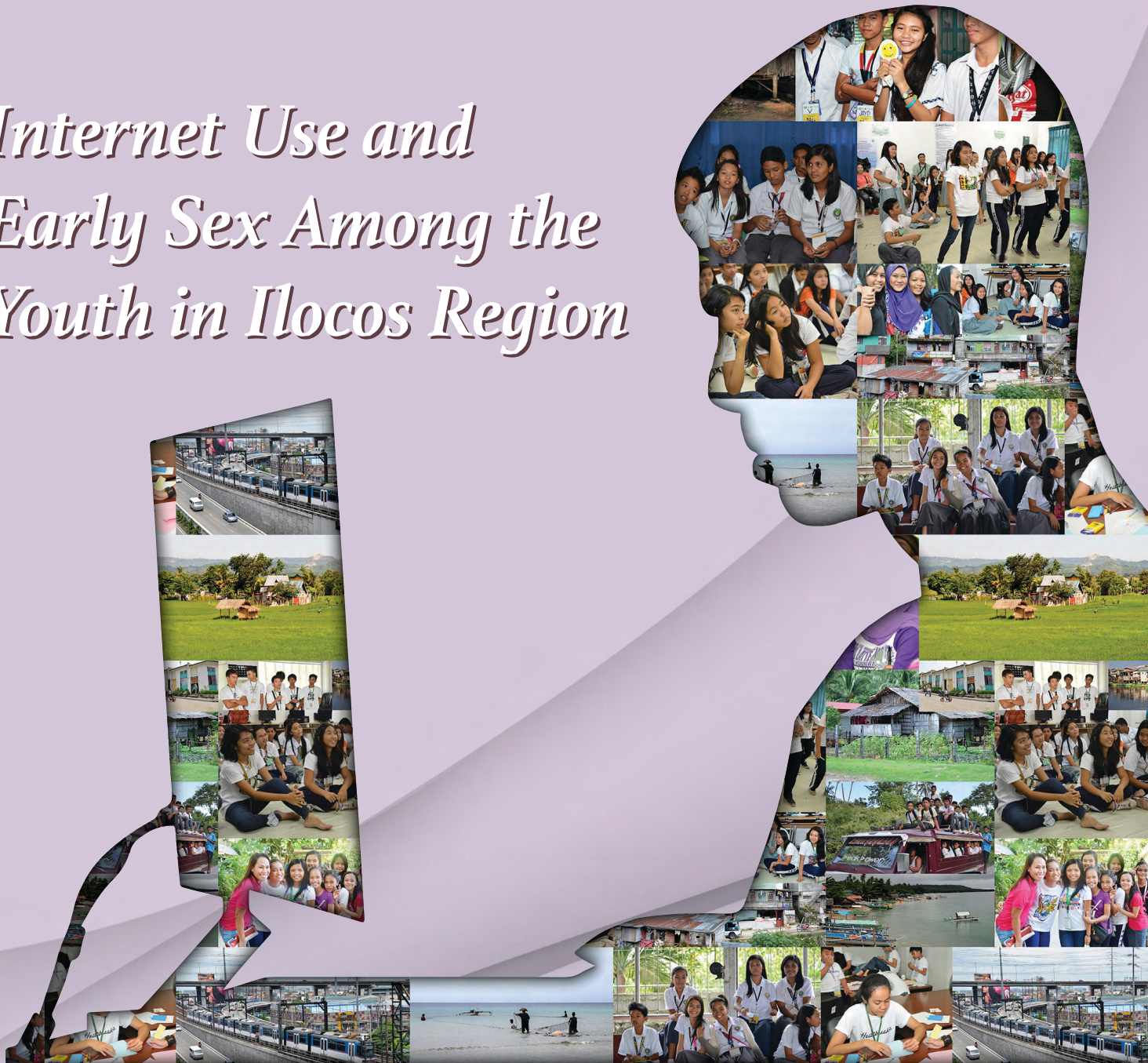


Post-Millennial Filipinos: Renewed Hope vs Risks

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

Internet Use and Early Sex Among the Youth in Ilocos Region



WORKING PAPER SERIES 2016-03
Violeta V. Alonzo and Elma P. Laguna

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Working Paper Series No. 2016-3

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Style Edited by Ms. Anna Melissa L. Gonzales
Layout by Ms. Jean Veriel M. Bulasa

ISBN 978-971-92497-7-1

“Post-Millennial Filipinos: Renewed Hope vs Risks”: Further Studies of the 2013 Young Adult Fertility and Sexuality (YAFS) Study – *Internet Use and Early Sex Among the Youth in Ilocos Region* is funded by the Commission on Population and developed in partnership with the Demographic Research and Development Foundation, Inc.

