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ONE-PARENT FAMILIES IN CONTEMPORARY CAMBODIA

One-Parent Families in Contemporary Cambodia

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Abstract (125 words)

Non-marital births and divorce remain rare in Cambodia. Due to dramatic levels of adult mortality reached during the late 1970s, growing up with a single parent is not. Using nationally representative, cross-sectional data, we estimate that about 12% of children under age 18 co-reside with only one of their biological parents. Using longitudinal data representative of the Mekong River Valley, we find this proportion to be declining. Nearly half of these children live in nuclear families (single parent with or without a step-parent), even though they live in multigenerational families more frequently than children who live with both their parents, especially, when young and not living with their mother. Last, we consider differences in socioeconomic conditions and child educational outcomes by number of co-residing parents.

Keywords: Cambodia, single parent, living arrangement, grandparent, multigenerational household

One-Parent Families in Contemporary Cambodia

Main text (7,310 words)

Introduction

Just a few decades ago, family systems in the rest of the world were predicted to converge toward what had emerged as the characteristic living arrangement of Western societies: the nuclear family, composed only of married parents and their biological children (Goode, 1960). Ironically, the Western family was then undergoing profound transformations, and the nuclear family soon lost its centrality to a more complex mix of living arrangements. In the last decades of the 20th century, an expansive literature has developed on the consequences of these transformations on the psychological and economic wellbeing of “the children of divorce” and children born “out-of-wedlock” (e.g., Wallerstein & Kelly, 1980; Duncan & Hoffman, 1985; Peterson & Zill, 1986; Chase-Lansdale & Hetherington, 1990; Amato & Keith, 1991; Cherlin et al., 1991; Furstenberg & Cherlin, 1991; Seltzer 1991; Kiernan, 1992; McLanahan & Sandefur, 1994; Cherlin, Chase-Lansdale, & McRae, 1998; Duncan et al., 1998; Jarvis & Jenkins, 1999; Guo & Harris 2000; Hill et al., 2001; Bianchi et al., 2006; Heuveline & Weinshenker, 2008. See Cherlin, 1999 for a review).

A few notable exceptions to the contrary (e.g., Park, 2007), most of the evidence to date on growing up in one-parent families has originated from Europe, North America (Canada and the United States) and Oceania (Australia and New Zealand). This is due in part to the perception that growing up without one or both parents is a modern consequence of cultural changes in the Western Nations which have led young adults from the late 1960s on to avoid some of the responsibilities associated with parenthood in order to achieve “higher order needs” (Lesthaeghe & Neidert, 2006). Regardless of whether one agrees with this interpretation of recent demographic trends known as the second demographic transition

theory (van de Kaa, 1987), similar trends have emerged in other parts of the world, including in Asia. In this region, the “retreat from marriage and childbearing”—later mean age at marriage and at first birth, and higher proportions never marrying and/or childless—has appeared first and more clearly (Leete, 1994; Situmorang 2007; Tey 2007; Jones & Gubhaju, 2009), but there are also emerging signs of a “divorce of marriage and childrearing”—union formation outside of marriage, possibly contributing to childbearing outside of marriage, and higher proportions of marriages ending in divorce or separation (Raymo, Iwasawa, & Bumpass, 2004; Heuveline & Poch, 2006; Xenos & Kabamalan, 2007; Raymo, Iwasawa, & Bumpass, 2009; Cammack & Heaton, 2011; Esara, 2012; Gipson et al., 2012).

If these new trends point toward increasing proportions of children that will spend all or part of their childhood away from one of their parents, one should also consider that a two-parent family from birth to age fifteen or older might have been the dominant childrearing environment for no more than a transitory period even in Western Nations. First, the recent increases in the likelihood that a parent may separate from a partner with children was preceded by substantial declines in the likelihood that a child be sent away from the parental home long before the age now considered to signal the transition to adulthood. European history documents the common departure from the parental home as apprentices and domestic workers at quite early ages (Aries, 1962; Pollock, 1985). In West Africa, another well-documented child-rearing living arrangement is child fosterage, which embodies various strategic responses to particular circumstances and not merely parental death (e.g., Isiugo-Abanihe, 1985; Bledsoe, 1990; Madhavan, 2004). Fine-grain studies of mobility made possible by “demographic surveillance systems” show the high prevalence of more temporary placement of children with relatives to improve their educational opportunities or to allow biological parents to take advantage of professional opportunities (Collinson et al., 2006).

