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A Longitudinal Analysis of Well-Being of Ghanaian Children in Transnational Families

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This study is the first to employ panel data to examine well-being outcomes—self-rated health, happiness, life satisfaction, and school enjoyment—of children in transnational families in an African context. It analyzes data collected in 2013, 2014, and 2015 from secondary schoolchildren and youth (ages 12–21) in Ghana (N = 741). Results indicate that children with fathers, mothers, or both parents away and those cared for by a parent, a family, or a nonfamily member are equally or more likely to have higher levels of well-being as children in nonmigrant families. Yet, there are certain risk factors—being a female, living in a family affected by divorce or by a change in caregiver while parents migrate—that may decrease child well-being.

Sub-Saharan Africa is a major exporter of labor migrants to the world. A significant number of these migrants originate from Ghana. Accurate figures on the number of Ghanaian migrants abroad are missing because of the lack of systematic data collection and also because of the illegal status of migrants overseas. By some estimates, the stock of Ghanaians who left the country for Western destinations had reached 825,000 by 2010, excluding undocumented migrants (World Bank, 2011). By other estimates, a total of 1.5 million Ghanaians reside abroad in Europe, North America, other African countries (predominately in the Economic Community of West African States), the Middle East, and Asia (Twum-Baah, 2005). Many of these migrants are parents who, either by choice or due to strict migration regulations, leave their children in Ghana in the care of a family or a nonfamily member, thus creating transnational families. There are no precise statistics on the number of children living in transnational care in Ghana, but nationally representative data suggest that approximately 37% of children under the age of 18, excluding orphans, lived without at least one biological parent in 2014 (Ghana Statistical Service, Ghana Health Service, and ICF International, 2014). Whether this is due to migration or other reasons is unknown.

Despite the size of this population, relatively little is known about it. Parental migration is often motivated by a desire to improve the living standards of children and other family members, although it is increasingly recognized that such benefits may come with social and emotional costs. Indeed, studies show that parental migration can have negative consequences on child well-being measured with outcomes such as education (Cebotari & Mazzucato, 2016; Cortes, 2015; Hu, 2013; Kandel & Kao, 2001; Nobles, 2011), physical and subjective health (Cebotari, Mazzucato, & Siegel, 2017; Dreby, 2010; Wen & Lin, 2012), psychological health (Graham & Jordan, 2011; Mazzucato & Cebotari, 2017), and happiness (Jordan & Graham, 2012). Through detailed analyses, these studies inform theoretical explanations and highlight the challenges that transnational families face in maintaining active relationships across borders. At the

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same time, these studies show that families continue to operate across large distances and over longer periods of time, and are able to be ever more resilient to the negative effects of migration. It is now acknowledged that children of migrants live in complex transnational care arrangements in the country of origin (Dreby, 2010; Parreñas, 2005). Different forms of transnational care allow children to continue to experience the comfort of a familial environment at home while simultaneously enjoying the economic benefits of migration (Antman, 2012; Donato & Duncan, 2011). Yet how the complexity of transnational family arrangements affects child well-being is an under researched area of inquiry.

This study builds on recent research on children in transnational care in several sub-Saharan African countries that used a range of indicators to investigate psychological, educational, and health well-being outcomes (Carling & Tønnessen, 2013; Cebotari & Mazzucato, 2016; Cebotari et al., 2017; Mazzucato & Cebotari, 2017; Mazzucato et al., 2015). This study focuses on subjective measures of child well-being and contributes to the literature in four ways. This is the first study to employ panel data to draw inferences with regard to child wellbeing in African transnational families. Using panel information is important because child outcomes are dynamic events and the existing studies almost exclusively rely on data snapshots to advance theoretical and empirical arguments. Second, this study investigates the well-being of children who experience different transnational care arrangements. Within this setting, we move beyond the classical measure of who the migrant parent is and additionally look at internal and international parental migration, and who the caregiver of the child is. We distinguish between different transnational family characteristics also in relation to other conditions that may be affecting child well-being, such as the stability of the care arrangement, marital status, and the gender of the child. As a result, we contribute to the literature by bringing the complexity of transnational family life into focus when measuring child well-being. Third, this study adds to small-scale qualitative studies that compose the majority of research on transnational families by comparing children in transnational care with those in nonmigrant families, thus enabling conclusions of whether the observed outcomes are relevant for a larger population of children. Fourth, the African context is a contribution to the literature, which is mostly based on evidence gathered in Latin America, Southeast Asia, and on internal migration in

China. There is a gap in the literature on large-scale analyses of African cases (although see Carling & Tønnessen, 2013; Cebotari & Mazzucato, 2016; Cebotari et al., 2017; Gaydosh, 2015; Goldberg, 2013; Madhavan, Schatz, Clark, & Collinson, 2012; Mazzucato & Cebotari, 2017). The African geographical focus is important due to specifics in family norms governing the function of transnational families. The widespread practices of child fostering and social parenthood, where it is customary for children to live in nonparental households, may result in outcomes that are different from those found in other parts of the world.

This study analyzes a sample of Ghanaian schoolchildren and youth between the ages of 12 and 21 years. The age range reflects the distribution of pupils in the schools and classrooms of the surveyed areas. For convenience, we use the term "children" for this age group to emphasize the type of relationship they have with the migrant parents. In the following, we discuss the context and the mechanisms under which migration may affect child well-being.

Migration and the Well-Being of Children

Since the turn of the century, transnational family studies emerged to focus specifically on families living across borders. Within this stream of literature, the outcomes of children left behind have become an important area of inquiry. Although there is a substantial interest in the well-being of children in transnational care, theoretical input remains underdeveloped. In general, parental migration is viewed as a strategy to improve the well-being of children and other family members when there is a state of economic deficiency in the country of origin (Stark & Bloom, 1985). However, questions remain about whether migration is a successful strategy to improve the well-being of family members who stay behind (Adams & Page, 2005). When looking specifically at children in transnational care, research indicates that parental migration may improve children's socioeconomic status (Wen & Lin, 2012), their health, and nutrition (Asis, 2006; Carling & Tønnessen, 2013), as well as their educational aspirations, attainment, and performance (Antman, 2012; Kandel & Kao, 2001). At the same time, studies articulate concerns about the emotional costs experienced by children following parental departure, especially when mothers migrate (Jordan & Graham, 2012; Parreñas, 2001).

The effects of migration on child well-being must, however, be understood in the context surrounding the transnational care of children (Graham & Jordan, 2011; Mazzucato & Schans, 2011). The transnational family literature focuses predominantly on specifics of parental migration and finds that maternal migration often results in poorer outcomes for children. Specifically, studies conducted in Southeast Asia and China found that separation from a mother makes children unhappier (Jordan & Graham, 2012), more disadvantaged in health, and less engaged in school (Wen & Lin, 2012). Drawing on ethnographic work in the Philippines, Parreñas (2005) found that children are more emotionally insecure following maternal migration than when fathers migrate. A negative relation between maternal migration and child well-being was found by research conducted in other geographical areas, such as Latin America (Dreby, 2007; Schmalzbauer, 2004) and Africa (Goldberg, 2013; Mazzucato et al., 2015). However, one must be cautious in making claims about negative consequences on children when mothers migrate, as this area of inquiry is recent and largely unexplored (Madhavan et al., 2012; Mazzucato & Cebotari, 2017).

