UDC 332

STUDY OF VARIABLES THAT AFFECT THE INCOME OF TAIS CLOTH CRAFTSWOMAN IN TIMOR LESTE

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ABSTRACT

This study aims to analyze: 1) education level, family size, number of hours and work experience affect the work productivity of tais cloth craftswomen in Timor Leste; 2) the effect of education level, family size, number of working hours, work experience and work productivity on the income of tais cloth craftswomen in Timor Leste; 3) the role of work productivity in mediating the effect of education level, family size, number of hours worked, and work experience on the income of tais cloth craftswomen in Timor Leste. This study used primary data, namely questionnaire data collection and in-depth interviews with tais cloth craftswomen in Timor Leste. Sampling was carried out using a proportional sample technique on 135 respondents. The analytical tools used are descriptive analysis and path analysis. The results showed that: 1) Education level, family size, number of hours worked and work experience had a positive and significant effect on the work productivity of tais cloth craftswomen in Timor Leste; 2) Level of education, family size, number of hours worked, work experience and productivity work has a positive and significant effect on the income of tais cloth craftswomenin Timor Leste; 3) Work productivity mediates the effect of education level, family size, number of hours worked and work experience on the income of tai tai sculptors women in Timor Leste.

KEY WORDS

Tais cloth, income, craftswomen.

Timor Leste is a country that is rich in tourism potential such as natural beauty, historical tourism and cultural heritage. Timor Leste consists of 13 districts and 65 sub-districts; each district has tourism potential that can be developed as a tourist destination. One of the tourist attractions that are still being developed in the lives of the people of Timor Leste is cultural heritage. The potential for culture and local wisdom in Timor Leste is the tais weaving craft which is a characteristic of Timor Leste culture, so the government of the Democratic Republic of Timor Leste protects it with a legal entity under the State Secretary for Arts and Culture of Timor Leste. The country of Timor Leste, known by the nickname "Bumi Loro Sae" is one of the countries in the Southeast Asian region. Its territory is bordered by Australia and the Timor Sea to the west and south, with the Province of NTT (Indonesia) in the west and bordered by the Ombai Strait and the Banda Sea in the north. The country with an area of approximately 15,410 km2 is the capital city of Dili.

Small industry has an important role in supporting economic growth and as a livelihood in developing countries (Ahiawozdzi, 2012), the industrial sector has a role in increasing Gross Domestic Product (GDP), job creation and increase the amount of production produced in the industry (Chaudhary, 2016). The handicraft industry is an industry that requires relatively low expenditures in improving skills and available materials can be utilized optimally (Gyanappa, 2016).

The handicraft industry often contains the cultural heritage of a particular country or region as a local characteristic. Cultural heritage is a symbol of resources that are consciously shaped and manipulated for social, economic, and political purposes under certain historical conditions (Ardika, 2013). Therefore, the cultural heritage that is still used or functioned today is the traditional tais cloth fabric. Tais cloth is one of the ancestral cultural heritage which is still used in the life of the people of Timor Leste. The number of Tais Fabric

industries in Timor Leste in 2020 is 7 tais fabric industries, namely, Alola Foundation, Kor Timor Unip Lda, Things and stories, Rui collections, Oro dolls, Casa vida, and Macho art.

There are not too many Tais Fabric Industries in Timor Leste. This is due to the topology of the area itself, which does not support the existence of large industries like in other countries (Oka, 2013). Tais cloth is still used by the community in activities such as; traditional ceremonies, religious ceremonies, wedding ceremonies, cultural festivals, carnivals, dowries, and as souvenirs by both local and international tourists can be made as one of the tourism products. The people of Timor Leste continuously function the local cultural heritage of tais cloth as a form of business/industrial market tais. Therefore, currently Timor Leste is still developing the industrial sector, especially the small industry sector to the medium industrial sector. Its development still depends on the city or district that is the fulcrum of its development.

Awareness of cultural heritage is still used for other purposes or interests, so the craftsmen continue to preserve tais as one of the local products that can provide economic benefits. The development of this tais cloth is based on several main considerations that this tais cloth is one of the national identities of the heritage of the ancestors until now it is still being used by the community for various purposes or interests. According to Wibisono (2005), the cultural identity of the state is a manifestation of cultural values that arise and develop from a life that is a characteristic that is different from other nations such as values, language, history, customs and geographic location.

