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### Paper title:

Children's time use in developing countries: Comparative evidence from Thailand, Philippines, Indonesia, and Vietnam

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# Short Abstract: (200 max.)

Children's time use is an important factor affecting human capital outcomes such as educational attainment and future employment. Thus far, little attention has been paid to how children's time use varies across and within middle- and low-income countries compared to more economically-advanced countries. In this article, we use comparative survey data to examine children's time use in four countries with varying degrees of development in the Asian region—the Philippines, Thailand, Indonesia, and Vietnam. We selected children's time use as the key outcome and, based on previous literature, we hypothesize that children's gender, and household characteristics influence the organization of children's daily lives, in particular how they allocate their time between leisure, study (outside school), housework, and work that supplements family income. Using a multivariate general linear modelling, we find evidence of gendered time allocation, with girls generally more likely to perform housework and devote less time to leisure, while boys generally spend more time working to support the household and more time in leisure. We also find evidence that family socioeconomic status is a strong predictor of children's time allocation. The detailed results suggest nuanced processes differentiating the country samples, and we discuss both their theoretical and practical implications. (200/200)

## Paper title:

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#### **Extended Abstract**

Time is a precious commodity, and how children spend their time is an important factor influencing human capital outcomes such as educational attainment and future employment. Distinctions have emerged within existing scholarship in conceptualizing children's time use between rest (sleep), leisure (play), work, and education, suggesting that economic pressure in less well-off households may constrain and structure children's time use differently compared to children in better-off families (Grootaert & Kanbur, 1995). In particular, children in low-income households tend to spend more time in economically significant activities at the expense of their engagement in school and leisure. While existing studies on children's time use are insightful, there are few from developing countries and the results, therefore, may not hold relevance to the realities of children in developing contexts (Bornstein et al., 2012). To date, relatively few studies have examined how children's time use patterns vary across and amongst middle- and low-income countries (Hsin, 2007)

The limited number of studies conducted in developing contexts do offer some insight relevant to the current study. Children in developing countries are more likely to allocate more time to work (both household chores and market work) compared to children in developed countries (Hsin, 2007; Larson and Verma, 1999) and gender is an important explanatory factor in children's time use allocation. One common pattern observed in low-income countries is that age and gender play an important role in shaping children's daily lives (Ritchie et al., 2004). Specifically, responsibilities to engage in economically significant activities (e.g. market work) increase with age, with boys typically performing more market work whereas girls are more engaged in domestic labour (Hsin, 2007).

In addition to gender differentials in children's time use, other household characteristics including household size, parents' education level, and parents' migration status may also structure how children spend their time. For instance, parental educational level and occupation were shown to affect child outcomes by way of shaping the types of activities conducted in the household and how family members interact with each other (Wamani et al., 2004; Dubow et al., 2009). However, findings are far from conclusive. For instance, some studies demonstrate that household size is negatively correlated with children's schooling (Steelman et al., 2002). Such findings are often explained by the 'resource dilution' logic of finite resources: parents who have fewer children can afford to invest more money in their children's education (Maralani, 2008). However, scholars have increasingly critiqued the resource dilution thesis, and instead highlighted the nuanced relationship between household size and child outcomes. Maralani (2008) found a positive association between family size and schooling among older child cohorts but a negative association for younger children. Similar ambivalence exists with regards to how parents' migration status affects children's time use. Nguyuen and Linh (2016) found that children with absent parents spend less time on school homework and more time on leisure and play. This is especially true if it is the mother who is migrant. Similarly, Portner (2016) found that girls reduce their time spent on schoolwork more pronouncedly when their mother is absent. In contrast, other studies have suggested that children in migrant households dedicate more time to schoolwork and therefore exhibit higher school grades compared to children in non-migrant households (Botezat & Pfeiffer, 2014). As one can see, existing evidence is contradictory.

In light of the lack of systematic empirical evidence on children's time use in developing countries, the current investigation seeks a broader understanding of how gender, migration status of parents, and household characteristics explain variation in children's time use using data from four lower-middle income countries within Southeast Asia.

We draw data from the Child Health and Migrant Parents in South-East Asia (CHAMPSEA) project, a longitudinal mixed-methods study that surveyed children and other household members in 2008-09 in four Southeast Asian countries with varying degrees of development. We examine children's time use as the key outcome in Indonesia (N = 513), the Philippines (N = 498), Thailand (N = 518), and Vietnam (N = 507). Our sample included children of age group between 9 and 11 years. We hypothesize that children's gender, the migration status of the parents, household characteristics, and the carers' backgrounds influence the organization of children's daily lives, in particular how they allocate their time between leisure (play), study (outside of school), housework, religious activities, schooling, traveling, taking care of family members, and jobs that supplement the family income. The time spent on each activity is recorded in minutes per day. We build a multivariate general linear model by regressing the logged variables of time use on the independent variables described above. The analysis is performed for the four countries separately.

## PRELIMINARY RESULTS

Our preliminary findings suggest that for all four countries except Vietnam, male and female children have substantially different patterns of time use. In Indonesia, boys spend more time playing than girls, while girls spend more time practicing religious activities, studying and taking care of housework than boys. Similar pattern is also found in the Philippines and Thailand. Girls spend more time studying, taking care of family members, and doing housework than boys in the Philippines. Girls spend more time studying, practicing religious activities, and taking care of family members and housework than boys in Thailand. For Vietnam, however, no gender difference is observed among the time use categories.

Our findings also show that the family's socioeconomic status (SES) is a significant determinant for children's time use patterns. Interestingly, once again, this relationship was substantiated in Thailand, The Philippines, and Indonesia, but not in Vietnam. In Indonesia, children from the lowest SES group spend less time schooling and studying, and more time in taking care of family members and conducting housework. In the Philippines, children from the lowest SES group spend less time studying and traveling and more time in taking care of family members and in family economic activities than the other groups. In Thailand, children from the lowest SES group spend less time studying than the middle and the highest SES groups. For Vietnam, there is no significant difference among the different SES groups.

In addition to gender and socioeconomic differences, our findings also show that for the Philippines, carer's level of education plays a key role in how much time children spend on religious activities. Children whose carers received education of upper secondary schools or above spend significantly more time on religious activities than those whose carers received education of lower secondary schools or below. Carer's age also correlates with the time children spent on taking care of family members. It is shown that for the Philippines, children spend less time taking care of family members when the carers are of older ages. Our findings also show that for Thailand, children who have siblings spend significantly more time taking care of family members than those who do not have siblings.

Lastly, for Vietnam, although gender and socio-economics do not predict how children spend their time, our findings show that other family characteristics have significant impacts. Father's occupation is a significant predictor for time spent on religious activities and schooling. Children whose fathers held elementary jobs spend less time practicing religion and schooling. Children also spend more time practicing religion when mothers are the carers, and when the household is a transitional migrant household. For children who have siblings, they spend more time studying and taking care of family members. Also, similar to that in the Philippines, children spend less time taking care of family members when the carers are of older ages.

The final part of the paper discusses the theoretical implications of these findings in detail, including a consideration of the nuanced processes operating in each study setting and how these relate to wider cultural and socio-economic differences between the four countries. This study contributes empirical evidence to inform current debates and scholarship about children's time use in developing contexts, and carries implications for social policies and programs that aim to improve human capital outcomes and promote wellbeing for children living in the developing world.

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