Alcohol Use among Very Early Adolescents in Vietnam: What Difference Does Parental Migration Make?*

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Little is known about the patterns of alcohol use among adolescents and the transmission of alcohol use behaviors from parents to children, including the passage into responsible and problem drinking, in the developing world. The following paper uses primary data from the Child Health and Migrant Parents in South-East Asia (CHAMPSEA) Project for older children aged 9, 10 and 11 to examine the prevalence (16.2 percent) and correlates of alcohol use initiation including parental migration status, caregiving arrangements and exposure to environmental alcohol use (family and friends) in Vietnam. Contrary to expectations, there is no observed migrant 'deficit.' There is some indication that early adolescents in the care of their grandparents are less likely to have a history of experimentation with alcohol use, although it is fully attenuated after controlling for other factors. Peer use is the most

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powerful explanatory measure of early adolescent drinking, with early adolescents more than five times as likely to have ever drunk alcohol if their friends drink also, and as expected, there is a strong child gender difference with girls much less likely to have a history of alcohol use.

"A man without alcohol is like a flag without wind"

- Popular Vietnamese saying

Introduction

Little is known about the patterns of alcohol use among adolescents and the transmission of alcohol use behaviors from parents to children, including the passage into responsible and problem drinking, in the developing world. In recent years, attention has focused on rapidly increasing rates of adult alcohol use and the global burden of disease associated with the use of alcohol and other substances, with alcohol as the first most important risk factor for ill-health and premature death in low mortality, lower income countries (Anderson, 2006). As more information becomes available about general patterns of alcohol use in diverse cultures, concern about adolescent alcohol use is rising as well, and with good reason evidently. Recent research from South Korea illustrates more than a two-fold increase from 1998 to 2005 to 10.1 percent among adolescents and young adults (Hong et al., 2011). Many countries in the Asian region are lower- and middle-income countries where sophisticated data collection and monitoring systems are only just emerging, and thus there is little extant research about patterns of adolescent alcohol use and how associated risk and protective factors in the region are similar to, or differ from, other cultural contexts.

Vietnam is geographically and culturally at the crossroads of East and South-East Asia, and offers an interesting site for examining different cultural influences. In regards to risk behaviors, it is very similar in many ways to other regional neighbors with, for example, higher rates of tobacco and alcohol use among men compared to women (Giang et al., 2008; Pham et al., 2010). There is, however, growing concern about changes in tobacco and alcohol use especially among young adults (Nguyen et al., 2012; Pham et al., 2010; Tho et al., 2007). The article uses primary data from the Child Health and Migrant Parents in South-East Asia (CHAMPSEA) Project for children ages 9, 10 and 11 to examine the prevalence and correlates of alcohol use including parental migration status and exposure to familial alcohol use in Vietnam. We refer to relevant literature from Vietnam, South-East and East Asia when available, and make reference to research on worldwide adolescent populations when applicable to develop the theoretical frame-

work. This strategy allows for us to theorize from the more well-developed frameworks of risk and protection (general adolescent populations in high income countries) to the less developed (in this case Vietnamese early adolescent populations) while utilizing more local knowledge from the region to contextualize the general population frameworks.