Tais cloth craftsmen are generally women. According to Olawepo (2012), women play a very big role in improving the economy. Women as one of the human resources in the labor market have a significant contribution, in the sense that the number of women who offer themselves to work is quite large (Ajuzie, 2012). Some of the housewives have not only been able to find work according to their abilities, but have also obtained financial freedom. This means that the number of female workers is as large as male workers and at the same time women also find the freedom to continue to carry out their role as mothers (Dellasera, 2012). Empowerment of women is the first step to achieve equality between women and men. Gender equality between women and men can increase women's labor force participation and position in the world of work. The equal position of men and women in work can increase women's contribution to better economic development.

According to Sugeng (2008), the increase in the participation of housewives who work in family economic activities is due to changes in people's views and attitudes about the importance of education for women and men, and the increasing awareness of the need for women to participate in development. There is a willingness of housewives to be independent in the economic field, namely trying to finance the living needs of the people who are their dependents. The involvement of women in the family economy can be seen in the informal sector (Josephine I, 2005). This development occurred during a period of rapid economic growth and structural changes, especially in the labor market (Nurdevianti, 2008).

Table 1. shows the number of tais cloth craftswomen in each District in Timor Leste in 2020. The highest number of craftswomen are in Lautem District with 31 people, then Viqeqe District with 29 people and Bobonaro District with 24 people. According to Sugeng (2008) the increase in the participation of housewives who work in family economic activities is due to the relationship between changes in people's views and attitudes about the importance of education for women and men, as well as the increasing awareness of the need for women to participate in development, the willingness of housewives to be independent in the economic field, namely trying to finance the living needs of those who are their dependents with their own income. According to Damongllala (2010), the informal sector is in great demand by women because it is relatively flexible in working hours, does not require large capital, and can use local materials. In addition, the informal sector can run in harmony with the role of women in the household, as wives and mothers. The current demands of socio-economic life cause everyone to work hard to fulfill their needs, so they can survive so that many housewives enter the job market (Metha, 2011).

Table 1 – Number of Tais Craftswomen in Each District in Timor Leste in 2020 (persons)

No	District	Total
1	Aileu	3
2	Ainaro	22
3	Baucau	18
4	Bobonaro	24
5	Covalima	23
6	Dili	2
7	Ermera	19
8	Lautem	31
9	Liquica	9
10	Manatuto	6
11	Manufahi	7
12	Oecessue	10
13	Viqueque	29
	Total	203

Source: Ministry of Arts and Culture of Timor Leste, 2020.

In this increasingly modern era, the need for a decent living for a family continues to increase. This situation is not proportional to family income, especially middle to lower families who cannot meet their family needs. One of the impacts of this situation is the number of women who play a role in seeking additional income for their families, not only that women from middle to upper economic families are also not a few who enter the world of work to meet family income (Sulaswati 2012). Lisa et al. (2018), the role of women in fulfilling economic needs has become a necessity, due to the increasing urgency of the necessities of life. The difficult economic situation caused by the husband's income which does not meet the necessities of life shows that women help to earn additional income. Okulicz, et. al (2017) studying the role of women basically analyzes two roles of women.

First, the role of women in the status or position as housewives who do work which indirectly generates income, but allows other household members to do work to earn a living. Second, the role of women in the position as breadwinners (additional or main) in this case women do productive work that directly generates income.

The involvement of women in the family economy can be seen in the informal sector (Josephine I, 2005). According to Damongllala (2010), women are interested in the informal sector because they are relatively flexible in working hours, do not require large capital, can use local materials and have a higher education background. Income is receipts in the form of money or goods originating from industrial products or other parties, which can be valued in the amount of money in effect at that time (Wcyliffe, 2016). The income obtained is not only from work, but also usually from other people's gifts, from the business being run, getting interest on money and renting rooms, houses, land and so on (Ita, 2016).

