FACTORS THAT LEAD TO ADOLESCENT PREGNANCY IN SELECTED BARANGAYS OF ANGADANAN, ISABELA

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Abstract— **This study was carried out to determine the factors that lead to adolescent pregnancy in selected barangays of Angadanan, Isabela, specifically Barangays Lourdes, La Suerte, Calabayan, Victory, Buenavista, and Sto. Niño, for the year 2022. This quantitative descriptive research study was conducted on 56 adolescent pregnant mothers, whether they are primigravida or multigravida, ages 10-19, through a total population sampling. Data were collected through an adapted questionnaire, which consists of two parts: socio-demographic characteristics of the study participants and the factors associated with teenage pregnancy among chosen respondents. This study answered the following research questions: what are the socio-demographic characteristics of the study participants when grouped in terms of age, barangay, educational status, number of children, marital status, and ethnic group; how do the factors lead to adolescent pregnancy in terms of personal, parental, environmental, and economic status; and is there a significant difference between the socio-demographic characteristics of the study participants and the factors that will lead to adolescent pregnancy? The findings revealed that the majority of the respondents were Ilokano junior high school undergraduates ages sixteen to nineteen (16-19) who reside at Barangay Lourdes and La Suerte and are still single and only have one (1) child. Furthermore, the economic factor is the main reason why adolescents get pregnant early due to unstable jobs to earn money, low educational attainment, and poor income of the parents to support the family needs. Moreover, the study concludes that there are significant differences in the personal and environmental factors in the respondents' age; there is a significant difference in the economic status factor in the respondents' residence due to the size of their population and the opportunity of every family to have a job; personal and environmental factors and respondents' educational status are significantly different from each other because some do not have a chance to continue schooling and are being influenced by their peers; lastly, having a significant difference in the personal factors in the respondents' marital status is due to low self-esteem of the respondents.**

Keywords— ***personal factor, parental factor, environmental factor, economic factor, adolescent, adolescent pregnancy, barangay***

I. INTRODUCTION

Adolescent pregnancy remains a significant public health and social concern across many countries, including the Philippines. It refers to pregnancy occurring among females aged 10 to 19 years, whether intended or unintended. As a complex issue, it affects not only the individuals involved but also broader aspects of society, including population growth, education, and economic development. Despite ongoing efforts to address it, adolescent pregnancy continues to pose challenges, particularly in developing communities where access to education and health services may be limited.

Data from the Philippine Statistics Authority (PSA) indicate that adolescent pregnancy has consistently contributed a substantial proportion of live births in the country. Between 2016 and 2020, births among mothers aged 10–19 reached significant levels, although a gradual decline was observed in recent years. While this decrease has been partly attributed to mobility restrictions during the COVID-19 pandemic, national and global reports still show that the Philippines has one of the highest adolescent birth rates in the ASEAN region. This suggests that the issue remains persistent and requires sustained attention.

Several factors contribute to the occurrence of adolescent pregnancy. These include limited parental guidance and communication, low socioeconomic status, inadequate access to education, and exposure to risky behaviors such as substance use. Peer pressure and experiences of sexual coercion or abuse further increase vulnerability among adolescents. In addition, the widespread use of digital media exposes young people to content that may influence early sexual behavior, often without proper guidance or understanding of its consequences.

The effects of adolescent pregnancy extend beyond early childbearing and are associated with various health, social, and economic risks. Young mothers face increased chances of complications such as anemia, infections, and mental health concerns, while their children are at higher risk of low birth weight and developmental issues. These challenges are compounded by interrupted education, limited employment opportunities, and social stigma, which may hinder long-term well-being for both mother and child.

In response, the Philippine government has implemented policies and programs to address adolescent reproductive health, including the Reproductive Health Law and national initiatives promoting comprehensive sexuality education and access to health services. Teenage pregnancy has also been declared a national priority, with government agencies directed to strengthen interventions and awareness campaigns, particularly through digital platforms. However, the effectiveness of these measures varies across local contexts, highlighting the need for community-based studies.

