Impact of migration mothers on the left behind school age children's education performance: A case study in rural areas, Sri Lanka

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Abstract
With a high number of migrant mothers as domestic workers and engaged in other employments in the Kurunegala District as in other districts of Sri Lanka, information on the education performance and welfare status of their left behind children reminds the need for a proper intervention. This study examines the key factors that affect the education performance of left behind school age children whose mothers have migrated. The study was conducted in Kotawehera, Rasnayakapura and Polpithigama Divisional Secretariat areas which are the high sending Divisions in Kurunegala District. An interviewer administered questionnaire and case study method were used to gather data. Univariate and multivariate analytical methods were used to analysis the data. Findings of the study reveal that the demographic and socio-economic profile of the migrated mothers and the children left behind are related to age, marital status, religion, educational level, income and expenditure and poverty. The study shows that nearly 60% of the children are female and 40% of the children are male, out of which 54% of the children are at the age of attending primary education. Further, the study has found a significant relationship between the migration of mothers and the impact on the education of the children who have been left behind. The marks obtained by the children are not significantly related to the teachers at their schools, but is related to the status of the migrant families at home. The roles of guardians and caregivers at home do not successfully help the children attain their education, physical and psychological well-being. Given the situation in the families where the mother has migrated, the fathers and elder people who stay at home should be responsible for the care and protection of the children left behind by their mothers.

Keywords: migration mothers, left behind children, education performance, rural areas, Sri Lanka

Introduction
This study explores the influence of mothers' migration on the left behind school age children's education in the rural areas in Sri Lanka. Both internal and international labour migrations have become a main element of the economy in Sri Lanka. It helps to reduce unemployment and poverty issues in the country. The majority of migrants are married and have school aged children. Almost all of them leave their children behind, and previous estimates indicate that about more than one million Sri Lankan children are left behind by international migrant mothers (Sibghatullah & Ravi, 2006) [12]. There is no estimation of the number of children left behind by international migrant fathers and both parents. Although mother's, father's or both parents' migration is associated with providing a better future for their children and families, parental internal migration is not estimated. Typically, contract migrants moving with their family and children would not be accepted by destination countries (Abeyasekara & Jayasundare, 2013) [1]. During the last few decades, international literature on children left behind by migrant mothers has been expanding rapidly but there are no evidences regarding urban parental migration literature on left behind children at local level (Meng & Yamauchi, 2015; Siriwardhana *et al*., 2013; Zhou *et al*., 2014) [8, 13, 16].
Existing literature on international maternal migration and left-behind children in Sri Lanka suggest a negative impact of parental migration on children's education and psychological well-being (Abeyasekara & Jayasundare, 2013; Sibghatullah & Ravi, 2006) [1, 12]. However, several studies in other developing countries find that remittances provide support for education and increase school enrolment (Asis, 2006; Perera & Jampaklay, 2011) [4, 9]. Literature on parental migration in Asia reveled that migrants leave their children behind in the countryside since key features of the country's social welfare systems discourage them from taking them to the urban areas (Meng & Yamauchi, 2015; Zhou *et al*., 2014) [8, 16]. In many countries policy makers give priority to education in their national planning for the annual budgets. Like other countries, Sri Lanka too is concerned about the education of the children as a key investment in all aspects of human development (Himaz & Aturupane, 2012) [7]. Parental migration may influence children's education in several different ways. Although, remittances may be quite important for the development and education of children, multiple aspects of information are needed to explore issues related to parental migration and education of the children left behind. However, how mothers' migration in local and international level influences the children's education is still being debated because of the ambiguity on whether the positive economic effects outweigh the negative psychological and welfare effects. There is a research gap in the analysis of educational enrolment and performance that consider children of mothers' migration at both, the local and international levels. Therefore, it is important to study the influences of mothers' migration for employment opportunities on the children's education in rural areas in the Sri Lankan context.

Objectives of the Study
The main objective of the study is to examine the key factors that affect the education performances of the children of migrating mothers who leave behind their school age children in rural areas of Sri Lanka.