Table 2 – Income of Tais cloth craftswomen in each District in Timor Leste Year 2017-2022 (US dollar)

No	Distrik	2017	2018	2019	2022	Total
1	Aileu	270.606	378.849	432.970	270.000	1.352.425
2	Ainaro	255.889	358.244	409.422	324.000	1.347.555
3	Baucau	1.317.882	1.845.035	2.108.612	360.000	5.631.529
4	Bobonaro	351.828	492.559	562.925	108.000	1.515.312
5	Covalima	153.828	215.007	245.722	243.000	857.577
6	Dili	10.146.972	14.205.761	16.235.155	216.000	40.803.888
7	Ermera	685.201	959.282	1.096.322	288.000	2.728.805
8	Lautem	1.389.707	1.945.590	2.223.531	450.000	6.008.828
9	Liquica	284.808	398.732	455.694	378.000	1.517.234
10	Manatuto	50.000	65.000	85.000	180.000	380.000
11	Manufahi	842.282	1.179.194	1.347.651	225.000	3.594.127
12	Raeoa	251.243	351.741	401.989	810.000	1.814.973
13	Viqueque	84.784	118.698	135.655	306.000	645.137

Source: Ministry of Arts and Culture of Timor Leste, 2022.

Table 2 shows the Income Data of Tais cloth craftswomen in each District in the State of Timor Leste in 2017-2022 (US dollars). It can be seen that every year the income of tais cloth craftswomen increases. The income of Tais cloth craftswomen in Dili District has the highest income with a total of 40,803,888 US dollars, followed by the income of Tais cloth craftswomen in Lautem District of 6,008,828 US dollars and the income of Tais cloth craftswomen in Manatuto District with the lowest amounting to 380,000 US dollars. The income of the tais cloth craftswomen is the net income earned by the craftswomen. In 2020 - 2021 due to the impact of the Covid-19 pandemic, tais cloth craftswomen have no income. This is because the public is advised by the government not to gather with each other, just stay and do activities at their respective homes.

Since the Covid-19 pandemic initially all people in all 13 districts in Timor Leste have been afraid because this outbreak is a threat to all humans in the world. In connection with the emergence of this pandemic which initially spread from China and even throughout the world including Timor Leste, the government of the Democratic Republic of Timor Leste responded firmly to this pandemic outbreak so that it would not continue to be fatal. The action taken by the government is to hold an emergency meeting by the Prime Minister's Cabinet with the Council of Ministers to make national regulations that are relevant to the WHO's call for preventing the Corona Virus outbreak/pandemic. All communities throughout the country are required to avoid the pandemic by carrying out activities such as; wear a mask covering nose and mouth, wash hands, keep a distance of at least 1.5 m from each other and avoid gatherings.

This government appeal is very important for all people in Timor Leste and has been obeyed and implemented by the community since 2019 until now. On the other hand, although the preventive provisions recommended by the government have been implemented well, activities related to the work of East Timorese women, especially the Craftswoman of Tais cloth, are still being carried out well in 13 districts, especially in rural areas. In principle, the situation and condition of the Pandemic in the Territory of Timor Leste will not have much influence on the activities of the Tais cloth Craftswoman in Timor Leste, in this case the craftswoman will carry out their usual activities. Unless the marketing is limited in its own area due to the lock down system.

Opportunities for women to be able to leave the domestic sector and then participate in the public sector are due to the awareness of women and because of changes in society's assessment and allows them to leave their roles in the domestic sector (Fadah and Istatuk, 2004). The role of women at this time is no longer associated with their role as wives or housewives who do only household activities, but has developed resulting in women to participate in every aspect of community activities (Iklima, 2014). Damongllala, 2010) mentions that the informal sector is in great demand by women because it is relatively flexible in working hours, does not require large capital, can use local materials and a higher education background. In addition, the informal sector can run in harmony with the role of women in the household.

The development of tais cloth has been planned by several Non Government Organizations (NGOs) in collaboration with the Secretariat of De Estado Da Arte E Cultura, providing training to women in weaving good quality tais cloth, providing socialization for the community to continue using traditional cotton materials in weaving, cultivating cotton, planning to use ink, providing motivation to craftsmen to maintain and continue to develop the tais cloth culture to be sustainable. The empowerment of women in Timor Leste, especially in tais cloth craftswomen, increases the productivity of women themselves. Housewives can fill their free time more productively to be able to generate coffers of money so that it will improve family welfare. The higher the education of the workforce, the higher the productivity tends to be (Sihombing, 2009). Education serves to prepare one of the inputs in the production process, namely labor, so that they can work with good production quality. This will further encourage an increase in output which is expected to lead to the welfare of the population. The higher the quality of education, the higher the productivity of the workforce, and the higher the effect on a woman's income (Subri, 2003:41).

