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International migration and children left behind: Impacts on children's school enrolment in Sri Lanka

Sunethra Perera
Aree Jampaklay

Introduction

This paper assesses how parental international (or transnational) labour migration¹ impacts the children's school enrolment² in Sri Lanka. Labour migration has become an important element of development strategy in Sri Lanka over the last three decades. It helps reduce unemployment and poverty and generates foreign exchange earnings in the country. The majority of migrants are married and have children. Almost all of them leave their children behind, and previous estimates indicate that about one million Sri Lankan children are left behind by migrant mothers (Save the Children Sri Lanka, 2006). There is no estimation of the number of children left behind by migrant fathers and both parents. However, mother's, father's or both parents' migration is associated with providing a better future for their children and families. The migration decisions are often made at the household level (rather than the individual level) as a survival strategy. Typically, contract migrants moving with the family and children would not be accepted by destination countries (Bryant, 2005). In recent years, international literature on children left behind by migrant parents has been expanding rapidly, and the social costs for children of international migrants have been given considerable attention (Bryant, 2005, 2008; Cortina, 2007; Yang, 2005).

Previous research on maternal migration and left-behind children in Sri Lanka suggest a negative impact of parental migration on children's education and psychological well-being (Save the Children Sri Lanka, 2006; Samarasinghe, 1989). On the other hand, some studies in other countries find that remittances provide support for education and increase school enrolment (Asis, 2006; Kuhn, 2006; Roongshivin, 1985). Remittance also allows households to increase human capital investment and children's schooling by reducing children's labour force participation (Baland & Robinson, 2000; Kaushik & Van, 1998). However, how migration affects children's education is still being debated because of uncertainty about whether the positive economic effects outweigh the negative psychological effect. There is vacuum of research on comparative analysis of educational enrolment and outcomes that considers children of migrants and non-migrants. Effects related to children of migrant mothers and migrant fathers are also far from conclusive. Therefore, it is important to study how parental overseas migration affects children's education in the Sri Lankan context. Previous studies mostly look at school participation or enrolment in general and have not focused on children's education by taking parental overseas migration as a key determinant.

¹ The *international labour migration* in this paper refers to the persons who go abroad for work.

² The term "school enrolment" is used in this paper to denote the child's educational participation at any academic institution, reported in the Census, 2001. Children those who reported as enrolled in any academic institutions on the census, 99% were in school and 1% of children were attended in other educational institutions.

The thirteenth Population and Housing Census -2001, Sri Lanka (SLPHC-2001) contains a question to identify whether a household member is temporarily abroad on the date of the census. This question, along with other variables makes the census an important source of information for examining the effect of migration on school enrolment of children. It is very rare to have national Census data with a question of temporary international migrants and many countries do not collect this information. This analysis uses 5% sample of Population and Housing Census, 2001 which is nationally representative thus, it is more appropriate for studying the effect of migration on schooling enrolment. Therefore, results can be generalized to national level. The study defines a child as a person less than age 18 years, in line with the United Nations Convention on the Rights of the Child (United Nations, 1989). As the study focus is children's school enrolment present analysis includes children between ages 5 to 17.

The paper first, describes the dynamic features of international labour migration in Sri Lanka; second, briefly explains the education system and cost of education; third, examines the relationship between parental migration and children's education that has been found in the literature; fourth presents the results of binary logistic regression models to assess the impact of parental migration on children's school enrolment controlling for a set of other individual and household level covariates; and fifth discusses findings to address policy implications.

International labour migration in Sri Lanka

International contract labour migration has embraced every society in the world more or less as a by-product of rapid economic globalization. Sri Lanka had entered the global labour market by 1976 with the opening of the labour market in West Asia due to huge increase in oil prices. The trend has continued into later decades and increased, following the liberalized economic policies that were adopted by the Sri Lankan government in 1977 (Gamburd, 1998; Siddiqui, 2008). Since then, contract labour migration has been used as an effective development tool. The Sri Lanka Bureau of Foreign Employment (SLBFE) collects data from migrants those go abroad for work contract. Usually initial contract is 2 years and later can be renewed if employer and employee agree. It is estimated that, approximately 1.7 million migrants were working abroad in 2009 (Sri Lanka Bureau of Foreign Employment, 2009).³ Some other studies state that between 1.5 to 2 million Sri Lankans origin are living overseas either as contract labour migrants, permanent or settler migrants (Sriskandarajah, 2002). The SLBFE annual registration numbers show current annual departure for contract foreign employment is slightly less than 250,000 (SLBFE, 2009). The annual trends of international contract migrants during the last two decades are given in figure 1.

