

Post-Millennial Filipinos: Renewed Hope vs Risks

Further Studies of the 2013 Young Adult Fertility and Sexuality (YAFS) Study

*Correlates of
Early School
Leaving
in the
Autonomous
Region in
Muslim
Mindanao*



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Josefina N. Natividad, ScD

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Message from the Executive Director

Since the turn of the century over fifteen years ago, the Philippines has seen the rise of the millennial generation of young Filipinos who are currently shaping the political landscape in late 2016 as they take a committed stand on the issues of the day.

It is appropriate for those concerned with Philippine development work to now start looking at the next generation of Filipinos and the Commission on Population has had a tradition of producing studies concerning young people.

“Post-Millennial Filipinos: Renewed Hope vs Risks” compiles 17 regional papers based on the dataset of the 2013 Young Adult Fertility and Sexuality (YAFS) Study. These studies explore and discuss the emerging issues and concerns of the youth that need appropriate policy and program responses.



The latest YAFS comes more than a decade after the 2002 YAFS. The 2002 YAFS showed the concerns of the millennial Filipino much like the latest YAFS of 2013 marks the rise of the Filipinos born around the turn of the century and could foretell the shape of things to come for the 21st century young Filipino.

The post-millennial Filipino is focused on screens (smart phone, tablet and monitor) and the media is full of “hashtag-worthy” statements of 140 words.

The studies we are presenting continue to note and update matters such as sexual risk behaviors, early sexual involvement, teen pregnancy, reproductive health problems including sexually-transmitted infections as well as non-sexual risk behaviors such as smoking, alcohol abuse and drug use as well as suicide ideation and lifestyle.

We invite you to tune in to the latest findings about the post-millennial Filipino. It can only result in a more informed thread of interaction with the shapers of our country’s future.

A handwritten signature in black ink, appearing to read 'Juan Antonio A. Perez III'.

Juan Antonio A. Perez III, MD, MPH

Executive Director

Commission on Population

Background

The 2013 Young Adult Fertility and Sexuality (YAFS) Study is the fourth installment of a series of nationally representative cross-sectional surveys on Filipino youth aged 15-24 (for YAFS 1 and 2 and 15-27 for YAFS 3). The YAFS has yielded valuable information about young people's sexual and non-sexual behavior, education, labor force participation, family relationships, attitudes and values regarding certain issues concerning them, personal characteristics like self-esteem, and adverse conditions like suicidal ideation and depression symptoms, all of which are of pertinence to one's understanding of this significant sector of society. The 2013 YAFS or YAFS 4 in particular was a response to the need of updating information on the situation of today's young people. From YAFS 3 in 2002, there have been many important new developments in the environment where young people are situated that need to be studied as these affect not just their sexual and non-sexual risk taking behaviors but also their total well-being. For instance, the changes in communication and information technology such as the prevalent use of cellular phones and the internet and the new forms of communication that these have produced like social networking were not explored in the previous YAFS. The foregoing expansion in technology is presumed to have resulted to notable changes in the patterns and topographies of courtship, dating and relationships among young people. The upsurge in the incidence of HIV infection primarily among men who have sex with other men (MSMs) requires more recent reliable data on male sexual and non-sexual risk behaviors which is currently not available because regular survey rounds like the National Demographic and Health Surveys conducted every five years does not routinely include men. Moreover, with YAFS 4, core behaviors that have been monitored over time in YAFS 1, 2 and 3 were also updated. Among these are the sexual risky behaviors, such as the prevalence of early sexual involvement, teen pregnancy and reproductive health problems including sexually transmitted infections (STIs) as well as non-sexual risk behavior like smoking, drinking and drug use.

With the wealth of information yielded by the YAFS 4, the Commission on Population (POPCOM) in partnership with the Demographic Research and Development Foundation, Inc. (DRDF) came up with seventeen (17) regional papers (Regions 1-13, 4B, CAR, NCR and ARMM) that explore and discuss the emerging issues and concerns of the young people that need appropriate policy and program responses.

