ABSTRACT

The Cordillera Administrative Region (CAR) stood out as the region with the highest proportion of young women initiating early childbearing in 2013. Given the strong linkage between fertility preferences and fertility outcomes, the study examined the fertility preferences of young people in CAR and the sociodemographic factors associated with these preferences between Cordilleran and Non-Cordilleran youth. The study also addresses the paucity of research examining the intersection of culture and fertility as well as the limited studies on the fertility preferences of males and young people.

Using data from the 2013 Young Adult Fertility and Sexuality Survey (YAFS) – a cross-sectional survey of Filipino young adults aged 15–24 with 19,178 respondents nationally and 928 respondents from CAR – the study provided evidence that Cordilleran youth have a significantly higher mean desired number of children compared to Non-Cordilleran youth. The findings also indicate statistically significant differences in the mean desired number of children between Cordilleran and Non-Cordilleran youth across the following sociodemographic subgroups: younger youth (aged 15–19), females, never-married youth, those who are at least high school graduates, those with fewer than three siblings, and those with internet exposure.

Based on these findings, the study recommends implementing interventions specifically tailored to address the preferred family size and the specific needs of Indigenous people in CAR, who constitute the majority of the youth in the region.

Keywords: Fertility Preferences, Youth, Indigenous People, Cordillera Administrative Region (CAR)

BACKGROUND

Fertility preferences or the number of children individuals or couples wish to have, constitute one of the most extensively studied areas in population studies. Fertility preferences can be measured in various ways - from the simple ideal number of children to have in a lifetime and the desire to limit childbearing, to more complex indicators such as the total wanted fertility rate (Croft, et al., 2023). Regardless of the measure, various studies have documented fertility preferences as strong predictors of fertility outcomes (Bongaarts, 1990; Cruz et al., 2018; Kodzi et al., 2010; Roy et al., 2008).

Desired fertility is a multidimensional concept influenced by various social, demographic, and economic factors. Studies indicate a positive association between age and desired number of children with younger age groups preferring smaller family sizes (Pedroso, 2008; Marquez & Westoff, 1999; Aniban, 2012; Otomu, 2000). In terms of sex, research shows that men's desires often influence family size decisions (David & Atun, 2014; Greene & Biddlecom, 1997; Pedroso, 2008). Pronatalist attitudes are more evident among males, who often desire larger families for several reasons. These include lineage continuation (Pedroso, 2008), men do not bear the physical and mental burden of carrying and raising a child (David & Atun, 2014; Greene & Biddlecom, 1997), lesser involvement in family planning education (Otomu, 2000), and viewing children as a measure of their "success" (Conteh-Khali et al., 2014).

Marital status is also associated with childbearing preferences. Studies by Degfie et al. (2014), Blair and Madigan (2021), and Atake and Gnakou Ali (2019) show that married couples tend to desire more children, largely due to husbands' pronatalist views. As the husband's education increases, both partners often prefer fewer children, highlighting the husband's decision-making power. However, Samad et al. (2022) found that empowered women (with empowerment based on employment, education, and religion), regardless of marital status, tend to prefer fewer children.

The association between religion and fertility preferences is not as extensively explored, and the limited studies that exist show mixed results. Matsumoto and Yamabe (2013) found that Catholics, Jews, and non-religious individuals prefer smaller families, while Protestants and Mormons prefer larger ones. This contrasts with Otomu's (2000) finding that Catholics prefer larger families. Among indigenous people, Cordilleran youth integrate their religious beliefs with traditional rituals (Castillo et al., 2023). This makes religion's influence on fertility preferences nuanced and context-dependent, especially in Cordillera where indigenous beliefs coexist with Christianity (Peterson, 2010).

The type of place of residence and the occupation associated with the residence also appear to affect one's fertility desires. Bulatao (1975) found that rural residents tend to have larger families due to the economic advantages children provide such as additional financial support, old-age support, and help around the house. Urban residents, however, see children more as sources of psychological support, valuing happiness and family harmony over larger family size. This pattern is also supported by studies from Pedroso (2008), Matsumoto and

Yamabe (2013), and Conteh-Khali et al. (2014), which show that those in agricultural occupations, which is more prevalent in rural areas, prefer larger families, while non-agricultural workers prefer smaller families.

Education is crucial, especially for women, as it influences various aspects of their lives, including fertility preferences (Mahanta, 2016). Studies show that lower educational attainment is linked to higher desired fertility (Matsumoto & Yamabe, 2013; Pedroso, 2008; Marquez & Westoff, 1999). Higher education leads women to prefer smaller families due to better opportunities and increased knowledge about reproductive health (Matsumoto & Yamabe, 2013; Conteh-Khali, 2014). In the Philippines, indigenous communities often receive lower-quality education (Cariño, 2012), making educational attainment a key factor in their fertility preferences.