Moreover, a long view might suggest that alternatives to the nuclear family might have become rarer in some settings, such as polygamy in parts of Africa (Lesthaeghe, 1989). Unmarried cohabitation is not really a new phenomenon in the Caribbean for instance (Goode, 1960) or among the lower classes in Europe and beyond. An arrangement similar to what was referred to as “poor man’s marriage” in Europe was also documented for instance in Thailand (Cherlin & Chamrathirong, 1988). If such unions had the same stability as marriages, they might not represent a heightened risk of exposing children to separation from one parent. However, levels of marital disruptions have not been negligible either, averaging about 15% after 20 years after marriage (Smith, 1981; Knodel, Havanon, & Pramualratana, 1984). Contrary to possible expectation, divorce rates might have declined during the mid-20th century’s rapid modernization of many Asian societies (Hirschman & Teerawichitchainan, 2003), in particular among Muslim populations (Jones, 1994 and 1997), when early marriages were prevalent, but also relatively easy to break—for men at least.

Finally, the main reason to consider the late 20th century as a rarity, with respect to the high likelihood for children to grow up with two biological parents, rather than as typical of a long era past is simply mortality. If single parenting resulting from divorce and non-marital fertility is becoming more prevalent, it is in part counter-balancing the declining prevalence of widows, and widowers to a lesser extent, raising children alone (Gordon & McLanahan, 1991). In the United States for instance, mothers’ aid programs were introduced in most states after 1910 to allow mothers to care for their children rather than to send them to an orphanage when forced to work following the desertion, disability, or death of their husbands (Gordon, 1994; Katz, 1996). While precise past prevalence estimates might be hard to come by, in many regions increases in the prevalence of children in single-parent families induced by recent demographic trends are likely reversing secular, mortality-induced declines in the

prevalence of children in these families first, before new highs might be reached. In pre-20th century Northeast China, about one-third of children would reach age 18 having lost at least one of their parents (Lee and Campbell 2014: 176). While the sequence of mortality declines inducing lower risk of orphanhood and socio-economic transformations that contributed to higher risk of parental separation and higher non-marital fertility ratios has developed over a long period of time in Western Nations, the country that is the focus of this paper, Cambodia, has been experiencing these changes at a much faster pace.

The Setting

Cambodia is a Southeast Asian country on the Gulf of Thailand, neighboring Thailand, Laos, and Vietnam (clockwise). A relatively small country of 181,000 km², its population remains 80-percent rural (United Nations, 2011). Current size notwithstanding, the country is widely known for the ancient city of Angkor, possibly the largest pre-industrial city in the world (Evans et al., 2007). Angkor was the centre of a Southeast Asian Empire that also included parts of present-day South Vietnam (and in Cambodia still referred to as *Kampuchea Krom*, meaning lower Cambodia) and North-eastern Thailand. Fallen into oblivion for over three centuries, its past *grandeur* was re-established, somewhat ironically, during the French Protectorate (1863-1953). Distant though it is, this glorious past has remained a central tenet of the Cambodian identity as a nation to this day (Edwards, 2007), as attested by the continuing conflict over the temple *Preah Vihear* at the Cambodia-Thailand border. Most Cambodians are also acutely aware of the fact that today Cambodia's population size of 15 million is only a fraction of Thailand's 67 million and Vietnam's 91 million (United Nations, 2013).

Internationally, Cambodia is also known now for the infamous "Khmer-Rouge" regime led by Pol Pot (1975-1979). Cambodia's independence from France did not result

from the same level of fighting as in Vietnam—the two countries previously forming French Indochina along with Laos. Unfortunately, Cambodia was later dragged into the turmoil of the American War in Vietnam. Head of the State since the independence, Prince Norodom Sihanouk proclaimed Cambodia's neutrality, but was suspected to have had allowed the Viet Cong access to the Cambodian territory. In any event, he was overthrown in 1970 by General Lon Nol who took a more pro-American stance. Sihanouk then called for armed resistance, joining forces with the Communist guerrilla that he had himself fought, and providing his immense popularity to a movement that had made little gain up to that point. The country then slid into civil war, with massive bombing by U.S. B-52's (Owen & Kiernan, 2006) possibly displacing as many as 1 million civilians and killing another 100,000 to 200,000, uncertain though these figures are. Unauthorized, and halted by the U.S. Congress in 1973, the operation might have delayed the fall of the Lon Nol government, and certainly contributed to its growing unpopularity (Chandler, 1993). (It also set in movement the chain of events that resulted in Richard Nixon's resignation.)