Transnational family studies, for the most part, look at international migration. There is also a large body of research that has been conducted in China and relates to internal migration, although over large distances (Gao et al., 2010; Hu, 2013; Wen & Lin, 2012). A number of recent studies looked at the effects of internal and international parental migration in relation to well-being outcomes and found that more often than not children whose parents migrated abroad do not have poorer physical or psychological health than children whose parents migrated internally in Ghana and Nigeria (Cebotari et al., 2017; Mazzucato et al., 2015). Another study found no association between internal or international parental migration and the school performance of Angolan and Nigerian children, but Ghanaian children were found to fare worse in school when parents were abroad than when parents were in the country (Cebotari & Mazzucato, 2016). Based on this evidence, there are reasons to believe that these two forms of migration will impact child well-being differently. Insights from the literature suggest that close proximity is necessary between the child and the primary caregiver for optimal child development (Suárez-Orozco, Todorova, & Louie, 2002). When parents migrate internationally, they usually encounter administrative and financial difficulties, which prevents them from physically seeing their children on a regular basis. International parental migration also creates higher expectations in children and caregivers back home regarding reunification and material benefits (Dreby, 2007; Parreñas, 2005). When these expectations are unmet, children may experience psychological and material difficulties that may affect their wellbeing.

The role of the caregiver in the life of children is conceptually important but does not feature prominently in the transnational family research (Mazzucato & Schans, 2011). Who the caregiver is when parents migrate plays a crucial role in the development of children in transnational care. If the parent who migrates is the primary caregiver, then children are more likely to experience difficulties because of separation (Heymann et al., 2009). When parents migrate, children must adapt to new care arrangements, form new attachments, and accept new authority figures (Schmalzbauer, 2004). As such, the caregiver plays a fundamental role in the life of children by providing a good quality parenting when one or both parents migrate. In Tanzania, Gaydosh (2015) finds that many parents decide to migrate only if they are able to find a close family member to care for their children. The availability of kin to provide care to children is seen as an enabling factor allowing African parents to migrate alone for work (Madhavan et al., 2012). Conversely, when migrant parents have difficulties finding a suitable caregiver in the local network of people, then tensions may arise within the transnational family (Poeze, Dankyi, & Mazzucato, 2017). The quality of care provided by the caregiver is also of relevance and is expected to be higher when the caregiver is one of the parents of the child or a close family kin member (Schmalzbauer, 2004).

The above discussion has focused on the characteristics of the family members (which parent migrate and who cares for the child) and on the type of migration (internal or international). There is another set of characteristics that pertains to the context within which migration takes place both at the family and societal levels. These relate to the stability of the care arrangement, whether parents are divorced or separated, the gender of the child (related to gender norms), and more generally to the family normative context. These are discussed in the following.

Little is known about how stable the care arrangements are for children in transnational care. The role of the caregiver and the frequency with which children change caregivers have been traditionally the focus of child psychology (Amato & Cheadle, 2005) and demographic scholarship (Gaydosh, 2015; Goldberg, 2013; Madhavan et al., 2012).

Research shows that disruptions in care arrangements increase the risk of children's violence, risky health behavior, adolescent childbearing, early school dropout, and greater mental discomfort (Boynton-Jarrett, Hair, & Zuckerman, 2013; Goldberg, 2013). Not until recently was the stability of the care arrangement introduced in the transnational family literature (Mazzucato et al., 2015). Studies point to a variety of factors that may disrupt the care arrangements of African children, including parental migration and the remitting flow (Poeze et al., 2017), parental divorce (Madhavan et al., 2012), child return migration (Bledsoe & Sow, 2011), and attending school or providing help to kin (Goody, 1982). These findings highlight the importance of studying the stability of the care arrangement and how it relates with child wellbeing in transnational families.

A recent body of research has focused on the relation between parental marital status and the well-being of children in transnational care. Evidence from migration research in Ghana reveals that parental absence may strain spousal relations, especially when women migrate singly or when both parents are away at the same time (Caarls & Mazzucato, 2015). A number of studies compared child well-being under conditions of parental migration in families where parents are together or divorced and found that, more often than not, children of divorced migrant parents are worse off in terms of nutrition, fever, and diarrhea (Carling & Tønnessen, 2013); psychological health (Mazzucato & Cebotari, 2017); educational aspirations (Nobles, 2011); and school performance (Cebotari & Mazzucato, 2016). The negative outcomes associated with migration and divorce are explained by specifics of this transnational context. The migration of parents in stable unions is motivated by a desire to improve the lives of children, whereas the divorced migrant parents may not always have time and resources to invest in children, particularly if they have formed new families abroad and have children in those unions (Dreby, 2010).

Gender differences between children are also of significance when measuring the well-being of children in transnational families. Although considerable heterogeneity exists in gender norms in different contexts, the dominant narrative is one in which girls are more disadvantaged when parents migrate. In China, for example, Gao et al. (2010) found that girls in transnational care are more at risk for unhealthy behaviors such as drinking and smoking than girls in nonmigrant families. In Vietnam, Behrman and Knowles (1999) concluded that the investment in girls is sensitive to the household income, in that fewer resources from abroad are used on girls' education, with negative effects on their school success. In Ghana, qualitative evidence suggests that girls do more domestic work and can move or be moved around more easily, which may alter their quality of life (Whitehead, Hashim, & Iversen, 2007). In other contexts, however, the gender differences were found to advantage girls when parents migrate. Evidence from Mexico suggests that paternal international migration has a net positive effect on girls' educational attainment, albeit such an advantage ceases to exist when fathers migrate internally (Antman, 2012).

The normative family context in which transnational families operate is also important to take into account. Much transnational family research originates from Latin American contexts, where nuclear family norms of care are strong and where it is common for migrant parents and children to reunite at the destination or to regularly see each other at the place of origin (Dreby, 2010; Nobles, 2011). By contrast, norms of child fosterage and social parenthood prevail in many African countries, including Ghana, where many children live in the care of someone other than the biological parents (Goody, 1982; Isiugo-Abanihe, 1985; Radcliffe-Brown & Forde, 1950). These norms contribute to a high proportion of children who live apart from their biological parents, irrespective of whether the parent is a migrant. Leaving children behind in transnational care can be a preferred choice for Ghanaian parents (Dito, Mazzucato, & Schans, 2017). The education landscape in Ghana features high-quality boarding schools and parents at times prefer this option for raising their children (Bledsoe & Sow, 2011). Finally, Ghanaian caregivers were found to build harmonious relationships with children in their foster care and treat them as "their own" (Poeze et al., 2017).

Current Research

Drawing on the above-mentioned literature, we conduct an analysis that takes into account the complexity of transnational families and the possible variations occurring in these families over time. We employ several dimensions pertaining to specifics in transnational family forms. Specifically, we look at internal and international migration in connection to parental migration status and who the caregiver of the child is. In addition, we analyze the diversity in the transnational forms of living in connection to some conditions—the stability of the care arrangement, parental divorce, and child's gender—that have been identified in the literature as potential risk factors for children's well-being. We do not expect to find uniform impacts on different well-being outcomes between children in transnational and nontransnational families. In previous studies (Cebotari & Mazzucato, 2016; Mazzucato & Cebotari, 2017), we found that Ghanaian children with a migrant father and a mother caregiver were likely to have poorer psychological health compared with children in nonmigrant families. At the same time, we found that the psychological wellbeing and school grades of Ghanaian children whose parents had both migrated were lower than those of children in nonmigrant families. We also found that frequent changes in caregivers had a negative effect on children's psychological health but not on their educational performance. This study looks at other, more subjective, indicators of child well-being. By extending the range of wellbeing dimensions that are being examined, and by conducting the analysis in a longitudinal fashion, we intend to have a more detailed insight into how sensitive the results are to the particular measure being analyzed and how this changes over time. This study aims to answer the following question:

To what extent do different forms of transnational family life affect the well-being (as measured by subjective measures of health, life satisfaction, happiness, and school enjoyment) of Ghanaian children in transnational care compared with children in nonmigrant families?