Correlates of Early School Leaving in the Autonomous Region in Muslim Mindanao

Josefina N. Natividad, ScD¹

Background and context

The 2013 Young Adult Fertility and Sexuality Study (YAFS4) provided updated information about the youth in the Philippines in the main topic areas of sexual and non-sexual risk behaviors. Like its three predecessor surveys, the results of YAFS4 have been widely disseminated and quoted and have spawned much interest in the behaviors of today's youth. One common clamor from those who have heard the YAFS results is to provide findings at a lower level of aggregation than the national level so that programs and policies guided by its findings may be better suited to local audiences. The series of regional-level papers of which this paper is part is an answer to that clamor. In general, the papers in this series address one specific issue identified by the regional offices of the Commission on Population as one that most needs further study because it is most in need of attention and intervention.

Whereas the identified issues of concern in the other regions are in the traditional topic areas of the YAFS surveys, such as teen pregnancy and sexual and non-sexual risk behaviors, such issues are not prominent among the youth of the Autonomous Region in Muslim Mindanao (ARMM). In fact, the youth in ARMM consistently showed a lower, if not the lowest, prevalence of engagement in both sexual and non-sexual risk behaviors. However, preliminary results from YAFS4 show that among the regions, ARMM has the highest proportion of youth whose highest educational attainment is an elementary level of education; it is also the only region with a small but not insignificant proportion with no schooling at all. Moreover, when asked about their main activity three months before the survey, youth in ARMM had the highest proportion who reported being idle (i.e., not working, not in school, and not engaged in unpaid work).

This situation raised concern from the audience of the regional dissemination forum on preliminary results of YAFS4 held in 2014 and attended by delegates from Basilan, Tawi-Tawi, and Sulu, prompting the Commission on Population regional office (through the OIC for the then still to be created ARMM Regional Office) to identify this topic for further analysis. The participants in that regional forum were concerned that youth in ARMM are leaving school early without having acquired basic skills for good employment; in short, they leave school with poor accumulated human capital.

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The accumulation of human capital is an essential component of a person's preparation for full and productive participation in society. The most common form of human capital is formal education, which provides individuals with the knowledge, skills, and training and prepares them for productive participation in the labor market. Poor human capital formation at the individual level generally leads to poor prospects in the job market and increases the likelihood of poverty in adulthood because it can lead to a greater risk of unemployment or employment in poorly paying jobs. Moreover, education as human capital has been shown to have an intergenerational effect in that better-educated parents tend to have better-educated children.

At the aggregate level, when there is poor human capital formation in the working-age population, the labor force is less equipped to propel the society toward economic growth. This can be inferred from the type of work prevalent in the economy as well as the nature of participation of the employable population in the work force. When there is poor capital formation, a sizable proportion of the labor force tends to be employed in low-skilled work in the informal sector. Given these, investment in education by governments as well as the private sector has been shown to be associated with increased productivity, reduced poverty, and income inequality (Bedi & Marshall, 1999).

At the level of the region, poor human capital formation may deter development because the labor force is not well prepared for the kind of employment that can spur regional growth.

A common indicator of poor human capital formation is early school leaving. This is broadly defined as having left school without completing the minimum education deemed necessary for favorable participation in the labor force. Such a minimum may or may not correspond to the statutory or compulsory education offered; thus, the operational definition of early school leaving varies across countries. In the European Union (EU), early school leavers are defined as “those who leave education and training with only lower secondary education or less and who are no longer in education and training” (European Commission, 2011). In the EU education system, lower secondary education corresponds to about 10 years of schooling and is equivalent to the old pre-tertiary education in the Philippines that was replaced by the K-12 system. In the EU, the compulsory education is up to upper secondary education, the equivalent of senior high school in the K-12 system now in place in the Philippines.

Another term that is closely associated with but not entirely synonymous to early school leaving is dropping out of school, although in some literature, the two are used interchangeably. For this paper, we will use the term *early school leaving* to refer to leaving school without having finished high school education. We refrain from using the term *dropout*, as the term broadly connotes leaving school without finishing a given level of education (primary, secondary, or tertiary); thus, there can be dropouts even at the tertiary level (i.e., college

dropouts). The main concern of this paper is to study the phenomenon of leaving school without having completed a secondary education, or early school leaving.

