

# Ethnic Minority Educational Success: Understanding Accomplishments in Challenging Settings

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Accepted: 7 April 2018 / Published online: 26 April 2018  
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**Abstract** Regardless of remarkable educational achievements for over the last 20 years, the academic attainment of Vietnam’s ethnic minority students continues to lag behind that of majority students. At upper-secondary education, not only has the educational disparity persisted, but it has increased over time. Recent studies have found ethnic minority students have to face many challenges including poor family socioeconomic background, long distances to school, poor school quality, and linguistic and cultural barriers. Despite challenges, some ethnic minority youths do enroll in and complete their upper-secondary education. Therefore, understanding how ethnic minority students manage to overcome barriers and succeed educationally can provide important insights regarding the means that policymakers, educators, and parents can pursue in order to address the educational disparity. The resilience literature exploring association between household adversities and children’s responses indicates that hardship does not always result in detrimental effects. This study used a mixed-methods approach and explored data from the Families and Communities in Transition study to examine risks and factors promoting upper secondary education among the Thai youth, the second largest ethnic minority group in Vietnam. The study found that poverty, low educated parents, low parental engagement in child’s education, school distance, being bullied, teased, and induced to dropout were challenges to ethnic minority’s upper-secondary school. More importantly, the study provided supporting evidence for a positive attitude toward schooling and effective support from their parents, relatives, school and in-school peers can prevent ethnic minority student from school dropout and promote their educational success.

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**Keywords** Educational resilience · Ethnic minority · Educational disparities · Vietnam · Ethnic inequality

## 1 Introduction

Vietnam has implemented several programs to promote the educational success of ethnic minority students during the past two decades. Despite achieving significant progress at the primary and the lower-secondary level, the academic achievement of Vietnam's ethnic minority students continues to lag behind that of majority students at the upper-secondary school level. Not only has this educational disparity persisted, but it has increased over time. In particular, the ethnic disparity with respect to net enrollment rates at the upper-secondary level increased from 21.4% in 1992 to 37.6% in 2012, and the completion rate disparity increased from 10.4 to 34.7% in the same period (World Bank 2011). This disparity highlights the need for educators and parents to understand the challenges that lay in the path of ethnic minority students.

A number of recent studies in Vietnam have identified many of the challenges that ethnic minority students face. These challenges include socioeconomic disadvantage, long distances to school, poor school quality, and linguistic and cultural barriers (Baulch et al. 2010; World Bank 2011; Glewwe et al. 2015). Despite these challenges, approximately 30% of ethnic minority youths do enroll in upper-secondary schools, and 20% of ethnic minority youths do complete their upper-secondary education (General Statistics Office 2014). Understanding how some ethnic minority students are resilient and manage to overcome barriers and succeed educationally can provide important insights on the avenues that educators can pursue in addressing educational disparity and the educational policies that should be emphasized.

Researchers have defined resilience as an individual's attainment of positive outcomes despite serious threats to adaptation or development (Masten 2001; Masten and Coatsworth 1998). The resilience literature exploring association between environment adversities and children's responses indicates that hardship does not always result in detrimental effects. Family, school, and peers can represent powerful adaptive systems that protect and promote the academic achievements of children who reside in favorable or unfavorable environments (Masten and Coatsworth 1998). Thus, studies of educational competence and resilience can shed light on the positive factors that enable Vietnam's ethnic minority children to succeed despite substantial challenges.

The present study has applied the competence and resilience framework and used a mixed-methods approach to explore factors that contribute to an ethnic minority student's educational success at the upper-secondary school level. Specifically, the present study has sought to understand how some ethnic minority students manage to transcend obstacles and enroll in upper-secondary school while similar ethnic minority students do not. Understanding educational resilience among ethnic minority youths can inform parents, educators, and policymakers about some of the means that they can use to promote upper-secondary school enrollment among ethnic minority children.

## 2 Challenges to Ethnic Minority Students' Educational Success

In order to understand how children who live in a socially and economically disadvantaged environments overcome adversities to achieve educational success, we need to identify the important threats to children enrolling in schools, attending classes, and attempting to complete their education (Masten and Coatsworth 1998). Thus, before discussing factors that may promote ethnic minority students' educational success, the present study discusses factors that may prevent these youths from achieving educational success. Existing research suggests that the educational attainment of ethnic minority students at the upper-secondary level can be threatened by several factors, including child marriage, family poverty, low levels of education among the parents, school access issues, language-based exclusion, negative peer influences, and disadvantaged neighborhoods.

### 2.1 Child Marriage

Child marriage is defined as marriage that occurs before age 18. Child marriage often threatens a girl's health and even her life, in addition to limiting her educational and economic opportunities for the future. In particular, early marriage is often associated with early pregnancy and dropping out of school (Baulch et al. 2010; UNFPA Vietnam 2016; Dunne et al. 2005).

A recent survey of females between the ages of 15 and 19 shows that although Vietnam's overall rate of early marriage was approximately 11% in 2014, the rate among female ethnic minority students was 26.6% (UNFPA Vietnam 2016). Vietnam's ethnic minorities have long used early marriage as a means of supplementing the family's labor (Phuong 2013). However, given the adverse impacts of early marriage on a student's continued schooling, early marriage among ethnic minorities can pose a serious risk to their educational success.

### 2.2 Family Poverty

Family poverty is one of the strongest barriers to an ethnic minority student's educational attainment. Family poverty acts in four ways. First, it limits a family's ability to support their child's education financially. Second, it influences parents' decisions regarding whether to send their children to school or keep them at home, where the children can contribute labor to the household's production. Third, family poverty affects the way parents allocate their own time working and support their children's learning (Chudgar and Shafiq 2010; Edmonds 2008). Fourth, research has shown that family poverty influences parenting styles; specifically, poor parents are more likely than others to exhibit harsh and inconsistent parenting, which often contributes poor educational outcomes for their children (McLoyd 1998; Nicholas-Omoregbe 2010).

Many studies conducted in Vietnam have indeed confirmed a robust and significant, negative association between family poverty and children's poorer educational attainment (Israel et al. 2001; Gumus 2014; Anh et al. 1998; Filmer 2000; Hannum 2003). Thus, given that ethnic minorities comprised 50% of the poor Vietnamese in 2014

(World Bank 2015), family poverty would represent the most pervasive challenge to the education of Vietnam's ethnic minority students.

### 2.3 Poorly Educated Parents

Researchers have found that being reared by parents with no or little formal education limits children's educational success. A parent's educational attainment can contribute to a child's educational attainment in three ways. First, parents who have the requisite education can help their children with homework, in addition to being able to provide for their children's physical health and nutritional needs. Second, they can serve as a safety net to their children's education during shocks. Third, these parents' examples of educational (and subsequent or related professional attainment) can motivate their children's own aspirations (Chudgar and Shafiq 2010; Haller and Portes 1973).

Compared to these parents, those without the requisite education have less knowledge, resources, and educational inspiration to contribute to their children's education. A recent study of Vietnam's ethnic minorities found that, because of their low educational attainment, ethnic minority parents with low educational attainment also exhibited low engagement and low esteem. The latter two characteristics affect children's educational motivation: they are associated with reductions in the children's educational success (Tran 2013). Because low education is well documented among Vietnam's ethnic minorities, inadequate parental education is likely to pose another serious challenge to the schooling of ethnic minority youths.

### 2.4 School Access

School factors associated with the enrollment of ethnic minority students include the family's distance to the nearest upper-secondary school. Because ethnic minorities mainly live in rural and mountainous areas, whereas upper-secondary schools are only available in district centers, ethnic minority students need to travel from their villages to district centers in order to attain an upper-secondary education. This challenge not only increases schooling costs but also creates security problems for children who have to travel long distances from home to school (Baulch et al. 2010; World Bank 2011).

### 2.5 Language Exclusion

Language exclusion is another barrier that an ethnic minority student must confront in order to attend school. Since Vietnamese is the official language used in Vietnam's schools, linguistic barriers can compromise ethnic minority students' educational achievement and attainment (Taylor 2007). Research has shown that children whose mother tongue is not Vietnamese often have lower test scores than those whose mother tongue is Vietnamese. Researchers have found that linguistic differences can partially account for Vietnam's ethnic educational disparities before children even start primary school (Glewwe et al. 2012).

Additionally, most teachers in Vietnam's rural and mountain schools are members of the majority group and are usually unfamiliar with the cultures and languages of many of Vietnam's ethnic minority populations. This social distance may weaken the

connection between teachers and ethnic minority students (Baulch et al. 2010; Giacchino-Baker 2007). For example, many researchers have found that Vietnam's ethnic minority students rarely interact with their teachers; instead, these students usually sit silently in class, unengaged in class discussions (Tran 2013). Unfortunately, a weak student-teacher connection is often associated with school dropout (Wang et al. 1998; Wasserman et al. 2003).

## 2.6 Risks from Peers

Both peers who are in school and peers who have dropped out can pose risks to the continued schooling of ethnic minority students. In-school peers are those students who come into contact with the ethnic minority student during school-related activities. These peers can have a sizable impact on an ethnic minority student; many ethnic minority students live in dormitories or rental houses in the district centers in order to attend upper-secondary school, rather than with their families. Living away from their families, ethnic minority students are vulnerable to discrimination and bullying at the hands of in-school peers. Research has found that ethnic minority students get teased by their in-school peers for any of several reasons: the minority students' lack of Vietnamese fluency, their low educational attainment, and their distinctive appearance (Tran 2013). This discrimination can adversely impact an ethnic minority student's educational motivation (Tran 2013), the perception of his/her academic ability, and educational interests (Wong et al. 2003). Ethnic minority students also report that fear of bullying at the hands of in-school peers constitutes a primary reason why they drop out of school (Nguyen et al. 2013).

Meanwhile, peers who have dropped out can contribute to the ethnic minority student's decision to be truant or to drop out of school as well. For example, research suggests that ethnic minority students who place little value in formal education have diminished enthusiasm for schooling and are easily persuaded to drop out of school when their friends do (Tran 2013). Rather than attending school, these students might join the labor force to earn a living, to help their family with household work, or to experience more enjoyment from life. Given the high prevalence of school dropout rates among ethnic minority students, a peer who drops out may have a strong influence on an ethnic minority student's continued upper-secondary enrollment.

## 2.7 Community-Level Risks

Because ethnic minorities often lack formal education and live in impoverished communities in rural and mountainous areas, their children are at risk of dropping out of school. Both living in poverty *and* living in neighborhoods where residents have little formal education can pose impediments to ethnic minority students' educational success. The residential poverty level, in particular, is often negatively correlated with a child's school participation, even when family background, including household income and parental education, are controlled for (Brown and Park 2002; Binder 1999; Hannum 2003; Garner and Raudenbush 1991). One possible explanation of this finding is that children living in an impoverished neighborhood may have fewer resources (e.g., community libraries, laboratories, or other facilities) and lack a well-integrated network that supports their learning (Abukari and Laser 2013; Gumus 2014; Wang et al. 1998).

In addition, low educational levels among adult neighbors are likely to be negatively correlated with children's educational success. Social capital theory proposes that an

individual's actions are often shaped and constrained by the social context in which the individual lives and that the actions of those individuals are controlled by societal norms and rules (Coleman 1988). Therefore, parents often benefit from observing and learning from other parents who live in the community, and they use what they have observed to make decisions about their investments in their child(ren)'s education. Furthermore, because children often view the adults in their community as role models, children's school participation can be influenced by the educational attainment of community adults. Researchers have found a positive correlation between the level of adult literacy within a community and the rate of school attendance, in places as diverse as India, Thailand, Kenya, and Turkey (Chudgar 2009; Buchmann and Brakewood 2000; Gumus 2014).

In summary, an ethnic minority child's educational success in Vietnam is determined by multiple factors that operate on many levels. Family- and community-level concerns include early marriage, which may disfavor educational success, especially for females. Similarly, poverty and limited educations may hinder parents' financial and social resources and growing up in an improvised neighborhood may limit children's access to role models with higher levels of education as well. School-specific factors also matter; a school's distance from the child's home community, issues of language exclusion, and inadequate teachers may all discourage a child's school participation. Finally, peers matter too: exposure to peers who are considering dropping out (or have dropped out already) and discrimination and bullying from schoolmates may negatively influence students' schooling outcomes and present obstacles to their academic achievement.

### 3 Factors Promoting Educational Success

Despite these numerous challenges, approximately 30% of ethnic minority youths do attend upper-secondary schools (General Statistics Office 2014). Some of them successfully complete upper-secondary education, pass the national entrance examination, and gain admission to postsecondary programs. This implies that ethnic minority youths may simultaneously possess characteristics or experience factors that protect and promote educational success. Studies of competence and resilience, in particular, suggest that individual-level resources, parental involvement in education, parenting practices, teacher-student relationships, and influences from peers and community can contribute positively to ethnic minority students' academic achievement.

#### 3.1 Individual Resources

Children living in similar adverse environments may exhibit different individual-level capacities for mediating risks and promoting academic competence: for instance, personal resources such as cognitive abilities, beliefs, and motivations (Masten and Coatsworth 1998). In addition to the apparent positive correlation between cognitive abilities and academic success (Masten and Coatsworth 1998), individuals' motivation to succeed academically and their *perceptions* about their academic abilities are also associated with academic competence (Laser et al. 2007; Garmezy 1991; Bandura 1986; Masten and Coatsworth 1998). For example, students who believe that educational performance depends on effort and hard work are likely to outperform students who believe that performance is fixed (Masten and Coatsworth 1998). Furthermore, children with positive views of self are often more educationally resilient than children with negative ones (Laser et al. 2007),

and youths who are optimistic about their futures also have better academic outcomes than youths who are less optimistic (Abukari and Laser 2013).