Socioeconomic status is also associated with fertility preferences, with higher status linked to a desire for fewer children (Pedroso, 2008; Matsumoto and Yamabe, 2013) due to the financial costs of childbearing and childrearing. Munakampe, Fwemba, and Michelo (2021) also highlighted that low wealth status, low education, and early marriage are linked to higher fertility preferences which is consistent with the findings of Ahinkorah et al. (2021) who found that poorer individuals with lower education tend to prefer larger families.

Studies that examined the link between main activity or employment and desired family size show contrasting findings. Atake and Gnakou Ali's (2019) study revealed that employment significantly lowers the desired number of children, offering more control and access to resources such as contraceptives. In contrast, Adsera (2005) and Kristensen and Lappegård (2022) found that unemployed individuals tend to prefer fewer children due to financial constraints and concerns about long-term commitments.

Several studies found evidence of intergenerational transmission of family size. Research by Axinn et al. (1994), Buhr et al. (2018), and Beaujouan (2019) suggests that parents' childbearing behavior influences their children's fertility preferences, as children often view their parents as role models. Axinn et al. (1994) explained that individuals may seek to recreate the familiar feelings of the family they had growing up by replicating their parents' fertility patterns later in life. Beaujouan (2019) found a weak but significant positive correlation between the number of siblings and preference for three or more children in France, and the same pattern was also evident in Buhr et al. (2018)'s study among young adults in Germany. However, socioeconomic factors can mediate this relationship.

Finally, understanding the impact of the internet and social media on fertility preferences is vital in our technology-driven era. These platforms play a significant role in spreading information and promoting small family norms (Conteh-Khali et al., 2014). Chisa and Hoskins (2016) found that media exposure affects indigenous communities' cultural traditions. Pedroso's (2008) analysis of Filipino husbands and wives indicates that higher media exposure correlates with a preference for smaller family sizes, echoing Marquez and Westoff's (1999) findings.

One aspect of fertility preferences and outcomes that remains largely unexplored is the influence of cultural factors. Evidence that culture can shape childbearing can be shown through variations in desired fertility across various ethnic groups. Pedroso's (2008) study showed a marked propensity to desire large family sizes among husbands and wives from major ethnic groups residing in Muslim Mindanao compared to their counterparts from other ethnic groups in the Philippines. Similarly, Aniban's (2012) research found that male Jama Mapuns, Samals, Tausugs, or Maranaos were more likely to desire a higher number of children compared to members of other ethnic groups such as Tagalogs, Cebuanos, and Ilocanos.

One major cultural factor that could explain variations in fertility and fertility preferences is agriculture. This is particularly significant among indigenous peoples, as agricultural practices cultivate various forms of heritage (both material and non-material) and are deeply intertwined with the traditions, values, and social norms of a community (Daugstad et al., 2006). Easterlin's (1975) Theory of Supply and Demand of Fertility offers a framework connecting culture, agriculture, fertility, and fertility preferences. This theory posits that individuals residing in agricultural areas tend to have higher fertility due to the demand for more labor. Bulatao (1975) further highlighted the value of children in traditional and agrarian societies, where they are viewed as economic assets that contribute to the household and agricultural work, leading to a preference for larger families. Caldwell (2005) also supported this notion, indicating that rural agricultural areas require additional and inexpensive labor, which tends to encourage higher fertility preferences and outcomes.

Despite the wealth of research on fertility preferences, there is a limited number of studies specifically focused on the fertility preferences of indigenous people. IPs which constitute a smaller community with a shared culture, traditions, and beliefs within a larger population, are recognized as a minority in the Philippines, like in other parts of the world. IPs in the country are officially designated as a minority by the National Commission on Indigenous Peoples (NCIP) as they comprise a "mere" 9% or 9.84 million of the country's total population (PSA, 2023).

The Cordillera Administrative Region

Nowhere is a study of the fertility preferences of IPs more salient than in the Cordillera Administrative Region (CAR) whose population is predominantly composed of IPs. CAR is a mountainous area in the northern Philippines, comprising six provinces—Abra, Apayao, Benguet, Ifugao, Kalinga, and Mountain Province—and two cities, Baguio City and Tabuk City. Based on the 2020 Census of Population and Housing (CPH), CAR has a total population of 1,797,660, making it the least populated region in the country (PSA, 2021). Despite its small population, CAR is home to several indigenous peoples, such as the Ibaloys, the Kankana-eys, the Bontoks, the Kalingas, the Ifugaos, the Isnegs, and the Tingguians or Itnegs. Collectively, they are known as "Cordillerans" or sometimes referred to as "Igorots" which means "mountain people" (Prill-Brett, 2019; Scott, 1962). The majority (68%) of the region's inhabitants are indigenous people, consisting of 42% Cordillerans and 26% members of other Indigenous groups (PSA, 2021).