³ The SLBFE do not provide detailed information about how do they calculate stock of emigrants each year and which categories of international migrants that they included.

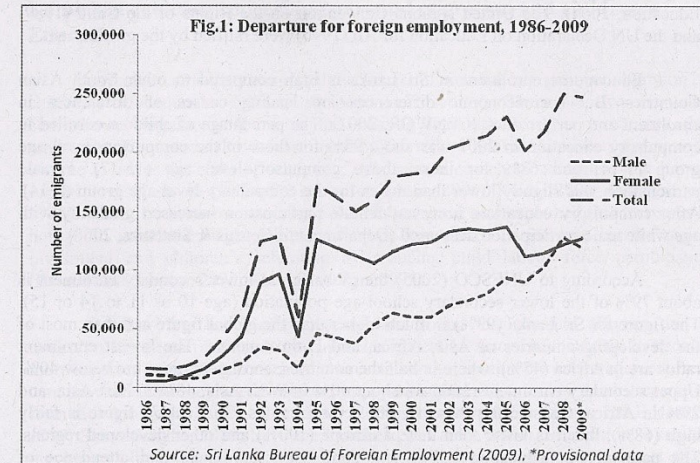


Figure 1 shows that in late 1980s males were dominating in the flow of contract labour migration. From 1989 to 2006, females continued to outnumber males. However, since 1980s, the numbers of male migrants has been gradually increasing and exceeded females in 2007. At present both male and female share almost the same proportions. In addition, migrants' remittance has become an integral part of Sri Lanka's national economy. In 2009 Sri Lankan migrant employees earned 382,801 Million Rupees which was 47.03% of total foreign exchange earnings of the country and foreign employment has also become the highest net earner of the country's foreign exchange. More than 94% of the Sri Lanka's current foreign migrant labour force is absorbed by the Middle Eastern countries and they remit approximately 60% of total remittance earning of the country (SLBFE, 2009). Even though, the macro level benefits of labour migration is visible, micro level impact, especially on children's outcome has rarely examined. Therefore, this paper examines the impact of parental migration on children's school enrolment.

Education system and cost of education in Sri Lanka

The general education system in Sri Lanka consists of four levels, primary, junior (lower) secondary, senior (upper) secondary and tertiary levels. Free education from grade one to university level was established in 1945 in Sri Lanka. The state has acknowledged the right of every child to have an education. The government has taken several steps to strengthen the educational participation of all children by providing financial support, such as scholarship schemes, free school textbooks, subsidized transport, school uniforms, and an allowance for the mid-day meal (Centre for Women Research, CENWOR, 2001). In 1997, Sri Lanka legislated compulsory education, mandating enrolment and attendance of children ages 5 to 14 (with effect from January 1998) in order to enhance higher educational participation among children (Ministry of

Education, 2004). The United Nations Convention on the Rights of the Child (1989) and the UN Declaration on Education for All (1990) were ratified by the government.

Educational enrolment in Sri Lanka is high compared to other South Asian Countries. But socioeconomic differences are leading causes of differences in enrolment and performance (CENWOR, 2001). The percentage of children enrolled in compulsory education in 2001 was about 93% for those in the compulsory-level age group (5-14) and 68% for those above compulsory-level age (15-17). Female participation was slightly lower than males for the compulsory-level age group (5-14). After compulsory education, however, female participation increased gradually with age while male participation decreased (Department of Census & Statistics, 2006).

According to UNESCO (2005) the global gross lower secondary enrolment is about 79% of the lower secondary school-age population (age 10 or 11 to 14 or 15). The figure for Sri Lanka (93%) is much higher than the global figure and than most of the developing countries of Asia, Africa, and Latin America. The lowest enrolment ratios are in Africa (45%), where in half the countries, enrolment ratios are below 40%. Upper secondary enrolment ratios are about 40% in West Asia, 48% in East Asia, and 29% in Africa. Considering these figures across regions, Sri Lanka's figure is fairly high (68%), but it is lower than that of Europe (100%) and other developed regions. The national free education policy and compulsory enrolment and attendance of children between ages 5 to 14 have made a remarkable improvement of school enrolment over the past several decades. However, a considerable proportion (7%) of children in compulsory school age (5-14) still does not enrol in school. According to Arunathilake, (2006) high out-of-pocket costs of education such as school transportation, school materials, exercise books, school facility fees, etc., are identified as significant factors for non-participation in education. While 96% of children in the wealthiest quintile are enrolled in school, only about 90% of those in the poorest quintile are. Estimates further show that educational expenses for a child in the poorest quintile amount to roughly 8.5% of their monthly per capita consumption expenditure (Arunathilake, 2006).