Background and Motivation

Prevalence of Adolescent Alcohol Use in Vietnam and the Region

There is limited research on alcohol use of young people in Vietnam, and this is especially true of early adolescents. Three recent studies provide some important information about the prevalence of adolescent alcohol use in Vietnam. The first is the Survey Assessment of Vietnamese Youth (SAVY), a national probability survey of adolescents and young adults conducted in 2003 and 2008. The SAVY is based on a survey of 7,584 youth aged 14-25 years. The most recent estimates from Wave 2 illustrate trends in adolescent alcohol use: among 14 to 17-year-olds, 47.5 percent have ever finished an alcoholic drink while 30.8 percent report ever having been drunk (Ministry of Health et al., 2010). Although not disaggregated by age, gender differences are noticeable, with 79.9 percent of young men aged 14 to 25 ever finishing a drink, and 60.5 percent ever drunk compared to 36.5 percent and 22 percent for young women across all ages. Another recent study conducted in Nha Trang province in central coastal Vietnam provides estimates of ever drinking at 78 percent male, 56 percent female based on a sample of 880 youth aged 16 to 24 (Kaljee et al., 2011). Results from a comparative study within East Asia (including Hanoi, Shanghai, Taipei) indicate that alcohol use is prevalent among male adolescents and young adults aged 15-24, with over one-third of the Hanoi sample (N=4,550) currently drinking alcohol (Nguyen et al., 2012). There are also significant differences for male adolescents aged 15-19 between local urban residents (29 percent) compared to migrants into Hanoi from rural (45 percent) and other urban areas (43 percent). With some relevance for the current study, the higher risk of drinking alcohol observed in youth who migrate into Hanoi is fully accounted for after controlling for other factors including age, employment status, and depression, as well as peer drinking. Our literature review provided no evidence of any research on the alcohol use of early adolescents younger than age 14 in Vietnam or adolescents of any ages who are children of migrants.

Some studies from other countries in the region have included early adolescents, and offer potential contextualization for Vietnam. Recent research, for example in Thailand, suggests much lower rates of alcohol use

among a large national sample of young people (N=50,033) with the overall rate of ever using alcohol at 28 percent among students in grades 7, 9, 11 and second-year vocational school (Sam-angsri et al., 2010). Particularly relevant to the current study based on age comparability are the prevalence rates among the 7th grade students (average age 12 years) for ever drinking alcohol of 15 percent, and for current alcohol use within the last 30 days of seven percent. The gender differences between ever and current alcohol use (aggregated across all ages) in Thailand are similar (although the gender difference is not as marked) to those in Vietnam with adolescent boys (37 percent ever drink, 24percent current drink) more likely than girls (20 percent ever drink, eight percent current drink) to report alcohol use. Of additional relevance to our study, a number of Thai adolescents who reported ever drinking stated that their age of initiation was less than 11 years of age.

Evidence from China is also potentially relevant to the Vietnam case primarily because of the shared cultural influence of Confucianism. This shared heritage is particularly relevant to North Vietnam where the CHAMPSEA data were collected. A study of adolescents in Beijing provides estimates for ever drinking and current drinking of 54 percent and 19 percent, respectively, among 6th grade students (combined boys and girls) (Li et al., 1996). Across the full sample (N=1,040) of 6th, 8th and 10th grade students, similar to Vietnam, the rates of male use were higher overall. While this study is more than 15 years old, the economic conditions in the capital city of China at that time may be more applicable to Vietnam in the late 2000s, and thus are considered relevant. One explanation offered for higher rates of drinking is greater exposure to western influences as evidenced, in particular, by greater consumption of beer which is a non-indigenous alcoholic beverage (Shell et al., 2010). If this is indeed a precipitating influence, similar logic could be applied to the CHAMPSEA data, with a greater exposure to foreign influences evident among children living in transnational households (THs), an explanation that build off more general theories of modernization which suggest changing family and social norms in response to wider societal transformation (Shell, et al., 2010).

A more recent Chinese study in a southern Chinese province, Guangdong, shows higher rates of alcohol consumption than the previous study among middle and secondary school students. Seventy percent of boys and 43 percent of girls reported ever using alcohol among this sample of 1,536 adolescents with an average age of 14 years old (Gao et al., 2010). Rates of current alcohol use were 33 percent and 13 percent for boys and girls, respectively. Of particular relevance to CHAMPSEA, Gao et al.(2010) compare adolescents with one or more migrant parents to adolescents living with both parents. They conclude that there are significant differences

between the two groups, in particular for adolescent girls living in migrant parent households who are at greater risk of binge drinking compared to those in non-migrant parent households.