In the Municipality of Angadanan, Isabela, records from the Rural Health Unit revealed a notable number of adolescent pregnancies across several barangays in 2022. This local situation underscores the importance of examining the issue at the community level. Thus, this study aims to explore the factors contributing to adolescent pregnancy in selected barangays of

Angadanan, Isabela. By identifying these factors, the research seeks to provide insights that may inform targeted interventions, strengthen educational programs, and contribute to efforts in reducing the incidence of adolescent pregnancy and its associated risks.

II. METHODS

This study employed a quantitative, non-experimental descriptive research design to examine the factors that contribute to adolescent pregnancy among females aged 10 to 19 in selected barangays of Angadanan, Isabela, for the year 2022. The design enabled the researchers to systematically describe and analyze the relationships among variables, particularly focusing on personal, parental, environmental, and economic factors associated with early pregnancy.

The target population consisted of pregnant adolescents aged 10 to 19 years, whether primigravida or multigravida, residing in Barangay Lourdes, La Suerte, Calabayan, Victory, Buenavista, and Sto. Niño. A total population sampling technique was utilized to include all identified respondents within these areas, ensuring comprehensive representation. These respondents were deemed appropriate for the study as they directly experienced the phenomenon being investigated, allowing for relevant and accurate data collection.

A closed-ended questionnaire served as the primary data-gathering instrument. It was composed of two parts: the first part gathered socio-demographic information such as age, barangay, educational status, number of children, marital status, and ethnicity, while the second part measured the factors contributing to adolescent pregnancy using a four-point Likert scale. The instrument was adapted from previous studies by Abiela et al. (2019) and Cristobal et al. (2015), with necessary modifications to suit the context of the study. To ensure validity and reliability, the questionnaire underwent expert evaluation and pilot testing. The computed Cronbach's alpha of 0.737 indicated acceptable internal consistency.

Data were collected through the administration of the questionnaire, where respondents indicated their level of agreement with each statement using a four-point scale ranging from strongly disagree to strongly agree. Prior to data collection, the researchers secured permission from relevant authorities, including school officials and barangay leaders. Informed consent was obtained from both the respondents and their parents or guardians. The questionnaires were personally administered, resulting in a complete retrieval rate. Ethical standards were strictly observed, guided by the principles of the Nuremberg Code and the Belmont Report, ensuring respect for persons, beneficence, and justice throughout the research process.

The collected data were analyzed using appropriate statistical tools. Frequency and percentage distribution were used to describe the respondents' profiles, while weighted mean and standard deviation were applied to determine the extent of the identified factors. Analysis of Variance (ANOVA) was utilized to examine significant differences based on socio-demographic characteristics, and ranking was employed to determine the relative importance of each factor.

III. RESULTS AND DISCUSSION

Profile of the Respondents

Table 1. *Profile of the Respondents*

Profile	Frequency	Percent
Age		
10-12	4	7.1
13-15	18	32.1
16-19	34	60.7
Barangay		
Lourdes	12	21.4
La Suerte	12	21.4
Calabayan	9	16.1
Victory	9	16.1
Buenavista	7	12.5
Sto.Nino	7	12.5
Educational Status		
Elementary Graduate	5	8.9
Elementary Undergraduate	5	8.9
Junior High School Graduate	19	33.9
Junior High School Undergraduate	21	37.5
Senior High School Graduate	1	1.8
Senior High School Undergraduate	5	8.9
Number of Children		
1	41	73.2
2	15	26.8
Marital Status		
Single	33	58.9
Married	1	1.8
Live-in	22	39.3
Ethnicity		
Ilokano	40	71.4
Ibanag	3	5.4
Tagalog	13	23.2
Total	**56**	**100.0**

The table above shows the frequency and percentage distribution of the age, barangay, educational status, number of children, marital status, and ethnicity of the respondents. As shown in the table, female adolescents ages 10-12 are the least number of respondents, having a frequency of 4 out of 56, or

7.1%. Adolescents aged 13-15 have a frequency of 18, or 32.1% of the total respondents. While most of the respondents who are engaged in adolescent pregnancy are found to be ages 16-19, with a frequency of 34, or 60.7%.