The 2020 CPH further showed that the youth aged 15 to 24 in CAR stands at 352,302 which accounts for 20% of the regional population (PSA, 2020). Of this number, more than half, 54% are Cordillerans (PSA, 2024; special tabulations). CAR also stood out in 2013 as the region with the highest proportion of young women initiating early childbearing (Natividad, 2016a).

CAR is mainly an agricultural region (PSA, 2020) with nearly half of the youth population (46%) engaged in agricultural activities (PSA, 2020). IPs of the Cordilleras have unique cultural norms, beliefs, and traditions. Their belief system is generally intertwined with their agricultural practices. For instance, rice production is central to various rituals related to religion, medicine, and offerings to the gods for a successful harvest and community well-being (Kohnen & Kohnen, 2022; Molintas, 2004). Their reproductive health-related practices are different from other ethnic groups. Maskay's (2020) study of the IPs of Mountain Province revealed persistent belief in traditional healers and *mangilot* to care for children during pregnancy, using *kuba* (a cloth made from the bark of a tree) as a substitute for a woman's napkin after childbirth, and placing snake skin on the mother's womb during labor complications, among others. This underscores the need to explore the fertility preferences of young people in CAR and whether or not culture is a significant factor.

There is a vast literature about Cordillerans, as many scholars and researchers are interested in the diverse facets of Cordilleran culture. However, within this pool of studies about the people of CAR and their culture, no study has explored their fertility preferences and the different factors associated with these preferences. Thus, building upon the extensive research on socioeconomic determinants of fertility preferences, this paper aims to shed light on the unexplored cultural influences within CAR by demonstrating differences between Cordillerans, the youth indigenous to CAR, and Non-Cordillerans.

Objectives and hypotheses of the study

In light of the context provided, the study seeks to examine the fertility preferences of young people in CAR and determine whether there is a disparity in fertility preferences between Cordilleran and Non-Cordilleran youth. Specifically, it aims to address the following questions: (1) What is the desired number of children of Cordilleran and Non-Cordilleran youth?; (2) Is there a significant difference in the fertility preferences between Cordilleran and Non-Cordilleran youth?; and (3) If so, what are the sociodemographic factors that could explain the significant difference in the fertility preferences between Cordilleran and Non-Cordilleran youth?

In line with this, the various sociodemographic characteristics of CAR youth are hypothesized to be associated with fertility preferences as measured by the desired number of children. Based on relevant literature, these sociodemographic characteristics include age, sex, marital status, religion, educational attainment, number of siblings, internet exposure, socioeconomic status, main activity, and urban-rural residence. The potential influence of cultural factors on fertility preferences was examined by using ethnicity. Specifically, the study posits that Cordilleran youth tend to prefer a larger family size compared to Non-Cordilleran

youth and that this difference can be explained by differences in their sociodemographic characteristics.

Significance of the study

This study addresses the paucity of research examining the intersection of culture and reproduction, as well as the limited studies on the fertility preferences of males and young people. Examining youth is crucial as they are at a stage where critical life transformations in education, employment, and relationships can greatly affect their fertility decision-making (Bledsoe & Cohen, 1993; Natividad, 2016b; UN, 2013). As documented earlier, men's fertility preferences are also significant as men's desires often influence family size decisions of couples.

The study considers the cultural and sociodemographic dimensions necessary to understand fertility dynamics among youth in the Cordillera region. It intends to enhance policymakers' and population program managers' understanding of indigenous fertility practices in the Cordillera. By comparing Cordilleran and Non-Cordilleran youth, the study seeks to ensure that reproductive health policies and strategies are effectively tailored to their distinct needs. This approach is crucial for addressing existing gaps in knowledge and formulating effective, culturally inclusive policies and programs. The research recognizes the limitations of the country's Reproductive Health Law's generalist approach, which fails to account for cultural factors influencing indigenous people's practices and preferences. By proposing policy and program recommendations tailored to these findings, the study advocates for a more nuanced and culturally-sensitive approach to reproductive health initiatives in the region.