Exposure to Alcohol Use among Peers and Family

Peer involvement in risk behaviors, including alcohol use, is strongly related to adolescent involvement (e.g., Nash et al., 2005; Pemberton et al., 2008). Results from the published report on the 2003 SAVY in Vietnam illustrate the prevalence of peer pressure to drink for male adolescents, with 15 percent of young men aged 14-17 strongly endorsing questions about experiences of peer pressure, rising to 30 percent for ages 18-21 (Ministry of Health et al., 2005), and the significance of peer alcohol use for adolescent and young adult current drinking is reinforced by the recent study of health risk behavior in Hanoi (Nguyen et al., 2012). A contemporary review of literature on alcohol use among South Korean adolescents highlights the significant influence of peer behavior (Hong et al., 2011). Hong et al. argue that the predominant Confucian values of group harmony and interdependence are likely to bolster the impact of peer behaviors among adolescents in South Korea.

Parental attitudes about alcohol use, including parental personal consumption, are, in general, consistently related to adolescent alcohol use across the developed world (Chalder et al., 2006; Hong et al., 2011; Lee and Cranford, 2008; Pemberton et al., 2008; Velleman, 1999). Interestingly, while the initial findings from the 2003 SAVY (Ministry of Health et al., 2005) in Vietnam indicated that 16.7 percent of adolescents reported paternal drinking problems and/or alcohol addiction, which suggested that a sizeable proportion of young Vietnamese might be affected by parental alcohol misuse, a more recent publication using the 2005 and 2008 SAVY (Nguyen et al., 2010) concludes that there is no statistically significant relationship between parental drinking and the drinking behavior of children. This is in contrast to research from Australia, US, UK, the Netherlands and within East Asia, South Korea, demonstrating this relationship with particular risks associated with problem drinking of parents for the consumption patterns of the next generation (Chalder et al., 2006; Hong et al., 2011; Lee and Cranford, 2008; Pemberton et al., 2008; Velleman, 1999).

Impacts of Parental Absence

Some studies and policymakers have articulated a concern about a potential deficit in the supervision of children and adolescents resulting in increased engagement in risk behaviors when parents migrate away for

work (ECMI/AOS-Manila et al., 2004). Very little research has, however, attempted to explain the relationship between parental out-migration and adolescent risk behaviors. The argument of a link between parent migration and child risk behavior is in line with research on the importance of *parental monitoring or supervision* for limiting risk behavior in young people (e.g., Hemovich et al.,2011; Nash et al., 2005; Ryan et al., 2010; van den Eijnden et al., 2011). Parental monitoring is a proven significant protective factor for adolescent risk behavior.

It is maternal migration in the South-East Asia that generally sparks worry about children receiving adequate nurturance, while concerns about paternal migration focus on children receiving adequate discipline (Battistella, 2007; McKay, 2007). In this light, parental absence, and in particular paternal absence, may result in increased risk behaviors because of a deficit in monitoring and discipline. However, the disproportionately high use of alcohol by men and gender role socialization in the Vietnamese context could exert the opposite influence with children, especially boys in father migrant households experiencing decreased opportunity of socialization into alcohol use. As such, understanding the relationship between migration, gender role models and alcohol initiation in early adolescence is an important public health issue for Vietnam, and other countries with rising concerns about adolescent and young adult risky alcohol use.

Given the identified research gap in this area, the following exploratory research questions are examined: (1) Are some of the commonly examined measures of early adolescent alcohol use applicable to the Vietnamese context?; (2) How are parental migration and caregiving arrangements associated with the risk of early adolescent drinking?