Method

Data

Data were collected in 2013, 2014, and 2015 as part of a panel study on the Effects of Transnational Child Raising Arrangements on Life-chances of Children, Migrant Parents and Caregivers between Ghana and the Netherlands (TCRA Ghana). The survey gathered information on children and youth aged 12-21 in two urban areas with high outmigration rates: Kumasi and Sunyani. A national data sampling strategy was not sustainable in the context of this study given the geographical spread of high out migration areas in Ghana. The Ashanti and the Brong Ahafo Regions, in which the two cities are, respectively, located, are regions with high rates of international emigration (Twum-Baah, Nabila, & Aryee, 1995) and thus ensured that we would be able to sample enough children with international migrant parents to be able to conduct the analysis. Thus, although detailed protocols were established to allow for future replication of the data, the sample is not nationally representative.

The survey employed a stratified sampling procedure to randomly select eight low- and high-quality public and private junior high schools (JHS) and senior high schools (SHS) in the two locations. Both school types last 3 years and SHS follows upon JHS. Normally students change schools between JHS and SHS, although some schools contain both levels. The Ministry of Education in Ghana ranks public and private schools in different quality categories based on school enrollment, infrastructure, and children's final exam performance. Schools were approached and asked to take part in the survey, all of which agreed to participate. Within each school, a class was randomly selected from each of the first two grades for the inclusion in the first round of the survey (2013). We chose to survey the first two grades of JHS and SHS to have a sufficient sample and to ensure that we would have all students for at least 2 years in our panel. In addition, a random but purposive sample of children in transnational care was selected in each school to ensure a sufficient number of children with migrant parents. In the subsequent panels, the same children were surveyed until they graduated from the school. During all rounds of the survey, children were reminded about the purpose of the study and the voluntary nature of their participation.

Overall, the national school attendance rates of Ghanaian children in urban JHS and SHS are 83% and 58%, respectively (Ghana Statistical Service, Ghana Health Service, and ICF International, 2014). In our survey, the survival rates of panel children in JHS were 83% in the second round and 96% in the third round. In comparison, the survival rates of panel children in SHS were 82% and 85% in Rounds 2 and 3, respectively. These rates do not include children who graduated from school. Each year, schools were visited a second time to include panel children who may have been absent during the first visit. Reasons for other absences were mainly related to school dropout and children being transferred to other schools. Of those children who dropped out or changed schools, 48% were living with both parents, whereas 34% and 18% had one or both parents away internally and internationally, respectively, at the time of data collection.

The survey questionnaire was administered in English and filled in by students themselves under the guidance and supervision of the surveying team. The same team, composed of five trained interviewers, assisted children in completing the questionnaires during the three rounds of data collection. In total, 985 unique respondents were sampled. Of these, 405 took part at two waves and 350 took part at all three waves. This study includes only children who were present in at least two rounds of the survey. To avoid ambiguity in the status of parental absence, we omit children who were orphans of both parents at the start of the survey (N = 14).

Measures

Self-rated *well-being outcomes* generally reflect how people evaluate the quality of their life. We use four measures of well-being to capture the complexity of the concept: self-rated health, life satisfaction, happiness, and school enjoyment. In all instances, children were asked to indicate on a scale from 1 to 5 how they rate their own health, how satisfied they are with their life, how happy they consider themselves, and if they generally enjoy school. Higher scores on the scale reflect better well-being outcomes. These are measures that are broadly used in the well-being literature and have been employed and validated in previous research on transnational families (Dito et al., 2017; Donato & Duncan, 2011; Jordan & Graham, 2012).

The analysis includes two independent variables pertaining to different forms of transnational family life of children in Ghana. The first measurement provides a detailed account of the parental migration status: non migrant, father away internationally, father away internally, mother away internationally, mother away internally, both parents away internationally, and both parents away internally. The second variable defines the child's caregiver: either both parents, or, for cases where one or both parents migrated, the other parent, an uncle or aunt, a grandparent, or others. This last category includes all relationships (siblings, nonkin adults, nobody, etc.) that could not be assigned separate categories due to small sample size. For the two transnational family life variables, cases where one parent was away internally and the other away internationally (N = 71), the status of the parent who was abroad was counted. The rationale for this choice is based on evidence from the literature that shows greater difficulties for children when parents migrate over large distances (Cortes, 2015; Suárez-Orozco et al., 2002).

Individual and family-specific control variables are included in the models. Two individual-level controls include child's *gender* and *age* in full years. The four family characteristics consist of the

education of the caregiver, the duration of childparent separation, the marital status of parents, and the stability of the care arrangement. The caregiver's education is a binary indicator, where one indicates completed secondary education or more. The information about child's current caregiver—the mother, the father, both parents, a family, and a nonfamily member—was used in relation to that person's highest level of education achieved. For children cared for by both parents, the highest education level of the two parents was recorded. The use of caregiver's education in longitudinal studies is important because it accounts for changes in adult human capital levels when children change residences and live with different caregivers over time. Also, qualitative studies have shown that in contexts of international migration, the role of the child's resident caregiver (whether the other biological parent or someone else) is important for the child's well-being (Dreby, 2007; Schmalzbauer, 2004). These authors argue that a caregiver can help a child to interpret his/her parent's migration positively, provide the necessary care and affection to make a child feel cared for, and foster communication between the child and the migrant parent through long-distance phone or Internet calls. The duration of separation records the period of time since children last saw their parents in person. This measure allows for three answers: no separation, separation occurred in the past 12 months, and separation occurred over 13 months ago or more. The marital status of parents is a binary variable with married/together and divorced/separated as categories. The stability of the care arrangement is also a binary variable, where one indicates that children changed caregivers one or more times during all parental migration events in a child's lifetime.

Two socioeconomic indicators that are likely correlated with migration and child well-being are included in the models. Controlling for household wealth is important because migration is often selective along a scale of affluence. Migration of parents involves resources and those who are able to ensure better living conditions for their children may also be more likely to migrate internally or internationally. To address this selectivity, we rely on a methodological tool described by McKenzie (2005), to create a household asset index. Specifically, we employ principal components analysis to generate an index that comprises information on assets such as the ownership of durable goods (house, refrigerator, computer, and means of transportation) and the access to private utilities (toilet and bathing facilities). A second measure of children's socioeconomic status summarizes the general *living conditions* of the child. Children were asked to assess their living conditions in relation to other children on a three-category scale: better, the same, or less good. For this analysis, a binary indicator was derived, where one indicates better living conditions and zero otherwise. The two indicators are used in lieu of a direct measure of household income because it is generally acknowledged in the literature that income data are difficult to collect accurately and that expenditure and asset data better explain migration decision making, human capital formation, and health investments (Acosta, 2011; McKenzie, 2005).

A further two measures account for the *total* number of children living with the child and the number of younger children that are present in the household. These indicators comprise biological brothers and sisters as well as other children who live under the same roof with the respondent. Together, these measurements provide an account of the total number of children and the position of the surveyed children within the household. In the African context where family relations are fluid, children can derive support from each other but the presence of other children may also entail a reduction in resources if children are younger and requiring care (Eloundou-Enyegue & Williams, 2006; Smith, Lalonde, & Johnson, 2004).