Published by:
Commission on Population
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TELEPHONE: 531-6805
FAX: 533-5122
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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.

Internet Use and Early Sex Among the Youth in Ilocos Region

Violeta V. Alonzo¹ and Elma P. Laguna²

Abstract

This paper describes the level of Internet use and early sexual initiation among young people in Region I. The analysis was extended to explore the possible link between Internet use and early sexual initiation. Using the regional data from the 2013 Young Adult Fertility and Sexuality Study, the results show a significant variation in the level of Internet use by marital status, educational attainment, and wealth index. Similarly, the proportion of young people who had early sexual initiation is higher among those with low education than those with a higher level of educational attainment. Both family and community characteristics do not have a significant association with Internet use and early sexual initiation. Logistic regression estimates show that only age and level of educational attainment are significant factors in predicting the likelihood of early sexual initiation.

Keywords: Internet use, early sex, Ilocos region

Introduction

The development of communication technology and its impact on society has been a widely studied area of research. In fact, the role of information and communication technology (ICT) as a facilitator of development, specifically in less developed countries, has become a well-established maxim of scholarly and public discourse, as ICTs can be significant enablers of positive change in the developing world (Chew, Ilavanasan, & Levy, 2010).

Information technology (IT) is credited to have produced a deep impact on human lives. Among young people, this impact is more pronounced in terms of greater access to information, which could facilitate more opportunities for learning and education. Technology facilitates the collection, storage, and management of information that the youth can utilize in their school work/assignments. ICT has contributed to universal access to education, equity in education, the delivery of quality learning and teaching, professional development, and more efficient

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educational management, governance, and administration. The development in ICT has afforded young people with various platforms of expression and avenues to seek information.

However, society can only benefit from technological innovations if investments are made to ensure that proper infrastructure for communication and IT is in place. Research has highlighted the disparity in access to ICT across countries and between the developed and developing regions of the world. This “divide” mirrors the socio-economic differences that already exist in the population. Tuano (2007) characterized the digital divide in terms of ownership, access, and utilization. Differences in ownership refer to the high level of ICT penetration, specifically in terms of household ownership of telephones, personal computers, Internet access, etc. Differences in terms of access refer to the provision of ICTs in home, community, and work environments. Indicators such as teledensity are often used to characterize this form of digital divide. The effective utilization of ICT, on the other hand, can be measured in terms of the number of households and firms that are utilizing ICTs for specific ends such as work- or school-related purposes.

In the Philippines, earlier studies have noted that ICT coverage, access, and utilization are widely dispersed. Using the 2003 Family Income and Expenditure Survey, Tuano (2007) found that less than 1 percent of households whose heads are economically classified as farmers own computers, while 11 percent own landlines and cell phones. In contrast, 2 percent of households whose heads are classified as industrial workers own computers, while 31 percent have telephones. The same pattern is found across regions, with the National Capital Region (NCR) exhibiting higher ICT user penetration than the rest of the regions in the country.

Among the innovations in ICT, it is the Internet that has attracted young people’s attention. It has provided them with a wider venue to gain awareness and respond to social concerns, and it has connected them across vast geo-political barriers. In the same manner, technological innovations also expose young people to potentially unwelcome information and damaging exposure to violence, pornography, and bullying, among others.

Initial findings from the 2013 Young Adult Fertility and Sexuality Study (YAFS4) showed a substantial difference in Internet use among young people across the country. While NCR youth reported almost universal Internet use (92%), ARMM registered Internet use among the youth at 22 percent. The Ilocos region lies above the national average of 58 percent, with 66 percent of its young people reporting to have used the Internet.

A more complete understanding of the impact of ICTs, however, can be achieved by taking a more holistic look at an individual’s communication and information repertoire, which are undoubtedly influenced by extant infrastructures, specific needs, and individual characteristics. Against this backdrop, this paper focuses on the Ilocos region and explores how

its young people differ in terms of their Internet use. An attempt is also made to link how Internet use affects young people's sexual behavior, such as early initiation to sexual activity.