Over the last two decades, extra tuition (private education) outside the school has become an integral part of educational expenditure. These tuition fees make up a large proportion of educational expenses. Furthermore, high direct and indirect costs of education are associated with the quality of education that the children receive. As a result, many parents prefer to send their children to popular urban schools (private or government) rather than rural schools. Moreover, more than 85% of children who finish secondary school but who do not qualify for entrance into national universities must rely on their parents' support to study further in private institutions because, only a very limited number of students can be absorbed into the vocational and other training provided by the government institutions. Thus, it is clear that children's continuing school or higher education depends on whether their parents can afford it. Typically, poor families cannot, so their children tend to leave school after compulsory-level education (i.e., after age 14 or G.C.E. O/L). For many migrant-sending societies, evidence shows that parental overseas migration can provide for the welfare of children and families left behind through remittances. This study explores the extent to which parental migration is associated with children's education in Sri Lankan context.

Empirical evidence concerning parental migration and children's Education

Several studies have examined the impact of parental international migration on children's education in different socioeconomic settings. There are two main and contradictory arguments found in the existing literature. First, it is claimed that remittances from parental overseas migration can reduce household poverty and provide income to cover the costs of schooling, thus increasing school enrolment and human capital investment in children's education (Asis, 2006; Kuhn, 2006; Roongshivin, 1985). Similarly, economic models of child labour have also explained that increases in household income through remittances allow households to increase human capital investment and children's schooling by reducing child labour force participation (Baland & Robinson, 2000; Kaushik & Van, 1998).

On the other hand, other research has found that parental absence due to migration has negative impacts on children's education since children tend to become more involved with doing household chores and do not receive the encouragement from care providers that they need, resulting in psychological vulnerability due to separation from their biological parents (Jampaklay, 2006; Srivastava & Sasikumar, 2003; Hettige, 1999; Samarasinghe, 1989; Save the Children Sri Lanka, 2006). In addition, a smaller number or a limited number of studies has found that parental migration does not affect children's education (University of the Philippines, Tel Aviv University, & Kaibigan, 2002).

In Sri Lanka, overseas migration and children left behind literature mainly focus on impact of migrant mothers on children's psychosocial wellbeing. Most of the results are drawn from information relate to specific communities or small sample size. It is hard to find comparative studies with regard to different impact of father and mother migration on children left behind especially on children's schooling. Most of findings reveal that children of migrant mothers less likely to attend education; absenteeism is high as they have to take care of younger siblings; school drop outs are high; low educational performances due to lack of attention of care givers (Hettige, 1999; Samarasinghe, 1989). A recent study of mother migration in Sri Lanka, also finds that educational attendance and performances are lower among children of mother migrants due to negligence and lack of encouragement by the family or care takers (Save the Children in Sri Lanka, 2006). In addition, ethnographic research findings of Sri Lankan coastal village of *Naaegama*, show that long term absence of mothers adversely affect girl children's schooling as they need to support household cores (Gumbard, 2008). These studies reveal evidence about children of migrant mothers with respect to specific social settings but results cannot be generalized to national level. However, present study overcomes methodological limitations faced by previous studies, as it uses national census sample data to examine the extent to which parental international migration is associated with children's school enrolment in Sri Lanka. It considers not only for children of migrant mothers but also children of migrant fathers, and children of non-migrants in the same model. Therefore, it can be identified that which group is better off than other groups and whether parental migration benefit children's school enrolment and thus results could be compared with similar contexts.

Data and Methods

Source of Data

The 2001 SLPHC completed enumeration for only 18 out of 25 districts and had to exclude 7 districts due to an ongoing war situation in those two provinces. The 2001 SLPHC contains questions to identify whether a household member is temporarily abroad on the date of census. Following this question and linking it with other variables provides an important source of information to examine the effects of migration on children left behind. This analysis uses a nationally representative sample (Department of Census and Statistics, 2003) of 5% of the 2001 Population and Housing Census. Thus, the results can be generalized to the national level. It is very rare to have national census data with a question on temporary international migrants. Censuses of many countries do not have questions to identify international contract migrants. The population and housing census-2011 has been scheduled to conduct covering all 25 districts and the census questionnaire has already included questions on migration in order to assess volume, characteristics and determinants of both internal and international migration. Thus, the forthcoming Sri Lanka's population census data could be an invaluable resource to undertake national level analyses of internal and international migration and their socio-economic determinants and consequences.

