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Social and Economic Determinants of Family Size in Sri Lanka (In Reference to Kirillawala – West GN Division)

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Abstract

In recent decades' world population has increased drastically, specially in developing countries. Population growth in developing nations can cause an array of problems: insufficiencies in health care programs, lack of resources and pollution. Regrettably, some difficulties, such as starvation due to food shortages, may occur. In order to battle these problems, growth of population must be controlled. Number of children in a family is one of the main factors which directly determine the future population of a country. So the purpose of this study is to identify socio-economic factors affecting on number of children in a family. Family size also depends on the number of children in a family. A sample of 66 people was selected using simple random sampling method. A questionnaire was used as a schedule to collect data from the local community of Kirillawala West Grama Niladhari Division. To analyze the data descriptive analysis, chi squared test and correlation tests were used. Also the data has been analyzed by SPSS and Excel software. The study indicates that there is a significant relationship between number of children and its some determinants as nature of parent's occupation, household's monthly income, parent's education level and marriage age. This study emphasizes that the monthly income and level of parent's education significantly affect for the number of children in a family. Also the parent's backgrounds affect the number of children in a family. Finally, the study concludes that the population can be controlled by changing level of education and income.

Keywords: *children, family, socio-economic, population, growth*

1. Introduction

The population includes all the people who live in a country. It is one of the major factors which determine the development process of a country. World population means all the human beings live in the planet Earth. Before 20th century the world population increased in a snail speed. In the mid-18th century it has slowly increased. But at the beginning of 20th century, the world population began to show a sudden increase its growth rate. In 1999, the world population was six billion. According to United Nation Organization's data, the organization has projected that the world population will increase by 9.2 billion in 2050 (Pathirage, 2011). Mid-year population in Sri Lankan is 21,670,000 in 2018 and it has been increasing continuously by today (Central Bank Report, 2018). As Sri Lanka is a developing country, already it shows undeveloped characters such as poverty, uncertain political background and lower GDP per capita. As a result of that Sri Lanka has to face many issues. Among them changing population growth rate is one of the main issues. Therefore, government should take necessary actions to overcome this situation. But before that it is necessary to identify the direct and indirect factors that determine the population of Sri Lanka.

A major characteristic which associates with developing country is higher population. In developed countries, the population growth rate lies lesser than 1 percent. But in developing countries it lies around 2.5 percent. A developed country takes around 70 or 80 years to double the population. But a developing country takes around 25 or 30 years for it. So that the population growth can be identified as a factor that highly affects for developing process in the developing countries than the developed countries. The population can be measured using number of births, deaths, and net migrations. Total birth is determined by number of children in a family. Number of children in a family can be affected by various factors. The main purpose of this study is identifying the impact of socio-economic factors affecting on number of children in a family. There is no special theory about factors affecting on the population growth. However, the factors affecting on number of children in a family indirectly determine the population of a country such as parents' income, education and occupation, marriage age, ethnicity, social status (Pathirage, 2011).
As a developing country, Sri Lankan population growth can be identified as a major problem. Not only present but also in the future Sri Lankan people will have to face many economical and sociological problems such as unemployment, aging,

decreasing of per capita income and increasing government welfare payment. So it is very important to find the factors affecting the number of children in a family, as its very rare to find such researches in current Sri Lanka. Therefore, the main purpose of this study was to identify the impact of socio-economic factors on number of children in a family.

2. Literature Review

Arthur (2005) stated that there are approximate relationships between family size and its some determinants as educational background of respondents, religion background and duration in employment of respondents. Furthermore, respondents who have got higher education have small families. Hence their children are having education well than others. However, the study has been able to find that spousal income is very important to determine family size. Especially this study found a significant relationship between family size and duration in employment. As well as this study found a negative relationship between income and family size. Pandey et al (2012) identified that socio-demographic factors influencing family size among rural population of district Nainital, Uttarakhad. According to this study, the socio-demographic factors are age at first marriage, perceived ideal number of children, literacy status, economic status, occupation of women and type of family. According to Sharif et al (2007), lack of knowledge on birth control planning make families has more than 6 children in a family. Matsumoto and Yamabe (2013) revealed that fertility intentions are higher among women living with large families in rural areas in Japan.

Uddin et al (2011) shows that, there is a positive relationship between ages of women and desired family size. That means, women who are in last stage of age have maximum number of children. Also the desired family size is lower compare with their fertility level. Nganga (2009) stated that age is positively related to family size and ownership of livestock was positively associated with numbers of children. Furthermore, they revealed education and employment are negatively related with family size and educated women have fewer children than others. Lachaud et al (2014) found that a family which has fewer children shows different patterns of investment in their children's schooling and there is a lower inequality between children by gender and birth order. The researcher identified that there is a systematic difference between family size and their education within the family. Also Children who are in small family have got higher probability to enrollment for schooling than large families' children. At that time age and gender are irrespective. But within a family, first born girls have disadvantages for their education side than other children. In addition, the study identified that fertility decline influences negative effect on oldest girls in a family.