As shown in several studies, particularly from the West, exposure to pornography and sexually explicit content is a factor in the early sexual initiation of young people. In the same manner, evidence abounds on the consequences of early initiation to sex on young people: early pregnancy, early marriage, dropping out of school, and reduced labor force opportunities for women. Thus, early sexual debut usually causes alarm, as it affects young people's transition into adulthood.

In the Philippines, the results of YAFS4 indicate an increasing proportion of youth who began sexual activity before age 18, from 13 percent in 1994 to 23 percent in 2013. In Region I alone, the median age at first sex is 18, and 23.2 percent had sex before they reached the age of 18.

While there have been various government policies and programs designed to address the increasing incidence of teenage pregnancy in the country, research efforts continue to focus on understanding the different factors that influence young people's attitudes and behaviors on reproductive health concerns. Much attention, for instance, has been given to the changing contexts of contemporary young people, who are called the "millennials." Today's young people spent their childhood immersed in a media-rich environment. In comparison to their predecessors, they grew up with technology and are not only users of ICT but also active content producers. Although much has been said about the effects of traditional media on the socialization of young adults, especially on topics related to sexuality and reproductive health, few studies have taken into account the influences of ICT, particularly access to the Internet, on young people's sexual behavior. The focus on the youth of Region I not only provides much needed information in understanding young people in the region, but also allows an encompassing perspective on the reach of ICT and its possible impact on young people's socialization.

Objectives of the study

This paper explores the factors influencing the use of the Internet and its influence on early sex among the youth in Region I.

Specifically, it aims to

1. describe the youth of Region I in terms of their individual, family, and community characteristics;

2. determine whether Internet use and incidence of early sex vary by individual, family, and community factors;
3. identify individual, family, and community factors that affect Internet use and incidence of early sex; and
4. determine whether Internet use is an important factor in early sexual initiation.

Scope and limitations

This study explores the factors affecting Internet use and early sex among the youth in Region I. While YAFS4 included various forms of technology through which information can be accessed, such as traditional media, Internet, and cell phones, this paper focuses only on Internet use and its effect on early sexual initiation.

YAFS4 generated information on adolescents' access to the Internet, the age at first Internet use, purpose of using the Internet, and mode of access to the Internet.

The purposes of using the Internet were categorized as follows: (a) entertainment, such as downloading of movies, videos, and music; (b) communication, which includes social networking, blogging, and checking email; and (c) school-related purposes such as school assignments and projects, as well as work-/business-related concerns like shopping online.

Access to the Internet was categorized into the following: (a) private, such as home connection, cell phone, and plug-in; and (b) public, such as school connection, workplace/office, Internet café, and WiFi in public places and buses.

Data and information on early sex is limited to age at first sex.

Study framework

Theoretical framework

One of the most important social processes is socialization, which provides an individual with the skills and habits necessary to perform as a functioning member of society. The different social institutions such as the family, school, church, and mass media contribute to one's socialization process. As individuals, we all learn about social norms in the family, and these norms are further reinforced in school. Several theories further explore the mechanisms through which various institutions influence an individual's socialization process. A more popular perspective is Albert Bandura's (1977) social learning theory. The emphasis of social learning is

on modeling and imitation. According to Bandura, increased exposure to stimulus leads to a higher tendency of imitation. The more constant and repetitive the stimulus, the more it is perceived to be acceptable and legitimate. This theory is usually used in mass media studies, particularly in explaining the effects of exposure to violence on children. Similarly, with the increasing role of ICT on the young, greater access to the Internet is assumed to provide more opportunities for the acquisition of new knowledge and information that may help young people in their transition to adulthood. Whether young people would tend to model their behavior on what they read and see on the Internet remains debatable. However, social learning theory could help us frame our understanding of ICT use among the young and how it eventually affects their attitude and behavior, specifically their sexual behavior.

Conceptual framework

The relationship between the dependent and independent variables is depicted in Figure 1. The independent variables consist of the profile of the youth in terms of individual and family characteristics and community factors. The dependent variables are Internet use and early sex.

The individual characteristics include the following: age, sex, marital status, education, religion, and wealth index.

The family characteristics include parenting style (i.e., the parents' reactions when the youth did something wrong).

The community factors include membership in youth organizations in the community and participation in activities in the community.

