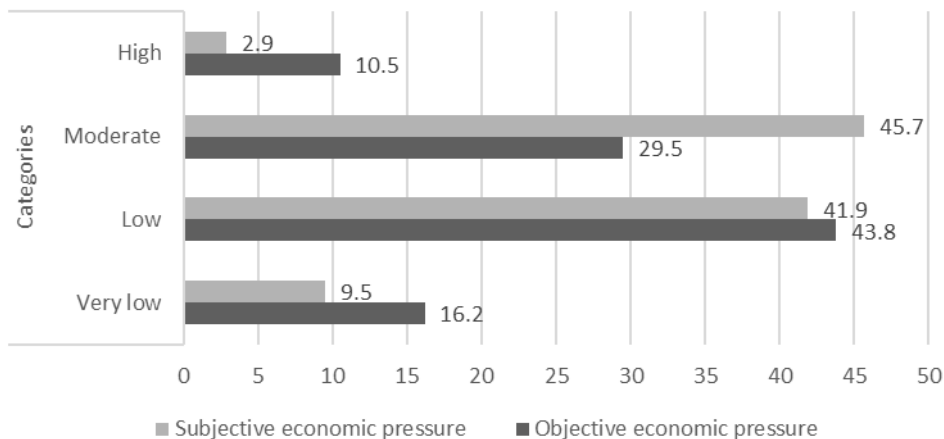


Fig. 1. Distribution of families (%) according to category of the family economic pressure

3.3 Coping Strategies

Coping strategies refer to the efforts made by individuals and families to manage, adapt to, and deal with stressors or pressures. Table 1 shows that the largest percentage of sample families had low coping strategies (81.9%), with an average index score of 47.65. Based on the results, the highest percentage was found in the problem-focused economic coping dimension, particularly in the indicators of reducing unnecessary expenses (39.0%) and changing meal menus (34.3%). The lowest percentage was found in the same dimension, in the indicator of pawning owned assets (3.8%). This indicates that most sample families never pawned their assets when facing economic difficulties, suggesting that their coping efforts were generally adaptive and focused on adjusting daily consumption patterns rather than selling or pawning property.

Table 1. Distribution of families (%) according to category, minimum and maximum values, mean, and standard deviation of the coping strategy index.

Dimensions of coping strategies	Categories			Min-max	Average±Std
	Low	Moderate	High		
EEFC	87.6	10.5	1.9	0.00-83.33	32.38±20.65
EPFC	69.5	25.7	4.8	0.00-91.67	52.14±18.91
SPEFC	66.7	27.6	5.7	0.00-100.00	43.65±23.61
SPPFC	44.8	32.4	22.9	0.00-100.00	57.93±23.12
CS	81.9	17.1	1.0	13.33-80.00	47.65±13.88

Notes: the index categories were determined using the cut off values by Sunarti et al. (2005): low=<60.0; moderate=60.0-79.9; high=>80.0; EEFC= Economic Emotion-focused Coping Strategy; EPFC= Economic Problem-focused Coping Strategy; SPEFC= Socio-psychological Emotion-focused Coping Strategy; SPPFC= Socio-psychological Problem-focused Coping Strategy; CS=Coping Strategy

3.4 Social support

Social support refers to assistance in the form of information, material, or behavioral help obtained through social relationships with family, neighbors, or the government. Table 2 shows that the largest percentage of family samples fall into the moderate category (62.9%), with an average index score of 36.53. Based on the study results, the highest percentage was found in the emotional support from neighbors dimension, particularly on the indicator that families feel safe and comfortable living in their neighborhood (64.77%), and in the informational support from extended family dimension, particularly on the indicator that extended families provide any kind of information (56.83%). Meanwhile, the lowest percentage was found in the instrumental support from the government dimension, particularly on the indicator that families receive financial assistance from the government (17.14%). This indicates that most of the sample families feel comfortable living in their neighborhood and receive various information from their extended family, either directly or through mobile phones, while most of them rarely receive financial assistance from the government.

Table 2. Distribution of families (%) according to category, minimum and maximum values, mean, and standard deviation of the social support index.