Review of literature

In the Western context, traditionally, three categories of risk factors for early school leaving have been studied: (1) social background factors such as race and ethnicity, gender, socioeconomic status, family structure, and geographic residence; (2) academic performance such as test scores and grade retention; and (3) academic behavior such as school engagement, truancy, and discipline problems (Lee & Burkam, as cited in Black, 2003). Studies that directly asked for the perceived reasons for early school leaving often found that the answers were dependent on whose point of view was being investigated. For example, when teachers are asked for the reasons why students leave without finishing high school, parental factors such as lack of supervision or interest in the child's progress in school and student factors such as lack of motivation, truancy, and delinquency are often mentioned. From the student's point of view, on the other hand, within-school factors such as poor relationships with teachers and with peers are more often cited as reasons for early school leaving than out-of-school factors such as the need to work. Certain school practices such as expulsion or suspension also act as push factors that drive youth to leave school early (Lee & Burkam, as cited in Black, 2003).

In terms of family structure, Bhrolchain, Chappell, Diamond, and Jameson (2000) found that in the United Kingdom, children of families that experienced disruption through parental divorce between ages 6 and 17 are more at risk of leaving school at a minimum age, with girls seemingly more at risk than boys.

In the developing world, many studies on the causes of early school leaving link it to factors that affect children well before they reach school age, specifically their health and nutritional status even while in the womb and in their early growing-up years. There is accumulated research evidence from various studies that reveal "associations between cognitive and psycho-social skills, nutrition and health status measured at young ages, on the one hand, and later educational attainment, earnings, and employment outcomes, on the other" (Armecin et al., 2006, p. 1). Armecin et al. concluded that "these life-cycle links suggest that a potentially effective way of alleviating poverty and engendering economic development is through policies that promote better development of cognitive, social, motor, and language skills and health and nutritional status among pre-school-age children" (p. 1). In these studies, early school leaving is but one of many adverse consequences that a child is prone to as a result of poor health and malnutrition in the early years.

A longitudinal analysis of children who received early childhood development intervention in Vietnam showed beneficial effects on cognitive scores even at later ages (Watanabe, Flores, Fujiwara, & Tran, 2005), while longitudinal data from the Philippines showed that children who were better nourished in infancy and early childhood were less likely to drop out of school and had a lower probability of grade repetition (Daniels & Adair, 2004).

Conceptual framework

The study is guided by a conceptual framework schematically shown here as Figure 1. The main dependent variable is early school leaving, operationally defined as having ever attended school but left school without completing a secondary education. There are two main sets of factors that will likely influence whether the youth will be an early school leaver. The first are factors related to the social background of the young person. For this set of factors, we chose two related to individual characteristics: one to geographic location and one to family background. The individual characteristics are ethnicity (whether Maguindanao, Maranao, Tausug, Sama/Bajao, Lumad, or none of these ethnicities [classified as others]) and poverty status (whether poor or non-poor; being classified as poor means belonging to the two lowest quintiles in the wealth index² [i.e., belonging to the lowest 40% in socio-economic status]). Geographic location is the place of residence, whether urban or rural. It is hypothesized that rural residents are more likely to leave school early because of issues of access to school or of competing demands on the child's time, such as the need to help in the farm or in household work. The family background characteristic is a dichotomous variable indicating whether the youth was raised by both parents. Based on previous studies, family disruption such as divorce or parental separation is a risk factor for dropping out of school.

The second set of factors is related to the schooling experience of the youth. The choice of predictive factors is guided by past studies that found that school practices such as expulsion, suspension, and grade repetition push a child toward early school leaving. Likewise, attendance in pre-school and the grade at which the child started grade 1 are considered predictive of early school leaving. In the literature, these two latter factors are associated with the cognitive, social, motor, and language skills and health and nutritional status of the child at a young age, whose effect can be manifested even long after the child has grown.

In the diagram, sex is shown as being outside of the boxes containing the dependent or outcome variable of early school leaving and the two major blocks of independent or predictor variables because sex is treated as a control variable. It is hypothesized that the effects of the two major blocks of predictors, social background and school-related factors, will not be the same for

² The wealth index is derived from the total sample of YAFS respondents, not restricted to the ARMM youth.

males as for females such that combining them in one analysis could mask these important differences.