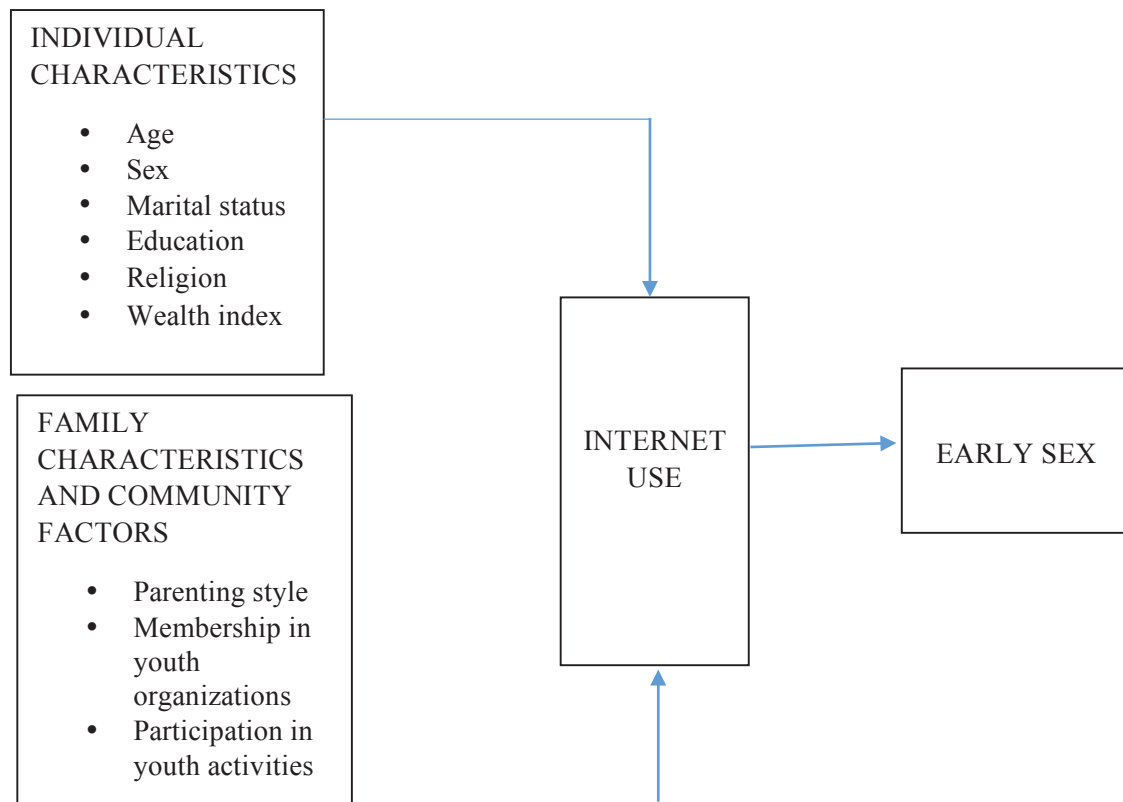


Figure 1. Conceptual framework of the study

Review of literature

Internet use

The modern era is extremely advanced and well developed primarily because of the launching of the Internet and its applications, which have provided individuals with the easiest routine in their daily lives (Guan & Subrahmanyam, 2009).

In the Philippines, the deregulation of the telecommunications industry was facilitated by the enactment of Republic Act 7925, otherwise known as the Telecommunications Policy Act. This act provided the impetus for the rapid development of ICT in the country. Consequently, the use of IT such as the cell phone and the Internet has gained popularity, and its convenience has facilitated the flow of information across socio-economic groups in different geographical locations.

The Internet has changed the face of people's lives. Today, people use the Internet to access the news from different news channels worldwide. Even the live video news from news channels can be accessed through the Internet, overpowering other media, even television.

Business opportunities and professional developments have also widened through the Internet. The need to advertise products is no longer a major problem, since companies can now develop their own websites as a source of information to convince customers to patronize them.

Despite the perceived positive effects of ICT both at the national and global levels, concerns have been raised about its negative consequences. Young people have become susceptible to cyber bullying, online sexual harassment and solicitation, identity theft, and unsupervised access to sexual content.

Harper (2012), in his report on how the Internet affects young people, noted that the youth's access to digital tools has mostly positive effects when it comes to research. But while the Internet offers these youth unprecedented access to a wealth of information, it also tends to distract them.