Material and Methods
According to foreign employment statistics, Colombo is the highest foreign labour migrant district (Sri Lanka Bereau of Foreign Employment, 2012) [14]. Kurunegala is the second highest district representing international labour migration and the third place in the internal out-migrant district (Department of Census and Statistics, 2012) [6]. There is not reported statistics regarding the mothers' labour migration and there is a vacuum of research study based on the issues of school age children of migrant parents. This will be a parallel study to identify and analyze the issues and challenges faced by the left behind school age children in both internal and international labour migrants' households. Since the previous studies on national and international labour migration have been based on the Western Province (Perera & Jampaklay, 2011; Ranathunga, 2011; Ukwatta, 2004) this study has been done in the Kurunegala district [9, 10, 15].

Population
The study population is school age children of the parental labour migrant households including both internal (rural to urban migration) and international labour migration from the Kurunegala district.

Sample
The sample has been selected from 54 Grama Niladhari (GN) divisions of the Kurunegala district including both rural and urban areas related to parental migrant households three months prior to the survey date. One student from each migrant household has been selected for the sample and the survey consists of a sample of 400 left behind school age children migrant households. Since the population of the migrant households of the district is unknown and more precise and valid results from the analysis needed to be obtained, 400 school age children were selected for the study sample. The sample size was decided according to Cochran's formula as follows: Since there is no previous determined proportion of the population, it was taken as p = 0.5.

$$n = z^2 * p\,(1 - p)\,/ME^2$$

P is the proportion of the population which has the attribute in question ME is the desired level of precision (the margin error = 5%)
q is (1-p)

$n = z^2 * p\,(1 - p)/\,ME^2$
n = 1.96^2 * (0.5) *(0.5)/ (0.05)^2
n = 385

But in this case, since the data analysis was done using multivariate analytical methods, a more reliable and valid sample was selected for the study to obtain more precise answers. Therefore, the sample size was increased to 400 respondents. Respondents selected represent both rural and urban areas of the district.

The process of data collection comprised of two categories, namely primary and secondary data collection in order to collect both in achieving the objective of the study. The quantitative data were collected through interviewer administered questionnaire surveys. The main sources for collecting secondary data were research publications, statistical reports published by the Department of Census and Statistics (DCS) and the Sri Lanka Bureau of Foreign Employment (SLBFE) and other sources of information related to labour migration.

Results and Discussion
Results of the Descriptive Analysis
Descriptive findings of the study reveal that the ethnic composition of the respondent families consisted of 83.9 percent Sinhalese and 16.1 percent Muslims. Out of respondents of mother migrant families of 400, the female respondent percentage (74.6%) is higher than the male respondents. The majority of the children left behind who have been included in the study comprise the age category of 6-10 years old. It is about 68.6 percent of the total children of the sample. The study shows that nearly 60 percent of the children are female and 40 percent of the children are male, out of which 54 percent of the children are at the age of attending below Grade five. Most of the primary caregivers are the close relatives of the children and the majority of them are the grandmothers and grandfathers. However, 18 percent of the caregivers were fathers of the children. According to the respondents' opinions, child protection among women is more powerful than among males (father, uncle or grandfather). Around 12.6 percent of the children are living with their siblings who are married.
The level of education of the caregivers of mother migrated (international migration) families are very low when compared to the internally urban migrated families. Sixty five percent of caregivers of the international migrant families have never attended school, while 20 percent of the caregivers have completed their G.C.E Ordinary Level and another 15 percent have completed their G.C.E Advance Level qualification. Compared to the international migrated family caregivers, the caregivers who are in internally migrated families are more educated.
In terms of the expenses on children's education, the internationally migrated mothers' families have invested more money on a higher quality education for their children than the internally migrated families. There is lack of evidence found from the study that higher financial support can bring higher performance. However, there are indications that the children in internal migrant mothers' families have high support from their caregivers for the children's education than the other children. According to the quantitative data, the first and second children of the internal mother migrated families have achieved their education performances. The qualitative information reveals that most children of international migrated mothers' families felt that the boys and girls are important.