The 5% sample of 2001 SLPHC is based on five thousand census blocks, selected using systematic sampling methods. Respondents were asked whether the household member was *in* or *out* of the country (question P₀). This information was used to identify overseas contract migrants. The household questionnaire included all household members' information, including those who were temporarily abroad on the date of the census. Although the SLPHC questionnaire did not differentiate migrants by their purpose of migration, previous studies give us clues that the majority of migrants had gone abroad on two-year contracts for the purpose of employment (Gamburd, 2000, 2008; Korale, 1995; SLBFE, 2009). Thus, this study assumes that all migrants 18 years of age and above had temporarily migrated internationally for employment purposes since the other types of migration to foreign destinations (e.g. student migration, tourist etc.,) are still very insignificant in numbers.

In the 5% sample of SLPHC data, 26,251 temporary emigrants were identified at the time of the census. When the sample weights were applied, 369,068 emigrants were identified for the total population. This number was validated by matching it with another source of data, the Sri Lanka Foreign Employment Bureau (SLBFE), which maintains foreign employment registration data for those who go abroad for contract employment. It was noted that the number of emigrants identified in the census was nearly equal to the number of emigrants registered with the SLBFE. It is also assumed that emigrants identified in the census (carried out in July 2001) had gone abroad during the immediate two years prior to the census date.

The results from both the census and the SLBFE registration (mid 1999 to mid 2001) are roughly the same⁴. This confirms that the Sri Lankan census data is appropriate for investigation of international contract migration issues in Sri Lanka.

⁴ Based on the assumption that migrants had gone abroad for an approximate two-year contract period, I noted that the observed number of emigrants (the emigrants identified in the census, that is, 369,068 emigrants) would have gone abroad within the immediate two years prior to the census date. In order

Children were linked to their parents using the "relationship to household head" question. For instance, if the relationship was stated as "son or daughter," it referred to a child of the household head and his/her spouse. If the relationship was stated as "grandchild" then it refers to the child of a household head's child. If the head had more than one child, then grandchildren were divided evenly between the household head's children. Children who were other relatives or who were not related to the household head (6 percent of all children) were not linked⁵. They were thus excluded because it was not known who their parents were. Bryant (2008) used the same method for census data for the Philippines for linking children to their parents in order to analyse international migration and children in the Philippines. An important weakness of the census data is that it includes limited direct information about migrants' characteristics.

Methods of analyses

Both descriptive and multivariate analyses are employed. Percentages are used for the purpose of describing the characteristics of children and children's school enrolment by their parental migration status. Sample weights are used for making the 5% sample nationally representative. Sets of statistical models are employed to assess the extent to which parental migration is associated with children's school enrolment. Since the outcome variable is dichotomous, binary logistic regression analyses were used to assess the effect of the independent variables on the odds that children would be enrolled in school. Three models are employed. The first model tests whether parental migration has a positive effect on children's school enrolment without other covariates. The second model controls for children's characteristics, namely, age, gender, number of children in the household, household head's education, and ethnicity. These variables are not affected by migration. The third model controls for household characteristics of children, namely, household headship, family structure, and household living conditions or household wealth, to test whether household-level factors have any effect on facilitating children's school enrolment. These household-level variables may either be a cause or an effect of migration. For instance, household living conditions themselves may operate as a push factor for migration since many

to validate this figure, I roughly checked it with the SLBFE data base. It was verified by assuming that the number of emigrants identified in the July 2001 census was roughly equal to the two-year deployment numbers (from mid-July 1999 to mid-July 2001) recorded in the SLBFE data. This should be equal to $(\frac{1}{2}(\text{emigrants, 1999}) + (\text{total emigrants, 2000}) + (\frac{1}{2}(\text{emigrants, 2001}))) = ((\frac{1}{2}(179,735) + (182,188) + (\frac{1}{2}(184,007))) = 364059$ emigrants. These two numbers are roughly equal.

⁵ The linking was carried out with the assistance of Dr. John Bryant, formerly of the Institute for Population and Social Research, Mahidol University, in using the database program SQLite. Bryant (2008) used the same program for the Philippine Census data for linking parent and children and validated his SQLite code by applying it to the IPUMS-International version of the 1999 Vietnamese census, which does have variables linking parents and children. His variable agreed with the IPUMS-International variable for over 98 percent of children in the sample. Integrated Public Use Microdata Series (IPUMS)-International collects large population samples from national censuses and makes them available for researchers. The IPUMS-International developed "location-of-mother" and "location-of-father" variables for every sample. Sri Lankan census samples are not available in the IPUMS-International database. The IPUMS-International website is <https://international.ipums.org/international/>

people choose overseas migration as a means of uplifting their living conditions. On the other hand, remittances could also enhance household living conditions, which in turn could affect children's schooling enrolment. The population average model or Generalized Estimating Equation (GEE) method was used to adjust the standard errors (robust variance estimation) for more than one child per household with the STATA9 statistical package (Liang & Zeger, 1986).