METHODS

The study utilizes data from the 2013 Young Adult Fertility and Sexuality Survey (YAFS), a cross-sectional survey of Filipino young adults aged 15-24 years, comprising 19,178 respondents. Since this study focuses on the youth residing in CAR, the sample was restricted to the 928 respondents in this region. Sampling weights were applied to ensure the representativeness of the results at the regional level resulting in 370 weighted cases.

Ethnicity is used in the study as a proxy variable for cultural factors. To distinguish between Cordillerans and Non-Cordillerans in the sample, the study employed the ethnicity variable which is based on the question “How do you classify yourself?” To make the question clearer, survey interviewers probed for ethnicity through a follow-up question mentioning some of the predominant ethnic groups in the area. For example, respondents in Baguio City might be asked, “How do you classify yourself? Are you an Ibaloi, Ilocano, or Kankanai?” In the study, Cordillerans (unweighted n= 436, weighted n= 187) include individuals who self-identify as members of any of the following ethnic groups: Apayao/Yapayao, Bontok/Binontok, Ibaloi/Ibaloy/Inibaloi, Ibontoc, Ifugao, Ikalahan/Kalanguya, Isneg, Itneg, Kalinga, Kankanaey/Kankanai, and Tinggian according to Prill-Brett’s (2019).. Respondents who reported their ethnicity as “Igorot” were classified as Cordillerans since Igorot is a collective term that

some Cordillerans use to identify themselves rather than their specific ethnicities. Thus, Non-Cordillerans (unweighted n=492, weighted n=183) are those who do not classify themselves under any of the mentioned ethnicities. Note that indigenous youth who are not included in Prill-Brett's classification of Cordillerans, such as Tigwahanon, Itawes, Malaueg, and others which constitute about 7.6% of all youth in CAR, are considered in this study as Non-Cordillerans.

The dependent variable, fertility preferences, was measured using the respondents' desired number of children. This is based on the response to the question "How many children do you want to have?" and responses range from 0 to 12 children. Ten sociodemographic characteristics of the youth were examined. In univariate analyses, age was grouped into 15-19 and 20-24 years old while sex was classified into male and female. Marital status was categorized into never married, formally married, living-in, and separated. Religion was grouped into Catholic and non-Catholic. Education was classified into five categories: elementary, high school undergraduate, high school graduate, post-high school, and college or higher. The number of siblings was derived by combining the number of biological brothers and the number of biological sisters given by the respondents. For the univariate analysis, this was categorized into none, 1, 2, 3, 4, and 5 or higher. Internet exposure refers to whether the youth use the Internet or not and was categorized into "with exposure" and "no exposure." Socioeconomic status was based on the wealth quintile and was grouped into poorest, second, middle, fourth, and wealthiest. The original six categories of main activity in the data were used, as follows: none, student, unemployed, housework, unpaid family worker, and working. The type of residence was initially considered but was eventually excluded from the analysis due to its lopsided distribution in CAR.

In bivariate analyses, the same categorization was used except for the following variables: marital status was grouped into never married and ever married (formally married, living-in, and separated); education was classified into high school undergraduate and high school graduate or higher; number of siblings was converted into a dichotomous variable with "less than 3" and "3 or more" as categories; socioeconomic status was dichotomized into poor (those belonging to the first and second wealth quintile) and non-poor (those belonging to the third, fourth, and fifth wealth quintile); and main activity was grouped into student, non-working (unemployed, housework and unpaid family worker), and working. The study used the Statistical Package for the Social Sciences (SPSS) version 29.0 to process the data and generate the statistical tables.

The study initially compared the profiles of Cordilleran and Non-Cordilleran youth by examining the percent distribution and descriptive statistics of the youth according to their background characteristics. Secondly, a one-tailed t-test for the difference in the mean desired number of children assessed statistically significant differences and the direction of the differences in fertility preferences between Cordilleran and Non-Cordilleran youth. Finally, sociodemographic characteristics that significantly differed between these two groups of CAR youth in terms of fertility preferences were determined by comparing the mean desired number of children for each category of the sociodemographic characteristics using a t-test of means.

RESULTS

Profile of Cordilleran and Non-Cordilleran youth

This section offers insights into the background characteristics that potentially differentiate Cordilleran and Non-Cordilleran youth by examining the percent distribution of the selected sociodemographic characteristics of these two groups of young people.

Among Cordillerans, the age group 20–24 years holds a slight majority at 50.8%, compared to 49.2% in the 15–19 age bracket (Table 1). Conversely, Non-Cordillerans exhibit a higher prevalence of the 15–19 age group at 54.6%, with the 20–24 age group constituting 45.4%.