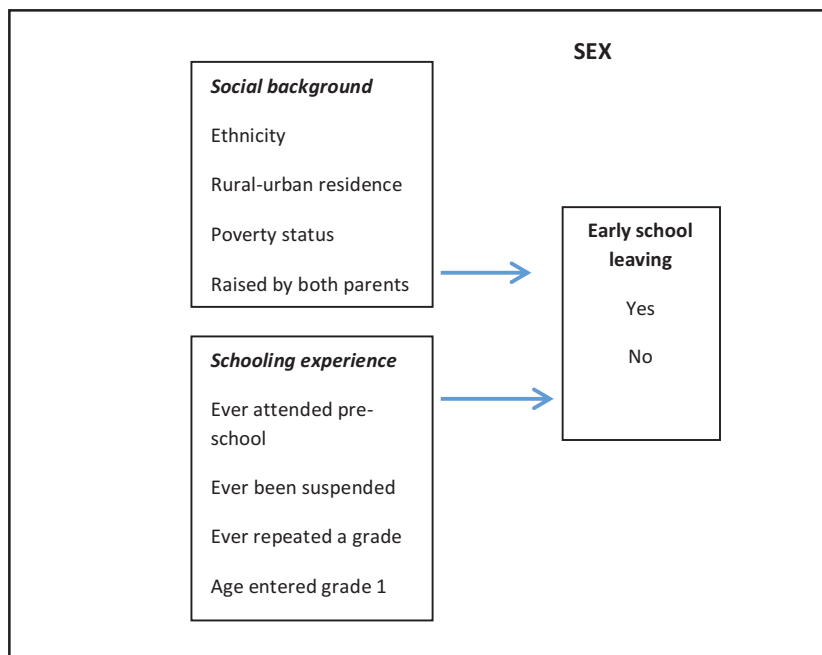


Figure 1. Conceptual framework showing the predictors of early school leaving in ARMM

Data and methods

For this paper, we used the regional data on ARMM youth from the YAFS4. To have enough cases to analyze, we used the unweighted data. In all, the total sample for this analysis consists of 1,056 ARMM youth aged 15–24.

Information on school-leaving status is derived from the following questions in the YAFS4 survey instrument:

1. Were you in school in the past three months?
2. What was the highest level of schooling that you completed?

For question 1, the possible answers are as follows: in school, not in school but have been in school, and never attended school. Those who are currently in school ($n = 306$) are considered non-early school leavers. Of the 609 cases who answered that they are not currently in school but

have been in school before, we categorized them into early school leavers or non-early school leavers based on their answer to question 2. If they left school and their highest level of schooling is a completed secondary education (i.e., high school graduate) or higher, they are considered non-early school leavers ($n = 236$). Those who left school with a completed education below high school graduate are categorized as early school leavers ($n = 454$). Finally, 60 ARMM youth in the sample never attended school. These cases are excluded from the analysis. Thus, out of a total of 1,056 cases from ARMM, the analytic sample for this paper consists of 996 cases.

To compare the timing of school leaving between the sexes, we performed survival analysis to compare the cumulative proportion of youth who have left school at each given age by sex.

Results

Table 1 shows the profile of the young adults in ARMM aged 15–24. As in the profile of other regions, there are more young adults aged 15–19 than 20–24-year-olds. Females slightly outnumber males (52.7% vs. 47.3%). About three in ten ARMM youth have finished only elementary schooling, while almost 6 percent never attended school. They are also overwhelmingly rural residents (93.6%). About six in ten belong to the lowest 40 percent of the population in socio-economic status and are thus considered poor. Maguindanao (30.7%) and Maranao (27.3%) constitute the most dominant ethnic groups in terms of relative share of the ARMM youth population. The Tausug group comes in third (18.7%), while we classified under one group those who self-identify as Sama or Sama Bajao, who constitute 6.8 percent. Other indigenous groups (e.g., Manobo, Tiruray) are grouped together under the category of Lumad, which makes up 10.5 percent of the sample. Most ARMM youth reported that they were raised by both parents (85.7%).