Dimensions of social support	Categories			Min-max	Average±Std
	Low	Moderate	High		
Extended family					
Emotional	41.0	56.2	2.9	0.00-73.3	42.16±19.49
Instrumental	70.5	29.5	0	0.00-66.67	29.84±19.16
Informational	39.0	52.4	8.6	0.00-100.00	51.11±25.24
Neighbors					
Emotional	43.8	54.3	1.9	0.00-91.67	39.60±19.24
Instrumental	59.0	39.0	1.9	0.00-72.2	31.75±16.55
Informational	35.2	59.0	5.7	0.00-100.00	50.16±27.49
Government					
Emotional	53.3	45.7	1.0	0.00-88.89	36.61±17.08
Instrumental	75.2	23.8	1.0	0.00-75.00	25.56±16.99
Informational	73.3	26.7	0	0.00-66.67	31.43±22.09
Social support	37.1	62.9	0	8.33-63.89	36.53±11.98

Notes: the index categories were determined using the cut off values by Sunarti et al. (2005): low=<33.4; moderate=33.4-66.7; high= \geq 66.8.

3.5 Family vulnerability

Family vulnerability refers to any deficiency that is predicted to cause suboptimal functioning or disruption in the roles, functions, and tasks of individuals or families. Figure 2 shows that the largest percentage of sample families were categorized as *moderate* (46.7%) with an average index value of 0.41. Based on the results, the highest percentage was found in the physical-economic vulnerability dimension, particularly in the indicator of not having savings sufficient for six months of family needs (88.6%). In addition, high percentages were also found in the social vulnerability dimension, specifically in the indicators of frequent family conflicts, particularly between husband and wife (70.5%), and wives feeling exhausted due to the absence or lack of clarity in the division of household responsibilities (97.1%). The lowest percentages were found in the indicators of having a family member who committed immoral acts (2.9%), not knowing neighbors or community leaders (4.8%), not being able to feel grateful for existing conditions (6.7%), and not believing that there is ease behind difficulties (8.6%). These results indicate that most sample families did not have

members who committed immoral acts, were familiar with their neighbors and community leaders, were able to be grateful for their circumstances, and believed that ease comes after hardship.

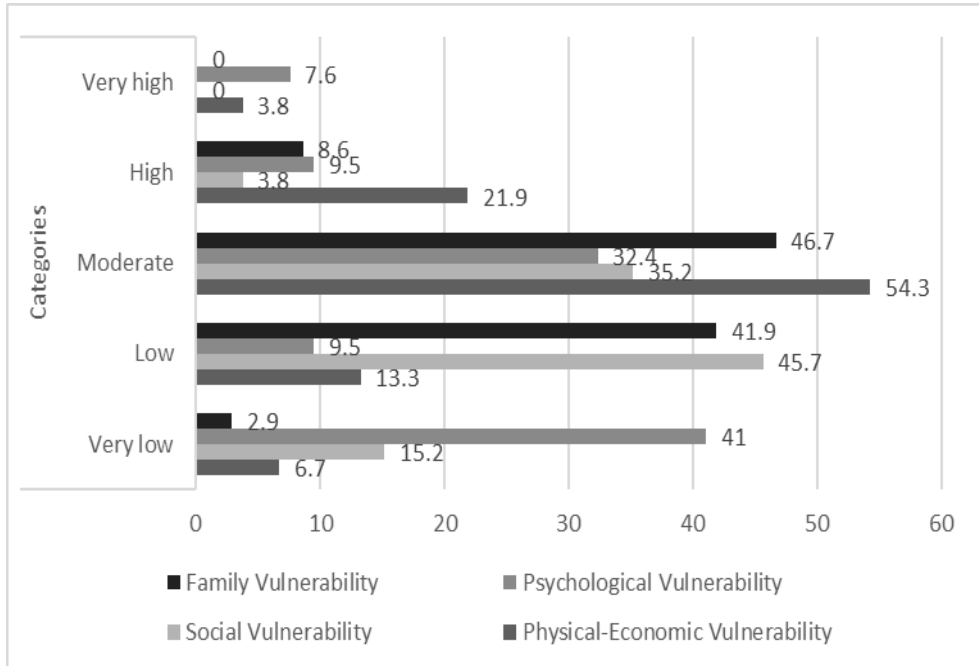


Fig. 2. Distribution of families (%) according to category of the family vulnerability