According to Arthur (2005), there is a significant relationship between family size and health of the family as well as religious background. In addition, women who have got higher education have smaller family sizes. Skirbekk's (2008) revealed that education, occupation and income is negatively related with fertility. Furthermore, according to Khongji (2013), there is a strong association between ideal number of children and religion, place of residence, educational level, living index and ethnicity in Meghalaya. Egenti et al (2016) identified that economic and socio-cultural factors are very important determinants of family size in Orlu, South East Nigeria. They revealed young girls like to have more children. But girls who married after the age of 30 years like to have fewer children. Also women who unemployed and civil servants preferred to have fewer children.

3. Methodology

The families who live in Kirillawala West GN division of Gampaha district in Sri Lanka has used to collect data for the study. There are many reasons for that. First one is that western province contains the largest population in Sri Lanka. Secondly Gampaha district is the place that contains second large population in western province. Western province is connected with three districts Colombo, Gampaha and Kaluthra. Respectively the populations are 2,326,000, 2,313,000 and 1,227,000. Among them Gampaha district has been selected as its population is higher than Kaluthara district. The study did not select Colombo district, as it is not practicable. Gampaha district is connected with 13 divisions. Among them Mahara division has been selected as it represents all religions in Sri Lanka. Mahara division connected with 92 GN divisions. Among them Kirillawala West GN Division was selected as it has families represent the all social states which help for the research (Census of Population and Housing Report, 2012). Also one of another reason is to select GN division for this study is that it is a small part of a country. Development process of any country should start with small units.
Population of this study covered 440 families which mothers' age more than 49 years old in Kirillawala West GN division of Mahara division in Gampaha district of Sri Lanka. Among them, 66 families have been selected via simple random

sampling method. The population for this study represents same status in the society. Therefore, they have not been divided to groups such as urban and rural.

Further questionnaire method has been used to collect data from the sample. According to the study, there is one dependent variable and many independent variables. The dependent variable is the number of children in a family and independent variables are mother's monthly income, father's monthly income, total monthly income, type of mother's occupation, type of father's occupation, nature of mother's occupation, nature of father's occupation, level of mother's education, father's education level, marriage type, marriage age, attendance for clinic and children's birth place. Moreover, these data have been analyzed by SPSS and Excel software.

4. Results

4.1 Descriptive Analysis

It was found out that 55% (36) respondents have one or two children, 30% (20) respondents have three or four children, 11% (7) respondents have five or six children and others 4% (3) have not any children. The average number of children is three.

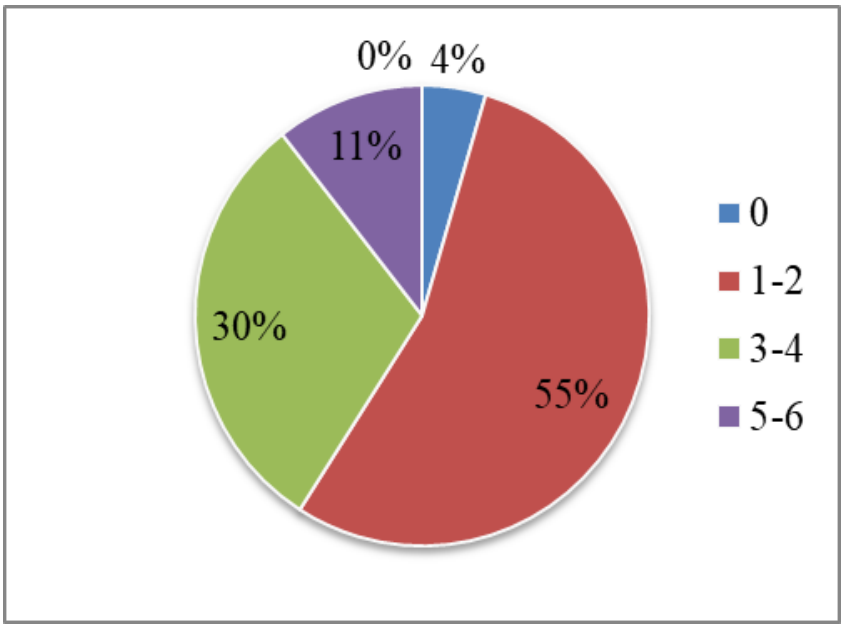

Figure 1: Number of children in a family
Source: Author Generated 2019

The many families had desired to have one or two children as their actual number of children. Among them 76% parent have been able to fulfill their hopes by taking one or two children as their number of children. Only 68% of women had an occupation. All fathers were engaged in any kind of occupation (100%). Also more fathers had a government and private occupation. Among them government is more than private. Furthermore, mother's average monthly income is 18,773 and father's average monthly income is 33,107.

According to this research, the nature of father's occupation, most of them have employed as full day. In presenting the nature of mother's occupation, most of them have not employed in any side. Among employed mothers, most of them are employed as full day. Few of them have employed as half day. But mothers have employed as temporary and seasonal more than half day.