Based on previous studies on transnational families, a family process variable was included to measure the *quality of the child–caregiver relationship* (Cebotari & Mazzucato, 2016; Jordan & Graham, 2012). Five response categories for the quality of the relationship ranged from (1) always open/warm to (5) never open/warm. In the analysis, we created a binary indicator where the last three categories were clustered to indicate a distant relationship and the former two to indicate a close relationship.

Interaction terms were fitted to examine the moderating relation between gender, marital status, the stability of care, and different transnational family forms. The interactions helped to establish whether there were gender-, care-, and marital-specific variations according to specifics of migration, as some transnational family studies suggest (Antman, 2012; Hu, 2013; Nobles, 2011).

Analysis

The aim of this study is to estimate the effects of different forms of transnational family life on child well-being over time. Modeling transnational family formations in relation to child well-being is complicated by the issue of migrant selectivity. The migration of parents may be positively selected in many ways, and those who are able to provide more resources for children may also be more likely to migrate. A number of controls described earlier are included in the models to partially control for migrant selection. Auxiliary analyses (not shown) were performed in which we looked at changes in the household assets and the subjective living conditions of children whose parents experienced a transition from being a nonmigrant to being an internal or an international migrant during the panel years. There was no conclusive evidence to suggest that more household resources and better living conditions were available to parents and children in the year prior to migration. However, there may also be other conditions that influence migration and child well-being that are not captured by our data, for example, the prepanel measurements of wealth, which may induce parents to migrate and affect children's well-being. We caution readers to keep this in mind as they consider the analysis.

In this investigation, we employ a fixed effects modeling strategy, where all time-invariant child and family characteristics are captured by the fixed effects method and all time events that may influence both child well-being and different transnational characteristics are accounted for by the wave (year) fixed effects. Compared with other computational techniques available such as the hybrid method (Allison, 2009), this study's fixed effects approach works with the assumption that all measured and unmeasured time-invariant variables are accounted for as long as they have the same effects at all occasions. The fixed effects modeling allows estimating the effects of change in different forms of transnational family life on the change in child's health, life satisfaction, happiness, and school enjoyment. Given the individual fixed effects modeling, the measures employed in this study are those that change over time, except for gender, which is included to produce the interaction terms.

All models add clusters of variables in a stepwise fashion to ascertain whether the effects remained once the controls were added progressively. Because of the space limitation, we only present the results of the full models. A separate model is run for each transnational characteristic in relation to each measure of child well-being. Each model estimates interactions between gender, marital status, and changes in caregiver, and the transnational family characteristics. For parsimony, only significant interactions are displayed. In all models, robust standard errors were estimated and corrected for clustering of observations at individual level. Indicators in the analyses were tested for collinearity and none was detected. Multilevel modeling was considered but not fitted because, with only eight schools in the sample, the number of units at the second level was too small for a solid specification.

Results

Table 1 provides a descriptive overview of the indicators employed in this study. Data showed that on average, children tended to report positive wellbeing outcomes. Within the sample population, 51% of children had at least one parent away internally or internationally at the time of the survey. Of those children living without a parent due to migration, the greatest proportion had a father away. When a parent migrated, children often stayed in the care of the other parent, followed by an uncle or aunt and other family members. Female respondents represented approximately half of the overall sample. The average age of children at the time of the surveys was 15.61 (SD = 2.01). The number of children separated from their parents for less than a year due to internal or international parental migration was almost equal to those who have been separated from their parents for a longer period of time (24% and 23%, respectively). Data show that 29% of children changed their caregiver one or more times during current and past parental migration events. Most children had parents who were married or in a relationship and reported a good relationship with their caregivers at home. In general, children reported living with up to three other children in the same household, and on average there were up to 1.39 (SD = 1.35) younger children in the residence. Children also declared having, on average, 3.65 (SD = 1.51) assets at home and approximately half of them reported having better living conditions than other children.

Table 2 shows the transition rates of parental migration status over panel years. Data revealed that of all children, the majority experienced no change in their parents' migration status. In the observed period, 88% of children with nonmigrant parents remained so; 79% and 81% of fathers and mothers, respectively, remained abroad; 71% and 65% of fathers and mothers, respectively, stayed as internal migrants in Ghana; and 70% of children with both parents away internally or internationally remained so. When children transitioned from having a nonmigrant parent to a migrant parent,

Table 1
Means/Percentages (SDs) of Dependent and Independent Variables

	Full panel sa	mple
Variables	%/M (SD)	N/n
Health	4.08 (0.93)	1,835
Life satisfaction	3.96 (1.01)	1,835
Happiness	4.01 (1.01)	1,835
School enjoyment	3.92 (0.96)	1,846
Parental migration status	100	1,848
Nonmigrant parents	48.92	904
Father away internationally	15.42	285
Father away internally	14.18	262
Mother away internationally	2.92	54
Mother away internally	6.06	112
Both parents away internationally	4.46	64
Both parents away internally	9.04	167
Caregiver	100	1,766
Both parents, nonmigrant	46.55	822
One parent, other away internationally	13.65	241
One parent, other away internally	17.04	301
Uncle or aunt, parent away	3.85	68
internationally		
Uncle or aunt, parent away internally	5.32	94
Grandparent, parent away internationally	2.66	47
Grandparent, parent away internally	1.98	35
Other, parent away internationally	2.49	44
Other, parent away internally	6.46	114
Child is girl	47.53	884
Child age (years)	15.61 (2.01)	1,860
Caregiver's education	43.80	805
secondary or more		
Duration of separation: none	52.63	979
Duration of separation: ≤ 12 months	24.03	447
Duration of separation: $13 \ge months$	23.33	434
Parents divorced/separated	33.03	608
Child changed caregiver ≥ 1	28.66	533
Living conditions are better when compared to other children	48.39	899
Household asset index	3.65 (1.51)	1,860
Total number of children living	2.99 (2.13)	1,860
with the child	2.99 (2.13)	1,000
Total number of younger children	1.39 (1.35)	1,860
living with the child Distant relationship with the caregiver	19.07	354

Note. Standard deviations in parentheses. The n indicates the number of observations for categories within each indicator.

more children had fathers and mothers who migrated internally (6% and 2%, respectively) than internationally (2% and 0.2%, respectively). Of those children who transitioned from having a father or mother migrant to living together with their parent, more did so who had an internal migrant parent (15% fathers and 23% mothers) than an

international migrant parent (8% fathers and 9% mothers). Transitions from having a single parent away to having both parents away were more common for internal (7% fathers and 9% mothers) than international migration (3% fathers and 0% mothers).

Transition rates of parental migration and children's caregiver are shown in Table 3. In the sampled population, 77% and 69% of children with a parent away internationally or internally, respectively, and cared for by the other parent remained in these care arrangements from 1 year to another. Of those children who were cared for by an uncle or aunt, 81% stayed in the care of these family relatives over time. Among categories of children that experienced the largest percentage change in status were those cared for by grandparents when parents were away internally and those cared for by others when parents were away internationally; of these children, only 44% and 48%, respectively, remained in the same care arrangements during the panel years. When changes in the care arrangement occurred, most transitions were made toward the care of one or both parents and toward the care of a close family relative. Most child-parent reunifications occurred from within Ghana rather than from abroad. These data illustrate that children's caregiver and the migration of parents are dynamic processes that change over time, giving greater reason to conduct a longitudinal analysis.