Additionally, barangays Lourdes and La Suerte tied with a percentage of 21.4 and both have a frequency of 12; subsequently, Calabayan and Victory have the same frequency of 9 and a percentage of 16.1; and lastly, Buenavista and Sto. Nino has a corresponding frequency of 7 and 12.5 as their percentage. In terms of educational status, most of the respondents are junior high school undergraduates, consisting of 21, or 37.5 percent, followed by 19, or 33.9 percent, for junior high school graduates; elementary graduates, elementary undergraduates, and senior high school undergraduates have both a frequency of 5 and a percentage of 8.9; and lastly, senior high school graduates have 1 frequency, or 1.8 percent.

Moreover, our respondents have several children ranging from 1 to 2. The respondents who have 1 child garnered a frequency of 41 and a percentage of 73.2, while respondents who have 2 children have a frequency of 15 and 26.8 as their percentage. 33 of the respondents who are engaged in adolescent pregnancy were single, with a percentage of 58.9; 22 of them were live-in at 39.3 percent, and 1 of them is married, with a percentage of 1.8. Finally, for ethnicity, 40 of the respondents are Ilokano with 71.4 percent, 13 are Tagalog with 23.2 percent, and 3 of them are Ibanag with a percentage of 5.4.

Factors that will lead to Adolescent Pregnancy

Table 2a. *Factors that will lead to Adolescent Pregnancy*

Statement	Mean	Verbal Description
Personal		
A1 *I have low self-esteem.*	2.55	Agree
A2 *I don't have knowledge about sex.*	1.96	Disagree
A3 *I feel pressured by my boyfriend.*	1.36	Strongly Disagree
A4 *I feel neglected and abandoned by my loved ones which is why I look for other love and attention.*	1.41	Strongly Disagree
A5 *I am being pushed by one of my family to marry early.*	1.13	Strongly Disagree
Grand Mean	**1.68**	**Strongly Disagree**

Table 2 shows the individual mean and grand mean of each factor affecting adolescent pregnancy, such as personal factors, parental factors, environmental factors, and economic status of the participants. Personal factors like having low self-esteem were answered positively, denoting that they contribute to the respondents' pregnancy. The finding conforms to the study by Chaplin et al. (2021) that women who did not plan their pregnancies have lower levels of self-esteem than those who did. Question A2 *(having no knowledge about sex),* on the other hand, was answered negatively with a description of *disagree*, meaning it is not a contributing factor to their early pregnancy. The finding is well reflected in the study of Donkor and Lariba (2017) that concealing sex education and sex knowledge from the youth made them more curious and vulnerable to sexual interaction; thus, there is the need for parents and schools to empower the youth through sex education to equip them with the knowledge to overcome the potentially corrupt information through social media and friends. While questions A3-A5 *(feel pressured by their boyfriend, feel neglected and abandoned by their loved ones, which is why they look for other love and attention, and being pushed by one of their family to marry early)* were answered *with "strongly disagree."* This disregards the idea that, according to the University of British Columbia (2016), often females may be pressured or forced by an older male partner to engage in sexual activity. Additionally, according to Acquah et al. (2022), lack of communication between parents and their daughters is one of the determinants of adolescent pregnancy. According to Plan International (2017), marriage pushed by parents because young people were in a relationship is one of the cases that leads to early pregnancy. As shown in the table, the grand mean for the personal factor is 1.68 and described as ***"strongly disagree,"*** showing that the personal factor does not influence their early pregnancy.