Table 1. Socio-demographic and family profile of ARMM youth

Socio-demographic and family profile	Percent	N
Age		
15–19	55.1	582
20–24	44.9	474
Sex		
Male	47.3	500
Female	52.7	556
Highest education		
No schooling	5.7	60
Elementary	32.0	337
High school undergraduate	32.6	344
High school graduate	15.1	159
College	14.6	154
Residence		
Urban	6.4	68
Rural	93.6	988
Poverty status		
Non-poor	36.3	383
Poor	63.7	673
Ethnic affiliation		
Maranao	27.3	287
Maguindanao	30.7	323
Tausug	18.7	197
Sama	6.8	72
Lumad	10.5	110
Others	6.0	63
Raised by both parents		
Yes	14.3	151
No	85.7	905
Total	100.0	1,056

Table 2 presents the school-related profile of the ARMM youth (i.e., the profile of those who ever attended school). Only about a third (36.1%) of ARMM youth who had gone to school ever attended pre-school. Moreover, while the mandatory age of entry at grade 1 is now 6 years, only 27.6 percent of ARMM youth who ever went to school entered grade 1 at age 6 or lower. The *de facto* age at entry is 7 years, reported by over half (53.7%) of ARMM youth. About 19

percent began schooling even later, at age 8 or higher. Experience of the school-related practices that have been linked to early school leaving is not highly prevalent, as less than 1 percent reported ever being expelled from school, 4.1 percent were ever suspended, and 18 percent have experienced repeating a grade at least once.

Table 2. School-related profile of ARMM youth who ever attended school

School-related profile	Percent	N
Ever attended pre-school		
No	63.9	619
Yes	36.1	349
Age entered grade 1		
6 or lower	27.6	262
7	53.7	510
8 or higher	18.6	177
Ever repeated a grade		
No	82.0	804
Yes	18.0	176
Ever been suspended		
No	95.9	943
Yes	4.1	40
Ever been expelled		
No	99.2	972
Yes	0.8	8
Total ^a	100.0	996

^aTotals do not add up to 996 cases because of missing responses.

Table 3 shows the schooling status of ARMM youth based on two questions:

1. Were you in school in the past three months?
2. What was the highest level of schooling that you completed?

In all, 29 percent of ARMM youth were currently in school at the time of the survey, while 65.3 percent had left school or are school leavers. Among all youth, 45.6 percent are early school leavers (i.e., they have left school without completing high school). At the time of the survey, 22 percent of ARMM youth have left school with at least a completed high school education. This implies that the majority of school leavers have not completed high school. In this crosstabulation of social background characteristics by schooling status, results show that the rate of early school leaving is, in general, perceptibly higher among the older youth, the males,

the poor, and the rural residents. By ethnicity, the proportion of early school leavers is highest among the Lumad group (57.7%), followed by those of Maguindanao ethnicity (52.5%)—both at slightly over half of youth who ever went to school. It is lowest among the Sama people (31.1%). However, the Sama also have the highest proportion who never attended school, at 15.3 percent, compared with the ARMM total of 5.7 percent. The ethnic group with the second highest proportion who never went to school is the Maguindanao.

Table 3. Summary table of schooling outcomes by social background characteristics

Background characteristics	In school	School leavers	Never been in school	Early school leavers	N
Age					
15–19	43.3	52.4	4.3	40.9	557
20–24	11.4	81.2	7.4	51.5	439
Sex					
Male	24.0	69.8	6.2	49.6	500
Female	33.5	61.3	5.2	37.1	556
Poverty status					
Non-poor	35.0	62.1	2.9	30.6	383
Poor	25.6	67.2	7.3	54.5	673
Residence					
Urban	54.4	44.1	1.5	23.9	68
Rural	27.2	66.8	6.0	47.1	988
Ethnic affiliation					
Maranao	28.6	68.6	2.8	41.6	287
Maguindanao	27.2	65.9	6.8	52.5	323
Tausug	37.6	56.9	5.6	41.9	197
Sama/Bajao	34.7	50.0	15.3	31.1	72
Lumad	21.8	72.7	5.5	57.7	110
Others	19.0	79.4	1.6	35.5	63
Raised by both parents					
No	23.2	70.9	6.0	49.7	151
Yes	29.9	64.4	5.6	41.9	905
Total	29.0	65.3	5.7	45.6	
N	306	690	60	454	1,056

Gender differences in school leaving

In this section, we analyze patterns of school leaving differentiated between males and females to examine if early school leaving varies by sex. Figure 2 presents the result of the survival analysis by sex, which compares the cumulative proportion of male and female youth who have left school at each given age. In the early years of schooling (ages 5, 6, and 7), one can see from Figure 2 that the proportion of school leavers is equally low for both males and females. At these ages, children are just beginning their entry into the formal school system. The lines begin to diverge at age 10, when noticeably more males have left school than females of the same age. In fact, by age 10, about 10 percent of boys have already left school, while the corresponding percentage among females is below 10 percent.