Table 1. Percent Distribution and Descriptive Statistics of the Background Characteristics of Cordilleran and Non-Cordilleran Youth: 2013 YAFS

Background Characteristics	Cordilleran Youth	Non-Cordilleran Youth	CAR
Age			
15-19 years old	49.2	54.6	51.8
20-24 years old	50.8	45.4	48.2
Mean (SD)	19.4 (2.8)	19.2 (2.7)	19.3 (2.7)
Sex			
Male	42.8	50.3	46.6
Female	57.2	49.7	53.4
Marital Status			
Never Married	76.0	69.0	72.6
Formally Married	13.0	13.8	13.4
Living-In	10.7	16.8	13.8
Separated	0.0	0.4	0.2
Religion			
Catholic	58.3	73.8	66.0
Non-Catholic	41.7	26.2	34.0
Education			
Elementary	3.7	6.6	5.2
High School Undergraduate	37.4	36.6	37.3
High School Graduate	18.2	18.0	18.1
Post-High School	9.6	8.8	9.0
College or Higher	31.0	30.0	30.5
Number of Siblings			
None	11.9	13.1	12.5
1	27.1	25.5	26.3
2	20.1	23.9	22.0
3	16.5	17.1	16.8

Background Characteristics	Cordilleran Youth	Non-Cordilleran Youth	CAR
4	10.7	10.0	10.4
5 or more	13.7	10.4	12.1
Mean (SD)	2.4 (1.8)	2.2 (1.7)	2.3 (1.7)
Internet Exposure			
With Exposure	43.4	42.5	42.9
No Exposure	56.6	57.5	57.1
Socioeconomic Status			
Poorest	26.7	23.7	25.2
Second	31.5	23.0	27.3
Middle	19.7	25.8	22.7
Fourth	13.4	17.8	15.5
Wealthiest	8.7	9.7	9.2
Main Activity			
None	1.2	1.4	1.3
Student	35.0	31.1	33.1
Unemployed	6.6	4.2	5.4
Housework	24.2	23.8	24.0
Unpaid Family Worker	7.8	9.1	8.5
Working	25.1	30.4	27.7
Urban-Rural Residence			
Urban	3.0	4.3	3.8
Rural	96.7	95.7	96.2
Total	100.0	100.0	100.0
N	**187**	**183**	**370**

A significant majority of Cordilleran youth are female, accounting for 57.2%, while Non-Cordillerans display a nearly even sex distribution with males at 50.3% and females at 49.7%. In terms of marital status, never-married youth constitute the majority for both Cordillerans (76.0%) and Non-Cordillerans (69.0%). Catholicism is the predominant faith for both groups, constituting 58.3% for Cordillerans and 73.8% for Non-Cordillerans.

Examination of the distribution of educational attainment reveals that "high school undergraduate" is the predominant category for both groups, encompassing 37.4% for Cordillerans and 36.6% for Non-Cordillerans. College education is reported by 31.0% of Cordillerans and 30.0% of Non-Cordillerans.

In terms of family structure, having only one sibling constitutes the highest percentage for both Cordillerans and Non-Cordillerans, with 27.1% and 25.5%, respectively. This is followed by 20.1% of Cordillerans and 23.9% of Non-Cordillerans having two siblings. On average,

Cordilleran youth have more siblings than Non-Cordillerans (2.4 vs. 2.2, respectively). Regarding internet exposure, nearly the same percentage of Cordillerans (56.6%) and Non-Cordillerans (57.5%) reported having no exposure. Differentials in socioeconomic status reveal that 58.2% of Cordillerans belong to the "poor" category (poorest and second wealth quintiles), while 53.3% of Non-Cordillerans are classified as "non-poor" (middle, fourth, and wealthiest quintiles).

Examining main activities, being a student emerges as the predominant pursuit for both Cordilleran (35.0%) and Non-Cordilleran (31.1%) youth. This is followed by working youth (25.1% among Cordillerans and 30.4% among Non-Cordillerans) and those engaged in housework (24.2% among Cordillerans and 23.8% among Non-Cordillerans). Geographically, an overwhelming majority of both Cordillerans (96.8%) and Non-Cordillerans (95.6%) live in rural areas. Due to this lopsided distribution, urban-rural residence is no longer explored in subsequent analyses.

Fertility preferences of Cordilleran and Non-Cordilleran youth

To address the first and second objectives of the study, this section compares the fertility preferences of Cordilleran and Non-Cordilleran youth and places their preferences in the context of national and regional averages. For this purpose, the percent distribution of the preferred number of children of these two groups of young people is presented in Table 2, along with selected descriptive statistics.