Study Data and Methods

CHAMPSEA is a mixed-method cross-sectional research program investigating the impacts of parental migration on children left behind in Indonesia, the Philippines, Thailand and Vietnam. The survey data analyzed here are selected from Phase 1 of the study and were collected during 2008 in two provinces in the north of Vietnam (total Vietnamese country sample N=1,012). Sampling was conducted in three stages. First, two provinces with high levels of international out-migration were identified by migration researchers. Second, communities were screened to identify eligible households and eligible households were those with a child in a specified age range where, at the time of the survey, either one or both parents were transnational migrants (transnational households or THs), or where both parents were present in the household ('usually resident' or non-migrant households). Third, a flexible quota sampling design was used to recruit

TABLE 1
ALCOHOL USE ACROSS THE CHAMPSEA STUDY COUNTRIES FOR CHILDREN AGED 9 TO 11

	Indonesia	Philippines	Thailand	Vietnam
Have you ever had a drink of beer, wine, or liquor—not just a sip or a taste of someone else's drink—more than 2 or 3 times in your life?	0.2	5.74	4.31	16.87 ***
How often have you had a drink of beer, wine, or liquor in the last 30 days? +	none	2.46	0.98	5.22 ***
Do you ever drink beer, wine, or liquor when you are not with your parents or other adults in your family?^	none	100	77.27	39.29 ***
Do any of your friends drink beer, wine, or liquor?	7.33	14.17	23.77	20.28 ***
Does anyone in your family drink beer, wine, or liquor ?	3.56	74.54	85.27	82.73 ***
N	505	488	510	498

NOTES: Number for 'current' and 'ever drink without family' take proportion of ever drink
*** Chi-square tests significant at p<.001
\+ Chi-square excludes Indonesia
^ Chi-square excludes Indonesia because of nil value and the Philippines because of 100% value

households for two cohorts of children, 3 to 5 (n= 501) and 9 to 11 (n=511) years old. To qualify as a transnational household, at least one parent must have been absent and working abroad for a continuous period of at least the six months prior to the survey. Similarly, a non-migrant household was taken as one in which both parents had been living at the same address as the qualifying child on most nights over the previous six months. The study design and sampling methods are described in greater detail in Graham and Yeoh (this volume).

Table 1 provides the standard set of questions about alcohol use in the CHAMPSEA older child questionnaire and the proportion of children answering 'yes' across the four study countries. Chi-square tests highlight how the rate of ever using alcohol is highest in Vietnam compared to the other three CHAMPSEA countries, and this was the decisive factor for exploring the relationship further within the Vietnamese context. While the Vietnamese children have the highest rate of ever drinking alcohol,

the proportion of children who report ever drinking alcohol without a family member is highest for children in the Philippines (100 percent) and Thailand (77.3 percent), indicating an area deserving closer examination in future research. The distribution of the data actually present a compelling incentive to explore whether the impact of migration, in particular paternal migration in Vietnam, could be detrimental to the development of responsible drinking in a cultural context where early adolescent alcohol use occurs within the family context. Specifically, if the absence of fathers results in greater experimentation with peers at an earlier age, this could translate into riskier behavior as the children move into later adolescent and young adulthood.

While current alcohol use is generally considered a better indicator of adolescent and young adult risk profile, we selected lifetime use because of the very low rates of current use in Vietnam, which is common for the early adolescent age group (Habib et al., 2010). Any use of alcohol (as defined by 'not just a sip or taste…more than 2 or 3 times') at early adolescent ages is generally considered a significant risk factor.

A combined measure of parental migration status and the child's primary carer was created to capture the current family residential and caregiving arrangements. The majority of the non-migrant households (82 percent) have mother carers, and the combined measure was used to address issues of multi-collinearity between the separate measures. Measures of whether the child's peers drink and whether family members drink are also included. Measures of child gender and age are included, as are measures for socioeconomic status (SES) (father's completed education and household wealth). The measure of father's completed education also accounts for historical family SES which may be able to account for some portion of unmeasured selection factors likely to influence which households are more likely to migrate compared to others. A measure of whether the index child (IC) has an older sibling is included as this is a recognized risk factor for early experimentation with drinking alcohol (Fagan and Najman, 2005). Two indicators of family process are included, a binary measure for good family functioning based on the composite child-reported Family APGAR (which stands for Adaptability, Partnership, Growth, Affection and Resolve - the first five parameters of family functioning) score and a binary indicator of whether the family regularly argues, which is recoded from the five-category original measure.