From age 10 to age 21, this gender gap remains and even widens, with males consistently leaving school in much higher numbers than females. For example, at age 15, almost 30 percent of female youth have left school, while the corresponding percentage for male youth is about 45 percent. The total picture is a gender-differentiated pattern of school leaving, with males leaving the education system earlier than females.

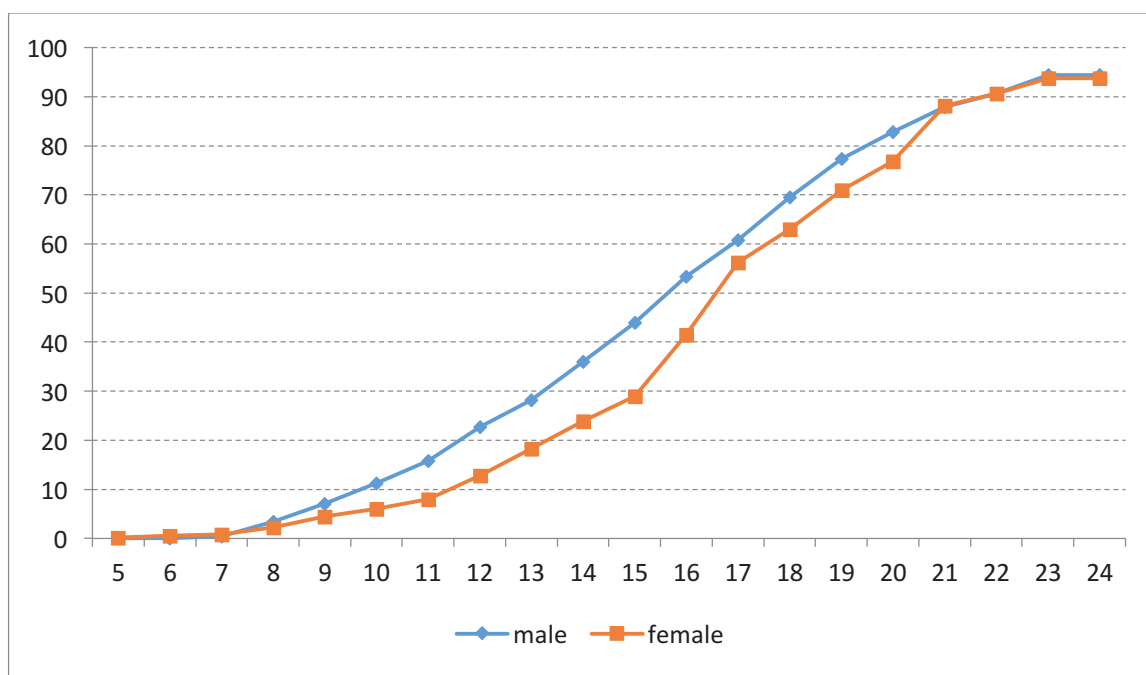


Figure 2. Cumulative percentage of age at school leaving by sex

Table 4 presents the gender-disaggregated main reasons for school leaving, for all school leavers and for early school leavers. This data is derived from the question asked of those who

have left school: “*Why did you leave school at the time you did?*” Only the most important reason was encircled from among a given set of possible answers. In all, results show similarities as well as some differences between the sexes.

Looking at all school leavers (i.e., including those who left school with a completed secondary education or higher), Table 4 shows that while the most common reason is the same for males and females, a reason that is economic in nature (lack of funds), there are distinct differences in the second and third most common reasons. More males left school because they did not like school, they failed, or they were bored with school (16.8% among male school leavers compared with only 5.9% among females). Similarly, many more females left school to marry (14.1% among females vs. 4.5% among males). Surprisingly, the reason “completed education” was mentioned by only 7 percent of all school leavers, higher among females than males. This implies that the majority of those who have left school, including those who had completed secondary education, did not consider themselves as having completed some desired level of education. This low proportion who reported “completed education” as their main reason for leaving school contrasts with findings from the 2002 YAFS where, at the national level, 23 percent of all school leavers gave “completed education” as their main reason for school leaving (Natividad, 2013).