### 3.2 Parental Involvement and Parenting Practices

Research has shown that parental involvement and parenting styles both play a central role in promoting the academic competence and resilience of children in the household. Parents get involved in their children's education by participating in school activities, communicating with children about their education, supervising their homework, and inspiring their educational aspirations (Blondal and Adalbjarnardottir 2009; Wang et al. 1998). Parental participation can promote school attendance and academic improvement. Parents can also promote their children's educational outcomes by strongly communicating educational values and praising children's effort, explicitly setting high expectations, and encouraging academic success (Wang et al. 1998; Abukari and Laser 2013).

Parenting practices also can be protective/supportive of a child's educational outcomes. Regarding specific parenting styles, authoritative parenting is positively correlated with educational achievement (Spera 2005; Blondal and Adalbjarnardottir 2009). This parenting style entails being warm and encouraging, setting clear standards for children's behavior, and enforcing appropriate developmental expectations. However, researchers have found that culture and other circumstances can moderate the effects of parenting style on children's outcomes (Masten and Coatsworth 1998). For instance, authoritarian parenting—which refers to parenting that is demanding and controlling without being warm or responsive—has been found to support educational achievement in some contexts too. Namely, when Leung et al. (1998) examined parenting styles' impact on children's educational achievement in the United States, Australia, and Hong Kong, they found that academic achievement was positively correlated with authoritarian parenting in Hong Kong and among families headed by parents with meager educations in the United States and Australia (Leung et al. 1998). Earlier, Baldwin et al. (1990) argued that strict parenting may be required to foster competence in children who live in hazardous environments (Baldwin et al. 1990).

Because most of Vietnam's ethnic minorities live in poverty and have low educational levels, and because Vietnam places great value on education (London 2011), authoritarian parenting may promote academic achievement among Vietnam's ethnic minority youths.

### 3.3 School-Level Supportive Factors

Researchers have identified several factors associated with improved academic performance and reduced risk of school attrition. These factors include supportive teacher-student relationships and attending a school that encourages a sense of belonging. Teachers promote academic competence by providing guidance and support, and by setting standards and expectations (Crosnoe and Elder 2004). (Gutman and Midgley 2000) found that teacher support was positively correlated with students' school adjustment and achievement. Moreover, researchers have found that having a teacher who is a mentor is an important factor to promote a child's educational achievement (Abukari and Laser 2013).

With respect to the school environment's role, researchers have found that small schools that are more inclusive, that support more family and community engagement, and that set clear expectations for students are more likely to see their students move to the next grade(s) and graduate (Wang et al. 1998).

### 3.4 Peer Support and Influences

Peers can support a fellow student's schooling in various ways. For instance, they can offer a sense of being cared for, valued, and loved (Wang et al. 1998). As most ethnic minority students in Vietnam do not live with their families when attending upper-secondary schools and thus likely spend more time with peers than with family, peer support may be particularly critical.

Ethnic minority students can also benefit from their peers' socioeconomic advantage, especially if these advantages translate into high educational achievement; the contagion theory proposes that children adopt their peer group norms and emulate their peers' behavior (Jencks and Mayer 1990). Therefore, peers with high educational achievement can positively impact school satisfaction, educational expectations, grades, and test scores among their fellow students (Masten and Coatsworth 1998). Wang et al. (1998) show that peer group's attitude towards school predicts many group members' test scores and that students whose peers value educational outcomes or spend more time on homework are less likely to be absent from school themselves. Ethnic minority students, then, who associate with highly educated peers in their school and/or in their village may have better academic outcomes than those whose friends have dropped out.

### 3.5 Community-Level Factors

Community factors can promote educational success in several ways. Safe neighborhoods allow youths to spend more time outside, to walk to nearby schools, and to have more opportunities to build positive relationships with peers (Kegler et al. 2005). Communities also create social and cultural values and norms that mediate children's educational behaviors. For one example, as mentioned above, the presence of educated adults in the community can promote children's educational attainment in that children often see these adults as role models. Studies in India, Thailand, Kenya, and Turkey also find positive relationships between community adults' literacy level and children's school attendance (Chudgar 2009; Buchmann and Brakewood 2000; Gumus 2014). In turn, research has also found that adults' expectations for the children in their communities—namely, that they be good citizens—function as a protective mechanism to minimize their school drop-out risk (Wang et al. 1998).

In summary, despite many potential barriers to ethnic minority children's educational achievement, parents and educators can use evidence-based practices to protect and promote their academic competence. Student' positive attitudes toward education, parental involvement, and some parenting styles (in this case, particularly authoritarian parenting) can support the educational achievement children with socioeconomically disadvantaged backgrounds. With respect to school-related resources, positive student–teacher relationships, a school environment that fosters a sense of belonging, and the presence in the child's life of highly educated peers can also contribute. Finally, research has shown that educational appreciation shared by community members is also a protective factor with respect to the education of ethnic minority students.



## 4 Methods

This study sought to understand how some ethnic minority students overcome challenges and achieve educational in upper secondary education? To answer this question, two specific questions were examined:

1. What are the risks that prevent ethnic minority students from enrolling in an upper secondary school?
2. What are the factors that promote ethnic minority students' enrollment in an upper secondary school?

### 4.1 Data

This study used data from the Families and Communities in Transition (FACT) study of the social changes and their influences on individuals, families, and communities of the Thai people in Vietnam from 2012 to 2015. The Thai in Vietnam, who is also known as Tay Thanh or Tay Muong (Vi 1996), are the second largest ethnic minority group in Vietnam and constitute approximately 1.55 million people (1.81% of the Vietnam population). They mainly reside in four provinces: Son La (36%), Nghe An (19%), Thanh Hoa (15%), and Dien Bien (12%) (General Statistics Office 2010). The FACT is a unique, community-based sample drawn from remote, rural areas with little infrastructure. Specifically, the sample was drawn from 16 Thai villages in Nghe An, a province in central Vietnam. The data includes both quantitative and qualitative components.

The quantitative data consists of information collected from Thai people ages 15 and above on different aspects that include demographic characteristics, educational attainment, and their attitude toward education and perceptions regarding educational benefits. FACT questionnaires were offered in both Thai and Vietnamese, and 78% of the respondents chose to be conducted in Thai. To date, the FACT has been conducted in 2012, 2014, and 2015. The present study used the data collected for the 2015 FACT, that consists of questions which assess perceptions about educational benefits as well as child–parent and student–teacher relationships for respondents born during the eight-year period from 1992 to 2000 (ages from 15 to 23). The final sample consisted of 682 respondents.

FACT qualitative data was collected through ethnographic research, focus group discussions, and intensive interviews. The present study used the data collected in 2015 through focus group and intensive interview that seek to understand how the Thai overcome the challenges that make it difficult for them to enroll their children in upper-secondary schools. The 8 focus groups met in 4 Thai villages from 2 districts (Que Phong and Quy Chau): 4 groups consisted of 21 youths who were between the ages of 15 and 17 and who were attending an upper-secondary school; the remaining 4 groups consisted of 21 youths who were between the age of 15 and 17 and not enrolled in upper-secondary school. Intensive interviews were conducted with 9 children who had dropped out of school and 8 children who were enrolled in an upper-secondary school, their 17 parents, and 4 teachers (2 teaching at the lower-secondary level and 2 teaching at the upper-secondary level).

Since ethnic minority people's social lives usually are limited to the communes in which they live, they may hesitate to express their perceptions to strangers. To address this concern, the study was assisted by FACT local staff who shared ethnic minority status with the study participants. This shared background enabled participants to have more confidence

and trust in expressing their opinions to the interviewer. Additionally, the local staff also facilitated the translation from Thai to Vietnamese when it was needed. The data was transcribed and translated into English.

## 4.2 Measures

To identify factors that promote educational success among ethnic minority students, a binary variable that indicated whether the student enrolled in an upper-secondary school was regressed on variables that reflected characteristics of the respondents, and their family, school, peers, and community.

### 4.2.1 Dependent Variable

*Upper-Secondary School Enrollment* This was a dichotomous outcome variable that indicated whether respondents ever enrolled in an upper-secondary school. The variable was adapted from the questions “Are you currently enrolled in school?” and “What is the highest grade completed?” Because respondents were 15 to 23 years old, respondents who ever enrolled in upper-secondary education were those who completed at least grade 9 but remained in schools or someone currently not in school, but they completed at least grade 10 (1 = enrolled, 0 = not enrolled).

### 4.2.2 Independent Variables

#### *Individual Characteristics*

*Optimism* It was an ordinal variable. Optimism consisted of three items measuring students’ optimism for the future on a 4-scale measurement. The three items were: “When times are bad, they will get better”; “I am always optimistic about the future”; and “When I have problems, I can make them better”. Responses were scored on a 4-point scale that ranged from 1 (strongly disagree) to 4 (strongly agree). Cronbach’s alpha calculated with data collected from the present sample was 0.96. To facilitate interpretation, this variable was recoded as a trichotomous variable: participants whose response was 1 standard deviation (SD) or less than the mean were interpreted as having a low level of optimism; participants whose response was within 1 standard deviation (SD) of the mean were interpreted as having an average level of optimism; and participants whose response was 1 standard deviation (SD) or greater than the mean were interpreted as having a high level of optimism.

*Children Perceptions About Parental Care* This was an ordinal variable that measured how much respondents feel that their parents care about them as a person. Responses ranged from 1 (not at all) to 4 (very much). To facilitate interpretation, this variable was recoded as a trichotomous variable: participants whose response was 1 standard deviation (SD) or less than the mean were interpreted as having a low level of parental care; participants whose response was within 1 standard deviation (SD) of the mean were interpreted as having an average level of parental care; and participants whose response was 1 standard deviation (SD) or greater than the mean were interpreted as having high level of parental care.

*Attitude to the Upper-Secondary Educational Benefits* This was an ordinal variable that measured student’s attitude toward benefits of upper-secondary school as opposed to

lower-secondary education. It was derived from the responses to two items. The two items were: "For a boy in this village, how much better off would they be by completing high school rather than just completing secondary school?" and "For a girl in this village, how much better off would they be by completing high school rather than just completing secondary school?". Participants responses ranged from 1 (no benefit off) to 8 (a lot of benefits). Cronbach's alpha calculated with data collected from the present sample was 0.95. Again to facilitate interpretation, this variable was categorized into three levels: participants whose response was 1 standard deviation (SD) or less than the mean were interpreted as having a poor attitude to benefits of upper-secondary education; participants whose response was within 1 standard deviation (SD) of the mean were interpreted as having a neutral attitude to benefits of upper-secondary education; and participants whose response was 1 standard deviation (SD) or greater than the mean were interpreted as having a high attitude to benefits of upper-secondary education.

*Student Perceptions About Teacher's Care* This was an ordinal variable. It was derived from three items that assessed participants' perceptions regarding whether their teacher's care and having a teacher as a mentor. The three items were: "Having a teacher that students can talk to is very important to children in the village"; "Having a teacher as the mentor for students is very important to children in the village"; and "Having a teacher who cares about students is very important to children in the village". Each item was assessed on an on a 4-point scale that ranged from 1 (strongly disagree) to 4 (strongly agree). Cronbach's alpha calculated with data collected from the present sample was 0.98. To facilitate interpretation, this variable was recoded as a trichotomous variable: participants whose response was 1 standard deviation (SD) or less than the mean were interpreted as having a low level; participants whose response was within 1 standard deviation (SD) of the mean were interpreted as having an average level; and participants whose response was 1 standard deviation (SD) or greater than the mean were interpreted as having a high level.

*Student Perceptions About Village's Safety* This was an ordinal variable that assessed what participants' thought about village's safety. It was derived from the responses to four items. The four items were: "I feel safe when I go out of my house on my own"; "All my neighbors are people that can be trusted"; "Most people in this village are basically honest"; and "Everyone in my village gets along well, and there are no major disagreements". Each item was assessed on an on an 8-point scale that ranged from 1 (very false) to 8 (very true). Cronbach's alpha calculated with data collected from the present sample was 0.79. To facilitate interpretation, this variable was recoded as a trichotomous variable: participants whose response was 1 standard deviation (SD) or less than the mean were interpreted as having a low level; participants whose response was within 1 standard deviation (SD) of the mean were interpreted as having an average level; and participants whose response was 1 standard deviation (SD) or greater than the mean were interpreted as having a high level.

*Child Marriage* This was binary variable indicating whether participants were married before their eighteenth birthday (child marriage = 1), other (child marriage = 0).

*Female* This was a binary variable indicating whether participants were female (female = 1 and male = 0).

*Age* Participant's age was based on the year the participant completed the 2015 survey.

### *Family Variables*

*Household Wealth Quintile* This was an ordinal variable that was based on a principal component analysis (PCA) of FACT data as proposed by Fry et al. (2014). By using household wealth quintiles, researchers can present and interpret differences in income between household wealth quintiles.