Variables and measurement:

The variables are constructed using dummy dependent and independent variables as explained below.

Dependent variables: Child's school enrolment

The dependent variable is "child's school enrolment," which is available in the census data (P16). This variable identifies whether a child has attended school during the previous 30 days. It is measured as a dichotomous variable (1 = a given child attends school; 0 = a given child does not attend school).

Key independent variable: Parental overseas migration status

The key independent variable of the study is parental overseas migration status on the date of Census. This variable was derived from the question P0 in the household questionnaire linking parents to their children. Given the limitation of data, return overseas migrant parents may have been included in the non-overseas migrant category if they have not mentioned that their previous residence as foreign country. This study uses 4 categories: (a) children of non-overseas migrant parents or children of non-migrants (NM), (b) children of overseas migrant fathers or children of migrant fathers (MF), (c) children of overseas migrant mothers or children of migrant mothers (MM), and (d) children with both parents overseas migrants (BPM). Note that the children of non-migrants (the first category) might also include children whose parents are *internal migrants*. Internal migrants were not taken as a separate category because focus here is the children of international labour migrants.

Other independent variables

Other independent variables include child's age, gender, number of children in the household, ethnicity, household head's education, household headship, family structure, and household living conditions or wealth. Previous studies used similar variables as predictors of children's school enrolment in multiple regression models (Arunathilake, 2006; Kuhn, 2006).

Child's age in this analysis includes 3 categories: age 5-9 (primary school), age 10-14 (junior secondary), and age 15-17 (senior secondary or above). Child's gender includes 2 categories, male and female. The total number of children in the household comprises 2 categories: child's household has 4 or more children, and child's household has 3 or fewer children. Child's ethnicity includes 2 broad categories: a given child is Sinhalese, and a given child is non-Sinhalese. Household head's level of education consists of 4 categories: never been to school, primary education, junior secondary education, and senior secondary and above. Household headship consists of 2 categories: male headship and female headship. The family structure includes 2

categories: a given child lives in an extended family, and a given child lives in a nuclear household.

The household wealth index is obtained using 8 variables of household characteristics. It is constructed following the method used by Filmer and Pritchett for the household wealth index (2001; Filmer 1999). Filmer and Pritchett used both housing characteristics and assets owned by the household members, collected in the DHS, as a measure of a household wealth to predict educational outcomes in developing countries. Since Sri Lankan census data did not include household assets, housing characteristics and basic facilities collected in the census data were used. The information reflects approximate household living conditions or wealth condition of households. These variables include housing construction materials of roof, walls, and floor, as well as house structure, number of rooms, type of toilet available, type of lighting, and house ownership. Each variable was constructed as a dummy, considering quality of materials or facilities (1 = good; 0 = bad or poor) related to each housing unit. Each variable was given an equal weight. The wealth index is obtained by employing the Principal Component Analysis (PCA) method. The first principal component is divided into 4 quartiles. The highest quartile (4th) denotes the highest household living/wealth condition and the lowest quartile (1st) indicates the poorest household living/wealth condition. Next, household wealth was re-categorized into 3 categories. The first quartile denotes poor, the middle two quartiles denote average, and the 4th quartile denotes rich.

Results

Descriptive analysis

The sample size for the study was 260,533 children aged between 5 and 17, obtained from the 5% sample of population and housing census, 2001, Sri Lanka. The sample weights were employed in order to make the sample nationally representative. The children's individual and household characteristics by their parental migration status are given in Table 1.