Table 2b. *Factors that will lead to Adolescent Pregnancy*

Statement	Mean	Verbal Description
Parental		
B1 *The degree of educational attainment of my parents affects their parental guidance.*	2.41	Disagree
B2 *I don't have parents or guardians at home.*	1.89	Disagree
B3 *My parents are separated.*	1.98	Disagree
B4 *I am lacking good female role model in my family.*	3.00	Agree

B5 *I don't have any sex education from my family.*	2.95	Agree
Grand Mean	**2.45**	**Disagree**

Parental factors such as lacking a good female role model in their family and not having any sex education from their family were answered positively, signifying that they contribute to the respondent's pregnancy. The findings conform to the study of Akella and Jordan (2014) that a teenager imitates her mother; thus, it can be a reason for early pregnancy. According to the Center for the Advancement of Health (2008), comprehensive sex education might lead to less teen pregnancy, and there are no indications that it boosts the level of sexual intercourse. Whereas questions B1-B3 (*the degree of educational attainment of their parents affects their parental guidance, don't have parents or guardians at home, and their parents are separated*) were answered *disagree*. The findings denied the study of Hendrick and Maslowsky (2019) that the mediating pathways linking higher levels of maternal education to lower risk for teenage childbearing and magnitudes of the associations were mostly similar for children of teen and non-teen mothers. According to the National Library of Medicine on "Influence of family type and parenting behaviors on teenage sexual behavior and conceptions," those with older lone parents are more likely to have previously lived with parents who then separated, this affecting boys' attitudes and behavior concerning sex and relationships. The grand mean for parental factor is 2.45 and defined as ***"disagree,"*** which shows that it does not contribute to adolescent pregnancy.

Table 2c. *Factors that will lead to Adolescent Pregnancy*

Statement	Mean	Verbal Description
Environmental		
C1 *My friends and peers are likely to talk about freedom in indulging in premarital sex.*	2.29	Disagree
C2 *My friends are likely to joke about still being a virgin.*	2.02	Disagree
C3 *Drugs and alcoholic drinks are usually introduced during our group gatherings.*	2.23	Disagree
C4 *Watching X-rated movies is a usual form of recreation among our barkadas.*	1.55	Strongly Disagree
C5 *My friends and peers usually read pornographic materials when they are together.*	1.71	Strongly Disagree
C6 *Unfortunately, I am being molested and sexually abused.*	1.34	Strongly Disagree
C7 *I get higher exposure to sex from internet, magazines, TV shows, movies, and others.*	1.61	Strongly Disagree
Grand Mean	**1.82**	**Disagree**

For environmental factors, questions C1-C3 (*their friends and peers are likely to talk about freedom in indulging in premarital sex, their friends are likely to joke about still being a virgin, and drugs and alcoholic drinks are usually introduced during our group gatherings*) were answered *disagree*. The findings opposed the study of Albright et al. (2014) that substance use among adolescents increases the risk of unplanned pregnancies. However, questions C4-C7 (*watching X-rated movies is a usual form of recreation among their barkadas; their friends and peers usually read pornographic materials when they are together; being molested and sexually abused; and getting higher exposure to sex from the internet, magazines, TV shows, movies, and others*) were answered negatively with a description of *strongly disagree*. The findings do not agree with the study of Bujang (2017) that premarital pregnant teenagers were almost ten times more likely to have had frequent exposure to pornography compared with non-pregnant teenagers; thus, frequent exposure to pornography was shown to have a significant association with premarital teenage pregnancy. According to Fine and Boyer (1992), abused women are three times more likely than non-abused women to have repeat pregnancies. Sexual victimization may account for the increasing number of teenage pregnancies. Thus, the grand mean for environmental factors is 1.82 and described as ***"disagree,"*** showing that this does not lead to adolescent pregnancy.

Table 2d. *Factors that will lead to Adolescent Pregnancy*

Statement	Mean	Verbal Description
Economic Status		
D1 *My parent's income is not enough to*	2.91	Agree

support our family.		
D2 *I don't have a discipline venture to earn money.*	3.29	Strongly Agree
D3 *My parents have a low level of educational attainment.*	3.16	Agree
D4 *My parents are working abroad.*	1.64	Strongly Disagree
Grand Mean	**2.75**	**Agree**