The higher the education of the workforce, the higher the productivity tends to be (Sihombing, 2009). With adequate education, the population will have a good opportunity to get out of poor status in the future, because if education investment is carried out evenly, including in low-income communities, the community can work well and develop (Anderson, 2013). According to human capital theory, a higher level of education allows a person to increase his income (Todaro, 2000). The higher a person's education level, the higher the income (Tarigan, 2006).

The size of the family, namely, the number of dependents in the family will affect the greater the expenditure in the household so that the more the number of dependents in the family, causing housewives to be motivated to increase the number of hours worked so that productivity and income also increase to meet expenses (Kusumastuti, 2012). As the number of dependents in the family increases, the expenditure in meeting the necessities of life becomes even greater, both in primary and secondary household needs. The number of dependents determines the outpouring of working hours from the work done, because the number of dependents in working age is a source of labor, efforts to improve work abilities and skills will be fulfilled, thereby increasing the standard of living (Prabowo, 2015).

The more working hours you use, the more productive you will be. This means that a long number of working hours will indirectly make a job more productive and by working productively it is expected to generate good income. Working hours for a person greatly determine work efficiency and productivity (Arifin, 2002). The higher the time devoted by female workers to work in producing goods and services, the higher the opportunity for women to earn additional income. This means that working hours have a positive influence on family income (Dewi, 2012:121). According to Espinal (1997), women are involved in the public sector to work in the labor market so that it affects work patterns in the family.

The arrangement of working hours for women to devote must be appropriate so that the main obligations in household activities do not forget their duties and roles in the family (Juhn and Potter, 2006). Working hours have an effect on income, which is the duration of time used to run a business (Wicaksono, 2011), which is measured by the length of time in hours a person does work every day. The more hours of work sacrificed, the more productivity will be, and the income earned will increase. The variable working hours affects the income of traders because a large number of working hours will increase the productivity value of traders, in other words, there will be more opportunities open for buyers to buy their merchandise (Muryati, 2015). More buyers will certainly increase sales results and profits (Adhikari, 2017).

Work experience in formal sector work is generally considered to be able to improve one's work ability. The length of a business can lead to work experience in business, where experience can affect a person's observations of behavior. The duration of opening a business can affect the level of income, the length of time a business person has been in his line of business will affect his productivity (Sri Mulyani, 2015). Work experience can describe a person's level of mastery of a job. Someone will have the opportunity to increase income and productivity with much longer experience Sukmana (2013). Yuliawati (2011) which states that work experience has a positive effect on work productivity. Fagbenle (2012) that one of the factors that affect the productivity of craftsmen comes from the craftsmen themselves or what is referred to as Human factors, one of which is work experience. Work experience is the most influencing factor in creating the growth of a business. Work experience is the most influencing factor in creating the growth of a business. Rizky Herdiansyah (2011) states that work experience has a positive effect on the work productivity of craftsmen and increases income.

Work productivity is the ratio between the amount of production of each craftsman with the time required by the craftsman to produce the product. According to Sulistiyani (2003: 199) work productivity concerns the issue of the final result, namely how much the final result will be obtained in the production process. The dimension of work productivity used in this research refers to the opinion of Syarif (2001), namely the results or outputs. Meta Purmina (2018), work productivity can affect the income of craftsmen, the more goods produced, the more income will be received. According to Payaman Simanjuntak (2005) labor productivity

is a comparison between the results achieved (output) with the overall resources (inputs) used per unit time. Samuelson (1993:133) also states that productivity is a concept of measuring the ratio of total output to the weighted average of inputs. High productivity will benefit industry and labor, especially increasing income and increasing welfare.