List-wise case deletion was used to account for missing data as the percentage missing was quite low (2.3 percent) for the subsample, resulting in the final analytic sample n= 498. This method was considered the best choice compared to other methods, such as multiple imputation, because of the low overall percentage of missing data and additional error introduced

after implementing imputation procedures. Tests of bivariate relationships between key independent variables and the dependent variable, ever drinking alcohol, were conducted, followed by fitting hierarchical logistic regression models to examine the contribution of the three substantive blocks of variables: 1) migrant-carer status; 2) risk factors for alcohol use; 3) child, household and other control variables to explain differences in self-report of alcohol drinking initiation. The bivariate comparisons between the dependent variable ever drinking and all of the independent and control variables were computed using chi-square tests (*see* Table 2), followed by a series of hierarchical logistic regression models. Table 3 presents the odds ratios (OR) and 95 percent Confidence Intervals (CI) for hierarchical logistic regression models with migrant-carer status first (Model 1), followed by indicators of alcohol use in the child's environment (Model 2), and finally, a block of child and family indicators (Model 3). Model 3 also controls for province of residence.

Findings

Before turning to the multivariate results, it is worth highlighting the key findings from the bivariate comparisons. In general, there are only a few significant bivariate results: child's gender, family functioning and alcohol use in the peer and family environments. While the chi-square test is not significant for the migrant-carer status, the p-value is less than 0.10 providing some indication of a relationship with lifetime use of alcohol. The most prominent correlations are found between ever drink alcohol and alcohol use among friends, with a correlation of 0.29. A correlation of this magnitude is considered moderate, but it does not necessitate exclusion from further analysis.

Multivariate Results

The first set of models (Model 1, Table 3) enters the measure of parental migration status and caregiving arrangement. There is a significant negative association with child alcohol use for children living in transnational households with a non-parental or other carer (TH-other carer) (OR=0.34, $p<.05$). The overall percentage of TH-other carer is 12.8 percent, and the majority of these carers are grandmothers (over 80 percent). There is also a marginally significant negative association with child alcohol use for children living in transnational households with a father (TH-father carer) (OR=0.60, $p<.10$). This does not support the proposition about risky behavior for households with mother migrants, and it does provide some support for the proposition that having the father present may encourage their

TABLE 2
MEASURES INCLUDED IN THE ANALYSIS (N=498)

Variables		All Children	% Ever Drink	
Dependent Variable				
Ever use alcohol	Binary indicator from original question: 'Have you ever had a drink of beer, wine, or liquor - not just a sip or a taste of someone else's drink - more than 2 or 3 times in your life' 0=no 1=yes	16.87	-	
Independent Variables				
Child is girl	Index child 0=boy 1=girl, from Household Roster	54.22	32.14	***
Child's age	Categorical measure of index child's completed years of age where possible values are			
	9	41.97	20.57	
	10	30.92	13.64	
	11	27.11	14.81	
Father's education	Binary variable created from years of completed schooling where			
	1=primary or less	72.89	16.80	
	2=lower secondary or higher	27.11	17.04	
Household wealth	Categorical measure that ranks households based on level of wealth			
	1=low wealth	39.76	16.67	
	2=average wealth	40.96	19.61	
	3=high wealth	19.28	11.46	
	Note: low wealth combines the 1st and 2nd quintiles of wealth index; average combines the 3rd and 4th while high represents those households in the 5th quintile only			
Older sibling	0=no 1=yes, from Household Roster	47.79	50.00	
IC family functioning good	A binary indicator created from the summed total of five standard items for family functioning based on the APGAR measure where 0=no 1=yes	57.23	46.43	*
Family arguments	A binary indicator created from the 5 category question, 'Do people in your family have serious arguments?' 0=no 1=yes (top two categories) 1=never; 2=hardly ever; 3=some of the time; 4=almost always; 5=always	27.91	30.95	
Family alcohol use	Does anyone in your family drink beer, wine or liquor? 0=no 1=yes	82.73	91.67	*
Friends alcohol use	Do any of your friends drink beer, wine or liquor? 0=no 1=yes	20.28	45.24	***
Migrant-carer status	Combined measure of a household's migration status and caregiving arrangements where			+
	0=Non-migrant household	43.98	21.00	
	1=TH-mother carer (father migrant)	15.26	18.42	
	2=TH-father carer (mother migrant)	26.31	13.74	
	3=TH-other carer (father or mother is migrant and carer is other than parent)	14.46	8.33	