*Parents Completing Upper-Secondary Education* This was a binary variable that indicated whether one of the parents had completed her or his upper-secondary education (both parents have less than an upper-secondary education = 0, one or both parents completing upper-secondary education or above = 1).

*Parent Perceptions About Benefits of Education* This was an ordinal variable that assessed attitude toward education. It was derived from the responses to four items. The four items were: “My mother thinks education is important for girls”; “My mother thinks education is important for boys”; “My father thinks education is important for girls”; and “My father thinks education is important for boys.” Each item was assessed on an on a 4-point scale that ranged from 1 (strongly disagree) to 4 (strongly agree). Cronbach’s alpha calculated with data collected from the present sample was 0.90. To facilitate interpretation, this variable was recoded as a trichotomous variable: participants whose response was 1 standard deviation (SD) or less than the mean were interpreted as having a low level; participants whose response was within 1 standard deviation (SD) of the mean were interpreted as having an average level; and participants whose response was 1 standard deviation (SD) or greater than the mean were interpreted as having a high level.

### *Community Variables*

*Village Poverty* This variable measured the percentage of household poverty in the village in which the participant lived. The household poverty was recognized in 2014 by Vietnam’s poverty line.<sup>1</sup> To facilitate interpretation, this variable was recoded as a trichotomous variable: participants whose response was 1 standard deviation (SD) or less than the mean were interpreted as having a low level; participants whose response was within 1 standard deviation (SD) of the mean were interpreted as having an average level; and participants whose response was 1 standard deviation (SD) or greater than the mean were interpreted as having a high level.

*Village Peer Dropouts* This variable measured the percentage of school dropout peers who were between the ages of 15 and 23 and did not attend upper-secondary school in the respondent’s village. To facilitate interpretation, this variable was recoded as a trichotomous variable: participants whose response was 1 standard deviation (SD) or less than the mean were interpreted as having a low level; participants whose response was within 1 standard deviation (SD) of the mean were interpreted as having an average level; and

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<sup>1</sup> In January 30th, 2011, the Vietnam’s government issued the Decision No. 09/QĐ-TTg on the poverty line applied for the period 2011–2015. Accordingly, in rural areas, households with average household income under VND 400,000 per capital per month (roughly USD 19.00 per capital per month) or in urban areas, households with average household income under VND 500,000 per capital per month (roughly USD 24.00 per capital per month) are classified as the household poverty.

participants whose response was 1 standard deviation (SD) or greater than the mean were interpreted as having a high level.

*Upper-Secondary Educational Level of Village Adults* This variable measured the percentage of people who lived in the participant's village, was at least 23 years of age, and had completed their upper-secondary education. The variable was also recoded into three levels: the low level of village adults completed upper-secondary school fell at least 1 SD below the mean on this measure (0.10), the average level of village adults completed upper-secondary school was within 1 SD on either side of the mean, and the high level village adults completed upper-secondary school fell at least 1 SD above the mean. To facilitate interpretation, this variable was recoded as a trichotomous variable: participants whose response was 1 standard deviation (SD) or less than the mean were interpreted as having a low level; participants whose response was within 1 standard deviation (SD) of the mean were interpreted as having an average level; and participants whose response was 1 standard deviation (SD) or greater than the mean were interpreted as having a high level.

### 4.3 Analytic Approach

To achieve the primary goal of understanding how ethnic minority students overcome challenges and achieve educational success by enrolling in an upper-secondary education school, we used a mixed-methods approach to explore FACT data with a triangulation design. Researchers employ a mixed methods approach when they want to use both quantitative and qualitative data to address the same research question (Suter 2012). First, the FACT quantitative data was used to examine the relationship between upper-secondary school enrollment and individual, family, school, peer, and community factors associated with Thai youths. Second, the FACT qualitative data was used to further understand these factors as well as the processes behind educational failures or success at the upper-secondary school level among Thai youths.

#### 4.3.1 Quantitative Analysis

The quantitative data were analyzed using the statistical software program, Stata 12. Logistic regression models were fit to explore the relationships between upper-secondary school enrollment and individual, family, school, and community variables. To build the model, we first used a Chi square test to determine whether there was a statistically significant bivariate association between an explanatory variable and upper-secondary school enrollment. Next, we used Pearson's correlation coefficient to examine the correlation among variables and determine any interaction needed for the model. Finally, we used stepwise modeling to select variables for the final logistic models of the analysis.

The logistic regressions were processed to predict upper-secondary school enrollment. We present the results from the model in three ways. First, we used odds ratios to reflect the extent to which an explanatory variable was associated with upper-secondary school enrollment. Second, we used Williams' (2012) average adjusted prediction approach to estimate predicted probabilities. The latter has the advantage of being easier to understand as well as making use of all of the data (Williams 2012). Finally, we used average marginal effects to illustrate the effects of risk factors and promoting factors on upper-secondary school enrollment for the model (Mood 2010).

### 4.3.2 Qualitative Analysis

We used the data from the focus group discussions and intensive interviews to examine risk factors and protective factors that promote upper-secondary school enrollment and to understand the factors that contribute to educational failures or success at the upper-secondary level among Thai youths. The analysis was conducted with Nvivo 11 software.

## 5 Findings

### 5.1 Results of the Quantitative Analysis

We present the results of the quantitative analysis in three sections. First, we present the results of the univariate and bivariate analyses that describe associations between characteristics of Thai youths and characteristics of their upper-secondary school enrollment. Second, we present Pearson's correlation coefficients that describe the relationships between upper-secondary school enrollment and various risk or supportive factors. Finally, we present the results of the logistic regression model.

Table 1 presents descriptive statistics associated with the primary study variables. Only 43% of the Thai youths between the ages of 15 and 23 had ever enrolled in an upper-secondary school. Compared to Thai youths who had never enrolled, the Thai youths who had enrolled differed on 6 characteristics, including child marriage, child perceptions of care from parents, household wealth, parents' completion of upper-secondary education, parental perceptions of upper-secondary school, and level of village peer dropouts from upper-secondary school.

Specifically, 86% of the youths who had married before age 18 had never enrolled in an upper-secondary school. Roughly 51% of the youths who reported having received a high level of parental care had enrolled in an upper-secondary school. Only about 27% of youths in the lowest household-wealth quintile had enrolled in an upper-secondary school, while roughly 53% from the highest household-wealth quintile had. Among children whose parents never completed an upper-secondary school, only about 37% had ever attended such a school themselves. And finally, among youths who lived in a village characterized by high level of peer dropout, only 36% had ever attended an upper-secondary school.

Table 2 presents Pearson correlation coefficients that describe the associations among all 15 study variables. Specifically, upper-secondary school enrollment negatively correlated with child marriage ( $r = -0.33$ ,  $p < 0.001$ ), level of village peer dropout ( $r = -0.14$ ,  $p < 0.001$ ), and age ( $r = -0.32$ ,  $p < 0.001$ ). Statistically significant positive correlations, meanwhile, were found between upper-secondary school enrollment and household wealth quintile ( $r = 0.18$ ,  $p < 0.001$ ), parents' completion of an upper-secondary education ( $r = 0.20$ ,  $p < 0.001$ ), parents' perceptions of upper-secondary education ( $r = 0.13$ ,  $p < 0.001$ ), child perceptions of parental care ( $r = 0.16$ ,  $p < 0.001$ ), and the student's perceptions of teacher's care ( $r = 0.09$ ,  $p < 0.05$ ). The table also shows that a positive correlation emerged between child marriage and being female ( $r = 0.33$ ,  $p < 0.001$ ); therefore, an interaction between child marriage and being female should be included in the logistic regression model.

In addition to these Pearson correlation coefficients, a preliminary, full, stepwise logistic regression model was also run, with the significance level set at  $p = 0.2$ , to determine which

**Table 1** Descriptive statistics from univariate and bivariate analysis with 15–23-year-old Thai youths in 2015

| Variables  | Total (N = 682) | Never enrolled (N = 388) | Ever enrolled (N = 294) | Pearson Chi square |
|--|-----------------|--------------------------|-------------------------|--------------------|
| <i>Dependent variable</i>                                  |                 |                          |                         |                    |
| Upper-secondary school enrollment                          | 0.43            |                          |                         |                    |
| <i>Explanatory variables</i>                               |                 |                          |                         |                    |
| Child marriage   |                 |                          |                         |                    |
| Child marriage = 0   | 0.77            | 48.08                    | 51.92                   | 72.80***           |
| Child marriage = 1   | 0.23            | 86.25                    | 13.75                   |                    |
| Optimism   |                 |                          |                         |                    |
| Low  | 0.10            | 59.78                    | 40.22                   | 0.56               |
| Average  | 0.61            | 58.33                    | 41.67                   |                    |
| High   | 0.29            | 56.05                    | 43.95                   |                    |
| Attitude to the upper-secondary education                  |                 |                          |                         |                    |
| Low  | 0.13            | 58.21                    | 41.79                   | 2.89               |
| Neutral  | 0.21            | 59.23                    | 40.77                   |                    |
| High   | 0.65            | 52.02                    | 47.98                   |                    |
| Student perceptions about village's safety                 |                 |                          |                         |                    |
| Low  | 0.20            | 52.9                     | 47.1                    | 2.72               |
| Average  | 0.65            | 56.82                    | 43.18                   |                    |
| High   | 0.15            | 63.46                    | 36.54                   |                    |
| Child perceptions about parental care                      |                 |                          |                         |                    |
| Low  | 0.04            | 87.5                     | 12.5                    | 18.39***           |
| Average  | 0.55            | 60.96                    | 39.04                   |                    |
| High   | 0.42            | 49.3                     | 50.7                    |                    |
| Student perceptions about teacher's care                   |                 |                          |                         |                    |
| Low  | 0.04            | 64.29                    | 35.71                   | 6.33               |
| Average  | 0.22            | 65.13                    | 34.87                   |                    |
| High   | 0.74            | 54.18                    | 45.82                   |                    |
| <i>Family variables</i>                                    |                 |                          |                         |                    |
| Household wealth quintile                                  |                 |                          |                         |                    |
| 1st  | 0.18            | 73.17                    | 26.83                   | 23.69***           |
| 2nd  | 0.19            | 63.28                    | 36.72                   |                    |
| 3rd  | 0.23            | 52.56                    | 47.44                   |                    |
| 4th  | 0.22            | 52.03                    | 47.97                   |                    |
| 5th  | 0.19            | 46.46                    | 53.54                   |                    |
| Parents completing upper-secondary education               |                 |                          |                         |                    |
| Completed = 0  | 0.72            | 63.21                    | 36.79                   | 27.46***           |
| Completed = 1  | 0.28            | 41.05                    | 58.95                   |                    |
| Parent perceptions about upper-secondary education benefit |                 |                          |                         |                    |
| Low  | 0.04            | 82.76                    | 17.24                   | 11.52**            |
| Average  | 0.20            | 62.77                    | 37.23                   |                    |
| High   | 0.76            | 54.07                    | 45.93                   |                    |

**Table 1** (continued)

| Variables                                 | Total (N = 682) | Never enrolled (N = 388) | Ever enrolled (N = 294) | Pearson Chi square |
|---|-----------------|--------------------------|-------------------------|--------------------|
| <i>Peer and community variables</i>       |                 |                          |                         |                    |
| Village peer dropouts                     |                 |                          |                         |                    |
| Low                                       | 0.12            | 34.94                    | 65.06                   | 19.47***           |
| Average                                   | 0.74            | 59.41                    | 40.59                   |                    |
| High                                      | 0.14            | 63.83                    | 36.17                   |                    |
| Village poverty                           |                 |                          |                         |                    |
| Low                                       | 0.20            | 63.91                    | 36.09                   | 6.08               |
| Average                                   | 0.58            | 53.15                    | 46.85                   |                    |
| High                                      | 0.22            | 61.18                    | 38.82                   |                    |
| Village adult's upper-secondary education |                 |                          |                         |                    |
| Low                                       | 0.21            | 63.12                    | 36.88                   | 2.96               |
| Average                                   | 0.63            | 56.02                    | 43.98                   |                    |
| High                                      | 0.16            | 53.21                    | 46.79                   |                    |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

variables to remove or add (not presented in the table). This exploratory model, too, suggested that a logistic regression model for predicting upper-secondary school enrollment should include the following: individual variables such as child marriage, gender, age, a gender interaction with child marriage; family variables such as household-wealth quintile, youths' perceptions of care from their parents, parents' completion of upper-secondary school, parents' perceptions of upper-secondary education; and, as the community-level variable, village adults' completion of upper-secondary education.

Table 3 presents the results of the final logistic regression models predicting upper-secondary school enrollment among Thai youths. The table reports the results in three ways: the odds ratios, the predicted probabilities, and the average marginal effects. First, regarding the odds ratio outcomes, in general, a statistically significant negative association was found between upper-secondary school enrollment and the following three explanatory variables: child marriage, age, and level of village peer dropouts. A statistically significant positive association with upper-secondary school enrollment, on the other hand, was found for the following five explanatory variables: youths' perceptions of the parental care they received, being female, household-wealth quintile, parents' completion of upper-secondary school, and parents' perceptions of enrolling in upper-secondary school.