Looking only at the early school leavers (the right panel of Table 4), the contrast between the sexes is highlighted even more. While economic reasons remain dominant for both sexes, relatively fewer males left school early for lack of funds, while about one in five male early school leavers left because they did not like/failed/were bored with school. Also, one in five left to help at home. In contrast, lack of funds and helping at home were reasons given by more female early school leavers (compared with all female school leavers). Not liking school was cited by only 7.7 percent. In addition, among females, the proportion whose reason was to marry is lower among early school leavers than all school leavers.

Peace and order issues did not figure prominently as reasons for school leaving; neither did school-related reasons, which are mainly related to accessibility and distance. Seemingly, the reasons for early school leaving are situated within the individual’s motivation level and immediate social circumstance and are strongly affected by one’s sex.

Table 4. Main reason for school leaving among all school leavers and early school leavers

Main reason	All school leavers				Early school leavers			
	Male	Female	All	N	Male	Female	All	N
Completed education	4.2	9.8	7.0	43	0.0	2.2	1.0	4
Did not like/failed/ bored with school	16.8	5.9	11.4	70	21.5	7.7	15.3	62
To help at home	18.7	11.1	14.9	92	23.3	15.3	19.7	80
Lack of funds	53.2	54.2	53.7	331	48.9	57.9	53.0	215
To marry	4.5	14.1	9.3	57	3.1	9.8	6.2	25
Health reasons	1.0	1.3	1.1	7	1.3	1.6	1.5	6
Family problems	0.6	1.3	1.0	6	0.9	1.6	1.2	5
School related	0.3	0.3	0.3	2	0.4	0.5	0.5	2
Peace and order	0.3	1.6	1.0	6	0.4	2.7	1.5	6
Others	0.3	0.3	0.3	2	0.0	0.5	0.2	1
Total	100.0	100.0	100.0		100.0	100.0	100.0	
N	310	306	616		223	183	406	

Regression analysis by sex

The succeeding tables present the results of the logistic regression analysis predicting the probability of early school leaving. Two sets of regression models were generated, one for each sex. The same set of predictors were used: social background factors of ethnicity, poverty status, rural-urban residence, raised by both parents, school-related factors of entry to grade 1 at age 6, ever attended pre-school, ever been expelled, ever been suspended, and ever repeated a grade. All predictor variables except ethnicity are dichotomous. For the ethnicity variable, the reference category is Maguindanao.

Males

The results of the logistic regression modeling for males indicate that being a Sama/Bajao, being poor, the school-related factors of entry to grade 1 at age 6, and ever attended pre-school are the significant predictors of early school leaving (Table 5). For the ethnicity factor, those who self-identified as being of Sama/Bajao ethnicity are significantly less likely to be early school leavers compared with the Maguindanao (odds ratio = .43). The other ethnic statuses did not turn out to be significant predictors, which means that the probability of leaving school early if one is Maranao, Tausug, Lumad, or others is not significantly different from that if one were of Maguindanao ethnicity. Meanwhile, male ARMM youth who are categorized as poor are two times more likely to be an early school leaver than the non-poor (odds ratio = 2.11). On the other hand, those who entered grade 1 at the mandatory age of 6 or lower are significantly less likely to leave school early than those who entered later than age 6 (odds ratio = .43). Similarly, those who ever attended pre-school are significantly less likely to be early school leavers at ages 15–24 than those who did not attend pre-school (odds ratio = .56).

Table 5. Odds ratios for factors predicting the probability of early school leaving among male youth

Males Factor	Odds ratio	95% CI for odds ratio		
		Lower	Upper	p
Maranao	1.44	0.87	2.39	ns
Tausug	0.91	0.45	1.83	ns
Sama/Bajao	0.43	0.18	1.00	.049
Lumad	1.61	0.77	3.35	ns
Others (ref = Maguindanao)	1.33	0.55	3.21	ns
Poor	2.11	1.38	3.23	.001
Urban	0.56	0.20	1.54	ns
Raised by both parents	0.61	0.30	1.26	ns
Entered grade 1 at age 6	0.43	0.26	0.71	.001
Attended pre-school	0.56	0.36	0.88	.012
Ever been suspended	2.19	0.84	5.73	ns
Ever been expelled	2.11	0.19	23.62	ns
Ever repeated a grade	1.27	0.73	2.21	ns

Note. ns = not significant.