Table 4 presents the differences in means of well-being outcomes by considering the migration status of parents and the child's caregiver. The bivariate differences showed that the reported levels of health were generally higher among children whose fathers or both parents migrated internationally when compared with children living with both parents. Similarly, children of migrants compared with children of nonmigrants reported higher levels of school enjoyment when mothers or both parents migrated internally and when fathers migrated internationally. The levels of life satisfaction and happiness, by contrast, were lower among children of migrants compared with children in nonmigrant families. Some differences in well-being were also observed when looking at the caregiver of the child. The reported levels of health were higher among children of international migrants compared with children living with both parents, and specifically when children stayed in the care of a parent, a grandparent, an uncle, or aunt. The reports of life satisfaction and happiness, by contrast, were predominantly lower among children of migrants, irrespective of who the caregiver of the child was compared with children of nonmigrants. Finally, children of migrants, relative to children in nonmigrant families, reported overall higher levels of school enjoyment when parents went away internally and children stayed in the care of a parent, an uncle or aunt, a grandparent, or others.

Table 2
Transition Rates for Parental Migration Status: 2013–2015

Parental migration status	Nonmigrant parents	Father away internationally	Father away internally	Mother away internationally	Mother away internally	Both parents away internationally	Both parents away internally	Total	N
Nonmigrant parents	87.83	2.06	6.18	0.19	1.69	0	2.06	100	904
Father away internationally	7.82	79.33	5.59	0	2.23	3.35	1.68	100	285
Father away internally	15.33	4	71.33	0.67	1.33	0.67	6.67	100	262
Mother away internationally	9.38	0	3.13	81.25	6.25	0	0	100	54
Mother away internally	22.73	0	1.52	1.52	65.15	0	9.09	100	112
Both parents away internationally	12.50	5	2.50	5	0	70	5	100	64
Both parents away internally	10.53	5.26	9.47	1.05	4.21	0	69.47	100	167

Notes. The matrix counts transitions from each observation to the next and follows the order of change in time for each individual. The changes between 2013 and 2015 are reflected in the rows.

Table 3 Transition Rates for Parental Migration and Child's Caregiver: 2013–2015

Both parents, numigrant way 9.04 0.04 0.041 0.044					Uncle or	Uncle or aunt,						
87.01 1.86 7.01 0.62 1.44 0 0.41 0 10.46 77.12 7.19 1.96 0 0 0 2.61 17.98 3.93 68.54 0.56 2.25 0 2.81 0.56 7 2.70 0 81.08 5.41 2.70 0 5.41 0 5.41 0 5.41 0 5.41 0 5.41 0 0 5.41 0 0 5.41 0		Both parents, nonmigrant	One parent, other away internationally	One parent, other away internally	aunt, parent away internationally	parent away internally	Grandparent, parent away internationally	Grandparent, parent away internally	Other, parent away internationally	Other, parent away internally	Total	Z
17.98 3.93 68.54 0.56 2.25 0 2.81 0.56 7 2.70 0 0 81.08 5.41 2.70 0 5.41 7 5.66 3.77 0 81.13 0 3.77 0 6.90 3.45 3.45 0 3.45 0 3.45 0 11.11 5.56 11.13 0 11.09 5.56 44.44 0 6.90 10.34 0 17.24 0 3.45 0 48.28 12.50 1.56 9.38 0 4.69 1.56 0 1.56	nonmigrant	87.01	1.86	7.01	0.62	1.44	0	0.41	0 2 61	1.65	100	822
17.98 3.93 68.54 0.56 2.25 0 2.81 0.56 7 2.70 0 81.08 5.41 2.70 0 5.41 7 5.66 3.77 0 81.13 0 3.77 0 6.90 3.45 3.45 72.41 6.90 3.45 0 3.45 11.11 5.56 11.13 0 11.09 5.56 44.44 0 6.90 10.34 0 17.24 0 3.45 0 48.28 12.50 1.56 9.38 0 4.69 1.56 0 1.56	лег амау .У	10.40	71.17	61.7	1.90	D	o	Þ	7:01	0.00	100	741
7 2.70 0 81.08 5.41 2.70 0 5.41 6.90 3.45 3.45 0 3.45 0 3.45 0 11.11 5.56 11.13 0 11.09 5.56 44.44 0 6.90 10.34 0 17.24 0 3.45 0 48.28 12.50 1.56 9.38 0 4.69 1.56 0 1.56	ther away	17.98	3.93	68.54	0.56	2.25	0	2.81	0.56	3.37	100	301
5.66 3.77 5.66 3.77 0 81.13 0 3.47 0 6.90 3.45 3.45 0 3.45 72.41 6.90 3.45 0 11.11 5.56 11.13 0 11.09 5.56 44.44 0 6.90 10.34 0 17.24 0 3.45 0 48.28 12.50 1.56 9.38 0 4.69 1.56 0 1.56	, parent away ly	2.70	0	0	81.08	5.41	2.70	0	5.41	2.70	100	89
6.90 3.45 0 3.45 72.41 6.90 3.45 11.11 5.56 11.13 0 11.09 5.56 44.44 0 6.90 10.34 0 17.24 0 3.45 0 48.28 12.50 1.56 9.38 0 4.69 1.56 0 1.56	, parent away	5.66	3.77	3.77	0	81.13	0	3.77	0	1.89	100	94
11.11 5.56 11.13 0 11.09 5.56 44.44 0 6.90 10.34 0 17.24 0 3.45 0 48.28 12.50 1.56 9.38 0 4.69 1.56 0 1.56	parent away ly	06.9	3.45	3.45	0	3.45	72.41	06.90	3.45	0	100	47
6.90 10.34 0 17.24 0 3.45 0 48.28 12.50 1.56 9.38 0 4.69 1.56 0 1.56	parent away	11.11	5.56	11.13	0	11.09	5.56	44.44	0	11.11	100	35
12.50 1.56 9.38 0 4.69 1.56 0 1.56	away 1y	06.9	10.34	0	17.24	0	3.45	0	48.28	13.79	100	44
	away	12.50	1.56	9.38	0	4.69	1.56	0	1.56	68.75	100	114

Notes. The matrix counts transitions from each observation to the next and follows the order of change in time for each individual. The changes between 2013 and 2015 are reflected in the rows.