Exploring the negative correlations further, specifically, the adjusted odds ratio for female and child marriage (0.12) indicated that the odds of ever having enrolled in an upper-secondary school for a female who married before age 18 were 0.12 times lower than those for a counterpart—male *or* female—who had not married before that age (other variables held constant). Similarly, for the odds ratios associated with a youth enrolling in an upper-secondary school would decrease by age. Especially, the odds that a 20-year-old youth enrolling in upper-secondary school was 0.44 times smaller than that of a 15-year-old youth. For youths who lived in villages with an average level or a high level of peers who had dropped out, the youths' odds of enrolling in an upper-secondary school were



**Table 2** Inter-correlations among explanatory variables and upper-secondary school enrollment: 15–23-year-old Thai Youths in 2015

| Variables  | 1        | 2        | 3       | 4     | 5       | 6     | 7       | 8       | 9      | 10    | 11 | 12 | 13 | 14 | 15 |
|--|----------|----------|---------|-------|---------|-------|---------|---------|--------|-------|----|----|----|----|----|
| 1 Upper-secondary school enrollment                  | –        |          |         |       |         |       |         |         |        |       |    |    |    |    |    |
| 2 Child marriage                                     | –0.33*** | –        |         |       |         |       |         |         |        |       |    |    |    |    |    |
| 3 Optimism   | 0.03     | –0.07    | –       |       |         |       |         |         |        |       |    |    |    |    |    |
| 4 Attitude to the upper-secondary education          | 0.05     | –0.06    | 0.02    | –     |         |       |         |         |        |       |    |    |    |    |    |
| 5 Household wealth quintile                          | 0.18***  | –0.13*** | 0.01    | 0.05  | –       |       |         |         |        |       |    |    |    |    |    |
| 6 Parents completing upper-secondary education       | 0.20***  | –0.07*** | 0.03    | 0.01  | 0.08*   | –     |         |         |        |       |    |    |    |    |    |
| 7 Parent perceptions about upper-secondary education | 0.13***  | –0.02    | 0.15*** | 0.09* | 0.07    | 0.06  | –       |         |        |       |    |    |    |    |    |
| 8 Child perceptions about parental care              | 0.16***  | –0.06    | 0.05    | 0.03  | 0.13*** | 0.06  | 0.11**  | –       |        |       |    |    |    |    |    |
| 9 Student perceptions about teacher's care           | 0.09*    | –0.03    | 0.33**  | 0.06  | 0.01    | 0.04  | 0.23*** | 0.15*** | –      |       |    |    |    |    |    |
| 10 Student perceptions about village's safety        | –0.06    | 0.05     | 0.11**  | 0.01  | –0.08*  | 0.01  | 0.02    | 0.04    | 0.10** | –     |    |    |    |    |    |
| 11 Village poverty                                   | 0.01     | 0.05     | –0.07   | –0.02 | 0.13*** | –0.04 | –0.05   | 0.02    | –0.09* | –0.03 | –  |    |    |    |    |

Table 2 (continued)

| Variables  | 1        | 2       | 3     | 4     | 5    | 6        | 7     | 8     | 9     | 10    | 11       | 12       | 13   | 14    | 15 |
|--|----------|---------|-------|-------|------|----------|-------|-------|-------|-------|----------|----------|------|-------|----|
| 12 Upper-secondary educational level of village's adults | 0.06     | -0.04   | -0.03 | 0.03  | 0.05 | 0.03     | 0.02  | -0.06 | 0.01  | -0.07 | -0.26*** | -        | -    | -     | -  |
| 13 Village peer drop-outs                                | -0.14*** | 0.12**  | 0.01  | -0.03 | 0.01 | -0.15*** | -0.02 | 0.00  | 0.00  | 0.03  | 0.11**   | -0.17*** | -    | -     | -  |
| 14 Female  | 0.01     | 0.33*** | -0.09 | -0.05 | 0.01 | -0.09*   | 0.05  | 0.02  | 0.04  | -0.07 | 0.01     | 0.00     | 0.01 | -     | -  |
| 15 Age   | -0.32*** | 0.18*** | 0.01  | -0.06 | 0.03 | -0.05    | -0.02 | -0.06 | -0.04 | 0.04  | -0.03    | 0.03     | 0.03 | -0.06 | -  |

\*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$

**Table 3** Logistic regression models predicting upper-secondary school enrollment among 15–23-year-old Thai youths in 2015 (N = 682)

| Variables                             | Odds ratios       | Predicted probabilities | Average marginal effects |
|---------------------------------------|-------------------|-------------------------|--------------------------|
| <i>Individual variables</i>           |                   |                         |                          |
| Child perceptions about parental care |                   |                         |                          |
| Low                                   | (.)               | 0.16*<br>(0.08)         | (.)                      |
| Average                               | 5.31*<br>(3.65)   | 0.41***<br>(0.02)       | 0.25**<br>(0.08)         |
| High                                  | 7.58**<br>(5.25)  | 0.47***<br>(0.03)       | 0.31***<br>(0.08)        |
| Child marriage                        |                   |                         |                          |
| Child marriage = 0                    | (.)               | 0.51***<br>(0.02)       | (.)                      |
| Child marriage = 1                    | 0.68<br>(0.32)    | 0.25***<br>(0.05)       | − 0.07<br>(0.08)         |
| Female                                |                   |                         |                          |
| Female = 0                            | (.)               | 0.42***<br>(0.03)       | (.)                      |
| Female = 1                            | 2.20***<br>(0.46) | 0.49***<br>(0.02)       | 0.14***<br>(0.03)        |
| Age                                   |                   |                         |                          |
| 15 age                                | (.)               | 0.56***<br>(0.05)       | (.)                      |
| 16 age                                | 1.12<br>(0.45)    | 0.58***<br>(0.06)       | 0.02<br>(0.07)           |
| 17 age                                | 1.36<br>(0.54)    | 0.61***<br>(0.05)       | 0.06<br>(0.07)           |
| 18 age                                | 0.67<br>(0.25)    | 0.48***<br>(0.05)       | − 0.07<br>(0.07)         |
| 19 age                                | 0.52<br>(0.22)    | 0.43***<br>(0.06)       | − 0.12<br>(0.08)         |
| 20 age                                | 0.44*<br>(0.16)   | 0.40***<br>(0.05)       | − 0.15*<br>(0.07)        |
| 21 age                                | 0.26***<br>(0.10) | 0.31***<br>(0.05)       | − 0.25***<br>(0.07)      |
| 22 age                                | 0.28***<br>(0.10) | 0.32***<br>(0.05)       | − 0.24***<br>(0.07)      |
| 23 age                                | 0.17***<br>(0.07) | 0.24***<br>(0.04)       | − 0.32***<br>(0.07)      |
| Female and child marriage             |                   |                         |                          |
| Female = 0 and child marriage = 0     | (.)               | 0.43***<br>(0.03)       | (.)                      |
| Female = 0 and child marriage = 1     | (.)               | 0.35***<br>(0.09)       | (.)                      |
| Female = 1 and child marriage = 0     | (.)               | 0.59***<br>(0.03)       | (.)                      |
| Female = 1 and child marriage = 1     | 0.12***<br>(0.07) | 0.15***<br>(0.03)       | − 0.36***<br>(0.10)      |

**Table 3** (continued)

| Variables  | Odds ratios       | Predicted probabilities | Average marginal effects |
|--|-------------------|-------------------------|--------------------------|
| <i>Family variables</i>                            |                   |                         |                          |
| Household wealth quintile                          |                   |                         |                          |
| 1st  | (.)               | 0.31***<br>(0.04)       | (.)                      |
| 2nd  | 1.50<br>(0.49)    | 0.38***<br>(0.04)       | 0.06<br>(0.05)           |
| 3rd  | 2.49**<br>(0.78)  | 0.47***<br>(0.03)       | 0.16**<br>(0.05)         |
| 4th  | 2.63**<br>(0.83)  | 0.48***<br>(0.03)       | 0.16**<br>(0.05)         |
| 5th  | 2.46**<br>(0.81)  | 0.47***<br>(0.04)       | 0.15**<br>(0.06)         |
| Parents completing upper-secondary education       |                   |                         |                          |
| Completed = 0                                      | (.)               | 0.38***<br>(0.02)       | (.)                      |
| Completed = 1                                      | 2.49***<br>(0.53) | 0.55***<br>(0.03)       | 0.16***<br>(0.04)        |
| Parent perceptions about upper-secondary education |                   |                         |                          |
| Low  | (.)               | 0.24**<br>(0.08)        | (.)                      |
| Average  | 2.79<br>(1.74)    | 0.39***<br>(0.04)       | 0.16<br>(0.09)           |
| High   | 3.65*<br>(2.17)   | 0.45***<br>(0.02)       | 0.21*<br>(0.08)          |
| <i>School, peer, and community variables</i>       |                   |                         |                          |
| Village peer dropouts                              |                   |                         |                          |
| Low  | (.)               | 0.57***<br>(0.05)       | (.)                      |
| Average  | 0.41**<br>(0.12)  | 0.42***<br>(0.02)       | -0.15**<br>(0.05)        |
| High   | 0.34**<br>(0.13)  | 0.38***<br>(0.04)       | -0.19**<br>(0.06)        |
| Constant   | 0.07**<br>(0.07)  |                         |                          |

Standard errors in parentheses. \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \*  $p < 0.05$

0.41 and 0.34 times lower, respectively, than the odds for youths in villages with the low level.

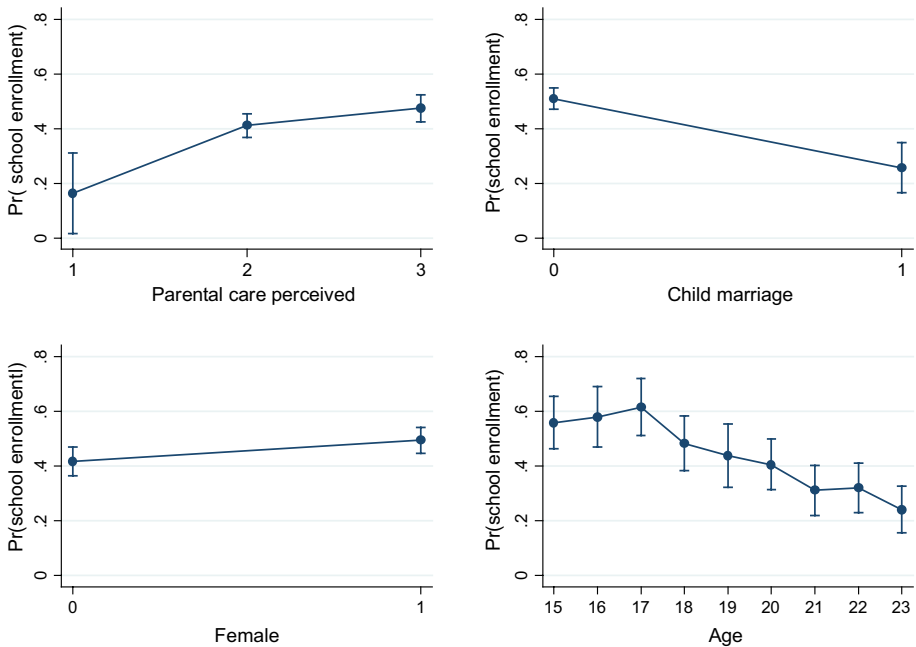
Regarding the positive correlations, odds ratios for child perceptions of parental care were 5.31 for those who perceived their parents' level of care for them as "average" and 7.58 for those who reported a "high" level, respectively. In other words, the odds of upper-secondary school enrollment for these children were 5 and 7 times greater than for those who (perceived themselves to have) received a low level of parental care, other variables held constant. With respect to gender (all else held constant), the odds of a female enrolling in upper-secondary school were 2.20 times greater than for a male. Thai youths whose household income fell in the 3rd, 4th, and 5th quintiles of the household income

distribution (higher quintiles representing greater wealth), were 2.49 times, 2.63 times, and 2.46 times more likely to enroll in upper-secondary school than those in the 1st quintile. Parental educational attainment also emerged as supportive, as youths were 2.49 times more likely to have enrolled in an upper-secondary school if they lived with parents who had completed their upper-secondary education, compared to youths who lived with parents that had not. Finally, youths who lived with parents that reported the most favorable perceptions of upper-secondary education had odds of enrolling in an upper-secondary school that was 3.65 times greater than did Thai youths who lived with parents that reported the least favorable perceptions of upper-secondary education.

Second, Table 3 presents predicted probabilities that were estimated using Stata 12's average adjusted prediction approach, which allows researchers to interpret the findings from a logistic regression model in a manner that many find easier to comprehend, compared to logit coefficients or odds ratios. The predicted probabilities in this table suggest that, on average, a female who married before age 18 had the lowest probability of enrolling in an upper-secondary school (15%), whereas youths who were 17-years-old had the greatest probability of enrolling in an upper-secondary-school (61%). Other factors associated with a relatively low probability of upper-secondary school enrollment were being a child who perceived his/her parents to have exhibited a low level of care (16%) and being a youth whose parents held the least favorable perceptions of obtaining an upper-secondary education (24%). A youth who lived in a village with a high level of peers who had dropped out and a youth who lived with parents who did not complete their upper-secondary education had equal probabilities of enrolling in upper-secondary school (38%). Table 3 also shows that the probability that a youth enrolled in an upper-secondary school was 56% for youths who were 15-years old, it was 58% for 16-year-olds; and 57% for Thai youths who lived in a village with a low level of peers who had dropped out.