In the Philippines, findings from YAFS4 noted the substantial proportion of young people with Internet access and ownership of cell phones. About 78 percent of the youth own a cell phone, with the proportion slightly higher among females (81%) than males (76%). Cell phone ownership is positively related to education level; that is, 51.3 percent among those with elementary schooling and 94.7 percent among the college educated own cell phones. Across regions, the proportion of youth who own a cell phone is highest in CALABARZON and Ilocos at 87 percent, followed by Central Luzon and NCR at 86 percent and 85 percent, respectively. The lowest proportion of cell phone ownership is found in the Autonomous Region in Muslim Mindanao (ARMM) at 52.4 percent.

From a national perspective, 58.9 percent of today's youth use the Internet, more so among females (61%) than males (57%). The regional profile shows two regions (NCR and ARMM) at the extreme ends of the spectrum, with the proportion using the Internet at 92.3 percent and 22.4 percent, respectively. As to the purpose of using the Internet, social networking was reported by 80.3 percent of Internet users.

One major concern regarding Internet use among the youth is easy access to sexually explicit content; 26.3 percent reported that they have visited websites with sexually explicit content. Visits to websites with sexually explicit content are more prevalent in NCR (36%) and Zamboanga Peninsula (33%).

Early sex

There is no standard definition of early sexual initiation (Marquez, 2008). Some studies done in the United States consider sexual initiation as early if it occurred before age 13 (e.g., Coker et al., 1994, as cited in Marquez, 2008), while others regard early sex as sex that took place as late as age 18 (e.g., Day, 1992, as cited in Marquez, 2008).

Other studies done on adolescent sexual behavior in six Asian countries including the Philippines defined early sexual debut as sex below age 20 (Xenos, Achmad, Lin, Luis, & Podhisita, 2001). Several studies (e.g., Gupta & Mahy, 2003, using samples from sub-Saharan Africa) have applied different definitions of early sex for males and females. Crockett et al. (1996, as cited in Marquez, 2008) used a median split of the ages of sexual initiation separately for boys and girls to differentiate early, middle, and late initiators of sex.

Research on youth sexuality has always underscored the dominant role of media in the sexual education of young people. A study of broadcast media content showed that on average, a teenage viewer is exposed to 143 incidents of sexual behavior on primetime television each week (Greenberg et al., 1993, as cited in Gruber & Grube, 2000). The majority of music videos also portray sexual feelings and impulses (Baxter et al., 1985, as cited in Gruber & Grube, 2000). Sexual messages on television are generally presented in a positive light; however, this is not accompanied by efforts to portray the potential risks of unprotected sexual intercourse (Lowry & Towles, 1989, as cited in Gruber & Grube, 2000).

Survey data have also shown that adolescents use the media as a source of information about sex, drugs, AIDS, and violence, as well as to learn how to behave in relationships. For instance, the study of Asekun-Olarinmoye, Asekun-Olarinmoye, Adebimpe, and Omisore (2014) on the effect of mass media and the Internet on the sexual behavior of undergraduate students from a metropolitan area in Nigeria found that respondents used the Internet and radio/television as sources of information on sexual issues. Most of the respondents (73.5%) believed that the Internet has a bad influence on the youth's sexual behavior, although 25.3 percent considered it acceptable to access the Internet for sexual material or movies. The study concluded that uncontrolled exposure to mass media and the Internet could negatively influence the sexual patterns and behavior of the youth.

Methodology

YAFS4 was the main data source for this study. YAFS4 has a total sample size of 19,178 young adults consisting of all eligible respondents aged 15–24 in the sample households nationwide. For Region I, YAFS4 covered a total of 73 barangays, 1,091 households, and 1,202 youth respondents.

Bivariate and multivariate analyses were employed. Specifically, patterns of Internet use and early sexual initiation were differentiated across individual, family, and community characteristics.

Findings

Profile of the Region I youth

The profile of the youth in Region I consists of individual characteristics and family and community factors. Table 1 presents a summary of these characteristics.