Table 4
Means and Standard Deviations of Child Well-Being by Different Transnational Family Characteristics

	Healt	h	Life satisfa	action	Happin	ess	School enjo	oyment
Transnational family characteristics	M (SD)	N/n	M (SD)	N/n	M (SD)	N/n	M (SD)	N/n
Parental migration status	F(6, 1,816) =	= 3.26**	F(6, 1,816) =	4.42***	F(6, 1,816) =	3.27***	F(6, 1,827) =	= 2.20*
Both parents resident, nonmigrant	4.10 (0.90)	890	4.06 (0.95)	890	4.10 (0.96)	890	3.91 (0.96)	895
Father away internationally	4.16 (0.86)	283	3.93 (0.96)	283	4.02 (0.97)	283	3.96 (0.92)	284
Father away internally	4.10 (0.93)	258	3.80 (1.05)	258	3.83 (1.08)	258	3.91 (0.96)	259
Mother away internationally	3.72 (1.18)	54	3.64 (1.16)	54	3.81 (1.02)	54	3.61 (0.85)	54
Mother away internally	3.88 (0.94)	110	3.86 (0.94)	110	3.91 (0.91)	110	4.09 (1.01)	111
Both parents away internationally	4.26 (0.76)	64	3.96 (1.01)	64	3.97 (1.06)	64	3.76 (1.00)	64
Both parents away internally	4 (1.11)	164	3.82 (1.11)	164	3.96 (1.14)	164	4.01 (0.92)	167
Caregiver	F(8, 1,733) =	= 1.61	F(8, 1,733) =	4.44***	F(8, 1,733) =	3.02***	F(8, 1,744)	= 0.93
Both parents, nonmigrant	4.11 (0.87)	809	4.08 (0.940	809	4.12 (0.94)	809	3.93 (0.95)	814
One parent, other away internationally	4.15 (0.88)	239	3.94 (0.95)	239	4.04 (0.94)	239	3.93 (0.93)	241
One parent, other away internally	4.08 (0.91)	296	3.86 (1.01)	296	3.87 (1.03)	296	3.95 (0.98)	298
Uncle or aunt, parent away internationally	4.17 (0.80)	68	3.91 (0.98)	68	4.01 (1.05)	68	3.76 (0.97)	68
Uncle or aunt, parent away internally	3.97 (1.04)	91	3.93 (0.92)	91	3.90 (1.04)	91	3.96 (0.94)	94
Grandparent, parent away internationally	4.19 (0.85)	47	3.95 (1.08)	47	3.93 (1.11)	47	3.95 (0.97)	47
Grandparent, parent away internally	3.91 (1.19)	35	3.65 (1.25)	35	4.08 (1.12)	35	4.14 (0.87)	35
Other, parent away internationally	3.79 (1.21)	44	3.57 (1.14)	44	3.72 (0.99)	44	3.69 (0.83)	43
Other, parent away internally	3.93 (1.08)	113	3.66 (1.18)	113	3.86 (1.18)	113	4.01 (0.94)	113

Note. Analysis of variance was used for all comparisons. Means presented with standard deviations in parentheses. Higher scores indicate higher levels of health, life satisfaction, happiness, and school enjoyment. *p < .05. **p < .01. ***p < .001.

The bivariate results revealed some interesting patterns on how children in different transnational care arrangements assessed their well-being outcomes. However, to answer the research question, we had to additionally employ multivariate models to test the combined effect of the independent variables on well-being outcomes. Tables 5 and 6 display the full fixed effects models for each transnational characteristic in relation to well-being outcomes. Because the aim of this study is to investigate the relation between different transnational characteristics and child well-being, we limit the interpretation and discussion of results to these associations.

The relations were not uniform when considering the transnational characteristics across different dimensions of child well-being. When the parental migration status was considered (Table 5), children with both parents away internationally were more likely to have higher levels of health, life satisfaction, and happiness as compared with children in nonmigrant families (β = 2.17, Model 1; β = 2.02, Model 2; β = 2.84, Model 3, respectively). Furthermore, results showed that children had higher levels of health, happiness, and school enjoyment

when mothers migrated internally as compared with children living with both parents (β = 1.54, Model 1; β = 2.08, Model 3; and β = 0.55, Model 4, respectively). Results also showed that international maternal migration was associated with higher levels of child happiness (β = 2.43, Model 3). Notably, the estimated coefficients for paternal migration and the internal migration of both parents were not statistically significant in any of the models.

In addition, significant interaction effects were found between transnational family characteristics and gender, divorce, and the stability of care, respectively. Specifically, the interaction terms revealed that girls were less likely to report better health when mothers migrated internally (β of the interaction term = -0.85, Model 1) and when both parents migrated internationally (\$\beta\$ of the interaction term = -0.85, Model 1). Furthermore, being a girl reduced the overall positive impact of international maternal migration on child happiness (β of the interaction term = -1.45, Model 3). The higher coefficient of the interaction term between mother abroad families and being a girl, in relation to happiness, may indicate greater difficulties for girls in this particular family type.

Table 5
Parental Migration Status and Child Well-Being—Fully Adjusted Models

	Health model 1 β (SE)	Life satisfaction model 2 β (SE)	Happiness model 3 β (SE)	School enjoyment model 4 β (SE)
Parental migration status				
Both parents resident, nonmigrant	_	_	_	_
Father away internationally	0.68 (0.43)	-0.06(0.46)	0.79 (0.61)	0.14 (0.19)
Father away internally	0.40 (0.40)	-0.22(0.44)	0.08 (0.57)	0.24 (0.16)
Mother away internationally	0.77 (0.76)	0.71 (0.59)	2.43 (0.85)**	0.04 (0.21)
Mother away internally	1.54 (0.58)**	1.06 (0.74)	2.08 (0.85)*	0.55 (0.23)*
Both parents away internationally	2.17 (0.69)**	2.02 (0.80)*	2.84 (1.04)**	0.43 (0.31)
Both parents away internally	0.25 (0.47)	-0.04(0.46)	0.09 (0.91)	0.10 (0.20)
Child is girl	0.27 (0.33)	0.19 (0.52)	0.56 (0.43)	0.47 (0.28)
Child age (years)	-0.01(0.06)	0.05 (0.05)	0.09 (0.05)	0.11 (0.05)*
Caregiver's education secondary or more	-0.09(0.08)	0.04 (0.09)	0.07 (0.08)	-0.03(0.09)
Duration of separation: none	_ ` '	_	_ ` ´	_ ` .
Duration of separation: ≤ 12 months	-0.30 (0.13)*	-0.17(0.17)	-0.23(0.16)	-0.27 (0.13)*
Duration of separation: $13 \ge months$	-0.36 (0.13)**	-0.06(0.17)	-0.23(0.15)	-0.26 (0.13)*
Parents divorced/separated	0.05 (0.10)	0.17 (0.15)	0.24 (0.14)	-0.10(0.10)
Child changed caregiver ≥ 1	0.07 (0.11)	0.11 (0.13)	0.13 (0.12)	-0.02(0.09)
Living conditions are better when compared to other children	0.01 (0.06)	0.19 (0.06)**	0.22 (0.06)***	0.12 (0.07)
Household asset index	0.07 (0.03)*	0.05 (0.03)	0.03 (0.03)	0.01 (0.03)
Total number of children living with the child	0.01 (0.02)	0.01 (0.02)	-0.01 (0.03)	0.00 (0.02)
Total number of younger children living with the child	0.04 (0.03)	0.05 (0.03)	0.02 (0.03)	0.02 (0.04)
Distant relationship with the caregiver	-0.06(0.08)	-0.26 (0.09)**	-0.26 (0.09)**	-0.25 (0.08)**
Interactions				
Mother Away Internally × Female	-0.85 (0.39)*			
Mother Away Internationally × Female			-1.45 (0.40)***	
Both Parents Away Internationally × Female	$-0.85 (0.41)^*$			
Mother Away Internally × Divorce			-0.76 (0.31)*	
Both Parents Away Internationally × Divorce		-1.42 (0.64)*	-1.49 (0.39)***	
Both Parents Away Internationally × Changed Caregiver ≥ 1	-0.67 (0.25)**	-0.84 (0.27)**	-0.93 (0.35)**	
Wave-fixed effects	Yes	Yes	Yes	Yes
Child-fixed effects	Yes	Yes	Yes	Yes
Unique number of children	741	741	741	741
Total number of observations	1,777	1,777	1,777	1,789
R^2	0.04	0.06	0.08	0.07

Note. Standard errors in parentheses (adjusted to account for clustering within individuals). *p < .05. **p < .01. ***p < .001.