Table 1: Children's characteristics by their parental migration status -2001

Children's Characteristics	Parental migration status (%)				Total
	Non-migrant parents (%)	Mother abroad	Father abroad	Both parents abroad	
Age					
5-9	37.3	35.5	44.3	45.6	37.3
10-14	38.0	40.5	38.2	37.9	38.2
15-17	24.7	24.0	17.5	16.5	24.5
Total %	100.0	100.0	100.0	100.0	100.0
Gender					
Male	50.8	52.6	51.0	50.0	50.9
Female	49.2	47.4	49.0	50.0	49.1
Total %	100.00	100.0	100.0	100.0	100.0
Number of children in the HH					
1-3 children	79.9	82.7	79.7	77.7	80.0
4 or more children	20.1	17.3	20.3	22.3	20.0
Total %	100.0	100.0	100.0	100.0	100.0
Ethnicity					
Sinhalese	80.7	80.7	56.7	64.5	80.3
Non-Sinhalese	19.3	19.3	43.3	35.5	19.7
Total %	100.0	100.0	100.0	100.0	100.0
Household head's education					
Never schooling	6.5	9.0	4.1	5.4	6.5
Primary education	22.1	30.4	12.6	17.2	22.2
Junior secondary	30.8	36.7	23.4	31.9	30.9
Senior secondary and above	40.6	23.9	59.9	45.5	40.4
Total %	100.0	100.0	100.0	100.0	100.0
Family structure					
Extended family	27.0	39.1	42.8	85.6	27.7
Nuclear family	73.0	60.9	52.2	14.4	72.3
Total %	100.0	100.0	100.0	100.0	100.0
Household headship					
Male headship	85.7	86.8	11.5	59.3	84.5
Female headship	14.3	13.2	88.5	40.7	15.5
Total %	100.0	100.0	100.0	100.0	100.0
Household living condition					
Poor	31.9	40.0	11.0	9.8	31.9
Average	31.1	33.3	28.5	15.1	31.1
Rich (Better)	37.0	26.7	60.5	75.1	37.0
Total %	100.0	100.0	100.0	100.0	100.0
Total number of children with sample weights)	3,722,171	140,364	63624	4397	3,930,556
Total number of children (5%)	246,392	8935	4883	323	260,533

Source: All percentages shown are derived from 5% sample of SLPHC, -2001 with sample weights.

The results show that in Sri Lanka, 5.4% of children aged between 5 and 17 are children of overseas migrant parents, while 94.6% are children of non-migrants. The greater differences between children of migrants and non-migrants can be observed through children's household level characteristics such as household structure and household headship. Data shows that nearly half of children of migrant fathers and children of both parents abroad belong to the young age category (5-9), while a higher proportion of children of migrant mothers are from middle age group (10-14). Although 81% of children of both non-migrants and migrant mothers comprise of Sinhalese ethnicity, nearly one half of children of migrant fathers consist of non-Sinhalese. Among Sinhalese ethnicity married women dominate in overseas migration while among non-Sinhalese married men dominate. The three fourths of children whose mothers abroad live in households that head had a junior secondary or lower level of education, whereas 60% of children of migrant fathers and 41% of children of non-migrants live with household head that had an upper secondary or above level of education. The percentage of children living in poor households (40%) is highest among children of migrant mothers, followed by those of non-migrant parents. The data indicates that the proportion of children of migrants living in extended households is high compared to the children of non-migrants.

Descriptive results of the children's school enrolment across parental migration status and children's characteristics are shown in Table 2. It is evident that the children of migrant fathers are better off than children of other categories in terms of school enrolment irrespective of their socioeconomic characteristics. The enrolment is high for young children (ages 5-9 and 10-14), compared to the older children (ages 15-17). The percentage of children enrol in school vary depending on whether migrant parent is mother, father or both parent. It can be noted that the children of migrant fathers and children of both-parent migrants had a higher percentage of enrolment irrespective of children's age and gender. Especially, after compulsory level, the higher proportion of children of migrant fathers continues schooling compared to other groups of children. Overall, children of migrant fathers have relatively higher percentages of school enrolment compared to children of other groups regardless of their ethnicity and household head's level of education. Children of migrant mothers living in extended family or in female-headed household have higher enrolment compared to than that of male-headed households or those who live in nuclear households. All categories of children of migrants receive relatively more support from extended family compared to the children of non-migrants. There are important differences in percentage of children enrolling across their living conditions (wealth index) and parental migration status. Children of migrant mothers in poor households experience relatively higher enrolment (86.0%) compared to the children of non migrants (82.5%). Because mostly poorer children tend to drop from school to help their families by employing child labour may have reduced with the mother migration. Looking closely, descriptive findings highlight that on an average children of migrants are better off in enrolling school than children of non-migrants.

Table 2: Children's school enrolment by parental migration status-2001

Children's Characteristics	Parental migration status (%)				Total
	Non-migrant parents (NM) (%)	Mother migrant (MM)	Father migrant (MF)	Both parents migrants (BPM)	
Age					
5-9	93.7	93.6	94.7	92.5	93.7
10-14	93.0	93.1	95.8	95.8	93.0
15-17	68.3	68.0	81.0	80.3	68.4
Gender					
Male	86.5	86.7	92.9	90.6	86.6
Female	87.8	87.9	92.5	93.0	87.9
Number of children in the family					
1-3 children	87.5	87.3	92.9	93.1	87.6
4 or more children	85.6	86.9	92.0	87.2	85.8
Ethnicity					
Sinhalese	88.9	88.5	94.6	96.2	89.0
Non-Sinhalese	79.8	81.9	90.4	83.7	80.2
Household head's education					
Never schooling	75.4	86.5	86.5	77.1	76.1
Primary education	83.2	86.3	88.6	87.3	83.4
Junior secondary	87.0	88.2	92.6	92.7	87.1
Senior secondary and above	91.3	87.3	94.1	94.5	91.3
Family structure					
Extended family	86.5	88.2	93.4	92.0	86.8
Nuclear family	87.4	86.6	92.3	90.1	87.4
Household headship					
Male headship	87.8	87.0	92.5	93.9	87.8
Female headship	83.4	89.0	92.8	88.7	84.4
Household living condition					
Poor	82.5	86.0	91.2	80.6	82.3
Average	87.9	88.4	92.3	90.5	88.0
Rich (Better)	90.7	87.7	93.3	93.5	90.7