Table 1. Profile of Region I youth

Background characteristics	Percent	N of cases
Age		
15–19	61.6	741
20–24	38.4	461
Sex		
Male	50.7	609
Female	49.3	593
Marital status		
Never married	79.0	949
Currently married	7.6	91
Currently living in	12.5	150
Separated/annulled/ divorced/widowed	(1.0)	12
Education		
No schooling/elementary	9.0	108
High school undergraduate	34.7	417
High school graduate/ vocational	33.6	404
College and above	22.7	273
Religion		
Catholic	76.9	923
Other Christians	22.6	271
Others	(0.6)	7
Wealth index		
Poorest	10.6	128
Second	19.0	228
Third	26.6	320
Fourth	25.6	308
Wealthiest	18.1	218

Note. Figures in parentheses are based on fewer than 30 cases.

Results show that the majority of youth surveyed (61.6%) belong to the age group of 15–19. The proportions of males and females are nearly equal at 50.7 percent and 49.3 percent, respectively. Most (79.0%) of the youth have never been married. About one in three (34.7%) are high school undergraduates, and another third (33.6%) are high school graduates. The majority are Roman Catholics (76.9%). In terms of the wealth index, only about 18.1 percent belong to the wealthiest families (top 20%), and around 10.6 percent belong to the poorest (lowest 20%).

Table 2 describes the family and community-related characteristics of the young people in Region I. Regarding parenting style, the respondents reported that when they did something wrong, it was common for their parents (first and second) to “counsel/talk” to them (72.5% and 73.6%, respectively). Scolding was also reported by more than half of the respondents.

With regard to community factors, 23.6 percent have participated in activities initiated by community leaders/members, while 19.1 percent reported that they are members of youth organizations in the community.

Table 2. Family characteristics and community factors

Parenting style and community factors	Percent	N of cases
Parenting style of 1 st person (multiple response)		
Counsel/talk	72.5	1,201
Ground me	1.7	1,201
Withhold allowance	1.4	1,201
Give me a scolding	56.8	1,201
Verbally abuse me	2.2	1,201
Physically punish me	22.9	1,201
Give me the silent treatment	1.7	1,201
No reaction	0.8	1,201
Parenting style of 2 nd person (multiple response)		
Counsel/talk	73.6	1,079
Ground me	1.5	1,079
Withhold allowance	0.8	1,079
Give me a scolding	53.7	1,079
Verbally abuse me	1.7	1,079
Physically punish me	22.1	1,079
Give me the silent treatment	1.6	1,079
No reaction	1.3	1,079
Community factors		
Participated in activities initiated by community leaders/members	23.6	1,202
Membership in any youth organizations	19.1	818

Note. Figures in parentheses are based on fewer than 30 cases.

Internet use

YAFS4 findings indicate that more than half of the young people in the Philippines are using the Internet (58.9%). A slightly higher proportion of Internet user penetration is found among the young people in Region I (65.7%). Table 3a presents the level of Internet use across background characteristics.

Table 3a. Internet use according to background characteristics

Background characteristics	Percent	N of cases	Sig
Current age			ns
15–19	67.6	741	
20–24	62.7	461	
Age started using the Internet			
Below 20	93.8	731	
20 and over	6.2	48	
Mean	14.9	779	
Sex			ns
Male	64.4	609	
Female	67.1	593	
Marital status			***
Never married	70.3	949	
Currently married	47.3	91	
Currently living in	47.3	150	
Separated/annulled/divorced/widowed	(75.0)	12	
Education			***
No schooling/elementary	18.5	108	
High school undergraduate	55.4	417	
High school graduate/vocational	70.5	404	
College and above	93.0	273	
Religion			ns
Catholic	65.2	923	
Other Christians	67.5	271	
Others	(57.1)	7	
Wealth index			***
Poorest	27.3	128	
Second	55.7	228	
Third	63.4	320	
Fourth	73.7	308	
Wealthiest	90.8	218	
Total	65.7	1,202	

Note. Figures in parentheses are based on fewer than 30 cases.

* $p < .05$. ** $p < .01$. *** $p < .001$. ns = not significant.

Compared with the older age group, slightly more 15–19-year-olds are using the Internet. The average age at first Internet use is 14.9 years, and the majority started using the Internet before age 20. Males and females have a similar level of Internet use (64.4% vs. 67.1%). Internet use differs significantly across marital status, with never-married youth exhibiting a higher percentage of Internet use than their married counterparts. Internet use increases with educational attainment, from 18.5 percent among those with elementary education or no schooling to 93 percent among the college educated. To some extent, the figures may suggest the prevalence of Internet use for various purposes such as doing school assignments and projects, social networking (Facebook), and office work.