Interaction terms also showed negative associations between higher levels of happiness and parental divorce when mothers migrated internally or when both parents migrated internationally (β of interaction terms = -0.76 and -1.49, Model 3, respectively). The relative effect size of the interaction "both parents away internationally and divorce" was larger than for the comparable interaction "mother away internally and divorce" attesting for a stronger negative effect of the former on children's reports of happiness. Similarly, children were less likely to report higher levels of life satisfaction when they lived in divorced families in which both parents were abroad (β of interaction

terms = -1.42, Model 2). Significant interaction effects for the stability of care are also worth noting. Results showed that one or more changes in caregivers reduced the overall positive effect of international parental migration on children's health, life satisfaction, and happiness ($\beta = -0.67$, Model 1; $\beta = -0.84$, Model 2; $\beta = -0.93$, Model 3, respectively).

Table 6 summarizes the results of models featuring the caregiver of the child in relation to well-being outcomes. Net of other factors, there were no statistically significant effects between specifics of the caregiver arrangement and different well-being outcomes of children in transnational care as

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Table 6
Caregiver and Child Well-Being—Fully Adjusted Models

	Health	Life satisfaction	Happiness	School enjoyment
	model 5	model 6	model 7	model 8
	β (SE)	β (SE)	β (SE)	β (SE)
Caregiver				
Both parents, nonmigrant	_	_	_	_
One parent, other away internationally	0.12 (0.16)	-0.23(0.69)	0.68 (0.44)	-0.04(0.62)
One parent, other away internally	0.26 (0.15)	-0.97 (0.65)	-0.14 (0.53)	-0.08 (0.46)
Uncle or aunt, parent away internationally	-0.01 (0.28)	2.92 (2.15)	2.68 (1.64)	-0.15 (1.57)
Uncle or aunt, parent away internally	0.27 (0.23)	-0.25 (1.01)	0.18 (0.88)	-0.62 (1.02)
Grandparent, parent away internationally	0.12 (0.28)	2.17 (1.40)	0.59 (1.53)	0.63 (1.12)
Grandparent, parent away internally	-0.06 (0.27)	-1.17 (2.38)	-1.41 (2.16)	0.54 (0.84)
Other, parent away internationally	0.40 (0.22)	0.77 (1.46)	1.00 (1.07)	0.31 (0.98)
Other, parent away internally	0.12 (0.25)	-0.54 (0.96)	0.34 (1.22)	1.58 (0.99)
Child is girl	0.14 (0.29)	0.08 (0.51)	0.64 (0.40)	0.42 (0.32)
Child age (years)	-0.02 (0.06)	0.04 (0.05)	0.07 (0.05)	0.11* (0.05)
Caregiver's education secondary or more	-0.11 (0.08)	0.05 (0.09)	0.12 (0.09)	-0.05 (0.09)
Duration of separation: none	—	—	— (0.0 <i>y</i>)	—
Duration of separation: ≤ 12 months	-0.20 (0.13)	-0.01 (0.17)	-0.16(0.15)	-0.24 (0.13)
Duration of separation: $13 \ge months$	-0.26 (0.13)	0.14 (0.17)	-0.16 (0.15)	-0.21 (0.14)
Parents divorced/separated	0.04 (0.11)	0.27 (0.18)	0.24 (0.17)	0.01 (0.16)
Child changed caregiver ≥ 1	-0.05 (0.09)	0.09 (0.13)	0.02 (0.10)	-0.05 (0.12)
Living conditions are better when	0.03 (0.06)	0.18 (0.07)**	0.20 (0.07)**	0.10 (0.07)*
compared with other children	0.03 (0.00)	0.10 (0.07)	0.20 (0.07)	0.10 (0.07)
Household asset index	0.06 (0.03)*	0.05 (0.03)	0.02 (0.03)	0.02 (0.03)
Total number of children	0.02 (0.02)	0.03 (0.03)	-0.01 (0.03)	0.02 (0.02)
living with the child	0.02 (0.02)	0.01 (0.02)	-0.01 (0.03)	0.02 (0.02)
Total number of younger	0.04 (0.03)	0.05 (0.03)	0.03 (0.03)	0.01 (0.04)
children living with the child	0.04 (0.03)	0.03 (0.03)	0.03 (0.03)	0.01 (0.04)
Distant relationship with the caregiver	-0.21 (0.09)*	-0.25 (0.09)**	-0.23 (0.09)*	-0.27 (0.08)***
Interactions	-0.21 (0.09)	-0.23 (0.09)	-0.23 (0.09)	-0.27 (0.00)
One Parent Caregiver, the		0.70 (0.32)*		
Other Parent Away Internally × Female		0.70 (0.32)		
Other Caregiver, Parent Away				0.77 (0.39)*
Internationally × Female				0.77 (0.37)
Uncle or Aunt Caregiver, Parent		-1.02 (0.54)*	-1.20 (0.59)*	
Away Internationally × Divorce		-1.02 (0.34)	-1.20 (0.59)	
Uncle or Aunt Caregiver, Parent		-0.71 (0.30)*		
Away Internationally × Changed Caregiver ≥ 1		-0.71 (0.50)		
Grandparent Caregiver, Parent				-0.82 (0.40)*
Away Internally × Changed Caregiver ≥ 1				-0.02 (0.40)
Wave-fixed effects	Yes	Yes	Yes	Yes
Child-fixed effects	Yes	Yes	Yes	Yes
Unique number of children	711	711	711	711
Total number of observations	1,702	1,702	1,702	1,714
R^2	0.04	0.08	0.08	0.08
Λ	0.04	0.00	0.00	0.00

Note. Standard errors in parentheses (adjusted to account for clustering within individuals). *p < .05. **p < .01. ***p < .001.

compared with children in nonmigrant families. However, interaction terms revealed some interesting facts. Specifically, we found that girls were more likely to report higher levels of life satisfaction when they were cared for by a parent while the other parent was away internally (β of the

interaction term = 0.70, Model 6). Similarly, girls were more likely to report higher levels of school enjoyment when parents migrated internationally and children were cared for by others (β of the interaction term = 0.77, Model 8). At the same time, children in divorced families who were being cared

for by an uncle or aunt when parents were abroad were generally less likely to report higher levels of life satisfaction (β of interaction term = -1.02, Model 6) or happiness (β of interaction term = -1.20, Model 7). Significant interaction effects of the stability of the care arrangement were also found; children who changed their caregiver one or more times were less likely to report higher levels of life satisfaction when they were cared for by an uncle or aunt while parents were away internationally (β of the interaction term = -0.71, Model 6) and of school enjoyment when they stayed in the care of a grandparent and parents were away internally (β of the interaction term = -0.82, Model 8). Taken together, the regression results seem to suggest that children were less likely to report higher levels of well-being when they lived in transnational settings that were characterized by divorce or instability of care. Furthermore, there were gender differences in children's reports of their well-being dependent on who the caregiver of the child was and parents' migration status.