3.6 Family subjective well-being

Family subjective well-being refers to the family’s perception in assessing satisfaction or happiness regarding the fulfillment of family needs. Figure 3 shows that the largest percentage of family subjective well-being among the sample families falls into the *moderate* category (69.5%), with an average index score of 0.54. Based on the study results, the highest percentage appears in the *social aspect* dimension of family subjective well-being, particularly on the indicator of *acceptance of the family by the surrounding community* (77.82%). In addition, a high percentage is also found in the *psychological aspect* dimension, specifically on the indicator of *comfort and family environment* (72.93%). Meanwhile, the lowest percentages are found in the indicators of *family savings ownership* (27.07%), *role as members of the wider community* (45.85%), and *participation in community activities* (47.62%). These findings indicate that most sample families feel fairly satisfied with their family and neighborhood environment. However, they tend to feel dissatisfied with their role and participation in community activities, as well as with the amount of savings they possess.

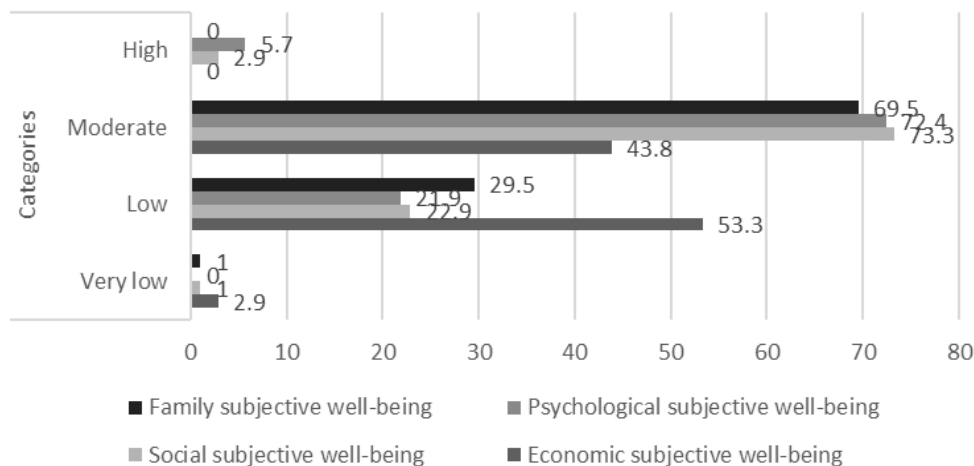


Fig. 3. Distribution of families (%) according to category of the family subjective well-being

3.7 The effect of family characteristic, objective and subjective economic pressure, coping strategies, social support, and family vulnerability on subjective well-being

The results of the test on the influence of family characteristics, objective economic pressure, and coping strategies on family vulnerability are presented in Table 3.

Table 3 presents the direct and indirect effects among variables. Per capita income has a significant positive direct effect on subjective well-being ($\beta=0.358$; $t>1.96$). The higher the per capita income, the higher the family’s subjective well-being. Per capita income has a significant negative direct effect on objective economic pressure ($\beta=-0.773$; $t>1.96$), indicating that higher per capita income corresponds to lower levels of objective economic pressure experienced by the family. Per capita income also has a significant negative direct effect on subjective economic pressure ($\beta=-0.252$; $t>1.96$). This means that the higher the per capita income, the lower the subjective economic pressure perceived by the family. Objective economic pressure has a significant positive direct effect on coping strategy ($\beta=0.580$; $t>1.96$). The lower the objective economic pressure, the lower the coping strategies employed by the family.

Subjective economic pressure has a significant negative direct effect on social support ($\beta=-0.245$; $t>1.96$), indicating that the lower the subjective economic pressure, the higher the social support received by the family. Subjective economic pressure has a significant positive direct effect on family vulnerability ($\beta=0.570$; $t>1.96$), meaning that the lower the subjective economic pressure, the lower the family vulnerability. Subjective economic pressure has a significant negative direct effect on subjective well-being. The lower the subjective economic pressure, the higher the family’s subjective well-being ($\beta=-0.567$; $t>1.96$).

Coping strategy has a significant positive direct effect on social support ($\beta=0.322$; $t>1.96$). The lower the coping strategy employed by the family, the lower the social support obtained. Social support has a significant negative direct effect on family vulnerability ($\beta=-0.320$; $t>1.96$), indicating that the lower the social support received by the family, the higher the family vulnerability. Social support has a significant positive direct effect on subjective well-being ($\beta=0.277$; $t>1.96$). The higher the social support received by the family, the higher the family’s subjective well-being.