A high percentage of Internet use (75.0%) was found among young people who reported that they participated in activities initiated by community leaders. A similar percentage of Internet use (74.4%) was reported by members of youth organizations (Table 3b).

Table 3b. Internet use according to community factors

Community factors	Percent	N of cases	Sig
Participated in activities initiated by community leaders/members	75.0	1,202	***
Membership in any youth organizations	74.4	818	ns

* $p < .05$. ** $p < .01$. *** $p < .001$. ns = not significant.

Early sex experience

Table 4 presents the differences in early sexual initiation of young people in Region I. The data are limited to young people who reported that their first sex experience occurred before age 18. Of all the individual characteristics considered, only age and educational level are significantly associated with early sex experience. Those with low educational attainment have a higher percentage of early sex. The same pattern is found when wealth index is taken into consideration, although the result is not statistically significant. A bivariate analysis of early sex and family and community factors shows no significant association (data not shown).

Table 4. Early sex according to background characteristics

Background characteristics	Percent	N of cases	Sig
Current age			***
15–19	78.3	152	
20–24	33.0	306	
Age at first sex			
Mean	18.0	458	
Sex			ns
Male	49.0	241	
Female	47.0	217	
Marital status			ns
Never married	51.7	205	
Currently married	36.3	91	
Currently living in	49.3	150	
Separated/annulled/ divorced/widowed	(58.3)	12	
Education			**
No schooling/elementary	66.7	42	
High school undergraduate	57.1	91	
High school graduate/ vocational	42.9	219	
College and above	43.4	106	
Religion			ns
Catholic	49.9	351	
Other Christians	41.6	101	
Others	(60.0)	5	
Wealth index			ns
Poorest	50.8	59	
Second	48.1	77	
Third	50.4	123	
Fourth	45.6	114	
Wealthiest	45.9	85	
Total	48.0	458	

Note. Figures in parentheses are based on fewer than 30 cases.

* $p < .05$. ** $p < .01$. *** $p < .001$. ns = not significant.

Factors affecting early sexual initiation

Based on the bivariate analysis, we identified factors that may have an effect on early sexual initiation. Both family and community factors did not show statistical significance, so we decided to limit the logistic model to background characteristics and Internet use. Table 5

presents the logistic regression results on the probability of early sexual initiation for males and females.

Table 5. Logistic regression estimates predicting the likelihood of sexual initiation before 18 years old for males and females

Characteristics	Male		Female	
	OR	CI	OR	CI
Constant	1.757		8.456***	
Use of Internet (Ref: no)				
Yes	2.009	0.955–4.226	1.049	0.545–2.018
Age group (Ref: 15–19)				
20–24	0.114***	0.057–0.228	0.189***	0.091–0.390
Marital status (Ref: ever married)				
Never married	1.157	0.570–2.346	0.397*	0.164–0.962
Education (Ref: below HS graduate)				
HS graduate or higher	0.890	0.428–1.850	0.207***	0.094–0.452
Religion (Ref: non-Catholic)				
Catholic	1.571	0.774–3.191	1.441	0.700–2.970
R ² (Nagelkerke)		0.333		0.303

Note. OR = odds ratio. CI = confidence interval.

* $p < .05$. ** $p < .01$. *** $p < .001$. ns = not significant.

Among males, Internet use increases the probability of early sex, but the result is not statistically significant. Being older decreases the likelihood of early sexual initiation, which is to be expected. This is the only factor that is statistically significant in the model.

For females, Internet use also increases the probability of early sex, although the result is not statistically significant. Being older, never married, and having higher educational attainment significantly reduce the risk of early sex among females.

Conclusion

Internet use among young people in Region I is associated with individual characteristics such as marital status, level of education, and wealth index, while early sexual initiation is influenced by age and level of education. Family and community factors do not seem to affect either Internet use or early sexual initiation of young people in Region I. Logistic regression

results on early sex, on the other hand, show that the odds seem to increase when both young males and females are Internet users, although the result is not statistically significant. For females, significant factors that predict the likelihood of early sex are age, education, and marital status.

This paper is an initial attempt to explore the link between young people's Internet use and the occurrence of early sex in Region I. The Internet use of young people in the region is interesting to explore given the assumption of a digital divide, particularly in terms of ownership, access, and use. As shown in the results, the level of Internet use among young people in Ilocos is above the national average but still lower than the percentage found in NCR.