Lastly, in terms of economic status, such as not having a discipline venture to earn money, it was answered positively with a description of ***"strongly* agree,"** which indicates that it contributes to the respondents' pregnancy; likewise, questions D1 and D3 (*their parent's income is not enough to support their family and their parents have a low level of educational attainment)* were answered positively with a description of ***"agree."*** *On* the other hand, question D4 (*their parents are working abroad*) was answered negatively with a description of ***"strongly disagree."*** The grand mean for economic status is 2.75 and is interpreted as ***"agree,"*** which concludes that this factor aids in early pregnancy. According to Liamputtong et al. (2015), teenagers most at risk of unplanned pregnancies are those from low socio-economic status. According to Hendrick and Maslowsky (2019), the mediating pathways linking higher levels of maternal education to lower risk for teenage childbearing and magnitudes of the associations were mostly similar for children of teen and non-teen mothers. According to Novela and Ripani (2016), having a job reduces the probability of pregnancy by about 3 percentage points; thus, not having work to earn money can increase the chances of early pregnancy.

Difference Between the Socio-Demographic Characteristics of the Respondents and the Factors that will Lead to Adolescent Pregnancy

Table 3. *Difference Between the Age of the Respondents and the Factors that will lead to Adolescent Pregnancy*

Sub-Variable	Age			H	p-value
	10-12	13-15	16-19		
Personal	43.25	33.39	24.18	7.45*	0.02
Parental	24.88	29.58	28.35	0.29^{ns}	0.87
Environmental	12.00	24.19	32.72	7.73*	0.02
Economic Status	21.63	31.06	27.96	1.23^{ns}	0.54

*-significant ^{ns}- not significant at 5% Level

Table 3 above shows the difference between the age of the respondents and the factors that will lead to adolescent pregnancy. The table revealed significant differences among the independent variables such as personal ($H = 7.45$, $p = 0.02$, $p < 0.05$) and environmental ($H = 7.73$, $p = 0.02$, $p < 0.05$) across the age group, which led to the rejection of the null hypothesis of the study. While there is no significant difference between the independent variables like parental ($H = 0.29$, $p = 0.87$, $p > 0.05$) and economic status ($H = 1.23$, $p = 0.54$, $p > 0.05$), thus, accepting the null hypothesis of the study. This shows that personal and environmental factors affecting adolescent pregnancy across age groups are significantly different. The findings conform to the study of Mecca et al. (1989) that self-esteem assessed early in or before adolescence should be a better predictor of teenage pregnancy than self-esteem assessed later in adolescence. In the study of Setiawan and Yunengsih (2021), adolescents exposed to pornography tended to be more sexually active at an early age. Additionally, not all sample means are equal. To identify exactly which groups differ from each other or to see which pair is statistically significant, post hoc analysis using pairwise comparisons of age (Bonferroni correction) is utilized, as shown in Table 3a below.

Table 3a. *Post Hoc Analysis Using Pair-wise Comparisons of Age (Bonferroni Correction)*

Variables	Age Groups	Test Statistics	Adj. p-value
Personal	16-19-13-15	9.212	0.15^{ns}
	16-19-10-12	19.074	0.076^{ns}
	13-15-10-12	9.861	0.806^{ns}
Environmental	10-12-13-15	-12.194	0.52^{ns}
	10-12-16-19	-20.721	0.047*
	13-15-16-19	-8.526	0.213^{ns}

*-significant ^{ns}- not significant at 5% Level

Based on the table above, the difference between adolescents aged 10-12 and 16-19 and environmental factors is statistically significant, indicating that environmental factors influence adolescents aged 10-12 and 16-19 more than other independent variables and age groups. The table revealed no significant difference between the personal factors and ages of the respondents, such as 16-19 and 13-15 (test statistic = 9.212, $p = 0.15$, $p > 0.05$), 16-19 and 10-12 (test statistic = 19.074, $p = 0.076$, $p > 0.05$), and 13-15 and 10-12 (test statistic = 9.861, $p = 0.806$, $p > 0.05$), thus accepting the null hypothesis.