Per capita income has a significant negative indirect effect on family vulnerability through objective economic pressure and coping strategy ($\beta=-0.220$; $t>1.96$). The higher the per

capita income, the lower the objective economic pressure and coping strategies used by the family, thus resulting in lower family vulnerability. Per capita income has a significant negative indirect effect on coping strategy through objective economic pressure ($\beta=-0.511$; $t>1.96$). The higher the per capita income, the lower the objective economic pressure experienced by the family, which leads to a lower level of coping strategies employed. Objective economic pressure has a significant positive indirect effect on family vulnerability through coping strategy ($\beta=0.580$; $t>1.96$). The lower the objective economic pressure experienced by the family, the lower the coping strategy employed, resulting in lower family vulnerability.

Table 3. The results of the test on the influence of family characteristics, economic pressure, coping strategies, social support, and family vulnerability on subjective well-being.

Direction of influence	Direct effect	Indirect effect	Total effect
Per capita income→ Subjective well-being	0.241**	-	0.358**
Per capita income→ Objective economic pressure	-0.780**	-	-0.773**
Per capita income→ Subjective economic pressure	-	-	-0.252**
Objective economic pressure → Coping strategy	0.519**	-	0.580**
Subjective economic pressure → Social support	-0.281**	-	-0.245**
Subjective economic pressure → Family vulnerability	0.468**	-	0.570**
Subjective economic pressure → Subjective well-being	-0.426**	-	-0.567**
Coping strategy → Social support	0.314**	-	0.322**
Coping strategy → Family vulnerability	0.281**	-	0.178
Social support → Family vulnerability	-0.321**	-	-0.320**
Social support → Subjective well-being	0.226**	-	0.277**
Per capita income → Objective economic pressure → Coping strategy → Family vulnerability	-	-0.113**	-0.220**
Per capita income → Objective economic pressure → Coping strategy	-	-0.402**	-0.511**
Objective economic pressure → Coping strategy → Family vulnerability	-	0.145**	0.580**

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

4 Discussion

The results of the effect analysis indicate that per capita income has a significant positive direct effect on subjective well-being. Family per capita income also has a significant positive effect on family well-being [6]. This finding is consistent with a broad body of empirical research indicating that higher income levels enhance individuals’ and families’ ability to satisfy both basic and higher-order needs, which in turn fosters positive emotional states, life satisfaction, and overall subjective well-being. Previous studies emphasize that adequate income reduces chronic financial stress and enables families to invest in health, education, and leisure, all of which are central components of subjective well-being.

Per capita income has a significant negative direct effect on objective economic pressure. These results are in accordance with studies showing that the higher the per capita income, the lower the family's objective economic pressure [7]. This relationship reflects the function of income as a key economic buffer that mitigates tangible financial constraints, such as debt burden, food insecurity, and limited access to essential services. Higher per capita income enables families to meet their daily needs more easily. Consequently, families with sufficient income experience fewer material shortages, which directly lowers measurable economic strain and promotes greater economic stability. Furthermore, per capita income has a significant negative direct effect on subjective economic pressure. This in line with other result which also show that per capita income is significantly and negatively related to families' subjective economic pressure [3]. This indicates that income not only shapes objective financial conditions but also influences families' perceptions, expectations, and emotional responses toward their economic situation.

Per capita income has a significant negative indirect effect on coping strategies through objective economic pressure. Based on the study's findings, fisherman families' per capita income falls into the high category, while their coping strategies are in the low category. This pattern suggests that higher income reduces exposure to economic stressors, thereby diminishing the perceived necessity to actively engage in coping behaviors. The higher the per capita income, the lower the family's objective economic pressure, leading to a lower level of coping strategy application. Families with higher income tend not to experience high objective economic pressure, and therefore, they do not need to employ more intensive coping strategies to meet their daily needs [11]. Previous studies similarly report that coping strategies are more frequently activated under conditions of scarcity and uncertainty, whereas financially stable families rely less on adaptive or problem-focused coping because their available resources are sufficient to manage daily demands.