The Khmer-Rouge troops were thus welcome by most when they entered Cambodia's capital city, Phnom Penh, on April 17, 1975. They swiftly proceeded to empty the capital and other cities (Carney, 1989), and undertook what has been described as the most radical social transformation ever attempted (Kiernan, 1996; Weitz, 2003). It certainly stands among the deadliest. According to the majority of extant estimates that place the regime's death toll in the range of 1.5 to 2.0 million excess deaths (Heuveline, 2001), the Khmer-Rouge regime might have caused the death of nearly one quarter of its initial population in its mere three years, eight months, and twenty days. The demographic scars of this period remain clearly visible in the age pyramid of the Cambodian population from the most recent (2008) population census (Figure 1). The age pyramid exhibits a narrowing among the 30-34 year-

olds due both to high infant and child mortality and to about one-third lower fertility during the Khmer-Rouge period (Heuveline & Poch, 2007). At older ages, a low male to female ratio reflects the roughly 3:1 ratio of mortality during the Khmer-Rouge regime (Heuveline, 1998). Also visible at younger ages is a “teen bulge” that results from the large birth cohorts of the post-Khmer-Rouge decades, followed by a fertility decline in the most recent decade. Having likely peaked over 7 children per woman in the 1980s, the current total fertility rate is estimated to have dropped to 2.4 children per woman (National Institute of Statistics and Ministry of Health Cambodia, 2001 and 2011).

FIGURE 1 NEAR HERE

Among the many radical transformations undertaken by the Khmer-Rouge regime, the most relevant to this study are those that have been described as “systematic assaults” on family ties (Kiernan, 1996). These ties are instrumental to the social reproduction that the regime sought to eliminate, and they also represented a source of allegiance that competed with the blind obedience the regime expected from all. Family members were often separated as a result of being assigned to different work teams formed on the basis of age and gender. Meanwhile, young adults were taught they owed everything to the regime rather than to their parents. Such policies were in direct opposition to the moral, religious and cultural foundations of Cambodian society (Ebihara, 1993), and arguably did the most damage to the population’s support of the regime. In any case, the impact on perceived family duties was at most temporary. As many survivors’ accounts demonstrate (e.g., Pran, 1994), individuals kept on taking considerable risks to care for immediate family members and as soon as the regime fell, on 7 January 1979, the survivors took to the roads to search for and reunite with kin.

Attempts to emancipate young adults from their parents did have an impact on marriage (LeVine, 2010). Contrary to the custom of marriage arranged by parents, preferably with the consent of their children (Pich, 1984), marriage partners were told to choose one another and only seek the authorization of their village leaders. The number of such “spontaneous” marriages might have been less than anticipated, and the regime assumed even greater control of the matter by organizing marriages *en masse*. Village leaders *de facto* assumed the parental responsibilities by pairing unmarried men and women in a collective, quick administrative procedure (Ngor, 1987; Ponchaud, 1998). In spite of their inauspicious beginnings, these marriage cohorts did not appear to experience high divorce rates (Heuveline & Poch, 2006).

In December 1990, the signing of the *Agreement on a Comprehensive Political Settlement of the Cambodia Conflict* signaled the end of Cambodia’s isolation from the United States and West-European Nations and ushered in a transitional political phase overseen by the United Nations. The new diplomatic climate was accompanied by a marked economic upswing, as indicated by the gross domestic product (GDP) growing at 7.6% per year in 1991, compared to 1.2% per year in 1990 (Asian Development Bank, 2008). With some fluctuations from 4.1% to 9.2% annually, the GDP continued to grow relatively rapidly until 1998. During this period, the labor force continued to be employed predominantly in the agricultural sector, albeit less so over time—from 81.0% in 1993 (first available year) to 76.8% in 1998 (Asian Development Bank, 2008)—whereas the manufacturing sector grew from 2.3% to 3.2% of the employed labor force. Perhaps the most conspicuous sign of the expansion of work opportunities is the spectacular development of the garment industry that employs mostly young, unmarried women and has fueled the migration to urban areas of rural “factory daughters” (Chea & Sok, 2001; Derks, 2008). Away from the parental

household, in which they would traditionally have remained at least until marriage, they are feared to be vulnerable to premarital conceptions. The subject of much discussion and comments, such conceptions are still to be detected in demographic data. Divorce rates are easier to track, and rising though they are, they remain relatively low (Heuveline & Poch, 2006). Extensive, labor-related migration is not limited to unmarried females, however, and in fact, most of the country's rural areas experience substantial outmigration (National Committee for Population and Development, 2009). Its potential disruptive influence on traditional family life has not been well documented yet.