The hypotheses in this study are: 1) Education level, family size, number of hours worked and work experience have a positive effect on work productivity of Tais cloth craftswomen in Timor Leste. 2) Education level, family size, number of hours worked, work experience, and work productivity have a positive effect on the income of Tais cloth craftswomen in Timor Leste; 3) Work productivity mediates the effect of education level, family size, number of hours worked, and work experience on the income of Tais cloth craftswomen in Timor Leste.

METHODS OF RESEARCH

This research is quantitative research. The data used in this study is primary data, sampling using proportional sample technique. The research instrument in the form of a questionnaire was then compiled to be used in collecting research data. This research was conducted in all Districts in Timor Leste. Timor Leste is famous for its distinctive variety of tais cloth. Tais cloth craftswomen are spread across 13 districts in Timor Leste. The dependent variable used in this study is the income of Tais cloth craftswomen in Timor Leste. The independent variables used in this study were education level, family size, number of working hours and work experience of Tais cloth craftswomen in Timor Leste. The intervening variable in this study is the work productivity of Tais cloth craftswomen in Timor Leste. The population in this study is Tais cloth craftswomen in Timor Leste, because all tais cloth craftsmen are women. The number of samples in this study based on the slovin formula as many as 135 respondents from 203 people. The sampling method used is proportional sample. This study specifically wants to test the hypothesis of a mediated relationship known as path analysis. The structural equation for path analysis is as follows:

$$Y_1 = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon_1 \quad \text{.. (1)}$$
$$Y_2 = \beta_5 X_1 + \beta_6 X_2 + \beta_7 X_3 + \beta_8 X_4 + \beta_9 Y_1 + \varepsilon_2 \quad \text{.. (2)}$$

Where: X_1 = education level; X_2 = family size; X_3 = working hours; X_4 = working experience; Y_1 = work productivity; Y_2 = income; $\beta_1 - \beta_9$ = path coefficient; ε_1, ε_2 = structural error.

RESULTS AND DISCUSSION

In the path analysis model the relationship between variables is linear and additive. The linearity test uses curve fit and applies the parsimony principle, that is, if the model is significant, it can be said that the model is linear. Table 3 shows a linear relationship with each other as seen from the significance value which is less than 0.05. The most linear relationship is between X2 - Y2, which is indicated by the largest F-Count, which is 18.224. The following is the result of processed research data with SPSS for Linearity Test.

Table 3 – Linear Relationships between Research Variables in the Study of Variables Affecting the Income of Tais cloth craftswomen in Timor Leste

Variable Relationship	R-Square	F	Sig
X1 - Y1	0,034	4,737	0,031
X2 - Y1	0,036	4,912	0,028
X3 - Y1	0,063	8,916	0,003
X4 - Y1	0,045	6,220	0,014
X1 - Y2	0,065	9,220	0,003
X2 - Y2	0,121	18,224	0,000
X3 - Y2	0,074	10,632	0,001
X4 - Y2	0,070	9,936	0,002
Y1 - Y2	0,093	13,639	0,000

Source: Data processed, 2022.

Only recursive models can be considered. As shown in Figure, the model made is only a causal flow system in one direction, not back and forth so that path analysis is feasible to be applied in this study. Minimal endogenous variables in the interval measuring scale. The size of the variables analyzed in this study: education level, family size, working hours, working experience, work productivity and income. Therefore, path analysis is feasible to use in this study. Observations are measured without error. Because the data used is on a ratio scale, it is appropriate for the study to be used in path analysis, by testing its validity and reliability. The structural equations in this study are as follows:

$$Y_1 = 0,184\ X_1 + 0,190\ X_2 + 0,243\ X_3 + 0,223\ X_4$$
$$Y_2 = 0,262\ X1 + 0,205\ X_2 + 0,210\ X_3 + 0,180\ X4 + 0,214\ Y_1$$

Table 4 – Results of Evaluation of Model Validity in the Study of Variables Affecting the Income of Tais cloth craftswomen in Timor Leste

Dependent Variable	Independent Variable	R Square
Work productivity (Y1)	X1, X2, X3,X4	0,178
Income (Y2)	X1, X2, X3,X4 Y1	0,308

Source: Data processed, 2022.