Per capita income has a significant negative indirect effect on family vulnerability through objective economic pressure. The higher the per capita income, the lower the family's objective economic pressure, which in turn reduces family vulnerability. This indirect pathway underscores the central role of economic resources in strengthening families' resilience against both short-term shocks and long-term stressors. Based on the study findings, the fisherman families' per capita income is categorized as high, their objective economic pressure as low, and their family vulnerability as moderate. Despite relatively favorable income conditions, the persistence of moderate vulnerability indicates that family vulnerability is a multidimensional phenomenon influenced not only by income but also by occupational risks, environmental uncertainty, and limited institutional protection in fishing communities. Family's per capita income affects its ability to meet basic needs, helping the family avoid problems and economic pressures that contribute to family vulnerability [12]. Previous studies confirms that stable income enables families to plan ahead, accumulate savings, and access protective resources, thereby reducing their susceptibility to economic shocks.

Objective economic pressure has a significant positive direct effect on coping strategies. The lower the objective economic pressure, the lower the coping strategies employed by families. This finding aligns with stress and coping theory, which posits that coping behaviors are situational responses that intensify when individuals or families perceive substantial stressors. Based on the study findings, both the objective economic pressure and coping strategies among fisherman families are categorized as low. Families experiencing low objective economic pressure tend not to employ extensive coping strategies to address economic issues [12]. Similar evidence from previous studies suggests that when economic demands are manageable, families conserve psychological and behavioral resources rather than engaging in frequent coping efforts. This condition occurs because families perceive that they do not need to make greater efforts to manage the pressures they experience. As a

result, coping strategies become less salient because everyday economic routines can be maintained without significant adjustment or sacrifice.

Objective economic pressure has a significant positive direct effect on family vulnerability. The lower the objective economic pressure, the lower the level of family vulnerability. Objective economic pressure directly constrains families' access to material and social resources, thereby increasing their exposure to instability and risk. The study findings indicate that the objective economic pressure of fisherman families falls into the low category, while their family vulnerability ranges from moderate to low. This condition suggests that vulnerability may still emerge from non-economic sources such as environmental hazards, livelihood instability, and limited access to social protection. When objective economic pressure is low, families are more capable of fulfilling basic needs, thereby reducing the risk of vulnerability that could disrupt the family's life balance [3]. Previous empirical findings consistently show that the fulfillment of basic needs serves as a protective factor that stabilizes family functioning and prevents long-term vulnerability.

Subjective economic pressure has a significant effect on social support. The higher the subjective economic pressure perceived by the family, the lower the social support they receive. This inverse relationship highlights the psychological dimension of economic stress, whereby heightened perceptions of hardship can inhibit social engagement. This may be because, based on interview results, families experiencing high subjective economic pressure tend to feel ashamed or reluctant to disclose their difficulties to others, which reduces social interactions and the amount of support they obtain. Previous studies similarly document that stigma and fear of negative judgment often prevent economically stressed families from seeking help, thereby weakening their social networks. Social support is generally reciprocal those who provide support usually expect the same in return in the future [13]. However, most fisherman families experience subjective economic pressure, causing them to focus more on their own problems rather than providing support to others. This situation disrupts reciprocal exchange mechanisms within communities, resulting in weakened social ties. As a result, their social correlation weakens, diminishing the potential for receiving social support. Over time, this erosion of social connectedness further limits families' access to emotional and instrumental support.

Subjective economic pressure has a significant positive direct effect on family vulnerability. Perceived economic stress amplifies emotional strain and uncertainty, which can undermine families' adaptive capacity. The higher the subjective economic pressure perceived by the family, the greater its vulnerability. The family, as a single entity, constantly faces vulnerability threats from various aspects economic, social, and environmental which can lead to family fragility. This multidimensional exposure demonstrates that vulnerability accumulates through the interaction between subjective perceptions and structural risks. Economic fragility is related to the family's financial pressure, while social aspects are associated with social stability and community issues. The results also indicate that subjective economic pressure has a significant negative direct effect on subjective well-being. Family economic pressure has a significant negative effect on family well-being [6]. These findings reinforce the argument that perceived economic hardship plays a crucial role in shaping well-being outcomes, independent of objective economic conditions.