Finally, the results of the logistic regression analysis in terms of Stata's average marginal effects. In general, negative associations were found between upper-secondary school enrollment and age, child marriage (especially females who married before age 18), and rates of village peers who had dropped out. Specifically, on average, the probability that a Thai youth had enrolled in an upper-secondary school was diminished for those between the ages of 19 and 23. Compared to Thai youths who were 15-years-old at the time of the survey, those aged 21, 22, and 23 were less likely to enroll in an upper-secondary school; the latter's estimated marginal effects, expressed in terms of percentages, were 25, 24, and 32%, respectively. Compared to any youth, of any gender, who had not married early, the probability of enrolling in an upper-secondary school was 36% smaller for a female who had married before the age of 18. Compared to youths who lived in a village with a high level of peers who had dropped out, the probability of enrolling in an upper-secondary school was 19% lower than it was for youths who lived in a village with a low level of peers who had dropped out.

Positive average marginal effects were displayed for the following variables: child perceptions of parental care, household-wealth quintile, parents' perceptions of the value of upper-secondary education, and parents' completion of upper-secondary education. As this table shows, the probability of enrolling in an upper-secondary school among Thai youths who reported having received a high level of parental care was 31% greater than that estimated for those who reported having received a low level of parental care. With respect to household wealth, the probability of enrolling in an upper-secondary school was 15% greater for Thai youths whose household fell in the highest wealth quintile than for Thai youths whose household fell in the lowest. Moreover, if a Thai youth's parents had



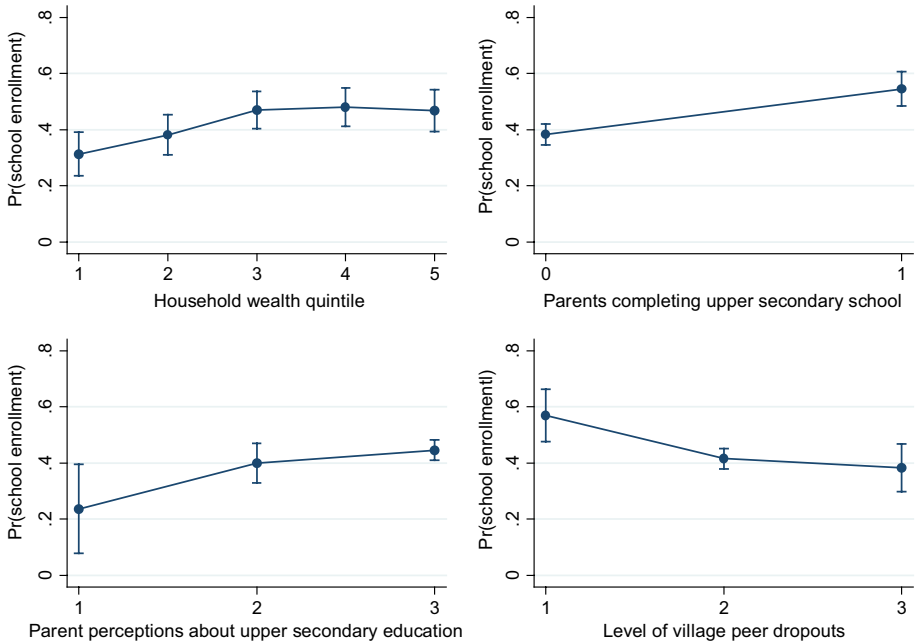
**Fig. 1** Predicted marginal probability of upper-secondary school enrollment by student perceptions about parental care, child marriage status, gender and age

completed their upper-secondary education, his/her probability of enrolling in an upper-secondary school was 16% greater than for a youth whose parents who had not.

Figures 1 and 2 display the relationships between the predicted probabilities of upper-secondary school enrollment and the aforementioned factors.

The FACT quantitative data suggest a few precise, potential reasons why Thai youths may drop out of upper-secondary school (see Fig. 3). First of all, participants reported that the family's need for their child's labor was the main reason for their child to have left upper-secondary school. Indeed, roughly 60% of Thai youths who were dropouts contributed to the family in monetary and non-monetary ways. For example, some youths earned income by working outside of the home; some worked on the family's farm; and some cared for siblings and elderly family members. The second-most common reason for dropping out of upper-secondary school was a dislike for school (about 15% of dropout sample). Respondents reporting an inability to afford school fees or who reported a child marriage as reasons for dropping out accounted for 9 and 7% of the dropout sample, respectively. Other reasons, such as poor school performance, distance to school, and having a peer or peers who had dropped out all totaled less than 10%.

In sum, the results of the quantitative analysis showed that many factors were significantly correlated with Thai youths' attrition or continued enrollment in upper-secondary school. On the one hand, a youth's high perceived level of parental care and parents' own strong appreciation for an upper-secondary education both promoted upper-secondary enrollment. On the other hand, various "risk" factors emerged in this study, including marriage before age 18, growing up in a low-wealth household, parents' having not completed an upper-secondary education, and a high level of peers who had dropped out in the youth's village. These factors all seemed to prevent the Thai youth from enrolling.

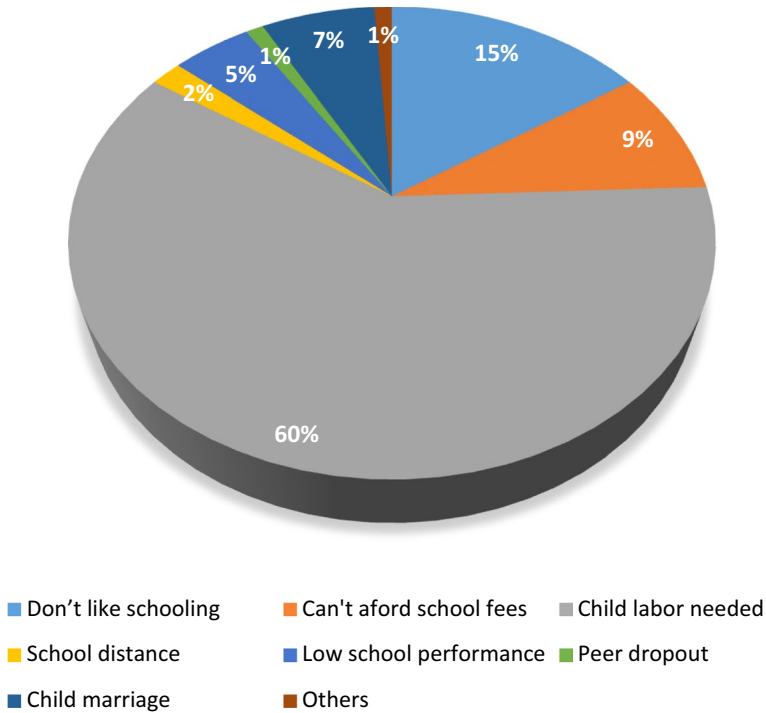


**Fig. 2** Predicted marginal probability of upper-secondary school enrollment by household wealth quintile, parental education, parent perceptions about upper-secondary education, and the level of village peer dropouts

Furthermore, the results indicated that, among Thai youths, upper-secondary school enrollment favored females, but females who married before 18-years-old were the most at risk for school dropout. Initial observations in the quantitative study also revealed that child labor was the most common reason for school dropout among Thai youths. These findings guided the qualitative analysis, which was designed to explore and understand some of the challenges and protective factors affecting Thai youths' ethnic minorities' upper-secondary educational success.

## 5.2 Findings from the Qualitative Analysis

The main purpose of the study's qualitative component is to find explanations regarding the paths by which significant factors identified in the quantitative analysis contributed to Thai youths' ability (or inability) to enroll in upper-secondary school. To accomplish this research goal, the qualitative findings are presented along two themes: risks for educational failure on the one hand and factors that promote Thai youths' success at the upper-secondary school level on the other. In addition, the qualitative component of this study yielded insights into the process used by Thai youths in their decision-making with respect to enrolling in upper-secondary education. Before presenting these findings, however, this chapter discusses the demographic characteristics of the Thai youths who participated in the focus groups and the intensive interviews.



**Fig. 3** Sample distribution of reasons given for leaving school (N = 378)

**Table 4** Characteristics of the 42 focus group participants

| Groups  | School status | Gender | No. participant | Grades |   |    |    |    |
|---------|---------------|--------|-----------------|--------|---|----|----|----|
|         |               |        |                 | 5      | 9 | 10 | 11 | 12 |
| Group 1 | In-school     | F      | 4               | 0      | 0 | 0  | 1  | 3  |
| Group 2 | In-school     | M      | 5               | 0      | 0 | 4  | 0  | 1  |
| Group 3 | In-school     | F      | 7               | 0      | 0 | 3  | 2  | 2  |
| Group 4 | In-school     | M      | 5               | 0      | 0 | 1  | 2  | 2  |
| Group 5 | Dropouts      | F/M    | 5               | 0      | 9 | 0  | 0  | 0  |
| Group 6 | Dropouts      | F/M    | 6               | 0      | 5 | 0  | 1  | 0  |
| Group 7 | Dropouts      | F/M    | 6               | 1      | 5 | 0  | 0  | 0  |
| Group 8 | Dropouts      | F/M    | 4               | 0      | 4 | 0  | 0  | 0  |

5.2.1 Participant's Descriptions

The present study used two types of qualitative data: focus group discussions and intensive interviews. Table 4 displays the main characteristics of the 42 focus group participants. Of these 42 Thai youths, half were enrolled in school, and half were not. Of the 21 youths who were in school, 8 were attending 10th grade, 5 were attending 11th grade, and 8 were attending 12th grade. Of the 21 who were not currently in school, one female had dropped



out after she completed 5th grade; one male had dropped out after he completed 11th, and 11 males and 8 females had dropped out after completing 9th.

Intensive interview participants, meanwhile, included 17 Thai youths, 17 of their parents, and 4 teachers. These interviews concentrated on understanding (a) the challenges that Thai youths confronted in attending an upper-secondary school and (b) how Thai youths overcame these barriers. Tables 5, 6 and 7 uses pseudonyms to identify the interview participants and presents selected sociodemographic characteristics. Student participants in these interviews included 9 youths who had dropped out: 6 male and 3 female. All youths who had dropped out had completed grade 9. Among the 8 in-school youths (4 females and 4 males) who were currently attending upper-secondary schools, 3 participants were in the 12th grade, 3 were in 11th, and 2 were in 10th.

There were 9 male parents and 8 female parents. None of the parents had ever attended an upper-secondary school education. Instead, only 3 parents had ever attended a lower-secondary school, and 4 never attended a primary school; the remaining 10 had attended no further than primary school.

Two (2) lower-secondary school teachers and 2 upper-secondary teachers participated in the intensive interviews. All of them had bachelor degrees in education and had taught Thai students for more than 8 years. Three (3) teachers were themselves Thai.

### 5.2.2 Challenges to Upper-Secondary School Enrollment

Thai youths who had dropped out, as well as their parents, mentioned some of the challenges that prevent them from attending an upper-secondary school; the students' reasons for dropping out reflected these challenges. Participants in both the focus group discussions and the intensive interviews gave the following reasons for leaving school: could not afford schooling costs, have to work for the family, don't live close to school, early marriage, poor school performance, and parents' believing that education is of low value. In addition to

**Table 5** Characteristics of the Thai youths participating in the intensive interview

| Participants | School status | Gender | YOB  | Grades   |
|--------------|---------------|--------|------|----------|
| Child 1      | Drop out      | M      | 1998 | Grade 9  |
| Child 2      | Drop out      | F      | 1999 | Grade 9  |
| Child 3      | In school     | F      | 1998 | Grade 12 |
| Child 4      | In school     | M      | 2000 | Grade 10 |
| Child 5      | In school     | M      | 1998 | Grade 12 |
| Child 6      | In school     | F      | 1999 | Grade 11 |
| Child 7      | Drop out      | M      | 1999 | Grade 9  |
| Child 8      | Drop out      | F      | 2000 | Grade 9  |
| Child 9      | Drop out      | M      | 1998 | Grade 9  |
| Child 10     | Drop out      | M      | 1999 | Grade 9  |
| Child 11     | Drop out      | M      | 1998 | Grade 9  |
| Child 12     | In school     | F      | 1999 | Grade 11 |
| Child 13     | In school     | M      | 1999 | Grade 11 |
| Child 14     | In school     | F      | 1999 | Grade 10 |
| Child 15     | In school     | M      | 1998 | Grade 12 |
| Child 16     | Drop out      | M      | 2000 | Grade 9  |
| Child 17     | Drop out      | F      | 1998 | Grade 9  |

**Table 6** Characteristics of the Thai youth's parents participating in the intensive interview

| Participants | Gender | YOB  | Grades  |
|--------------|--------|------|---------|
| Parent 1     | M      | 1975 | Grade 3 |
| Parent 2     | F      | 1979 | Grade 3 |
| Parent 3     | F      | 1975 | None    |
| Parent 4     | M      | 1977 | Grade 1 |
| Parent 5     | M      | 1966 | Grade 7 |
| Parent 6     | F      | 1980 | Grade 9 |
| Parent 7     | M      | 1975 | Grade 5 |
| Parent 8     | F      | 1977 | None    |
| Parent 9     | F      | 1981 | None    |
| Parent 10    | F      | 1972 | None    |
| Parent 11    | M      | 1973 | Grade 3 |
| Parent 12    | M      | 1977 | None    |
| Parent 13    | F      | 1977 | Grade 4 |
| Parent 14    | M      | 1953 | Grade 9 |
| Parent 15    | M      | 1968 | Grade 5 |
| Parent 16    | M      | 1971 | Grade 5 |
| Parent 17    | F      | 1965 | Grade 5 |

**Table 7** Characteristics of teachers participating in the intensive interview

| Participants | School          | Gender | YOB  | Ethnicity | Education level | Teaching experiences (years) |
|--------------|-----------------|--------|------|-----------|-----------------|------------------------------|
| Teacher 1    | Lower-secondary | M      | 1982 | Thai      | Bachelor        | 8                            |
| Teacher 2    | Upper-secondary | F      | 1974 | Thai      | Bachelor        | 18                           |
| Teacher 3    | Lower-secondary | M      | 1980 | Thai      | Bachelor        | 10                           |
| Teacher 4    | Upper-secondary | M      | 1976 | Kinh      | Bachelor        | 14                           |

these stated reasons for dropping out of school, youths who remained in school, as well as their parents and teachers, also reported some challenges to school enrollment. This latter group pointed to school distance, bullying, teasing, and inducing to dropouts as issues they confronted when trying to enroll in an upper-secondary school.