In this paper, we first seek to document the current prevalence of single-parenting in Cambodia and its trend. We expected that declining adult mortality contributed to a reduction in the incidence of single parenting, but lacked hard data to anticipate whether potential increases in parental separation or labor- and education-related migration sufficed to counterbalance this mortality effect. We then document the living arrangements of children co-residing with a "lone parent," that is, with only one of their two biological parents. Using data from the 1998 General Population Census (GPC), Demont and Heuveline (2008) showed that nuclear families were the most prevalent in Cambodia, and small anthropological studies suggested they had been for some time. We expected, however, that multigenerational family might provide more common living arrangements for children with lone parents so that grandparents could help their single children with the care of their grandchildren. Finally, we used the few available socio-economic indicators for parents and children to assess whether, as documented in Western Nations, children growing up with a single parent in Cambodia are disadvantaged compared to their peers growing up with both their biological parents.

Data

In order to examine the living arrangement of children in Cambodia, this paper utilizes two datasets: the 2004 Cambodia Socio-Economic Survey (CSES) and the Mekong Integrated Population-Registration Areas of Cambodia (MIPRAoC) project. We first describe these two data sources; the next section focuses on the variables constructed from their data and used in the analyses for this paper.

Sources

We first used cross-sectional data from the 2004 Cambodia Socio-Economic Survey (CSES) to examine the distribution of living arrangement of children at a national level. The 2004 CSES was conducted by the National Institute of Statistics from November 2003 to January 2005. This is a nationally representative, multistage sample survey designed to collect information at two levels: first, village information on the economy, infrastructure, and employment, and second, household information on demographics, employment, education, housing conditions and health. With close to a 100% response rate, 14,978 households were reached, providing information on 74,719 household members altogether.

These data were complemented with longitudinal, but not necessarily nationally representative data from the Mekong Integrated Population-Registration Areas of Cambodia (MIPRAoC) project. The MIPRAoC project continues and broadens The Mekong Island Population Laboratory (MIPopLab), both combining a demographic surveillance system (DSS) and occasional, topical, “rider” social-science surveys. While MIPopLab’s Population-Registration Area (PRA) had been hand-selected for pilot testing, MIPRAoC’s six additional PRA were drawn from a sample of roughly equal size areas within all the districts classified as rural in the 1998 GPC (National Institute of Statistics, 1999) and located along the Mekong River, from the Northern border with Laos to the Southern border with Vietnam (Figure 2). MIPRAoC is thus intended to be representative of the population of these contiguous

districts, where 20% of the rural households in the country resided at the time of the 1998 GPC. At the time of registration, each household head provides for each household member their name (later replaced by a unique identifier), gender, birth date, relationship to the head, and parental information (is the mother/father alive, and if so, where does s/he lives, else when did s/he die). All women between the ages of 15 and 74 also provided complete marriage and birth histories.

FIGURE 2 NEAR HERE

The initial registration in the six new PRA and demographic update in the initial PRA (MIPopLab) were conducted in 2008. The resident population of the seven PRA was then close to 60,000 (59,592 individuals registered, Table 1). One of the selected PRA is located in Phnom Penh Province, and though classified as rural in the 1998 Census, it has since been absorbed by the capital city's urban agglomeration and its population has grown quite large. Only one third of this PRA population has been retained in the biennial demographic updates and rider survey. As a result, the size of the population followed in the demographic updates is slightly above 50,000. Updates were conducted in 2010, 2012 and 2014, but only the first one was available when these analyses were conducted. All demographic update records indicate individuals' relationship to the household head, allowing for tracking of children's living arrangements over time.

Variables Construction

The household roster of the 2004 CSES indicated for each household member (a) her relationship to the head of the household and (b) whether her biological parents resided in the same household. This allowed us to construct two variables: (1) one index for the number of co-resident parents, and (2) one categorical variable corresponding to household-structure typology. The first household type is nuclear: households consisting only of (single or two)

parents and (biological, step or adopted/foster) children. The second type, “multigenerational” consist of households that include at least one grandparent in addition to parents and children. Extended households constitute the third type of households, those including parents, children, and additional relatives in either generation (e.g., sibling of the head of household or of the head’s spouse, nephew/niece of the head or head’s spouse). Households that include parents, children, and both grandparents and relatives in the parents’ or the children’s generation are classified as “extended-multigenerational.” The fifth type is a residual category gathering “other” households that cannot be strictly classified as one of the four above types. In particular, these households might include children not living with parents or living with parents and other either non-relatives or relatives in a fourth generation for instance (Figure 3).

FIGURE 3 NEAR HERE

The same two variables were constructed from the first two rounds of MIPRAoC. Moreover, in these data questions about parental co-residence are preceded by a question on the survival of each biological parent, and in case of death, the time of death. This filter question increases the likelihood that parents listed as co-residents are indeed biological parents and not step or foster parents. We also used this question to calculate the number of surviving biological parents, and assess the contribution of adult mortality to not co-residing with both parents.