Table 2 reveals that Non-Cordillerans exhibit a higher percentage than Cordillerans in preferences for two and three children, registering at 45.9% vs. 40.1%, and 36.6% vs. 31.6%, respectively. Conversely, Cordillerans demonstrate a higher percentage in preferences for four and five children, constituting 13.4% and 7.5% compared to Non-Cordillerans at 8.2% and 2.2%, respectively.

Table 2. Percent Distribution and Descriptive Statistics of the Preferred Number of Children of Cordilleran and Non-Cordilleran Youth: 2013 YAFS

Preferred Number of Children	Cordilleran Youth	Non-Cordilleran Youth
	Percent	Percent
0	0.0	1.6
1	5.9	5.5
2	40.1	45.9
3	31.6	36.6
4	13.4	8.2
5	7.5	2.2
6-12	1.0	0.4
Total	100.0	100.0
N	187	183

Min	1	0
Max	12	10
Mean (SD)	2.8 (1.2)	2.6 (1.0)
N	187	183
1-tailed p-value	0.007	

Noteworthy distinctions arise in the range of the desired number of children. Cordillerans express a broader range, citing a minimum of 1 child and a maximum of 12 children, in contrast to Non-Cordillerans whose minimum preferred number of children stands at 0 and maximum at 10 children. Cordilleran youth prefer to have 2.8 children, on average, while the corresponding figure for Non-Cordillerans is slightly lower at 2.6. Although the figures do not appear to be substantially different, the one-tailed t-test reveals a statistically significant difference in these means (p=0.007).

When compared with the national average, CAR youth reported a higher mean preferred number of children at 2.7 compared to the national average of 2.6. This mean of 2.7 children is also among the highest in all regions of the country, along with Eastern Visayas (2.7), SOCCSKSARGEN (2.7), and ARMM (4.1 children) (Natividad & Marquez, 2016).

Correlates of fertility preferences

This section addresses the third objective by identifying the sociodemographic factors that could explain the significant difference in fertility preferences between Cordilleran and Non-Cordilleran youth. Table 3 presents the outcomes of t-tests that examined the significant differences in the mean preferred number of children between Cordilleran and Non-Cordilleran youth across various background characteristics.

There are statistically significant differences in the mean desired number of children between Cordilleran and Non-Cordilleran youth among the following sociodemographic subgroups: (1) Younger youth (2.8 vs. 2.5), (2) Females (2.6 vs 2.4), (3) Never Married (2.8 vs. 2.6), (4) High School Graduate/Higher (3.0 vs. 2.7), (5) Having Less than Three Siblings (2.8 vs. 2.5), and (6) With Internet Exposure (2.8 vs. 2.4). In all subgroups showing significant differences, Cordillera youth exhibited higher fertility preferences than Non-Cordillerans.

No significant differences are observed in any category of the variables Religion, Socioeconomic Status, and Main Activity.

Table 3. Mean Preferred Number of Children of Cordilleran and Non-Cordilleran Youth by Background Characteristics: 2013 YAFS

Background Characteristics	Cordilleran Youth		Non-Cordilleran Youth		p-value
	Mean	N	Mean	N	
Age					
15-19	2.8	92	2.5	100	**0.027**
20-24	2.9	95	2.7	83	0.208
Sex					
Male	3.1	80	2.7	92	0.057
Female	2.6	107	2.4	91	**0.033**
Marital Status					
Never Married	2.8	142	2.6	126	**0.046**
Ever Married	2.8	45	2.5	57	0.142
Religion					
Catholic	2.8	109	2.5	135	0.092
Non-Catholic	2.9	78	2.6	48	0.112
Education					
HS Undergraduate	2.8	77	2.6	79	0.154
HS Graduate/Higher	3.0	110	2.7	104	**0.044**
Number of Siblings					
Below 3	2.8	110	2.5	114	**0.015**
3 or more	2.9	77	2.7	69	0.347
Internet Exposure					
With Exposure	2.8	79	2.4	76	**0.018**
No Exposure	2.9	103	2.7	103	0.149
Socioeconomic Status					
Poor	2.8	109	2.7	85	0.094
Non-Poor	2.9	78	2.5	98	0.085
Main Activity					
Student	2.7	65	2.4	57	0.080
Non-Working	3.1	47	2.8	56	0.294
Working	2.8	74	2.5	71	0.321
Total	2.8	187	2.6	183	0.013

DISCUSSION AND RECOMMENDATIONS

The study uncovered statistically significant differences in fertility preferences between Cordilleran and Non-Cordilleran youth, with the former expressing a slightly higher average desired number of children than the latter. This difference is most pronounced among specific sociodemographic subgroups: younger youth, females, individuals who were never married,

those with higher education, those with fewer than three siblings, and youth with internet exposure.