*5.2.2.1 Could Not Afford Schooling Costs* Participants in the qualitative data collection component reported an inability to afford school costs as the most common reason for their leaving school. Costs included housing, meals, transportation, school supplies, and school fees.

The parents and teachers of Thai youths who did remain in school, however, reported that according to the government's subsidy program, ethnic minority students receive a monthly stipend of 575,000 VND (approximately 26 USD) and 15 kg of rice. Additionally, if ethnic minority students live in the school dormitory, they do not have to pay rent, although they do have to pay utility bills. At the same time, informants also reported that families could only receive this financial support at the end of each semester or at the end of each school year. Meanwhile, most of the parents of youths who had

dropped out stated that they were not aware of that kind of support, and even if they had known, they would not have had enough cash on hand to cover school costs without it.

Child 7, a youth who dropped out of school and has a twin brother, reported that during the registration period for an upper-secondary school, his father, who worked outside the home, and his mother did not have enough money—200,000 VND (about 8 USD) for the registration fee. By the time his dad returned home, they had missed the registration deadline. As a result, he and his twin brother could not enroll in their upper-secondary school. Their father said:

My children told me when I got home that “We wanted to take the entrance exam, but we didn’t have enough money for registration.” I asked their mother why she didn’t get a loan. She said she didn’t know where to get a loan, and when I returned home, the exam was over. That’s why my children couldn’t attend the 10th grade. Sometimes I feel sorry for the kids.

This explanation illustrates the important role that insufficient financial support—in particular, lacking sufficient cash on hand for requisite fees before receiving government subsidies—played in posing challenges to upper-secondary school enrollment for Thai youths. Namely, it was one of the biggest upper-secondary educational obstacles they faced.

*5.2.2.2 Have to Work for Family* The second-most common explanation participants gave as to why the youths dropped out of an upper-secondary school was: “have to work for the family.” The work that participants mentioned included both household chores and paid work. Child 10, the fourth child of five who all lived with their single mother, remembered when he was notified that he had passed the entrance examination for upper-secondary school; he remembers being happy when he told his mother. To his surprise, though, she asked him to stop continuing beyond the lower-secondary school. His mother affirmed:

There is only me raising this family. I am often sick, and no one helps me with taking care of my family, which is a lot of work. I work in the rice fields and do whatever I need to raise my children: for example, gathering bamboo shoots and working as short-term hired labor. If he [informant’s son] goes away, no one will help me to do household work.

Child 9, the oldest child in a two-child family, decided to drop out of school in order to reduce his family’s financial burden by working to contribute extra money. His parents tried to convince him to focus his attention on his schoolwork. He said:

My dad said, “Just focus on your studies; don’t worry too much.” But I couldn’t concentrate on my studies. I could only think about the work I should be doing to reduce his workload. Then I dropped out of school, even though my parents encouraged me to keep going with it. I was distracted by the money I could potentially earn to help my parents.

The above stories indicate that pressures to work—be that inside or outside of the household—contributed to many 15-year-old Thai youths dropping out of upper-secondary school.

*5.2.2.3 Dislike of School or Being Too Lazy to Attend* Thai youths additionally gave the following two reasons for their leaving school: “don’t like school” or “too lazy to

attend school.” Some participants who did not consider their family to be having financial difficulties stated that they, or their children, did not attend upper-secondary school for laziness or for a dislike of school. Child 16, the second child of a two-child family, said:

My family doesn’t have any difficulties. I didn’t enroll in the upper-secondary school just because I don’t like school, and I’m too lazy to study.

Child 16’s statement suggests that lacking sufficient motivation to attend one’s upper-secondary education represents a risk (for poor academic performance) for Thai youths.

**5.2.2.4 Child Marriage** Child marriage, typically the result of minority cultural norms in Vietnam and of insufficient parental control, also contributed to school dropout among Thai youths. Participants in the focus group discussions and the intensive interviews mentioned that early marriage persisted as a reason for school dropout, especially for girls. Teacher 1, a Thai lower-secondary school teacher with 8 years of experience in teaching Thai students, affirmed that child marriage, even “wife kidnapping”—a courtship ritual occasionally still practiced among the Thai people—still threatens girls’ schooling. As an example, he told the story of a female, 9th-grade Thai student who was kidnapped in order to become a wife. Another example of early marriage’s disruptive impact on schooling was the story of Child 8, a grade 9 female student who left school to be with her lover. While she claimed that she had dropped out of school in order to hang out with her friends, her mother stated:

We wanted her to finish the 9th grade no matter what. But then her lover came to ask for marriage, so she stopped schooling. We wanted her to finish the upper-secondary school, but she didn’t listen.

These stories imply that child marriage remains a common practice among Thais, a practice that continues to threaten enrollment in, and completion of, upper-secondary education among Thai youths.

**5.2.2.5 Low School Performance** Although Thai youths who had dropped out of school did not report poor academic performance as a reason for having done so, their parents and teachers did. Child 11, the oldest child of a two-child family, had dropped out after completing the 9th grade. He stated that he had decided to drop out because the 9th grade felt like enough for him; however, his mother said that he decided to drop out because he had poor study habits and did not do well in school. He did not want to continue to study, she claimed, despite the fact that she and her husband encouraged him to try. Teacher 4, a Thai upper-secondary teacher with 14 years of teaching experience, affirmed that:

Children dropped out of upper-secondary schools because they could not follow lessons and found school boring before leaving the school.

**5.2.2.6 Low Parental Engagement in the Child’s Education** Teachers reported that the parents of the Thai youths participating in the qualitative study were not engaged in their child(ren)’s education. In particular, the parents purportedly exhibited little interest in deciding up to what level of school their child(ren) would attend, or in encouraging them to attend school at all. Specifically, low parental engagement in child education was mentioned through the school decision-making process and in the way that parents encouraged their children’s schooling. Most of the participants in the qualitative component reported that the decision to enroll in or drop out of an upper-secondary school was

left up to the youth themselves. For the most part, the parents just followed their child's decision.

Indeed, none of the youths who had dropped out of school reported that their parents had forced them to attend an upper-secondary school; instead, most of them reported that they had made the decision to leave school on their own. Although some were able to convince their child to return to school, some were not. For example, despite the fact that Child 9's parents reported that they could find a way to financially support their son's schooling, he still chose to drop out. Child 11, meanwhile, said that he did not like school, so, after completing 9th grade, he told his parents that he had decided to drop out. They responded with, "It is up to you."

In contrast, Thai youths who did remain in school reported that their parents had encouraged but had not forced them to attend their upper-secondary school. In some cases, even though parents asked their child to *stop* attending, the child decided to continue, and the parents, in turn, had to figure out a way to support the child through this choice. For example, when the parents of Child 6 asked her to stop going to school, she decided to remain enrolled, thus prompting her mother to find a paying job in order to earn a living and support her child's education.

Child 14's story was quite different. After her father passed away, her step-mother told her that she had to stop going to school and must prepare to get married. Instead, Child 14 decided that she would live with her grandfather and continue her upper-secondary education as a member of his household.

Thai youths' role in the family's decision-making about their own schooling extended even to decisions about whether to reside on or off campus when attending a school away from home. Interviewed parents reported that living in the school dormitory was more expensive and that the rules there were much stricter than the rules that came with living off-campus. However, in general, youths' decisions on this matter were heavily influenced by their personal living preferences and not by housing costs, and their preferences could be a determining factor even among families with limited financial resources.

Child 4 and his brother, for example, attended the same upper-secondary school away from home. Although Child 4 lived in the dormitory, his brother lived off campus. Their parents reported that since his brother did not like to live under the strict rules that came with dormitory life, he stayed in a rental room. Similarly, Child 5 and his sister also attended the same school as one another; he lived off campus, while she lived on campus.

Teacher 3, an upper-secondary school teacher with 14 years of experience, explained:

Living on campus is more guaranteed and stable. While living off campus, students have to cook for themselves; we cook for students on campus and offer free extra classes. However, children feel not as free [living on campus] as living outside. Their parents want them to live on campus, but some children don't like to. Parents have to follow their children, and that way they spoil their children.

The above reports indicate that lack of strong parental engagement in one's child's education was a contributing factor in poorer upper-secondary school attendance by Thai youths.

**5.2.2.7 School Distance** Having to travel significant distances between home and school posed a significant barrier for many Thai youths. In addition to the physical and logistical hardships posed by the journey itself, the family had to pay whatever travel costs there were, and the child(ren) and the family had to endure the hardships associated

with the child's living away from home. In order to attend their upper-secondary school, all of the youths who participated in the qualitative component of this study had to travel at least 20 km to the district center, where their upper-secondary school was located. Many of youths participating in the qualitative study reported that long and difficult distances prevented them from attending. Child 1, who was a 10th-grade student, lived 47 km away from the district center, and his older brother was the only available family member who could take him to school on his motorbike. Child 1 dropped out after attending just the first two weeks of the school year. His father reported that this was because he (the child) had become sick; however, traveling and living away from home posed the greatest challenges. As his father explained:

He often got sick when he studied there, so we had to take him home two or three times during the first two weeks of the school year. It was hard because he lived far away. We tried convincing him to return to school, but he didn't listen. We even tried convincing him to try for vocations, but he didn't listen, so we let him be.

Because most schools were located at great distances from where the Thai youths lived with their families, the families had to find their enrolled child(ren) housing that was close to the upper-secondary school. In fact, *all* of the participating parents reported that they had to find on- or off-campus housing for their child(ren) who attended upper-secondary school. Although housing on campus was free, students still had to pay for their meals and utilities. Many parents reported that the school costs associated with living off campus were roughly the same as those associated with living on campus, if the students brought food such as rice from home and cooked for themselves. Ultimately, most of the in-school children reported that their decision regarding whether to live on or off campus depended on lifestyle preferences. Child 6, an 11th-grade student who lived on campus, stated:

I like living in the dormitory because it is more enjoyable and secure. Students on campus often hang out when they have free time. We help each other and also had a teacher to supervise and support after school hours.

Child 13, another 11th-grade student, lived off campus and reported:

It is about 700,000 VND per month to live off campus, and the cost for on campus is 800,000 VND per month. So I can save some money each month. It was also noisy and crowded on campus, so that it was hard for me to focus on studying.

For these families and their children, there are challenges to be faced beyond simply securing housing for the enrolled student, such as those that arise when youths live apart from the family. All of the youths who had moved away from home to live near or on the school grounds reported that homesickness was the greatest challenge they faced during the first weeks.

**5.2.2.8 Bullying, Teasing, and Inducing to School Dropout** Being bullied and/or teased also contributes to Thai youths' decision to drop out of upper-secondary school. Both teachers and youths reported these behaviors when they were interviewed. Thai boys and girls who were enrolled in an upper-secondary school at the time of the intensive interviews or focus groups reported that they had been bullied and teased both when they were

on and off campus. Freshmen were the students most likely to report having been bullied and teased, often by juniors and/or by former local students who had already dropped out.

Child 14, a currently-enrolled female freshman who had experienced both bullying and teasing, said:

Students in 12th grade used to tease me when I was studying. They even threatened to hit or to slap me. They threatened us all. They just wanted to bully freshman students. I also saw they fought other freshmen.

Thai youths who reported that they experienced bullying and teasing gave several reasons that they believed lay behind the behavior. Child 15, a 12th-grade student who had experienced bullying, mused, "I was bullied maybe because I was unwelcome in this place." Child 13, an 11th-grade student, said he was teased because he spoke in a thick Vietnamese accent. Child 1, who reported that he was teased about his poor academic performance, mentioned that, before he had dropped out of his upper-secondary school, the biggest challenge that he faced there was overcoming his sense of shame over the fact that he had taken supplemental courses at a continuing education center, as opposed to taking the regular upper-secondary school courses.

Although teachers stated that language exclusion was a big problem for students at the primary and the lower-secondary school levels, they seemed to feel it was not such a problem in upper-secondary school.