Early sexual debut is an emerging trend in the Philippines, which also explains the high incidence of teenage pregnancy in the past years. Clearly, such occurrence results from a variety of factors including young people's personal characteristics, their family background, the community they live in, and to some extent, their mass media and ICT consumption.

The findings do not point to Internet use as a significant factor in early sex; rather, findings show that age and education are important predictors of early sexual initiation. However, patterns also show variation in early sex experience among Internet users as compared to non-Internet users, with a higher proportion of early sex found among Internet users. There is still a need to further explore the various nuances of the effect of Internet use on the decision making of young people regarding sexuality.

Policies and programs on adolescent and reproductive health have been initiated by government, non-governmental organizations, and private organizations. There are already LGU ordinances on the establishment of youth/teen centers and the institutionalization of youth-related programs and projects. What is lacking, however, are more targeted policies on ICT use that would safeguard adolescents' use of and access to the Internet. Ongoing advocacy and information dissemination campaigns such as the U4U online portal of the Commission on Population should be sustained and expanded to cover other youth-related issues. There is also a need to teach young people how to properly use ICTs in order to fully benefit from its many promises. This effort should be a concerted undertaking among parents, teachers, and adult members of society.

Further research should focus on young people's ICT use. Such research should delve deeper into young people's level of engagement online, their social media practices, their website preferences, the ways in which they use ICT, and their parents' involvement in their ICT use (e.g., monitoring, restriction, and discussion). There is also a need to educate parents and teachers on young people's ICT needs and utilization. As borne out by studies, the young are more adept with technology and could always find ways to circumvent restrictions set by adult

members of society. A proper balance must be struck between allowing young people to explore and providing an adequate level of parental oversight.

Finally, special attention should be given to out-of-school youth (OSY). For example, the U4U advocacy initiative of the Commission on Population can be targeted to OSYs to instill in them responsibility and hope for the future. The challenge is to find ways to reach OSYs, since unlike in-school youth, they are likely to be employed or engaged in other activities.

Acknowledgment

This research was funded by the Commission on Population under the YAFS4 Regional Further Study Project of the Demographic Research and Development Foundation.

References

- Asekun-Olarinmoye, O. S., Asekun-Olarinmoye, E. O., Adebimpe, W. O., & Omisore, A. G. (2014). Effect of mass media and Internet on sexual behavior of undergraduates in Osogbo metropolis, Southwestern Nigeria. *Adolescent Health, Medicine and Therapeutics*, 5, 15–23. doi:10.2147/AHMT.S54339
- Bandura, A. (1977). *Social learning theory*. New York, NY: General Learning Press.
- Chew, H. E., Ilavarasan, P. V., & Levy, M. (2010). The economic impact of information and communication technologies on microenterprises in the context of development. *The Electronic Journal of Information Systems in Developing Countries*, 44(4), 1–19.
- Gruber, E., & Grube, J. (2000). Adolescent sexuality and the media. *Western Journal of Medicine*, 172(3), 210–214.
- Guan, S. A., & Subrahmanyam, K. (2009). Youth Internet use: Risks and opportunities. *Current Opinion in Psychiatry*, 22(4), 351–356.
- Gupta, N., & Mahy, M. (2002). Sexual initiation among adolescent girls and boys: Trends and differentials in sub-Saharan Africa. *Archives of Sexual Behavior*, 32(1), 41–53.
- Harper, M. (2012). *Study shows how Internet use affects today's youth*. Retrieved from <http://www.redorbit.com/news/technology/1112724816/internet-affects-youth-110212/>
- Marquez, M. P. N. (2008). The sexual initiation of Filipino youth. In *Life events of Filipino youth: An event history analysis*. Quezon City: Demographic Research and Development Foundation and University of the Philippines Population Institute.
- Tuano, P. A. (2007, October). *Sub-national determinants of the digital divide: The case of the Philippines*. Paper presented at the 10th National Statistics Conference, Mandaluyong, Philippines.
- Xenos, P., Achmad, S., Lin, H. S., Luis, P. K., & Podhisita, C. (2001). *How common is early sexual onset and sex before marriage?* (AYARR Project Research Brief No. 7). Honolulu, HI: East-West Center.



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