NOTE: Chi-square tests significant at ***p<.001 **p<.01 *p<.05 +p<.1

TABLE 3
EVER DRINK ALCOHOL, HIERARCHICAL LOGISTIC REGRESSION MODELS (N=498)

	OR	95%	CI	OR	95%	CI	OR	95%	CI
Migrant Carer Status									
Non-migrant household		-			-			-	
TH-mother carer	0.85	0.44	1.65	1.21	0.60	2.47	1.09	0.52	2.29
TH-father carer	0.60	0.33	1.09 +	0.62	0.33	1.15	0.53	0.26	1.07 +
TH-other carer	0.34	0.14	0.84 *	0.44	0.17	1.10 +	0.39	0.15	1.04 +
Family alcohol use				2.21	0.94	5.19 +	2.09	0.87	5.02
Friends alcohol use				4.26	2.54	7.16 ***	4.92	2.77	8.75 ***
Child is girl							0.29	0.17	0.50 ***
Father's education									
Primary or less								---	
More than primary							0.97	0.53	1.77
Household wealth									
Low								---	
Average							1.28	0.71	2.29
High							0.71	0.31	1.63
Older sibling							1.14	0.68	1.94
Family functioning good							0.66	0.38	1.12
Family arguments							0.95	0.53	1.70
Pseudo R2	0.02			0.10			0.18		
Log likehood	-221.96			-204.31			-185.74		

NOTE: Model 3 controls for child age and province
***p<.001 **p<.01 *p<.05 +p<.1

children to drink, but perhaps responsibly, and not more than 'a taste or sip.' Further research specifically focusing on family socialization of alcohol use would be needed to clarify such propositions.

The second set of models (Model 2, Table 3) brings in environmental alcohol use -- of friends and family. After controlling for family and peer use of alcohol, the significant association between alcohol use and living in a transnational household with a non-parental or other carer (grandmothers) is marginally significant (0.44, $p<.10$). The strong association between peer use and child use is the most significant story in Model 2, children with friends who drink are more than four times as likely to have experimented with drinking themselves (OR=4.26, $p<.001$). The strength of this finding is at par with other research in Vietnam for older adolescents (Nguyen et al., 2010; Nguyen et al., 2012). Of a more minor note is the marginally significant positive association between family alcohol use and child use (OR=2.21, $p<.10$).

The final set of models (Model 3, Table 3) brings in the child, family and household characteristics, including SES as well as household structure and family process measures that are associated with risk behavior in early adolescents in other cultural contexts (e.g., Habib et al., 2010; Hemovich et al., 2011; Hong et al., 2011; Kaljee et al., 2011). As expected there is a strong child gender effect, with girls much less likely to report every drinking alcohol (OR=0.29, $p<.001$). There are no significant differences for either of the measures of SES, father's education or household wealth, nor for any of the family structure (older sibling in household) or family process (family functioning and family conflict) measures. In other cultural contexts outside of East Asia, having an older sibling increases the likelihood of exposure to alcohol initiation (Nash et al., 2005), although this association is predicated on the older sibling's own involvement in risky behavior. This information is not available for the current study. What about the initial blocks of variables? The strength of the association between peer use and child's own use is increased with children who have friends experimenting with drinking almost five times as likely to have experimented themselves (OR=4.92, $p<001$). The pattern of relationships between migration status and caregiving arrangements is quite similar, with marginally significant associations between living in a transnational household with either a father (OR=0.53, $p<.10$) or non-parental or other (grandmother) carer (OR=0.39, $p<.10$) less likely to report alcohol consumption than those living with both parents at home. Model 3 also controls for child age (9, 10 or 11) and province of residence.