Results of the Multivariate Analysis
The composite index was developed using left behind family members' perceptions regarding the influences of mothers' migration on educational performance of school age children. The assumptions were checked in order to create an index using the Principle Components Analysis (PCA). Since all the variables used in creating the index are

categorical variables gathered through the Likert Scale questions from the survey, the first assumption is satisfied. Moving to a PCA, the data must be out of outliers. As a result of the analysis, there were no more outlier issues. Since for the third assumption there need to be linear relationships among all variables, a matrix plot shows no relationships among the variables. According to Baglin (2014), this assumption is typically violated when considering the linear relationship among ordinal scaled variables. The Pearson correlation matrix used on ordinal data is giving rise to spurious multidimensionality and biased factor loadings. Accordingly, based on the above clarifications this assumption remained unsatisfied.

Although, there are a few methods that we could use in detecting sampling adequacy, one of the best methods is the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy for the overall dada set. Accordingly, the KMO value for the sets of variables is 0.729. This measure varies between 0 and 1, and a value closer to 1 is better. Since the KMO value of the data is greater than or equal to 0.7, it can be confirmed that the sample is adequate for the analysis. However, it is considered that there need to have an adequate correlation among the variables in order for them to be reduced to a smaller number of components. Bartlett's Tests of Sphericity for the data is significant (Chi-Square value = 771.278 and P-value = 0.000). In order to determine the number of significant factors from the variables, the scree plot can be used as the most appropriate visual method. The following figure indicates that in the technique of Kaiser's criterion of the Eigen value rule, only four factors were selected to explain the total variance.
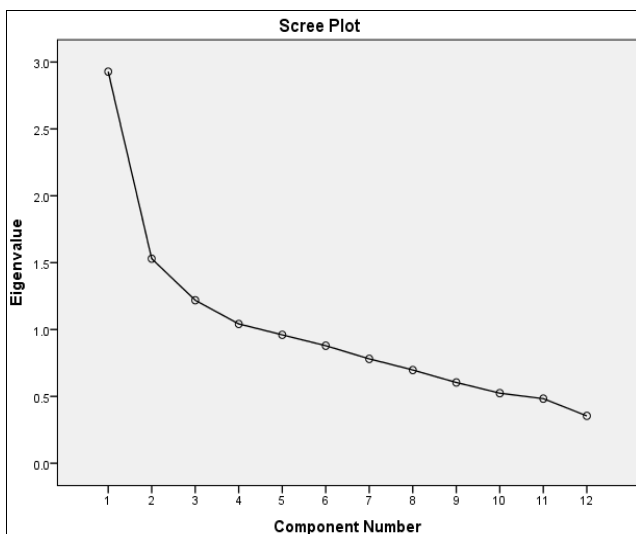
Source: Constructed based on Survey Data, 2019

Fig 1: Scree Plot of Eigenvalues of Perceptions of Children's Education

It means each successive component is accounting for smaller amounts of the total variance. In general, what is needed is to keep only those principal components whose eigenvalues are greater than 1. Components with an eigenvalue of less than 1 account for less variance than does the original variable. Total variance of education performance of school age children of migrant mothers' in rural areas in Kurunegala District is 56.0 percent. The four components explained the 56.0 percent total variance with

the first, second, third and fourth components as 24.403%, 12.748%, 10.157% and 8.680% respectively.

The importance of the components in measuring the total educational performance is not the same. Therefore, the proportion of these percentages is taken as weights on the component score coefficients, and non-standardized index was constructed for the sample using the following formula. NSI=. (0.44) *(Component 1 Scores) + (0.23) *(Component 2 Scores) + (0.18) (Component 3 Scores) + (0.16) * (Component 4 Scores). The index measures the educational performance of school age children of migrant mothers, relative to the other on a linear scale. Since it was difficult to interpret the positive or negative values of the index, Standardized Indices were constructed, the value of which can range from 0 to 100 by using following equation: According to Antony & Rao, (2007) [2] standardized equation (section 7.4.2) can be obtained as standardized composite index to measure the performances. According to the descriptive statistics of the calculated index, the data of the composite index is distributed with skewness of -0.27, which indicates that the distribution is negatively skewed with a median of 55.04 and the index is ranged "between" 0 to 100.

When considering the attitudes of caregivers related to the left behind school age children's school performances, the quintiles of education performance were constructed into five groups thus creating a range from the lowest stage (1st quintile) to the highest stage (5th quintile) (Antony & Rao, 2007) [2]. The following Table shows the differences of education performances of the left behind school age children in the study areas.