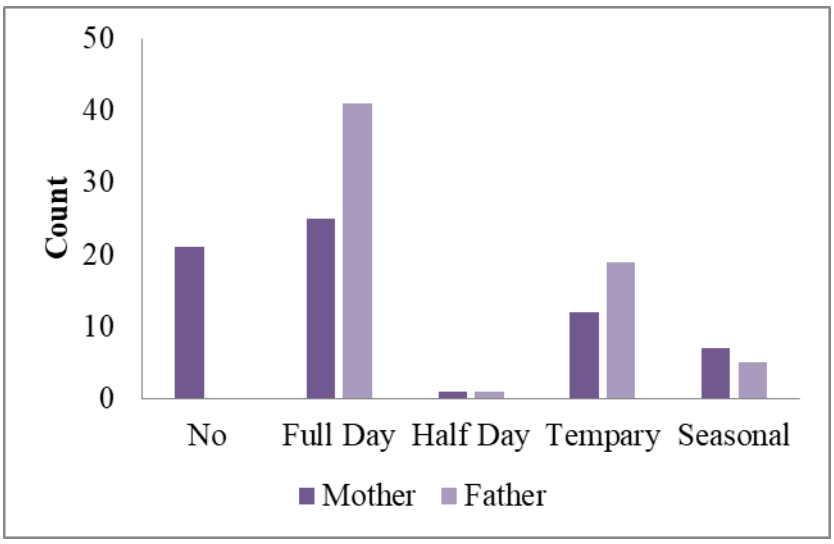

Figure 2: Nature of occupation of the parent
Source: Author Generated 2019

On the other hand, 100% parent has passed even grade five class. Also 85% mothers and 86% fathers had passed grade nine class. As well as 61% mothers and 59% fathers had passed the O/L. Further 32% mothers and 29% fathers had passed the A/L. But 9% mothers and 9% fathers had followed the higher education. According their marriage life, the mean age of marriage is 23 years and most of them have marriage as love marriage. Also 80% mothers have used family planning methods.

4.2 Economic Determinants of Family Size

To determine the relationship of different independent variables with the size of the family (number of children) 11 hypotheses were made and tested.

H_{01} = There is no relationship between family size and type of mother's occupation.
H_{02} = There is no relationship between family size and nature of mother's occupation.
H_{03} = There is no relationship between family size and income of mother's occupation.
H_{04} = There is no relationship between family size and type of father's occupation.
H_{05} = There is no relationship between family size and nature of father's occupation.
H_{06} = There is no relationship between family size and income of father's occupation.
H_{07} = There is no relationship between family size and total income of the family.
H_{08} = There is no relationship between family size and level of mother's education.
H_{09} = There is no relationship between family size and level of father's education.
H_{10} = There is no relationship between family size and parent's marriage age.
H_{11} = There is no relationship between family size and parent's marriage type.

Table 1: Socio - economic Determinants of family size

Hypotheses	Chi square value	Sig value	Decision
H_{01}	41.215	.000	H_{01} Rejected
H_{02}	33.273	.001	H_{02} Rejected
H_{03}	31.896	.023	H_{03} Rejected
H_{04}	29.606	.041	H_{04} Rejected
H_{05}	13.886	.126	H_{05} Accepted
H_{06}	34.343	.003	H_{06} Rejected
H_{07}	36.874	.001	H_{07} Rejected
H_{08}	38.828	.000	H_{08} Rejected
H_{09}	33.895	.001	H_{09} Rejected
H_{010}	29.645	.001	H_{10} Rejected
H_{11}	9.546[a]	.145	H_{11} Accepted

Source: Author Generated 2019

According to Chi-square tests, nine hypotheses are rejected and two hypotheses are accepted. So that there is a significant relationship between number of children and its some determinants as nature of mother's occupation, mother's monthly income, type of father's occupation, father's monthly income, total income of month, level of father's education, level of mother's education and marriage age in the sample area. Also there isn't a significant relationship between number of children and its some determinants as nature of father's occupation, and marriage type. These are the relationships between number of children and its Socio-Economic determinants.

5. Conclusion

According to findings of the study, the researcher could find that the mean number of children is three in the sample area. Therefore, it is really medium number of children compare to present condition of the society. That means unlike past lot of parent like to make one or two children in present. Also the study found that many families have boys more than girls. Background of parent is very important variable that determine the number of children in a family. According to the survey, the researcher could find that females' occupation has affected by the marriage. After ha marriage many of the mothers were unemployed. As well as all fathers who selected as the sample had an occupation after the marriage. Also more fathers had a government and private occupation. Among them government is more than private. Though all parents have passed Grade 5 only a very few amount did higher education. According their marriage life, the mean age of marriage is 23 years and most of them have marriage as love marriage. Finally, most of them have pointed out that the main factors that determine the number of children in a family is husband's wish and income

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