Discussion

This paper offers a number of important insights into the area of early adolescent alcohol use in Vietnam, a lower-middle income country that is engaged in a rapid period of modernization. In Vietnam, as in many other developing countries, household migration is a common event during the life course period of family reproduction. The motivation for the paper was initiated by the observation that close to 17 percent of Vietnamese children aged 9,10, and 11—school-aged early adolescents— in the CHAMPSEA Project reported ever having 'a drink of beer, wine, or liquor—not just a sip or a taste of someone else's drink—more than 2 or 3 times in your life?.' A lack of information about early adolescent alcohol initiation and use led us to draw on the related literature for older adolescents in Vietnam and the region, and occasionally further afield when there were gaps in regional knowledge to build up a case for the conceptualization. Our aims were modest (1) to establish whether some of the common independent variables of early adolescent alcohol use are applicable to the Vietnamese context; and (2) to investigate whether and how parental migration status and caregiving arrangements are associated with the risk of early adolescent drinking.

The Importance of Peers

Peer use is a powerful independent influence on early adolescent drinking in this context, with children more than five times as likely to have ever drunk alcohol if their friends drink also. While it is not possible to discern the direction of causality from the cross-sectional data, it is nonetheless, troubling that almost 17 percent of this young age group is engaging in risk behavior—alcohol use—that can have long-term health and well-being consequences. This finding serves as a complement to recent findings about the high prevalence of peer pressure to drink from the Survey Assessment of Vietnamese Youth that studied older adolescents and young adults (Ministry of Health et al., 2005, 2010) as well as the findings from Nguyen et. al. (2012) that show an increased likelihood of current drinking for older adolescents and young adults (OR=2.2) with peers who also drink alcohol. The confirmation of the significant relationship between peers and adolescent drinking across these diverse studies highlights an area that deserves greater attention in public health policy within Vietnam.

The Importance of Who is Providing the Care

Of particular interest to our inquiry here was the relationship between alcohol use and parental migration/caregiving arrangements. The lack of

previous research led us to question --might children of mother migrants, lacking the nurturance of the mother, be at particular risk? Might children of migrant fathers, lacking the discipline of the father, be at risk? Additionally, we queried whether the influence of Confucian values and gendered socialization into manhood might operate as a protective factor when fathers socialize their sons into culturally appropriate alcohol use. In the context of migration, if a father is absent, this could then result in a deficit to the usual socialization process. We found little evidence of a clear gendered migrant parent effect. We used non-migrant households as the comparison group, taking into consideration that these household are less likely to have a 'monitoring deficit' with both mothers and fathers in physical residence. After controlling for environmental alcohol use of peers and family, the impact of parental migration and caregiving arrangement remains only marginally significant. Prior to controlling for environmental alcohol use of peers and family, we find that it is children in migrant parent households with non-parental or other carers who are the least likely to report lifetime use of alcohol across all of the models. While the distribution of other carers includes grandmothers, grandfathers, older siblings, and aunts, the majority of these other carers are paternal grandmothers (1 in 2), reflecting the strong patrilocal heritage of North Vietnam (Frankenberg et al., 2002). This provides some evidence that the nature of substitute care arrangements, in particular the care provided by grandmothers, is an important contributing factor to limiting early adolescent alcohol initiation. In studies based in other countries there are indications that grandparents may enforce stricter rules on child behavior compared to the child's parents, which may act as a deterrent for risk behavior (Yorgason et al., 2011). While this may be beneficial in the short run, some studies suggest that it may backfire during later adolescence when rebellion against supervision and monitoring is more likely to occur (Pittman, 2007).