The disparity can be attributed to two factors discussed earlier which provide plausible explanations for why communities such as the indigenous people of the Cordillera, who reside in the predominantly agricultural mountainous region of northern Philippines, prefer larger families. First, these findings align with Easterlin's Supply and Demand Theory of Fertility (1975), suggesting that agricultural settings like the Cordillera, where labor demands are higher, tend to favor larger families. Since a great majority of both Cordilleran and Non-Cordilleran youth reside in largely rural and agricultural areas, economic demands alone do not account for the difference. Besides economic demands, cultural traditions may play a more pivotal role in shaping Cordillerans' preference for larger families as part of their heritage, supported by an emphasis on preserving traditional family values (Bulatao, 1975). Indigenous beliefs further underscore the significance of children in Cordilleran culture, where rituals passing down knowledge start from pregnancy (Eggan and Scott, 1963).

The significant difference in the desired number of children between Cordilleran and Non-Cordilleran youth supports the main argument of this study - fertility preferences are influenced not only by social and economic factors but also by cultural factors. Prill-Brett (2004) noted that female Cordillerans are traditionally tasked with child-rearing responsibilities while Eggan and Scott (1965) found that children are believed to make marriages permanent. If a Cordilleran couple remains childless, their marriage is perceived as unlucky or unsuccessful. Cordillerans also hold tightly to traditional systems, beliefs, and knowledge, with rituals surrounding the passing of knowledge from pregnancy to the child's marriage (Eggan and Scott, 1963). Cordilleran children are raised to ensure the continuation of these local practices and traditions. The influence of cultural norms on desired fertility is not unique to Cordillerans. For instance, Hanunuo Mangyans, an indigenous group residing in Oriental Mindoro, prefer more children primarily for pride and old-age support (Tolosa, 2015).

Younger Cordillerans may have exhibited higher fertility preferences compared to younger Non-Cordillerans because of the former's early exposure to familial responsibilities, traditions, and indigenous beliefs. From a young age, Cordillerans are taught about these aspects, including rituals and indigenous knowledge that are passed down starting from pregnancy (Eggan and Scott, 1963). This early upbringing instills in them a distinct perspective on family systems and emphasizes the importance of family within their community. Moreover, Peterson (1990) observed that younger Cordillerans, particularly those in Benguet, often take on responsibilities such as caring for younger siblings when their parents are absent. This early involvement with siblings underscores the significance of children in Cordilleran culture. These cultural practices and traditions alongside the larger family sizes of Cordilleran youth compared to Non-Cordilleran youth, may contribute to why even those with fewer siblings prefer larger families compared to Non-Cordillerans.

Cordilleran females' higher desired family size can be attributed to the pervasive gender roles where females are traditionally tasked with child-rearing (Prill-Brett, 2004). These roles are

ingrained from a young age, and females may prefer larger families as a cultural norm. Additionally, Cordilleran females see a "support system" in their community and husbands during pregnancy (Eggan and Scott, 1963; Prill-Brett, 2004). More children are believed to bring luck to the couple and make marriages permanent. Childlessness after marriage is seen as bad luck (Eggan and Scott, 1965). These cultural beliefs may have contributed to higher fertility preferences among females compared to Non-Cordillerans. In contrast, the study found no significant disparity in fertility preferences between male Cordillerans and their Non-Cordilleran counterparts, possibly due to uniformly high fertility preferences among both groups.

Marital status revealed a perplexing pattern, with a statistically significant difference in the mean preferred number of children between Cordilleran and Non-Cordilleran youth among the never-married youth, but not among the ever-married group. The significant difference among never-married individuals suggests that cultural factors have a strong influence on fertility preferences before marriage. However, once individuals are married, these preferences may become more homogenized across cultural groups, possibly due to shared experiences and challenges of married life (e.g., financial stability) that override initial cultural predispositions. In addition, the absence of statistical significance among ever-married youth could also be due to a smaller sample size or greater variability in this group, requiring further investigation to draw definitive conclusions.