Table 1: Descriptive Statistics of Five Quintiles Related to School Age Children's Education Performances in Study Area

Stages of Education Performance	N	%
Lowest Stage	156	39.00
Second Stage	136	3400
Middle Stage	51	12.70
Fourth Stage	36	09.00
Highest Stage	21	05.30
Total	400	100.00

Source: Constructed Based on Survey Data, 2019

The percentage of lowest education performances of mother migrant families in the study area was 39.0 percent. Considerably, the highest level of education performances was reported around fourteen percent. It is important to mention that the low attention of caregivers regarding the children's education, lack of a separate place for studying at home, noisy environment and less attendance of school highly affected their low performances. The educational performance of the international mother migrant's and internally migrant's children were assessed through the subject-wise scores in Mathematics and English at the end of the last year examination held in 2019. The attendance ratio and the student report card of each student in the sample have been used to assess their academic performance. It has to be mentioned that the educational performance of the majority of the younger age male students was also influenced by the irregular attendance and lack of proper engagement in studies at home. It is estimated that 1 in 3 children of the internationally migrated mothers are at a high risk of low educational performance at school. However, these children tend to withdraw from their

education within the compulsory education age and it may influence their future and society badly.
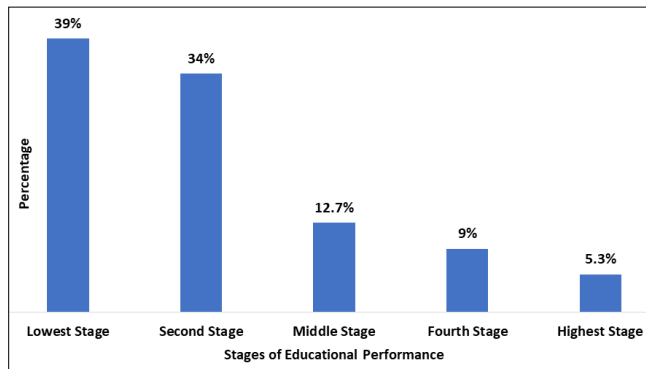
Source: Constructed Based on Survey Data, 2019

Fig 2: Group of Educational Performance Stages of School Age Children of Mother Migrants

As Antony & Rao, (2007) [2] have stated, to identify the differences of performances, the constructed index was classified into five quintiles thus creating a range from the lowest stage (1st quintile) to the highest stage (5th quintile). The differences of performance of education of mother migration families are shown by the above Figure. Figure 02 indicates a different condition regarding the educational performance of school age children of mother migrants. It shows that approximately one-third of the respondents expressed bad perceptions of school age children's educational performance related to four factors. According to the low attention of caregivers, lack of space at home, low attendance at schooling and low motivation regarding self-studies of negative educational performances may vary among mother migrant families.

Conclusion

Parents' migration is an economically better solution to left behind family members. Though more parents migrate due to concerns for the well-being of their children, it is in fact a failure on both the well-being and educational attainment in rural areas of Sri Lanka. The main objective of the research was to investigate the effect of mothers' migration on the education performance of left behind school age children in rural areas of Sri Lanka. Because literature on international parental migration in developing countries shows that while investments on the children's education was lowest, it benefitted the household economic conditions (Asis & Ruiz-Marave, 2013; Perera & Jampaklay, 2011; Zhou et al., 2014) [5, 9, 16]. The low educational attainment of the younger aged students, especially male students in the sample appears to be influenced by the absence of mothers. Data from the survey sample and existing literature suggest that a mother's international migration tends to be positively associated with remittances to left behind family members rather than the children's educational development and mental wellbeing (Abeyasekara & Jayasundare, 2013; Arguillas & Williams, 2010; Perera & Jampaklay, 2011; Robles & Oropesa, 2011) [1, 3, 9, 11]. However, empirical studies have not found any internal mother migration effect on children's education in Sri Lanka. Findings of the study revealed that the internal mother migration also directly influences the children's secondary level education performances due to less attention of the caregivers. The current study shows that the mothers' international

migration negatively effects younger aged school children's education, while internal mother migration negatively effects the children's secondary level education. At the same time, both internal and international mothers' migration positively affects household development economically. However, both types of mother migration negatively affect the children's mental well-being in rural areas of Sri Lanka.

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