In this study there are two dependent variables, work productivity (Y1) and income (Y2). For the two dependent variables, the work productivity variable (Y1) gives a value of 0.178. The number means that the influence of the independent variable on the dependent variable is 17.8 percent. While the income variable (Y2) gives a value of 0.308, this number means that the influence of the independent variable on the dependent variable is 30.8 percent.

The total coefficient of determination of 0.741 means that 74 percent of the variables used can be explained by the model formed, while the remaining 26 percent is explained by other variables outside the model.

Table 6 – Path Coefficient in the Study of Variables Affecting the Income of Tais cloth craftswomen in Timor Leste

Variable Relationship	Coefficient Standar	Standar Error	P-value	Information
Structure 1				
X1 -> Y1	0,184	0,278	0,023	Significant
X2 -> Y1	0,190	0,456	0,019	Significant
X3 -> Y1	0,243	0,155	0,003	Significant
X4 -> Y1	0,223	0,116	0,006	Significant
Structure 2				
X1 -> Y2	0,262	1,270	0,001	Significant
X2 -> Y2	0,205	3,270	0,013	Significant
X3 -> Y2	0,210	0,593	0,006	Significant
X4 -> Y2	0,180	0,516	0,025	Significant
Y1 -> Y2	0,214	0,865	0,006	Significant

Source: Data processed, 2022.

Based on Table 6, it can be explained that education level has a positive and significant effect on work productivity. This is indicated by a coefficient of 0.184 and a significant level of less than 0.05, with a P-value of 0.023. This means that the higher the education level of Tais cloth craftswomen will increase work productivity. Family size has a positive and significant effect on work productivity. This is indicated by a coefficient of 0.190 with a significance level of less than 0.05, with a P-value of 0.019. The more family members in the Tais cloth craftswomen household, the more excited Tais cloth craftswomen are to be able to work productivity. Working hours have a significant effect on work productivity. This is indicated by a coefficient of 0.243 and a significant level of less than 0.05, with a P-value of 0.003. The more working hours Tais cloth craftswomen will increase their work productivity.

Working experience has a positive and significant effect on work productivity. This is indicated by a coefficient of 0.223 and a significant level of less than 0.05 with a P-value of

0.006. The more working experience Tais cloth craftswomen gets, the higher their work productivity will be. Education level has a positive and significant effect on income. This is indicated by a coefficient of 0.262 and a significant level of less than 0.05, with a P-value of 0.001. The higher the education level of Tais cloth craftswomen, the Tais cloth craftswomen will be able to increase their income. Family size has a positive and significant effect on income. This is indicated by a coefficient of 0.205 and a significant level of less than 0.05 with a P-value of 0.013. The more members of the Tais cloth craftswomen family, the more the head of the family will work harder to earn income to meet the needs of all family members.

Working hours have a significant effect on income. This is indicated by a coefficient of 0.210 and a significant level of less than 0.05, with a P-value of 0.006. The more working hours Tais cloth craftswomen will increase their income. Working experience has a positive and significant effect on income. This is indicated by a coefficient of 0.180 and a significant level of less than 0.05, with a P-value of 0.025. The more working experience Tais cloth craftswomen gets, the higher the income that will be obtained. Work productivity has a positive and significant effect on income. This is indicated by a coefficient of 0.214 and a significant level of less than 0.05, with a P-value of 0.006. The higher the work productivity of Tais cloth craftswomen, the higher the income that will be obtained by the Tais cloth craftswomen.

The results of the analysis of the direct effect given by X1 to Y2 is 0.262 while the indirect effect of X1 through Y1 to Y2 is 0.184 x 0.214 = 0.039. Then the total effect given by X1 to Y2 is the direct effect plus the indirect effect, namely 0.262 + 0.039 = 0.301. Based on the results of these calculations, it is known that the direct influence value is 0.262 and the indirect effect is 0.039, which means that the direct influence value is greater than the indirect effect value. These results indicate that education level directly has a significant effect on the income of Tais cloth craftswomen.

The direct effect given by X2 to Y2 is 0.205. The indirect effect of X2 through Y1 to Y2 is 0.190 x 0.214 = 0.040. Then the total effect given by X2 to Y2 is the direct effect plus the indirect effect, namely 0.205 + 0.040 = 0.245. Based on the results of these calculations, it is known that the direct influence value is 0.205 and the indirect effect is 0.040, which means that the direct influence value is greater than the indirect effect value. These results indicate that directly family size has a significant effect on income.