The significant disparity in fertility preferences between Cordilleran and Non-Cordilleran youth, particularly regarding the role of education and the internet, also merits closer examination. Particularly intriguing are the higher fertility preferences among Cordillerans with internet exposure and higher education, which run counter to the expected pattern based on previous studies that noted the influence of these factors in promoting smaller family norms (e.g., Conteh-Khali, 2014; Mahanta, 2016). The results of this study suggest that cultural factors may exert a stronger influence on fertility preferences, outweighing the fertility-reducing effects typically associated with increased education and media exposure. For instance, the persistence of traditional values among educated Cordilleran youth (i.e., larger preferred family size) might indicate the strength of cultural transmission within indigenous communities, even in the face of modernizing influences. This could explain why Cordillerans maintain a preference for larger families despite factors that typically reduce fertility preferences in other groups. The apparent resilience of Cordilleran cultural beliefs underscores the need for a more nuanced examination of how cultural factors interact with education and media exposure in shaping fertility preferences among indigenous populations.

The study, therefore, underscores the importance of considering the unique beliefs and attitudes of indigenous people regarding fertility and advocates for tailored interventions to address their specific needs and contexts. For instance, programmatic efforts focusing on fulfilling couples' desired fertility through family planning services and advocating for smaller family sizes via information, education, and communication (IEC) campaigns should include IPs. Initiatives such as the collaborative project between NCIP and the Commission on Population and Development (CPD) that provides family planning services tailored to Indigenous Cultural

Communities/Indigenous Peoples (ICCs/IPs) in the CARAGA region (Sumando, 2022) should be replicated nationwide in areas with substantial numbers of IP residents, such as CAR.

The study's findings also have important implications for policy formulation under the Reproductive Health (RH) Law. While the law aims to provide universal access to reproductive health services and recognizes Filipinos' reproductive health rights, the results suggest that its generic implementation may be ineffective for indigenous populations like the Cordillerans, failing to address their specific needs. Policymakers should consider developing culturally sensitive interventions that respect indigenous values while promoting reproductive health. This might involve collaborating with indigenous leaders to design family planning programs that align with Cordilleran cultural practices, or creating educational materials that frame family size discussions within the context of indigenous traditions and economic realities. Such tailored approaches are crucial, especially considering Maskay's (2020) observation that indigenous peoples globally face racial discrimination and social exclusion, often depriving them of basic healthcare services, including sexual and reproductive health (SRH). Therefore, there is a pressing need for the continuous promotion of indigenous RH to develop policies that support their cultural beliefs and practices. Further studies are needed to inform these inclusive national policies, ensuring that the implementation of the RH Law effectively serves all Filipino communities, including indigenous populations.

It is important to note some key limitations of this study and how they can be addressed in future research. Firstly, it is crucial to acknowledge the methodological limitations, particularly in measuring cultural factors. This study used Cordilleran and Non-Cordilleran ethnicities as a proxy variable to address the challenge of directly quantifying these factors. While this approach allowed for comparative analysis, it may have obscured nuances within and between these two groups. This underscores the need for more refined methods to capture and quantify specific cultural elements influencing fertility preferences. Future research should aim to develop more precise measures of cultural factors, possibly through integrating qualitative methods or developing culturally-specific survey instruments. This would enhance our understanding of the impact of cultural factors on fertility preferences and provide a more nuanced picture of diversity within ethnic groups.

Secondly, the limited number of survey respondents prevented more in-depth statistical analyses of the data, such as multivariate analyses of the factors contributing to variations in fertility preferences between the two ethnic groups studied. This constraint highlights the need for larger-scale studies of young people in CAR that would allow for more robust statistical examinations and potentially uncover additional insights. Additionally, given the age range of the study sample (15-24), there may be cohort effects at play. Longitudinal studies tracking how fertility preferences evolve as these youth age could provide valuable insights into the stability of these preferences over time and life stages, enriching our understanding of the interplay between culture, age, and fertility preferences.

These limitations underscore the importance of qualitative research to validate quantitative findings and provide deeper insights into the cultural nuances that may not have

been fully captured in the current study design. For instance, further qualitative research is essential to understand IPs' acceptance and behavior towards family planning and responsible parenthood, helping them achieve their desired fertility. Replicating Bulatao's work in the early 1970s, which explored various factors influencing the perceived value of children among Filipinos, in a contemporary context could also provide valuable insights into how beliefs, attitudes, and behaviors regarding fertility preferences have evolved over time.

Lastly, the potential long-term demographic implications of these findings warrant consideration. If higher fertility preferences among Cordilleran youth persist, it could lead to significant changes in the demographic composition of the Cordillera region. This could have far-reaching consequences for resource allocation, educational planning, and economic development in the area. Moreover, it raises questions about the future balance between maintaining indigenous cultural practices and addressing broader national population goals. As such, these findings contribute not only to our understanding of fertility preferences among indigenous youth but also highlight the complex interplay between culture, development, and demographic change in the Philippines.

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