Moreover, some Thai youths dropped out when they saw that their friends did, and vice versa. Child 1, for instance, reported that when he decided to quit school, his roommate—also from his village—dropped out of school on the same day. His friend had said, "I won't study if you don't." In contrast, Child 9 was encouraged by his friends to follow suit as they dropped out of school and joined the labor force so that they could earn an income. Finally, some other Thai students succumbed to the siren call to enjoy a life of leisure, free of the normal age-related responsibilities. Teacher 1 said:

The 9th-grade students are just uncontrollable. They won't go to school even if they are told. They prefer wandering on the street rather than going to school. Although we don't have electricity, school truancy due to billiards and gambling still a big problem.

What all of these examples suggest, taken together, is that while Thai youths sometimes experience bullying and teasing by their classmates, this is not the only factor in their decision to drop out; they also face more "friendly" pressure to drop out of upper-secondary school, and this tends to come from village peers who have dropped out earlier.

In summary, Thai youths experience diverse challenges to their beginning and continued enrollment in upper-secondary education. These challenges come from multiple levels, including individual, family, peer, and school. At the individual level, Thai youths may drop out of upper-secondary school because they do not personally place much value on obtaining an upper-secondary education; because they underperform with respect to their academic goals; and/or because they enter into a child marriage that results in their staying home instead to perform the duties expected of a spouse. Family-level obstacles seem largely economic: Thai youths may drop out of upper-secondary school because their families cannot afford to send them, or even because their families need the additional labor the child contributes to the household. Family disregard for or inexperience with education would be a subtle family-level obstacle too. At the peer level, Thai youths may quit school because of bullying and/or teasing, but also because their friends (less maliciously) encourage them to drop out. Finally, at the school level, Thai youths might drop out because they

have to travel great distances to attend; because they struggle to secure the funding needed to travel these distances and live away from home; and because they grow homesick after moving away from their families. However, it should be noted that, even for Thai youths who did not speak fluent Vietnamese, this language barrier was *not* among their reasons for dropping out.

### 5.2.3 Factors Promoting Upper-Secondary School Attendance

Thai youths, their parents, and their teachers who participated in the focus group discussions and in the intensive interviews identified factors that promoted the youths' attendance at an upper-secondary school. These factors included the individual student's positive attitude toward education, parental support for obtaining an upper-secondary education, and student relatives' support.

**5.2.3.1 Positive Attitude Toward Education** Thai youths with a positive attitude toward education generally believe that education can secure their future success. Despite the significant difficulties they faced, those who were still enrolled reported that they continued to attend because they believed that education would allow them to escape hunger and poverty and could help them have a better life than the life their parents lived. The following situation illustrates these points:

Child 14 was a grade 10 student and the third sister in a four-child family. Her mother passed away when Child 14 was in 3rd grade. Her dad re-married, to a widow who had 2 children of her own. Child 14 decided to drop out of school when she completed 9th grade to work in a shop in order to earn money to support her older sister, who wanted to continue her college education. Unfortunately, Child 14's father died 1 year after she dropped out. After his death, Child 14 was sent to live with her grandfather. She asked him if she could continue her schooling. With his support, 2 years later, she passed the upper-secondary school entrance exam and enrolled. She said: "My circumstances have been my motivation to return to school. I need to have the education to have a better life than my parents."

Child 6, an 11th-grade student, faced different circumstances and made different decisions. Due to the construction of a hydroelectric dam, her family was relocated to Quy Chau. Her father was a drug user, and her mother left the family to work in a garment factory in the south. With her job, the mother was able to earn a living and pay for her daughter's schooling. Her mother reported that she had asked the child to leave school because many other people had stopped their education to work. Child 6, however, was not persuaded by her mother's argument. She said: "I wanted to complete my upper-secondary school so that I can find a good job and change my life."

**5.2.3.2 Parental Support** Parents reported that they provided significant support to their children that enabled the latter to attend school. This support included encouraging their child to attend, reducing the workload that their child was expected to manage, and securing the financial resources necessary for the child's attendance. Most of the children who attended school reported that their parents convinced them to attend by telling them that education is the only way they could escape a life filled with economic hardship and that they would not be able to find a job if they had not completed their upper-secondary education. Their parents also convinced them that they did not have to worry about doing house-



hold work or earning money for the family, reassuring them that they—the parents—could afford all of the school expenses that might be incurred.

Indeed, most of the participants in the focus groups and in the intensive interviews reported that the provision of parental financial support played an important role in determining whether the child enrolled in an upper-secondary school. Parents, furthermore, reported that the families of ethnic minority students could receive educational subsidies for the children's attendance in upper-secondary school; however, these subsidies were insufficient and available only at the end of each semester or even only at the end of each school year. To secure sufficient funding, then—especially cash funds—for their child(ren) to attend an upper-secondary school, many parents had to work multiple jobs. Some of the parents even chose to move away from their families to work in the south in order to earn higher wages that could support the child(ren)'s schooling. For example, to support Child 6's education, her mother left the family, leaving her 10-year-old son with neighbors, in order to work in the south for a garment factory. She said: "I knew I should not leave my son alone, but if I stay home, I could not afford for my daughter's schooling."

Other parents remained where they were living. Most of the fathers took any job that they could find, such as construction and legal or illegal wood gathering. Meanwhile, most of the mothers earned money by harvesting bamboo or rattan from forests or making crafts. Parent 4, a mother of two children who were enrolled in school, said:

To have about 1,600,000 VND (about 73 USD) for two children per month for my children attending upper-secondary school, I collected anything from the forests that can be sold. Recently, it was bamboo. If there is no rain, I can gather about 100 kg of fresh bamboo, equivalent to 10 kg of dried bamboo, and that can be sold for 2,000,000 VND (90 USD).

**5.2.3.3 Relatives' Support** In addition to parents, Thai youths received significant support from their relatives. According to parents and the youths themselves, was the emotional and other support provided by relatives (who were also their neighbors). When Child 14's parents passed away, for instance, her grandfather—a veteran and a former local authority—not only looked after her; he also supported her desire to return to upper-secondary school and gave her the educational orientation that she needed to succeed in school. And when Child 6's mother left home to work in the south, neighbors took care of her younger brother, and the children's aunt who is living in town agree to look after and provide meals for Child 6 while the girl attended the upper-secondary school.

Some family members even served as educational role models as well; Thai youths who were enrolled in school reported that their relatives, especially those who were highly educated and/or highly respected in the community, had a positive influence on the youth's desire to succeed in school. Both Child 14 and Child 15 (siblings) claimed that they were encouraged and motivated by the example of their uncle, who was the vice president of the Commune People's Committee. Child 4 reported that his grandfather, who worked in the district police department, had the greatest influence on his motivation in upper-secondary education. And Child 3 cited her uncle, who worked in the Commune People's Committee, as the person with the greatest influence on her educational aspirations.

**5.2.3.4 School-Level Supportive Factors** Schools also provided Thai students with additional resources. The qualitative component participants reported that the school

gave the family its government subsidies and provided free lodging when the student's home was a great distance away. Schools also assigned teachers who would provide supervision and support after regular school hours for the students who were living in the dormitories, and some students reported that their grades improved as a result of these resources. Other students said they preferred to have more freedom, so they eventually moved off campus.

Thai youths and their parents claimed that the bonds between the youths and their upper-secondary school teachers were not as close as the bonds that the youths shared with their lower-secondary school teachers. In fact, most of the youths reported that their *lower*-secondary school teachers had the greatest influence on their school performance. Parents' remarks echoed this: they reported that they often met and talked with lower-secondary school teachers about their child's learning but that they only met with the upper-secondary teachers during regular parent–teacher conferences.

**5.2.3.5 Peer Support** Thai youths who were still enrolled in school often mentioned that they had frequently received support from their schoolmates as well. Moreover, the students who lived on campus reported that they often gave or received support from their roommates. This support included helping with homework, sharing class notes, sharing food, and taking care of one another when one of them got sick.

In summary, in addition to supporting the validity of some of the quantitative findings, the findings from the qualitative analyses also revealed low school performance; dislike of school; low parental engagement in the child's education; school distance; the experience of being bullied or teased; and encouragement from friends to drop out as further challenges to the Thai youths' upper-secondary school enrollment. The qualitative research also uncovered that the Thai students who overcame the challenges so common to their same-ethnic peers in pursuing an education shared many characteristics with one another. These included (1) a positive attitude toward schooling and (2) effective support from parents, other relatives, the school itself, and in-school peers.

All in all, what the qualitative conversations made clear was that although a positive personal attitude toward education plays an important role in a child's school outcomes, parents, other relatives, the school itself, and peers offer the economic and social resources that enable the child to achieve academically.

## 6 Discussion

The present study sought to understand how some Thai ethnic minority students overcome obstacles and achieve success in their upper-secondary education. Using quantitative and qualitative data from the 2015 FACT, the present study showed that the educational success or failure of Thai ethnic minority students was influenced by broad-ranging factors, including individual, family, school, peer, and community.

At the individual level, child marriage among Thai youths threatens upper-secondary school enrollment. Previous studies have consistently shown that marriage before age 18 is particularly prevalent among ethnic minority females (Baulch et al. 2010; UNFPA Vietnam 2016), and Phuon (2013) has indicated that child marriages are often motivated by traditional methods of supplementing the family's labor. However, the current study also highlighted that the customs of forced marriage and "wife-kidnapping" among Thai

youths, coupled with situations wherein teenagers conduct romantic relationships amidst low parental control, increase a child's risk of entering an early marriage. While female youths were more likely than their male counterparts to remain enrolled in school, girls who married before age 18 were the group most vulnerable to drop out. This paradox can be explained rather simply: once a girl or young woman is married, her first priorities are expected to be household work and giving birth—not schooling. As child marriage is already illegal in Vietnam, these findings suggest that it is necessary to expand awareness of child marriage laws and the drawbacks of child marriage, with such messages particularly targeted toward ethnic minority youths and their parents and communities (among whom child marriage is more prevalent).

In addition to child marriage, poor academic performance also prevents ethnic minority students from enrolling in upper-secondary education. Since students have to pass an entrance exam to be eligible to advance to upper-secondary school, those who have been poor academic achievers may fail to pass this pivotal exam. The current study also reveals that children who fail the entrance exam must take supplemental courses to compensate for their educational deficits and eventually reach upper-secondary education; however, paradoxically, the shame students might feel for attending supplemental courses also can encourage them to give up their schooling. Furthermore, regardless of their path to upper-secondary school, if the youth performs poorly academically while there, schoolmates might tease them—and teasing and bullying represent additional disincentives for some students to continue with their studies. Thus, replacing the entrance exam with a mechanism of school-oriented admissions in which based on student's interests and their academic achievements, they can apply either upper-secondary school or vocational training school. Additionally, paired with efforts focused on creating a friendlier school environment, might promote ethnic minority enrollment in upper-secondary education.

Findings from the present study's qualitative component are consistent with earlier studies, which suggested that a positive attitude toward pursuing one's education can help a youth achieve academic success (Abukari and Laser 2013; Lesser and Oscós-Sánchez 2007). The current qualitative findings indicate that for children who are reared by poorly educated or neglectful parents, personal educational attitudes played a key role in determining whether he/she enrolled or remained enrolled in an upper-secondary school. Essentially, youths who believe that education can bring them a better future are more likely to make great efforts to enroll in and complete an upper-secondary education. Such a finding suggests that efforts to increase awareness regarding education's benefits and educational orientation can promote school enrollment among ethnic minorities.

Similar to earlier studies (Baulch et al. 2010; World Bank 2011), the current study finds that residing in a household with limited financial means poses a significant challenge for ethnic minority youths with regards to enrolling in an upper-secondary school. Two explanations for this phenomenon emerge from the current study's focus groups and interviews:

First, schools require students to pay school expenses (e.g., housing, meals, other fees) up front, and while the government subsidies for ethnic minorities are mostly sufficient for covering these expenses, they are often not disbursed until after each term. Therefore, impoverished ethnic minority families who lack the requisite cash cannot send their children to school. In this case, the results of this study suggest that disbursement of the educational subsidies at the beginning of the academic term rather than at the end might promote upper-secondary school enrollment and reduce school dropout among ethnic minority youths. Making registration and the attendant paperwork cost-free might also promote ethnic minority enrollment and attendance rates.

Second, residing in an impoverished household puts pressure on ethnic minority youths to help their families, both in the form of chores and in the form of additional income. These families sometimes must choose between enrolling a child in upper-secondary school or sending the child into the workforce. Therefore, when the benefits of schooling are unclear to a family and are instead only realized at some unknown future time, the ethnic minority student may decide to drop out in pursuit of a more immediately tangible outcome.

Rearing by poorly educated parents poses another challenge to ethnic minority youths who might consider enrolling in upper-secondary school. Previous studies have suggested that parents with limited educations may not be able to help their children in school or serve as educational role models (Chudgar and Shafiq 2010; Tran 2013). The present study has shown, furthermore, that parents who have little-to-no formal education also have less influence on their children's educational choices. Additionally, the ethnic minority parents in this study who were not highly educated often exhibited low engagement in their child's education, or even neglectful parenting which had been shown in prior research to be associated with adverse academic outcomes for the child (Blondal and Adalbjarnardottir 2009).