Source: All percentages are shown 5% sample of SLPHC, -2001 with sample weights

Multivariate analysis

The purposes of multivariate analyses are to examine the extent to which parental migration is associated with children's school enrolment accounting for other individual and household factors. The results of logistic regression estimates are given in table 3. The results are interpreted using odds ratios ($\exp(\beta)$). If the odds ratio is between 0 and 1, it indicates decreased odds of children enrolling school given a certain condition. If the odds ratio is greater than 1, it indicates the increased odds of children enrolling school given a certain condition. The first model shows that if the children have father overseas, the odds of enrolling in school is 96% higher than those of non-

migrant parents. Both parents migrating overseas is also significantly associated (at $p < 0.05$) with the odds of children attending education. However, having a mother overseas is not significant in predicting the odds of children attending education in the first model. The second model shows the total effects of parental migration on children enrolling education controlling for children's characteristics. Results show that father overseas migration increases the odds of school enrolment by 80%. Mother migration increases the odds by about 13% compared to children of both parents not abroad. The significance of both parents overseas disappears in the second model. In the third model, household characteristics of children are controlled for. Effects of father's overseas migration and mother's overseas migration remain in the third model and father and mother overseas migration increase the odds of enrolment by 79% and 16% respectively. Exploring a model using mother overseas as a reference category, results (not shown in tables) show that father migrated for overseas has a larger positive influence on children's enrolling school than mother overseas migration. Children of migrant fathers 54% more likely enroll school compared to children of migrant mothers.

For the children's characteristics, odds ratios do not much vary between second and third models. Children's characteristics and household characteristics included in the models (age, gender, ethnicity household heads' education household headship, family structure and household living condition) do contribute significantly in explaining children's school enrolment.

Children of above compulsory age 87% less likely to enroll in education compared to primary school age children. Female children are 15% more likely to enroll in education compared to male children. The household head's education has a significant impact on their children's education. Results show children living with household head who have lower educational level significantly lower the odds of their children enrolling school compared to living with higher educated household heads. Children who live with household head who had never been to school are 72% less likely to enroll compared with children living with household head who had above senior secondary level. Living in household of highest living condition group (4th quartile) increases the odds of educational attendance by 90% compared to the poorest group (1st quartile).

Table 3: Logistic regression estimates of parents' overseas migration on children's school enrolment

	Model 1			Model 2			Model 3		
	Coef.	Std. Err.	Exp (B)	Coef.	Std. Err.	Exp (B)	Coef.	Std. Err.	Exp (B)
Parents' migration status									
(Ref. children of non-migrants)									
Children of									
migrant mothers	0.051	0.051	1.053	0.120	0.048	1.127**	0.143	0.048	1.153**
Children of migrant fathers	0.675	0.675	1.964***	0.588	0.088	1.800***	0.585	0.090	1.795***
Children of both parent migrant	0.439	0.439	1.552*	0.374	0.225	1.454	0.317	0.228	1.372
Age (Ref: 5-9)									
10-14									
15-17				-0.133	0.021	0.875***	-0.147	0.021	0.863***
Individual characteristics									
<i>Gender (ref. male)</i>									
Female									
<i>Ethnicity (ref. Non-Sinhalese)</i>									
Sinhalese									
<i>No. of children (ref. less than 4)</i>									
Four or more children									
<i>HH head's education</i>									
(ref. Senior or above secondary)									
Never schooling									
Primary education				-1.166	0.031	0.312***	-0.889	0.033	0.411***
Junior secondary				-0.717	0.023	0.488***	-0.534	0.024	0.586***
Household characteristics									
<i>HH headship</i>									
(ref. female headship)									
Male headship									
<i>Family structure (ref. extended)</i>									
Nuclear family									
<i>Household living condition (ref. poor)</i>									
Average									
Rich (better)									
Wald Chi-Square									
	69.66		16728.90			0.648	0.024	1.911***	
Prob > chi2									
	***		***			***		***	
No. of observations									
	260533		260533			260533		260533	

Note: ***p<0.001; **p<0.01; *p<0.05.