In addition, for the MIPRAoC data, several socio-economic variables were considered. The first variable is the type of employment of all previously or currently employed individuals. We created five employment sectors from farming (including fishing, hunting, forestry and plantation) to craft, industry, civil servant or white-collar and service jobs. All individuals employed in farming or craft were also asked whether they owned the land or resources needed for their activity (e.g., boat for fishing, loom for weaving). We

created four categories for property ownership, rent for payment, free usage (e.g., lend by kin), or being a laborer. These variables were intended to capture some of the differences among the households children live in. The only two individual-level variables for the children themselves were their literacy (ability to read and write in any language) and the highest grade they had completed at the time of the baseline (Round 1) survey. From the latter, we constructed a grade for age variable to assess potential differences in grade repetition. The minimum age to enter grade 1 is 6 years at the beginning of the school year (Heuveline et al. 2012), and the appropriate grade for age thus depends on both the year of birth and month of birth. However, reporting on the month of birth is poor and we do not know how strictly the month cut-off is enforced. This introduces some ambiguity with respect to the year in which a child should have started school. We treat two consecutive grades as possibly appropriate for a child's year of birth—a conservative approach since some in the lower grade might have started a year earlier than their grade-peers and repeated a grade later.

Results

We first compared the proportion of children under age 18 who are living with only one of their biological parents in the total and rural-only samples of the 2004 CSES, and in the first two rounds of MIPRAoC (2008 and 2010). Although MIPRAoC is not intended to be fully nationally representative even of the rural-only population, the estimates shown in Table 1 are relatively close to those from the 2004 CSES. According to the 2004 CSES, 12.3% of children under 18 live with only one of their parents. The proportion is slightly lower in the rural-only sample (12.1%) and compares to 10.6% at Round 1 (2008) and 10.2% at Round 2 (2010) in MIPRAoC. Meanwhile, about 5% of children under age 18 live with neither of their biological parents.

TABLE 1 NEAR HERE

The slight difference between the two surveys is also consistent with the decrease between the two rounds in MIPRAoC. Because this survey followed the same children across rounds, with the small exception of children who moved in or out of the PRA, the difference between the two rounds is driven by changes in living arrangements in children under age 16 at round 1, and by the replacement of the older cohort of children aged 16-17 by new birth cohorts. Further analyses (not shown here) suggested that differential migration and changes in living arrangements between the two rounds were rare events. The trend over time is thus driven numerically by cohort replacement. The main determinants of this trend (the reasons why cohort-replacement effects exceed intra-cohort changes) are the decline in adult mortality since its Khmer-Rouge-era peak and the role that parental death plays in children's living arrangements. As the 2004 CSES does not provide information on the survival of parents, we illustrated these two factors with data from Round 1 in MIPRAoC.

Table 2 shows a breakdown of children under age 18 by number of living parents, and parental co-residence. As of 2008, 93.3% of children under age 18 still had both parents. The proportion is much lower among these recent birth cohorts than among those who born before and during the Khmer Rouge regime. In MIPRAoC, childhood orphans are defined as those having lost a parent before the median age at marriage in Cambodia—23 years for females or 25 years for males. These higher than typical age cut-offs were selected because parents play an important role in marriage arrangements, and except for short-term education- or work-related migration, individuals would typically remain in the parental home until marriage. Based on these definitions, as many as 9,250 individuals under 65 years of age were identified as having become orphans during their childhood. Of these, the majority were paternal orphans (5,851), with fewer maternal orphans (1,882) or bilateral orphans (1,517), that is, individuals who had lost both biological parents by the cut-off age. These high

numbers (in the order of 15% relative to a population size of roughly 60,000 residents) reflect the very high mortality experienced during the Khmer Rouge period, by men in particular.

Note that the median age of the Cambodian population being only 23.5 years (United Nations, 2013), even these numbers still underestimates the actual probabilities of becoming an orphan, as defined above, since the risk is actually “censored” for over one-half of the population. The actual probability could be estimated with data by age and proper life-table accounting, but was not attempted here as it was not central to these analyses.

TABLE 2 NEAR HERE

Even though the proportions in Table 2 are not directly comparable to those orphaned during childhood in MIPRAoC due to different age cut-offs, the difference still reflects substantial declines in adult mortality. While this trend is shared with nearly all countries, it substantially affects living arrangement prevalence in Cambodia because parental death remains one of the main causes of not living with both parents. Numbers in Table 2 also show that parental mortality actually accounts for nearly half (46.2%) of children living with only one of their biological parents. Interestingly, the proportion of children whose parents are both alive is higher among children living with neither parent than among those living with only one parent. This suggests that living with neither parent might more frequently result from children placement decisions (to pursue work or education opportunities) than living with a single parent. In any event, the decline of adult mortality in this setting is a strong determinant of the prevalence of single-parent family.