Coping strategies have a significant positive direct effect on social support. Adaptive coping strategies particularly positive reframing positively influence social support [14]. Adaptive coping facilitates constructive communication and openness, which are essential for mobilizing support from family members, peers, and the broader community. The findings suggest that adaptive coping not only reduces distress but also enhances the perception of social support. Individuals who engage in adaptive coping are more likely to interpret social interactions as supportive and meaningful. In other words, individuals who are able to manage stress through adaptive coping strategies tend to be more open to receiving

help from others, thereby making the social support they receive more effective. Conversely, maladaptive coping strategies such as self-blame can erode social support, as individuals may withdraw or struggle to accept assistance. Previous studies shows that maladaptive coping contributes to social withdrawal and weakens the protective function of social networks. Thus, coping strategies not only influence individuals' psychological conditions but also determine the extent to which social support can function as a source of resilience.

Social support has a significant negative direct effect on family vulnerability. Social support functions as a protective factor through two mechanisms: (1) directly, by providing emotional and instrumental resources, and (2) indirectly, by moderating the impact of external stressors such as conflict or economic crises [8]. This buffering effect allows families to better withstand adversity and reduces the likelihood that stressors escalate into chronic vulnerability. Families with limited social support tend to be more vulnerable because they lose their "safety net" when facing difficulties, making them more prone to dysfunctions such as child neglect or domestic violence. Without adequate support, vulnerable families may become trapped in a negative cycle of stress, conflict, and declining family functioning, which exacerbates vulnerability. Empirical evidence consistently demonstrates that strong social networks are critical for maintaining family stability under adverse conditions. Therefore, interventions aimed at reducing family vulnerability should prioritize strengthening social support networks through peer support programs, the utilization of local resources, and education on how to effectively access and use available support systems.

Social support has a significant positive direct effect on subjective well-being. Social support has a significant influence on subjective quality of life [9]. Social support enhances well-being by fostering a sense of belonging, emotional security, and perceived control over life circumstances. Social support provides not only emotional reassurance but also practical assistance, which helps individuals and families cope with life's challenges more effectively, thereby enhancing their overall life satisfaction and perceived well-being. Previous studies consistently confirm that individuals embedded in supportive social environments report higher levels of happiness, resilience, and long-term well-being.

5 Conclusion and recommendation

5.1 Conclusion

This study involved fisherman families in Muara Angke Fishing Village. The results of the effect analysis showed that per capita income has a significant positive direct effect on subjective well-being. Per capita income has a significant negative direct effect on objective and subjective economic pressure. Objective economic pressure has a significant positive direct effect on coping strategies. Subjective economic pressure has a significant negative direct effect on social support. Subjective economic pressure has a significant positive direct effect on family vulnerability. Subjective economic pressure has a significant negative direct effect on subjective well-being. Coping strategies has a significant positive direct effect on social support. Coping strategies has a significant positive direct effect on family vulnerability. Social support has a significant negative direct effect on family vulnerability. Social support has a significant positive direct effect on subjective well-being. Per capita income has a significant negative indirect effect on family vulnerability through objective economic pressure and coping strategies. Per capita income has a significant negative indirect effect on coping strategies through objective economic pressure. Objective economic pressure has a significant positive indirect effect on family vulnerability through coping strategies.

5.2 Recommendation

Based on the results of the study, fisherman families need to seek side jobs as an alternative when they cannot go fishing during the lean season. Fisherman families are also encouraged to participate in educational programs to improve coping strategy skills, such as financial management education including saving. In addition, fisherman families are recommended to maintain family harmony and implement a clear division of tasks among family members.

For the government, it is recommended to enhance the economic well-being of fisherman families through training programs that improve fishermen's skills and processing of fishery products for fishermen's wives. For future researchers, it is recommended to develop studies using other research designs to conduct longitudinal studies, which would allow analysis of fisherman families' conditions regarding economic pressure, coping strategies, social support, vulnerability, and subjective well-being during both harvest and lean seasons.

The study has certain limitations, including that data collection was conducted during the lean season, so the findings do not fully represent the conditions of fisherman families during the harvest season. Furthermore, the study intentionally involved only wives as respondents. However, because the study's unit of analysis is the family, involving both husbands and wives would yield more comprehensive results. Additionally, some households in the study area were affected by tidal flooding, which made data collection through interviews less conducive.

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