Discussion

This analysis is the first, to our knowledge, to longitudinally investigate the effects of living in transnational families on the well-being of children in an African context. This allows us to more accurately ascertain the effects that have been previously tested in studies based on cross-sectional data. Four results, in particular, warrant discussion because they add a different perspective to current knowledge. First, living transnationally does not necessarily cause poorer well-being, contrary to what is often found in the literature. Second, the forms that transnational families take are an important differentiating factor as to whether children experience a decline in well-being as a consequence of parental migration. Third, multiple indicators of well-being are necessary in order to more accurately reflect the multifaceted nature of how children experience living in a transnational family. Finally, the gender of the child, marital discord, and instability of care are particular risk factors that heighten the likelihood of poorer outcomes for children within transnational families. These findings are discussed in detail in the following.

Results indicate that living transnationally in and of itself do not cause poorer well-being. In fact, under some transnational family compositions, children may have better well-being outcomes than their counterparts living with both parents. This is an important finding because it nuances the results from previous studies that associate parental migration with poorer well-being outcomes of children in transnational care. First, in contrast to small-scale studies on which most knowledge about transnational family life stems, our study contains a comparison group of children in families without a migration experience, allowing us to discern if negative well-being outcomes are indeed particular to transnational family life or may be associated with other characteristics of the population at large. Second, being one of the only longitudinal studies that looks specifically at child well-being in transnational families, this study captures variations in well-being over time. We know from qualitative studies (Dreby, 2010; Schmalzbauer, 2004) that children can adapt to new caregivers as time goes by and are better able to cope with parental absence as they grow older. Although demographic longitudinal studies in the area of child well-being in sub-Saharan Africa exist (see Gaydosh, 2015; Goldberg, 2013; Madhavan et al., 2012), these are mainly focused on the South African context that is characterized by internal migration. This study is the first to collect such data for international migration. Finally, most of the negative associations found between transnational families and child well-being pertain to studies in Latin America, China, and Southeast Asia. The African context may differ because of the prevalent norms around family life characterized by social parenthood and child fostering, making it common for children to change residency and be raised by people other than their biological parents, irrespective of parental migration status (Radcliffe-Brown & Forde, 1950). This may contribute to the fact that Ghanaian children do not necessarily feel underprivileged if they do not live with their parents (Poeze et al., 2017) as has been found in other contexts (Cortes, 2015; Parreñas, 2005). Finally, an important distinguishing factor is that few studies on migration and child well-being ask children to evaluate their well-being and instead rely on the assessments of adults such as parents, other caregivers, or teachers. As Jordan and Graham (2012) note, children experience their transnational realities differently from adults, and it is, therefore, important to take children's reports into account.

The results also highlight the importance of considering multiple indicators of well-being, as different associations were found in relation to specific well-being measures, attesting to the multiplicity of dimensions that comprise a child's experience in transnational families. We also found that although

on the whole transnational family life does not lead to worse well-being outcomes, particular family configurations do put children in more vulnerable positions. The stability of the care arrangement, something that only recently has been taken into account in migration research (Mazzucato et al., 2015), was found to be an important determining factor in the analysis. Care arrangements in which children move residences and are in the care of different people are more likely to negatively reflect on children's well-being. Changing caregivers may be traumatic for children because they need to adapt to new environments, form new attachments, and accept new authority figures (Schmalzbauer, 2004; Smith et al., 2004). Findings of this study closely align with evidence from demographic longitudinal research in Africa that reflects on the importance of the stability of care for children's life paths (Goldberg, 2013; Madhavan et al., 2012).

Who the caregiver is, whether a parent, an aunt or uncle, or someone else, does not make a difference for children's well-being. Yet who the migrant parent is and whether he or she has migrated internally or internationally does make a difference. Better outcomes are found for the health of children when both parents have migrated internationally, greater happiness for children when mothers have migrated either internally or internationally, and more school enjoyment and better health for children whose mothers have migrated internally compared with children living with both parents. These are important distinctions especially with regard to mothers' migration as previous studies have emphasized the suffering that children experience when mothers migrate (Cortes, 2015; Jordan & Graham, 2012; Wen & Lin, 2012). Yet, in our study, we find that transnational family life when mothers migrate actually leads to greater health, happiness, and school enjoyment for children in Ghana. Migration studies have shown that women tend to remit more regularly and their remittances are prevalently used for the upkeep of the family (Pfeiffer & Taylor, 2008). Furthermore in our study, the caregivers of children whose mothers migrated either internationally or internally were noticeably more likely to have higher levels of education (results not shown). This may correspond with the fact that the Akan ethnic group, to which most of our respondents belong, is matrilineal, in that mothers are more involved in the decision making related to the care of their children. Indeed, a recent study that looks into the transnational child-care practices, mostly among the Akan in Ghana, concluded that migrant parents are guided in their choice of a

caregiver by circumstantial characteristics such as the caregiver's level of education and the certainty that children will receive a proper disciplinary supervision (Poeze et al., 2017).

We also find an important story about gender as a risk factor for children in transnational care. Girls' health is negatively affected depending on which parent migrates: when mothers migrate internally or both parents migrate internationally, the health advantages diminish for girls as compared with boys. The same is true for their happiness when mothers migrate internationally. In terms of caregivers, girls' life satisfaction and school enjoyment were found to reach higher levels than that of boys when they live with one parent and the other parent is an internal migrant and when they are in the care of a nonparental caregiver and the parent is away internationally. Yet, girls who change caregivers fare worse than boys in terms of life satisfaction and school enjoyment when they are cared for by uncles or aunts and their parents are away internationally and when cared for by a grandparent and their parents are away internally. The negative gender differences may reflect the unequal distribution of workload and resources in the Ghanaian households, in that girls do more chores and benefit less than boys from the remitted capital (Whitehead et al., 2007). Although the reasons need to be further investigated, it is important to note that under certain circumstances girls may suffer or gain more than boys.

Finally, divorce is also an important risk factor. Children who were cared for by an aunt or uncle while their parent migrated internationally experienced a decline in life satisfaction and happiness when parents were divorced or separated. Likewise, divorce or separation leads to lower levels of happiness in children who live in families where the mother migrated internally and to lower levels of happiness and life satisfaction when both parents migrated internationally. These findings are consistent with recent research on divorce, migration, and child well-being in Ghana (Cebotari et al., 2017; Mazzucato & Cebotari, 2017) and other contexts (Carling & Tønnessen, 2013; Nobles, 2011). The evidence presented here leads to an important assertion: parent-child separation may take various forms through migration, divorce or both, among which the separation that involves both migration and divorce may reflect on children's outcomes more negatively. Future research that looks into the dynamics of parental migration and marital discord in relation to child well-being will do well to further explore this line of inquiry.

The limitations of this study should be noted. Although we employ panel data and control for the socioeconomic status of the child's household, the issue of migrant selectivity persists. There is no empirical literature that is able to completely control for migrant selectivity over time, but one needs to be alert to this condition. Another limitation is that we conducted the study over a period of 3 years and therefore only measure short- to medium-term effects on child well-being. Subsequently, we are not able to assess how the circumstances of migration affect children in their transitions into adulthood, once they leave school for example. Finally, this study includes children who attended schools in two urban areas with high out migration rates in Ghana. Therefore, the results may not be generalizable to children who dropped out of school or reside in areas with lower migration rates in the country.

These limitations notwithstanding, this study adds a longitudinal perspective to the current knowledge on the effects of living in transnational care on child well-being. The fact that children across different transnational family forms were equally or more likely to have better levels of well-being compared with children in nonmigrant families is encouraging and challenges some of the existing theoretical constructs about child well-being in the transnational family literature. The results of this study help avoid discourses that stigmatize children of migrant parents and strengthen the argument that migration in and of itself is not detrimental for children in transnational care.

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