Discussion and conclusion

In Sri Lanka, international labour migration and children left behind issues have always been discussed in the literature, usually from the perspective of female migration to Middle East countries and largely emphasizing the social costs of mother migration. Therefore, this study moves one step further to look at children left behind in comparative aspects, considering not only children of migrant mothers, but also children of migrant fathers, with comparisons to children of non-migrants, and how such migration processes impact children's school enrolments. The findings indicate that both father and mother migration positively affects children's school enrolment compared to that of children of non-migrants, when controlled for children's individual

and household characteristics. Though the analyses included children left behind by both parents, those numbers are insignificant and in the final model did not have a significant impact on children's enrolment. Therefore, the results discussed giving considerable attention to the children of migrant mothers and fathers.

The findings from multivariate logistic regression analyses show that father migration has a greater impact on school enrolment. This finding supports the evidence from previous studies of the Philippines, Mexico, Ghana and Bangladesh, which emphasize that migration of fathers could enhance children's school enrolment and investment in their education (Bryant, 2008; Kuhn, 2006; Morrison & Schiff, 2008; Guzman et al, 2008).

There are several possible explanations for this relationship. (a) a majority of children of migrant fathers enjoy relatively high socioeconomic status even before migration, compared to the other groups; (b) when the father migrates abroad, the mother becomes head of the household and can easily fulfil the roles that he had performed within the family; (c) children can easily manage education with mother and the relatives; (d) children of migrant fathers receive better quality care since the mother is the primary caregiver; (e) the majority of migrant fathers receive higher salaries than migrant mothers so that the amount of remittance received by migrant fathers' families are relatively high; (f) thus investment in children's education, especially for out-of-school extra tuition education is also fairly high; (g) father migration has less disruptive effect on families left behind than does that of migrant mothers as it does not cause changes in primary caregivers' roles. All these factors allow children of migrant fathers to increase and lengthen their school enrolment.

The present study finds that mother migration itself does not put children at a disadvantage. Children of non-migrants, whose mothers stay at home, do not enjoy greater advantages than do children of migrants. Multivariate findings reveal that when controlled for individual and household characteristics mother migration too has positive impact on children's school enrolment. The present study findings suggest that mother migration could also increase poor children's school enrolment compared to the children of non-migrants, controlling for children's individual and household factors. It is further supported by the Philippines experiences which reveal that children of migrant mothers are also doing better in school compared to the children of non-migrants (Asis, 2006).

More than half of children of migrant mothers belonged to the low level of household living condition. This national level data reconfirm the findings of previous studies that the majority of Sri Lankan transnational women migrants come from poorer segment of society and majority of them were not previously employed in Sri Lanka (Gamburd, 2008; Korale, 1985). It can be argued that remittances of mother's migration increase not only household income but also increase the investment on children's education and thus, increase schooling enrolment. Remittances from migrant mothers also help children of poor families keep away from child labour compared to children of non-migrants in same level of living condition, as remittances could support for direct and indirect cost associated with children's education.

Although, in general school enrollment for non-Sinhalese children are less than majority Sinhalese children, parental migration could advance children's school enrolment irrespective of their ethnicity. Since fathers are dominated in overseas migration, among non-Sinhalese children, remittances received from migrant fathers may affect on investment on their children's education and it may have increased school enrolment.

Fifth, the findings indicate that household living condition or wealth had strong impact on children enrolling education. In Sri Lanka, the existence of free education and age 5-14 year compulsory education legislation system provides the greater access to education irrespective of their household income. However, recent research finds direct and indirect cost of education, opportunity cost of child time and child labour decrease the children's school enrolment especially, poorest segment of the society (Arunathilake, 2006). A large number of children who dropped from secondary school after compulsory level (O/L or A/L) have to depend on their parents' money for obtaining higher education or training. Mostly, such training or education is provided by the private institutions. So, if parents could afford children to continue their education. Thus parental migration may also support continuation of children's education by sending remittances. Past studies also found a positive relationship between remittances and children's educational expenditure and they argue that remittances provide greater support for education and raise educational enrolment by increasing the ability of households to pay for education thereby increase educational attainment of children in migrant families (Asis, 2006; Bryant, 2005; Kuhn, 2006; Roongshivin, 1985; Yang, 2005). This finding also seems to suggest that in overall parental migration have positive effect on children's school enrolment. Therefore, policy makers should start looking at parental migration in a more positive light.

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