The direct effect given by X3 to Y2 is 0.210 while the indirect effect of X3 through Y1 to Y2 is 0.243 x 0.214 = 0.052. Then the total effect given by X3 to Y2 is the direct effect plus the indirect effect, namely 0.210 + 0.052 = 0.262. Based on the results of these calculations, it is known that the direct influence value is 0.210 and the indirect effect is 0.052, which means that the direct influence value is greater than the indirect effect value. These results indicate that working hours directly have a significant effect on income.

The direct effect given by X4 to Y2 is 0.180 while the indirect effect of X4 through Y1 to Y2 is 0.223 x 0.214 = 0.047. Then the total effect given by X4 to Y2 is the direct effect plus the indirect effect, namely 0.180 + 0.047 = 0.227. Based on the results of these calculations, it is known that the direct influence value is 0.180 and the indirect effect is 0.047, which means that the direct influence value is greater than the indirect effect value. These results indicate that working experience directly has a significant effect on income.

Table 7 – Summary of Direct Effects, Indirect Effects, and Total Effects between Research Variables

Independent Construct	Dependent Construct				
	Y_1 Y_2				
	PL	PT	PL	PTL	PT
X_1	0,184	0,184	0,262	0,039	0,301
X_2	0,190	0,190	0,205	0,040	0,245
X_3	0,243	0,243	0,210	0,052	0,262
X_4	0,223	0,223	0,180	0,047	0,227
			0,214		

Source: processed data, 2022.

Table 8 – Relationships, Unstandardized Coefficients, Standard Errors, Standardized Coefficients,
t arithmetic and Significant in the Study of Variables

Relationship	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
X_1->Y_1	0,641	0,278	0,184	2,302	0,023
X_2->Y_1	1,087	0,456	0,190	2,383	0,019
X_3->Y_1	0,471	0,155	0,243	3,047	0,003
X_4->Y_1	0,324	0,116	0,223	2,799	0,006
Y_1->Y_2	2,401	0,865	0,214	2,776	0,006

Table 8 presents the unstandardized coefficients and standard errors of the independent variables X1, X2, X3, and X4, to the mediating variable Y1, and the mediating variable Y1 to the dependent variable Y2, which will then be used in the calculation of the Sobel test.

Based on the Sobel test, the calculated z value is 2.49 > 1.96 (z value is at a significant level of 0.05), which means that the work productivity variable (Y1) mediates the education level

Based on the Sobel test, the calculated z value is 3.09 > 1.96 (z value at a significant level of 0.05), which means that the work productivity variable (Y1) mediates family size (X2) on the income variable (Y2).

Based on the Sobel test, the calculated z value is 2.91 > 1.96 (z value is at a significant level of 0.05), which means that the work productivity variable (Y1) mediates working hours (X3) on the income variable (Y2).

Based on the Sobel test, the calculated z value is 6.40 > 1.96 (z value at a significant level of 0.05), which means that the work productivity variable (Y1) mediates working experience (X4) on the income variable (Y2).

Based on the results of the Sobel test, it can be concluded that the work productivity variable (Y1) mediates the effect of the education level variable (X1), family size variable (X2), working hours (X3) and working experience (X4) on the income variable (Y2). The work productivity variable is an intervening variable that partially mediates because it has been proven to significantly mediate all the variables in this study.

According to the theory of human capital education, a higher level allows a person to increase his income (Todaro, 2000). The higher a person's education level, the higher the income (Tarigan, 2006). As the number of dependents in the family increases, the expenditure in meeting the necessities of life becomes even greater, both in primary and secondary household needs. The increasing number of children is followed by an increase in the number of family dependents. Therefore, for the sake of increasing welfare from an economic point of view, other family members are required to work other than the head of the family (Mayaswari, 2015). The number of dependents determines the outpouring of working hours from the work done, because the number of dependents in working age is a source of labor, efforts to improve work abilities and skills will be fulfilled, thereby increasing the standard of living (Prabowo, 2015).