Additionally, there is the suggestion that children in mother migrant-father carer households (TH-father carer) are less likely to have experimented with alcohol. What might explain this? One possible explanation could be related to the household residential patterns. The overall rate of co-residence with grandparents across the study sample is 33 percent. The distribution of three-generation households is unbalanced, with the greatest number found in the transnational households with other carers (37 percent) followed by non-migrant households (34 percent). Children living in a household with a migrant parent and a parental carer are the least likely to have a live-in grandparent (both less than 20 percent). The study country field workers noted that in many instances, grandparents may reside in close proximity to the index child, although the family does not include them within their official household. It is possible that when the mother is an international

migrant the father may substitute his care with grandparent care although not view it as primary. Another possible explanation is that these two-generation households reflect a more 'modern' family configuration that could indicate the adoption of new ideas from outside cultural influences, including changes in thinking about child initiation into alcohol use. One of the changes attributed to migration is the transmission of different cultural norms to the family in the origin location (Adler and Gielen, 2003). Further investigation of this possibility would require more detailed data collection about the extended family residential patterns as well as changing community and family cultural norms on alcohol use.

Concluding Remarks

The current study provides new information about the prevalence rates of alcohol use initiation for early adolescents (16.7 percent) in two northern Vietnam provinces which can be used as initial benchmarks. There are limitations to the generalizability of the findings; in particular the two provinces cannot be considered representative of the Vietnamese population, especially given the selection criteria to choose provinces with high levels of international labor migration. The study examined the significance of common independent variables (child, family, household characteristics) in explaining lifetime alcohol use in the Vietnamese context, and has also focused particularly on understanding the relationship between parental monitoring—as measured by parental migration status and household caregiving arrangements—and alcohol use. While the effect of decreased parental monitoring is implicit in concerns expressed in regional press and selected academic research (Parreñas, 2003), this study is the first, to our knowledge, to apply the framework of parental (including non-parental caregiving) monitoring to the transnational household in the region.

Concern about how the absence of one or both parents may result in a monitoring deficit thus leading to an increase in the likelihood of adolescent alcohol use, echoes concern about parental monitoring deficits in single parent households. Indeed, recent research by Hemovich et al., (2011) reaffirms the link between single parent households and decreased parental monitoring as being associated with increased alcohol and drug use in a US national sample of 4,173 adolescents. While the conditions of the transnational household are not directly comparable to single parent households which have experienced dissolution of the parental relationship, changes in the physical structure of the household do alter caregiving patterns and parental monitoring. The results from CHAMPSEA in Vietnam do not provide any conclusive evidence about a positive or negative impact of parental migration and household caregiving arrangements, although

greater understanding of why it is children in the care of grandmothers who are least likely to drink reflects a shift in cultural norms for the current generation of parents compared to their own families of origin. The National Longitudinal Study of Adolescent Health (Add Health) conducted in the US starting in 1994 for grades 7 to 12, oversampled ethnic and racial minorities, and research highlights significant differences between different Asian immigrant subgroups for alcohol use (Choi, 2008). Of particular interest here is the significantly lower rate of lifetime use of alcohol among Vietnamese American adolescents (mean age 16 for in-home sample) at 40 compared to all other subgroups, which include South Asian, Chinese, South Korean, Japanese and Filipino adolescents, as well as unspecified others. While family migration to the U.S. is not directly comparable to split-household contract labor migration from Vietnam, the findings provide some indication of lower consumption among co-ethnic group members of an earlier generation. Whether there are unobserved influences related to differences in birth cohorts or if there are certain characteristics of intergenerational relationships influencing the observed differences cannot be determined at present.

Similar to studies with older adolescents in the region, after controlling for other factors, the key finding is the significant risk factor of peer engagement in alcohol use to the incidence of risk behavior. As the children in this sample age into middle adolescence, greater understanding of the risk and protection profiles will become possible if these children follow the trends of adolescent drinking observed in other Vietnamese studies. The current study provides further evidence that public health surveillance and intervention should consider the rising salience of peer relationships in the modern age of Vietnam. The significant influence of peers may reflect changing cultural values away from the traditional family sphere. Developing greater understanding of the adolescent transition to adulthood will rely on longitudinal data collection to track pathways into and out of adolescent risk behaviors in Vietnam and other lower- and middle-income countries.

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