Having documented the trend in co-residency with only one parent and central role of parental death, we then analysed the living arrangements of children living with only one of their biological parents. We find that a little less than half of them live in a nuclear household (46.1%), which in this case is a household headed by a single parent or by a single parent and

a stepparent. Another third lives in multigenerational households, simple (11.7%) or extended (22.7%).

TABLE 3 NEAR HERE

Comparing these living arrangements to those of children co-residing with both or neither of their parents, we observe that the prevalence of both nuclear and simple multigenerational households among children living with one parent is much closer to the prevalence among children with both parents. As Demont and Heuveline (2008) before, we find living in a nuclear family to be the most prevalent childhood living arrangement in the Mekong River Valley of Cambodia (61.3%). We expect this to apply to Cambodia as a whole, even though nuclear households are actually less prevalent in the urban than in the rural areas of Cambodia. We find that the prevalence of nuclear families is also substantially lower among children living with only one parent than among those living with both parent (46.1% v. 66.4%), and for children living with neither biological parent, the prevalence dropped much lower (13.3%). Likewise for simple multigenerational households, its high prevalence among children living with neither biological parent stands out (27.7%) next to the relatively small difference in prevalence among children living with only one v. with both parents (11.7% v. 9.4%). The living arrangement whose prevalence differs most between children co-residing with only one rather than with both of their biological parents is the extended multi-generational households. Its prevalence among children living with only one parent is twice what it is among those living with both parents (22.7% v. 10.7%), and close to its prevalence among children living with neither parent (23.5%).

We further examined whether the age of the child and the gender of either the child or the lone biological parent affect the distribution of household children live in. In Table 4, the household distributions are shown for children living with only one of their parents under

exact age 6, between exact ages 6 and 12, and between exact ages 12 and 18. In the interest of readability, the “multigenerational” and “extended multigenerational” household types were grouped together, and (single-generation) “extended” households—relatively infrequent regardless of the number of co-resident parents (e.g., 7.4% among those living with only one parent)—were also regrouped with the “other” household type. We observe that when children are young, living with only one parent takes place in a multigenerational household in nearly half of the cases (49.9% among children under exact age 6), but living with only one parent in a nuclear family (with a single parent or with a biological parent and a step-parent) becomes more common as the children age (51.4% among children between exact ages 12 and 18).

TABLE 4 NEAR HERE

Because the age gradient of mortality is steeper as grandparents’ age, we might anticipate the proportion of children living in multigenerational households to decline as children age. Even if grandparents are still alive, as children get older grandparents do too, and we might also expect both a lesser demand (from parents to grandparents) for help with childcare and a lesser supply with the diminishing capacity of aging grandparent(s) to help with childcare. While this expectation partly bears out, the prevalence declines much less between children aged 6-11 and those aged 12-17 (34.3% v. 28.3%) when the effect of grandparents’ morbidity and mortality should be the same if not stronger. We believe that the much higher prevalence of multigenerational households among younger children reflects primarily the persistence of the traditional co-residency of newlyweds with parents, typically on the bride’s side, before they establish their own household (Heuveline and Poch, 2006). Another factor might be that multigenerational households can be maintained or formed equally to help with childcare and with elderly care, as care for aging parents is mostly

provided by kin in Cambodia. We find that if for children living with only one parent, the prevalence of multigenerational households declines more modestly between age groups 6-11 and 12-17 than between age groups 0-5 and 6-11, for children living with both parents the proportion even increases between the age groups 6-11 and 12-17 from 17.5% to 18.5% (results not shown). This may indicate that when grandparents stay or move in with an adult child for need of elderly care they are most likely to do so with an adult child who has remained in an intact relationship with his or her spouse.

With respect to the gender of the child co-residing with only one of their parents, there is little difference in the living-arrangement distribution of boys and girls: nearly one half lives in two-generation single-parent household, with or without a step-parent (45.3% of boys and 46.9% of girls), and over one-third live in a multigenerational household (35.6% of boys and 33.2% of girls, results not shown). There are stronger differences with respect to the gender of the co-resident biological parent. Bearing in mind that the number of children living with their biological father but not with their biological mother is quite small, the majority of these children appear to live in a nuclear household, possibly with a stepmother (55.4%, Table 5). For children living with their biological mother and without their biological father, nuclear households are still the most prevalent but no longer account for the majority of cases (44.9%). The prevalence of multigenerational households is nearly identical between the two groups, and thus the prevalence of “extended” and “other” household type mostly compensates for the difference in nuclear household prevalence (11.9% v. 20.5%). Further analyses of both the child’s age and gender did not reveal additional patterns, that is, the age patterns apply to both gender and the gender patterns are stable with age (e.g., the prevalence of “extended” and “other” household type among children living with their biological mother only varies from 19.6% under age 6 to 21.1% for age 12 and over, results not shown.)