Despite the fact that ethnic minority parents were sometimes limited in the contributions they could make to their children's educational success by their own (i.e., the parents') low educations, they still seemed to have their own ways to support their children's schooling. The current study has shown that some of these poorly educated parents hold a high appreciation for the benefits of education, which seems to motivate them to find (or create) their own ways to offer significant support. For instance, in addition to offering strong encouragement to their child to attend school, some of these parents also reduced their child's household workload or went to great lengths (e.g., moved out of town, arranged long-term childcare) in order to secure the financial resources needed for their child's school attendance. This finding suggests that interventions that enhance parents' awareness of the very real benefits of upper-secondary education can encourage them to support their children's attendance.

With respect to school factors, consistent with earlier studies, findings from the present study indicate that a great distance between home and the upper-secondary school represents a significant barrier to enrollment for ethnic minority students (Baulch et al. 2010; World Bank 2011). This barrier manifests itself in three different concerns: living expenses, living conditions, and security. The present study found that the decision to seek on- or off-campus housing depended more on the student's housing preferences (mainly about living conditions) than it did on costs. Hence, the fact that various students in the current study expressed disinterest in the on-campus housing suggests that the free housing offered by schools is not necessarily attractive to all students. Improvements in housing may result in larger numbers of ethnic minority students interested in taking advantage of the free housing, which in turn can promote their attendance at the upper-secondary school level.

Peers, meanwhile, pose both risks and protective factors for ethnic minority students attending (or thinking of attending) upper-secondary school. On the one hand, the present study has shown that bullying and teasing on the part of schoolmates have a negative impact on ethnic minority youths' decision to remain in an upper-secondary school. The presence of dropouts who live in the youths' villages also exerts a negative impact on their decisions about upper-secondary education. On the other hand, socioemotional support given by one's schoolmates (and relatives) can facilitate educational success among ethnic minority youths in upper-secondary school. In addition to Wang et al.'s (1998) finding that friends offered a sense of being cared for and loved, the present study finds that

ethnic minority students frequently share food and money with each other, especially with roommates.

Highly educated relatives also emerged in this study as playing an important role in promoting the education of ethnic minority students. These relatives can serve as an additional safety net (besides the parent) for the child's educational endeavors. They also can be educational role models.

## 7 Conclusion

This paper has found supporting evidence for the argument that although most ethnic minorities retain several features associated with poor academic attainment, some do possess a few characteristics that support their upper-secondary education.

Early marriage; poverty; low-educated parents; low parental engagement in the child's education; a long distance to school; being bullied or teased; being encouraged to drop out by friends; and the presence of a high number of peer dropouts in one's own village all pose risks for the ethnic minority youths studied here. Namely, these factors have all been identified as contributors to dropout among this population.

Having highly supportive parents, prestigious or highly-educated relatives, highly-educated peers, and a positive personal attitude toward education, meanwhile, all promote ethnic minority youths' enrollment in and completion of upper-secondary education.

To reduce and eliminate risks to upper-secondary school dropout and thereby promote ethnic minorities' educational success, these findings suggest, the Vietnamese government can do several things.

First, with respect to school access, it can expand networks of upper-secondary schools into remote and rural areas. It must also improve the effectiveness of education-related programs geared toward ethnic minorities: particularly, the educational-benefit application process needs to be simplified, so that poor and low-educated parents are able to access these benefits for their families. Furthermore, while it is wonderful that the government offers subsidies for ethnic minorities' schooling and it should continue to do so, these financial subsidies should be disbursed at the beginning of, instead of after, each semester. The entrance examination for upper-secondary school should be replaced with school-oriented admission.

Finally, a few cultural shift efforts are imperative. The performance of marriage law should be strictly enforced to reduce and eliminate marriages before age 18. A stronger appreciation for education should also be fostered across society; the government must find ways to cultivate a stronger awareness of the benefits of education, particularly among ethnic minority students, their parents, and their communities. Enacting these changes will require schools and educators to take an active role, working together with students, parents, and communities, to create better learning conditions and environments for ethnic minority students.

**Acknowledgements** This research is funded by the Eunice Kennedy Shriver National Institute for Child Health and Development (R01 HD060709-01A1 and R21 HD073033-01). Assistance was also provided by Penn State's Population Research Institute which is supported by an infrastructure grant from the National Institutes of Health (2R24HD041025-11).

## References

- Abukari, Z., & Laser, J. A. (2013). Gender differences in academic outcomes among Ghanaian youth: The role of protective and risk factors. *Journal of Community Psychology, 41*(1), 117–138.
- Anh, T. S., Knodel, J., Lam, D., & Friedman, J. (1998). Family size and children's education in Vietnam. *Demography, 35*(1), 57–70.
- Baldwin, A., Baldwin, C., & Cole, R. (1990). Stress-resistant families and stress-resistant children. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 257–280). New York: Cambridge University Press.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology, 4*(3), 359–373.
- Baulch, B., Nguyen, H. T. M., Phuong, P. T. T., & Pham, H. T. (2010). *Ethnic minority poverty in Vietnam*. Manchester: Chronic Poverty Research Centre (CPRC).
- Binder, M. (1999). Community effects and desired schooling of parents and children in Mexico. *Economics of Education Review, 18*(3), 311–325.
- Blondal, K. S., & Adalbjarnardottir, S. (2009). Parenting practices and school dropout: A longitudinal study. *Adolescence, 44*(176), 729.
- Brown, P. H., & Park, A. (2002). Education and poverty in rural China. *Economics of Education Review, 21*(6), 523–541.
- Buchmann, C., & Brakewood, D. (2000). Labor structures and school enrollments in developing societies: Thailand and Kenya compared. *Comparative Education Review, 44*(2), 175–204.
- Chudgar, A. (2009). Does adult literacy have a role to play in addressing the universal elementary education challenge in India? *Comparative Education Review, 53*(3), 403–433.
- Chudgar, A., & Shafiq, M. N. (2010). Family, community, and educational outcomes in South Asia. *Prospects, 40*(4), 517–534. <https://doi.org/10.1007/s11125-010-9169-z>.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, S95–S120.
- Crosnoe, R., & Elder, G. H. (2004). Family dynamics, supportive relationships, and educational resilience during adolescence. *Journal of Family Issues, 25*(5), 571–602. <https://doi.org/10.1177/0192513x03258307>.
- Dunne, M., Leach, F., Chilisa, B., Maundeni, T., Tabulawa, R., Kutor, N., et al. (2005). *Gendered school experiences: The impact on retention and achievement in Botswana and Ghana*. London: DfID.
- Edmonds, E. (2008). Child Labor. In T. P. Schultz & J. Strauss (Eds.), *Handbook of development economics* (Vol. 4, pp. 3607–3709). Amsterdam: North-Holland.
- Filmer, D. (2000). The structure of social disparities in education: Gender and wealth. *World Bank Policy Research Working Paper* (2268).
- Fry, K., Firestone, R., & Chakraborty, N. M. (2014). *Measuring equity with nationally representative wealth quintiles*. Washington, DC: PSI.
- Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist, 34*(4), 416–430.
- Garner, C. L., & Raudenbush, S. W. (1991). Neighborhood effects on educational attainment: A multilevel analysis. *Sociology of Education, 64*, 251–262.
- General Statistics Office. (2010). *The 2009 Vietnam population and housing census: Completed results*. Hanoi: Central Population and Housing Census Steering Committee.
- General Statistics Office. (2014). *Result of the Vietnam household living standards survey 2012*. Hanoi: General Statistics Office.
- Giacchino-Baker, R. (2007). Educating ethnic minorities in Vietnam: Policies and perspectives. *Kappa Delta Pi Record, 43*(4), 168–173.
- Glewwe, P., Chen, Q., & Katare, B. (2012). What determines learning among Kinh and ethnic minority students in Vietnam? An analysis of the round 2 young lives data. Young lives working paper. No 80. Oxford. <http://www.younglives.org.uk/files/working-papers/wp80-what-determines-learning-among-kinh-and-ethnic-minority-students-in-vietnam>. Accessed 15 Sept 2012.
- Glewwe, P., Chen, Q., & Katare, B. (2015). What determines learning among Kinh and ethnic minority students in Vietnam? An analysis of the round 2 young lives data. *Asia & the Pacific Policy Studies, 2*(3), 494–516.
- Gumus, S. (2014). The effects of community factors on school participation in Turkey: A multilevel analysis. *International Review of Education, 60*(1), 79–98.
- Gutman, L. M., & Midgley, C. (2000). The role of protective factors in supporting the academic achievement of poor African American students during the middle school transition. *Journal of Youth and Adolescence, 29*(2), 223–249.
- Haller, A. O., & Portes, A. (1973). Status attainment processes. *Sociology of Education, 23*, 51–91.

- Hannum, E. (2003). Poverty and basic education in rural China: Villages, households, and girls' and boys' enrollment. *Comparative Education Review*, 47(2), 141–159. <https://doi.org/10.1086/376542>.
- Israel, G., Beaulieu, L., & Hartless, G. (2001). The influence of family and community social capital on educational achievement\*. *Rural Sociology*, 66(1), 43–68. <https://doi.org/10.1111/j.1549-0831.2001.tb00054.x>.
- Jencks, C., & Mayer, S. E. (1990). The social consequences of growing up in a poor neighborhood. *Inner-City Poverty in the United States*, 111, 186.
- Kegler, M. C., Oman, R. F., Vesely, S. K., McLeroy, K. R., Aspy, C. B., Rodine, S., et al. (2005). Relationships among youth assets and neighborhood and community resources. *Health Education & Behavior*, 32(3), 380–397.
- Laser, J., Luster, T., & Oshio, T. (2007). Risk and promotive factors related to depressive symptoms among Japanese youth. *American Journal of Orthopsychiatry*, 77(4), 523.
- Lesser, J., & Oscós-Sánchez, M. A. (2007). Community-academic research partnerships with vulnerable populations. *Annual Review of Nursing Research*, 25(1), 317–337.
- Leung, K., Lau, S., & Lam, W.-L. (1998). Parenting styles and academic achievement: A cross-cultural study. *Merrill-Palmer Quarterly* (1982–), 44, 157–172.
- London, J. D. (Ed.). (2011). Historical welfare regimes and education in Vietnam. In *Education in Vietnam* (pp. 57–103). Singapore: Institute of Southeast Asian Studie.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227.
- Masten, A., & Coatsworth, J. (1998). The development of competence in favorable and unfavorable environments. *American Psychologist*, 53(2), 205–220.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2), 185–204. <https://doi.org/10.1037/0003-066X.53.2.185>.
- Mood, C. (2010). Logistic regression: Why we cannot do what we think we can do, and what we can do about it. *European Sociological Review*, 26(1), 67–82.
- Nguyen, H. T., Tran, T., & Ngo, M. T. (2013). School violence evidence from young lives in Vietnam. *Vietnam Policy Paper*, 1.
- Nicholas-Omoregbe, O. S. (2010). The effect of parental education attainment on school outcomes. *IFE Psychologia: An International Journal*, 18(1), 176–182.
- Phuong, L. (2013). Thực Trạng và Giải Pháp Giảm Thiểu Tảo Hôn và Hôn Nhân Cận Huyết Thống Trong Đồng Bào Dân Tộc Thiểu Số [Problems and Solutions to Reduce Child Marriage and Consanguineous Marriage among Ethnic Minorities]. <http://tapchidantoc.ubdt.gov.vn/2013-08-06/41672580409ef00dadabdf51f496f0-cema.htm>. Accessed 28 Aug 2017.
- Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review*, 17(2), 125–146. <https://doi.org/10.1007/s10648-005-3950-1>.
- Suter, W. (2012). Qualitative data, analysis, and design. In *Introduction to educational research: A critical thinking approach* (2nd ed., pp. 342–386). Thousand Oaks, CA: Sage.
- Taylor, P. (2007). Poor policies, wealthy peasants: Alternative trajectories of rural development in Vietnam. *Journal of Vietnamese Studies*, 2(2), 3–56. <https://doi.org/10.1525/vs.2007.2.2.3>.
- Tran, N. T. (2013). Factors associated with low educational motivation among ethnic minority students in Vietnam. *Ritsumeikan Journal of Asia Pacific Studies*, 32, 124–136.
- UNFPA Vietnam. (2016). Ending child marriage: Towards a world where girls are free to dream. [Press release]. <http://vietnam.unfpa.org/en/news/ending-child-marriage-towards-world-where-girls-are-free-dream>. Accessed 23 Apr 2018.
- Vi, A. V. (1996). *Some ideas about the social structure and land tenure system of thai people in the region of Highway 7 in Nghe An Province*. Paper presented at the The 6th International Conference on Thai Studies, Chiang Mai, Thailand.
- Wang, M., Haertel, G., & Walberg, H. (1998). *Educational Resilience (Laboratory for Student Success Publication Series No. 11)*. Philadelphia: Temple University Center for Research in Human Development and Education.
- Wasserman, G. A., Keenan, K., Tremblay, R. E., Coie, J. D., Herrenkohl, T. I., Loeber, R., et al. (2003). Risk and protective factors of child delinquency. *Child Delinquency Bulletin Series*, pp. 1–14.
- Williams, R. (2012). Using the margins command to estimate and interpret adjusted predictions and marginal effects. *Stata Journal*, 12(2), 308–331.
- Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on african american adolescents' school and socioemotional adjustment. *Journal of Personality*, 71(6), 1197–1232.
- World Bank. (2011). *Vietnam—High-quality education for all by 2020* (Vol. 2). Washington, DC: World Bank.
- World Bank. (2015). *“Staying the Course” East Asia and Pacific economic update (October)*. Washington, DC: World Bank.