Working hours for a person greatly determine efficiency and work productivity (Arifin, 2002). The higher the time devoted by female workers to work in producing goods and services, the higher the opportunity for women to earn additional income. This means that working hours have a positive influence on family income (Dewi, 2012). Women are involved in the public sector to work in the labor market so that it affects work patterns in the family. The arrangement of working hours for women to devote must be appropriate so that the main obligations in household activities do not forget their duties and roles in the family (Juhn and Potter, 2006).

Working experience is knowledge or skills that are already known and mastered by a person as a result of actions or work that have been carried out previously for a certain period of time. The more experience, the level of satisfaction will increase where from experience you will be more careful and learn from mistakes so that in completing a job it will feel more satisfying because of the experience you have (Hamzah, 2004). Yuliawati (2011) which states that working experience has a positive effect on work productivity. With a high level of education and supported by working experience, the workforce will have more

opportunities to find work. Rizky Herdiansyah (2011) states that working experience has a positive effect on the work productivity of craftsmen and increases income.

Education is the only determinant for individuals in finding work, especially for women. Research conducted by Setyonaluri (2014) found that having a high education and working in the public sector can reduce the possibility of experiencing job disruption. Fitria (2012) states that education level has a positive influence on a person's decision to work. The higher a person's education level will make the time they have becomes expensive, and the desire to work will be higher.

For women who have higher education, they will choose to work rather than just stay at home to take care of children and families. According to Riana (2013) states that education level has a positive but not significant relationship to the outpouring of women's working hours, it means that if there is an additional education level for female workers, it will cause an increase in the outpouring of working hours for female workers, although it does not have a significant effect on the outpouring of time. Shabrina (2014) education level plays an important role in determining a job, the higher the education level, the more feasible it is to get a job and income.

Family size, namely the number of family members greatly determines the number of family needs (Erwin, 2012). The number of people or family members who are dependents is expressed in units of people (Wira, 2013). According to Widyawati (2013) family size is the number of family members consisting of wives, children, and other people who participate in the family being or living in one house and eating together which is the responsibility of the head of the family. The size of the family size in a house shows the size of the burden that must be borne as a family member. The size of the family size affects the willingness to do work and earn income to support family dependents (Situngkir, 2007).

Working time (hours) has an effect on income. Someone who works longer hours will get paid more than someone who works for a shorter time (part time). According to Sugeng (2009), stated that working hours are one of the factors that influence income in the household economy. The longer the outpouring of working hours, the more results will be received so that the income obtained will increase and the needs of the family can be met.

Working experience is closely related to income, the more experience that person will be able to increase his income. The wider a person's working experience, the more skilled a person is in doing something. Fajar Pasaribu (2007:633), work experience and work productivity are positively related. The more years of service, the higher the experience and skills that will support their work so as to increase work productivity and increase income.

Work productivity can affect the income of craftsmen, the more goods produced, the more income will be received (Meta Purmina, 2018). According to Payaman Simanjuntak (2005) labor productivity is a comparison between the results achieved (output) with the overall resources (inputs) used per unit time. Productivity is a concept of measuring the ratio of total output to the weighted average of inputs. High productivity will benefit the industry and the workforce, especially increasing their welfare. Productivity reflects the work ethic of the workforce which is reflected in a good mental attitude.

CONCLUSION

Based on the results of the analysis and discussion, the following conclusions can be conveyed: Education level, family size, working hours and working experience affect the work productivity of Tais cloth craftswomen in Timor Leste. Education level, family size, working hours, working experience and work productivity affect the income of Tais cloth craftswomen in Timor Leste. Work productivity mediates the effect of education level, family size, working hours and working experience on the income of Tais cloth craftswomen in Timor Leste.

Some suggestions as a form of implementation of the research are as follows: The creation of market opportunities is expected that the government and society can work together to achieve success in economic development. The government of Timor Leste is expected to add new cadres to succeed the Tais cloth craftswomen in the younger

generation, considering that most of the craftswomen are old people and this tais cloth is local wisdom that needs to be preserved for the next generation of the nation. The Timor Leste government is expected to help provide aid funds, facilities and infrastructure for Tais cloth craftswomen so that they can be productive, especially during the Covid-19 condition. There is a need for guidance and development regarding the quality of tais cloth and a global marketing strategy.

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