A. Females

The predictors of early school leaving among female ARMM youth reveal a distinctively dissimilar picture from that of males. Unlike the males, other ethnicities, not only Sama/Bajao, are protective against early school leaving. Specifically, Maranaos and Tausugs are also significantly less likely to be early school leavers compared with the Maguindanao ethnic group. Being poor has a definite negative effect. Female ARMM youth who are classified as poor are three times more likely to leave school early (odds ratio = 3.30) than the non-poor (Table 6).

Unlike the case for males, being raised by both parents significantly reduces the probability of being an early school leaver for the female youth in ARMM (odds ratio = .60). Starting grade 1 at the mandatory age of 6 or lower likewise reduces the likelihood of early school leaving, the same effect observed for the males. Moreover, female ARMM youth who have ever been suspended from school are five times more likely to be early school leavers than those who were never suspended (odds ratio = 5.42).

Table 6. Odds ratios for factors predicting the probability of early school leaving among female youth

Females Factor	Odds ratio	95% CI for odds ratio		
		Lower	Upper	p
Maranao	0.32	0.19	0.56	.000
Tausug	0.45	0.23	0.86	.016
Sama/Bajao	0.27	0.11	0.70	.007
Lumad	1.35	0.68	2.66	ns
Others (ref = Maguindanao)	0.43	0.16	1.13	ns
Poor	3.30	2.04	5.33	.000
Urban	0.55	0.17	1.84	ns
Raised by both parents	0.60	0.36	0.99	.048
Entered grade 1 at age 6	0.63	0.40	0.99	.045
Attended pre-school	0.76	0.48	1.19	ns
Ever been suspended	5.42	1.40	20.91	.014
Ever been expelled	9.59	0.72	127.81	ns
Ever repeated a grade	1.34	0.79	2.26	ns

Discussion

In general, the study has established that there is a very high rate of early school leaving among the youth of ARMM. Among those aged 15–24, 45 percent have left school without completing a secondary education. Furthermore, there is a marked gender differential favoring females. The study has shown that almost half (49.6%) of male ARMM youth are early school leavers compared with 37.1 percent of females. While lack of funds is the most common reason given for early school leaving by both sexes, it is also worth noting that among males, a manifest lack of interest in school or school failure is another common reason. Thus, males tend to leave school earlier than females, as evident in the gap between males and females in the proportion who have left school at each given age.

The results of the regression analysis show that among males, the risk of early school leaving is about the same across ethnic groups, except for the Sama/Bajao, who manifest a significantly lower risk of early school leaving. However, it is also this group that has the highest proportion who have never attended school. This implies that among the Sama, those who manage to enter the school system are likely to stay on to complete at least a secondary education. Those who never went to school among members of this group may have been prevented by reasons other than motivation. Likely, there is limited access for them to go to school. The picture is quite different among females. Regression results show that Maranao,

Tausug, and Sama/Bajao are significantly less likely to leave school early than Maguindanao females, while the risk of early school leaving among the Lumad is about the same as that of Maguindanao females. Being raised by both parents has a protective effect against early school leaving for females but not for males.

Regression results on the school-related factors present an interesting angle to pursue in improving the human capital formation among the youth of ARMM. The significant protective effect of attending pre-school and starting grade 1 at the mandatory age of 6 (or lower) against early school leaving especially manifest among males indicates that the trajectory toward leaving school without completing a high school education starts early on in the child's life. This finding is consistent with what has been established in the literature about the long-term positive effects of interventions in early childhood that are evident even up to adulthood. Early school exposure, as indicated by attendance in pre-school and formal school entry at age 6, is likely tied up with other underlying factors such as better nutrition or cognitive stimulation in the pre-school years.

In any case, this finding can guide the design of future interventions that will seek to reduce the unacceptably high early school leaving rates among the youth of ARMM. It implies further that the prevention of early school leaving should begin even before formal school age. For this reason, the role of parents is a crucial factor. Parenting education seminars should therefore pay special attention to teaching parents that early school exposure, good nutrition, and cognitive stimulation before formal entry into the school system will go a long way in preventing early school leaving in their children.

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