TABLE 5 NEAR HERE

We next considered the socioeconomic conditions of children under age 18 and co-residing with at least one biological parent, starting with parental occupations. Summing across all these children (results not shown), we observe first that agriculture (farming, fishing or forestry) remains the dominant employment sector for more than half of all fathers (54.5%) and half of all mothers (52.3%, “home makers” being a separate category not reported as currently or previously employed). The service economy, however, employs a quarter of employed mothers (24.3%) and fathers (25.0%), and an even higher proportion when children are young, reflecting the fact that younger parents are more likely to participate in this sector. While for fathers, civil service provides the third employment sector (10.9%), mothers’ third most frequent sector is craft (15.4%). In Table 6, we show the occupation of parents living with or without their child’s other biological parent. Because the occupational distribution changes with child age, as noted above, Table 6 presents the distribution of parental occupations for three age groups: 0-5, 6-11 and 12-17. We first observe smaller proportions of mothers employed in agriculture when not living with their child’s father, whereas for fathers the proportion is markedly lower only when the child is under age 6. The service economy makes up most of the difference, the proportion of mothers employed in this sector increasing to over one-third when not living with their child’s father. Differences are also visible for fathers though more variable with child age, likely due to the smaller number of cases. For instance, we do observe a higher proportion of fathers employed in civil service among children living with both parents than among those living with their biological father only.

TABLE 6 NEAR HERE

For parents who were engaged in the first two sectors (farming, fishing and plantation or craft), we next considered whether these parents owned or rented the land or other resources they needed in their employed activities. Again summing across all these children first, we observe that about three quarters of the parents own these resources (72.2% of mothers and 77.4% of fathers). Fathers are also slightly more likely to rent these resources. The larger difference by parental gender is that a higher proportion of mothers (12.2%) than fathers (5.1%) are employed as labourers. As we also find that ownership of work resources increases with age, Table 7 again shows the parental ownership of children living with only one parent v. of those living with both of them for three age groups: 0-5, 6-11 and 12-17. Mothers of children under age 6 and not co-residing with the child's father are the least likely to own land or production resources (63.1%), whereas the fathers of children living with both parents are the most likely to own these (80.8%). For mothers, we observe that the age patterns diverge with mothers of older children becoming more likely to own work resources if they do not live with the child's father than if they do. This likely reflects the greater proportion of widows among them. The age and gender differences in ownership prevalence are almost entirely compensated by symmetrical age and gender differences in the proportions employed as laborers.

TABLE 7 NEAR HERE

We conclude with a few indicators of children's educational outcomes: literacy, school attendance, and grade for age. First, the overall literacy rate is higher for children co-residing with only one parent than those co-residing with both. As shown in Table 8, however, this result is an artefact of the strong differences in children's age distributions by number of co-residing parents. Among children who are already 12 and over, the illiteracy

rate is actually higher among children who are co-residing with one of their parents (10.9%) than among those co-residing with both parents (7.9%).

TABLE 8 NEAR HERE

We found exactly the same pattern with respect to school attendance. Children co-residing with only one of their parents are more likely to attend a formal school (73.1%) than children co-residing with both parents (58.6%), but the difference is again explained by differences in age distribution rather than in age-specific propensities to attend school. (We also considered attending a traditional pagoda school, but the numbers were quite small). As shown in Table 9, for children age 6 and over, the proportion of children attending school is actually slightly higher when a child is co-residing with both parents.

TABLE 9 NEAR HERE

Finally, we examined potential differences in grade-for-age distributions. As shown in Table 10, we find little differences by number of co-resident parents when children are 6-to-8-year old, with nearly 90% of children being in the appropriate grade regardless of parental co-residency. However, as is the case with literacy, and to a smaller extent with school attendance, differences begin to appear when children are 9-to-11 year old. In this age group, the proportion of children at the appropriate grade for age has fallen to 47.9% and 48.0% respectively for children with no co-resident parent and those with only one, compared to 53.1% for those still co-residing with both biological parents. The decline in grade-for-age appropriateness over only three years of age is quite dramatic, but the proportions are actually in line with national statistics suggesting that less than half of the 7th graders are the expected 12 years of age (Ministry of Education, Youth, and Sports 1997). To return to differences by parental co-residency, these differences widen further as children get older. Among 12-to-14 year-olds, the proportion of children at the appropriate grade for age is down to 41.8% for

children living with both parents, 35.5% for those living with only one co-resident parent, and 31.4% for those living with neither parent.

TABLE 10 NEAR HERE

Discussion

Our analyses of nationally representative data from 2004 (CSES) find that a large majority of Cambodian children under the age of 18 live with both their biological parents. Living with only one of them is not exceptional, however. According to these data, 12.3% of all children under age 18 live with only one biological parent (and possibly a stepparent), while another 5.3% live with neither of their biological parents. Another source of non-nationally representative but longitudinal data (MIPRAoC) provides similar prevalence estimates and suggests that the proportion of children living with only one of their parents was actually slightly declining between 2008 and 2010. We attribute this to the still substantial contribution of parental mortality to single parenting: the non-residential biological parent has died for 46.2% of all children living with only one biological parent. The decline in adult mortality thus seems to outweigh other demographic factors that could contribute to increases in single parenting.

We then compared the residential arrangements of these children living with only one of their biological parents with the typical arrangements of other children. With a substantially larger sample, our results confirm those of Demont and Heuveline (2008), especially the predominance of nuclear households in which live 61.3% of all children, and still 46.1% of those who co-reside with one of their biological parents. Another 23.3% of all children (34.4% of children co-residing with only one parent) live in multigenerational households with at least one parent and one grandparent. The higher prevalence of multigenerational households among children living with only one of their biological parents

is consistent with our expectation, based on unpublished findings from focus groups in the MIPRAoC project and published findings from a qualitative study in Thailand (Safman, 2003). In both, parents express a clear preference for their children to be taken care of by their own parents (i.e., the children's grandparents) rather than by any other relative, in the event they were not able to care for their children themselves. The prevalence of multigenerational household is even higher, approaching one-half (49.9%) when children with a lone parent are under age 6, which we link to the remnants of the tradition by which married children co-reside with parents on either side for a few years after marriage (Heuveline & Poch, 2006).

Prevalence data does not allow us to infer the potential motivation for living in a multigenerational rather than in a nuclear household. Multigeneration co-residence may indicate parents' demand for grandparental help with childcare, but could also indicate the supply of elderly care to the grandparents. We find that among children living with lone parents, the prevalence of multigenerational households decline as they get older, whereas it increases in the older age groups among children living with both biological parents and whose grandparents may begin to need more care. We interpret these different age patterns as indicating that intact two-parent families preferentially take in elderly parents in need of care, whereas younger (more valid) grandparents preferentially take in lone parents with children.

Moreover, we find no difference in living arrangements with respect to the gender of the child, but find that lone fathers are more likely to live with their biological children in a nuclear household than lone mothers. This is consistent with greater rates of remarriage among men than among women in Cambodia (Heuveline & Poch, 2006), which would facilitate continuing to care for children in a nuclear household. Altogether, these results converge to suggest that nuclear households provide the preferred living arrangement for

raising children in Cambodia, with multigenerational households representing an alternative when this preference cannot be met.

Based on data from Round 1 in MIPRAoC, which only contain census-type information, our ability to contrast the wellbeing of children living with both v. only one of biological parents is limited. We are able to compare, however, the occupational distribution of parents and their ownership of work resources, depending on the number of parents a child co-resides with. While agriculture remains the main activity for both adult men and women in this rural population, the proportion employed in the service economy is higher for mothers who are living with their child but not with the child's father. When these mothers are engaged in farming, fishing, plantation or in craft, they are substantially less likely to own land or the resources needed for their production than mothers co-residing with both their child and the child's father when that child is young (under age 6). We find a small difference in the opposite direction when the child is older (age 12 and over), which we attribute to the greater prevalence of widows among the mothers not living with the child's father at these (child) ages.

We also considered differences in child literacy, school attendance, and grade for age. We find a substantially larger proportion of children aged 12 and over who are not literate among those co-residing with only one of their parents (10.9%) compared to those who are co-residing with both parents (7.9%). Differences in school attendance, more modest though they are, point in the same direction. For instance, 4.5% of children aged 12 and over are not attending school among those co-residing with both parents, compared to 6.3% among same-age children co-residing with only one of their parents. When children are attending school, there are also lower proportions of children in the appropriate grade for their age, between the ages of 9 and 14, when not co-residing with both biological parents. Overall, the limited

available socioeconomic indicators suggest some differences in child wellbeing, but perhaps not as dramatic as might have been feared. We thus tentatively conclude that opportunistic changes in living arrangements—and co-residence with grand-parents in particular—represent a coping mechanism that alleviates the strongest of the potentially negative effects of living with a lone parent. Further analyses of MIPRAoC Rounds 3 & 4 rider-survey data, which include a full socio-economic assessment, will allow us to test this assertion more rigorously.

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