There were no significant differences between the environmental and age of the respondents 10-12 and 13-15 (test statistics = -12.194, $p = 0.52$, $p > 0.05$) and 13-15 and 16-19 (test statistics = -8.526, $p = 0.213$, $p > 0.05$). This led to the acceptance of the null hypothesis. While there was a significant difference between the environment and age of the respondents, like 10-12 and 16-19 (test statistics = -20.721, $p = 0.047$, $p < 0.05$), which results in the rejection of the null hypothesis.
The table shown above concludes that environmental factors affect adolescents aged 10-12 and 16-19. The finding is well

reflected in the study of Bujang (2017), which found that premarital pregnant teenagers were almost ten times more likely to have had frequent exposure to pornography compared with non-pregnant teenagers; therefore, frequent exposure to pornography was shown to have a significant association with premarital teenage pregnancy. According to Fine and Boyer (1992), abused women are three times more likely than non-abused women to have repeat pregnancies. Sexual victimization may account for the increasing number of teenage pregnancies. According to Albright et al. (2014), substance use among adolescents increases the risk of unplanned pregnancies. According to Fadel (2020), both a toxic school environment and home life add to the complexities of early pregnancy. According to Thrasher (2015), an increase in positive environmental factors (household income and parental education) decreased negative behaviors (risks of teenage pregnancy); thus, negative environmental factors increase the possibility of teenage pregnancy.

Difference Between the Barangay of the Respondents and the Factors that will lead to Adolescent Pregnancy

Table 4. *Difference Between the Barangay of the Respondents and the Factors that will lead to Adolescent Pregnancy*

Sub-Variable	Barangay						H	p-value
	Lourdes	La Suerte	Calabayan	Victory	Buenavista	Sto.Nino		
Personal	27.54	18.67	32.11	29.89	34.14	34.93	6.99 ns	0.22
Parental	26.92	23.38	26.44	26.83	40.86	32.43	6.07 ns	0.30
Environmental	20.38	35.96	26.00	28.11	37.00	24.86	8.06 ns	0.15
Economic Status	19.50	21.33	21.39	35.17	43.79	41.50	20.51 *	0.00

*-significant ns- not significant at 5% Level

Table 4 above shows the difference between the barangay of the respondents and the factors that will lead to adolescent pregnancy. The table revealed significant differences among the independent variables, such as economic status (H = 20.51, p = 0.00, p < 0.05) across the barangays, which led to the rejection of the null hypothesis of the study. Whereas, there was no significant difference between the independent variables like personal (H = 6.99, p = 0.22, p > 0.05), parental (H = 6.07, p = 0.30, p > 0.05), and environmental (H = 8.06, p = 0.15, p > 0.05) across the barangays, thus accepting the null hypothesis of the study. This shows that the economic status affecting adolescent pregnancy across barangays is significantly different. This result accepted the study of Natividad (2013) that teenagers who are predominantly poor and reside in rural areas increase the chances of early pregnancy. Also, it denotes that not all sample means are equal. To identify exactly which groups differ from each other or to see which pair is statistically significant, post hoc analysis using pairwise comparisons of barangays (Bonferroni correction) is utilized, as shown in Table 4a below.

Table 4a. *Post Hoc Analysis Using Pair-wise Comparisons of Barangays (Bonferroni Correction)*

Variables	Barangay	Test Statistics	Adj. p-value
Economic Status	Lourdes – La Suerte	- 1.833	1.000 ns
	Lourdes – Calabayan	- 1.889	1.000 ns
	Lourdes - Victory	- 15.667	0.398 ns
	Lourdes – Sto. Nino	- 22.000	0.058 ns
	Lourdes – Buenavista	- 24.286	0.021 *
	La Suerte – Calabayan	- 0.056	1.000 ns
	La Suerte - Victory	- 13.833	0.752 ns
	La Suerte – Sto. Nino	- 20.167	0.122 ns
	La Suerte – Buenavista	- 22.452	0.048 *
	Calabayan – Victory	- 13.778	1.000 ns
	Calabayan – Sto. Nino	- 20.111	0.191 ns
	Calabayan – Buenavista	- 22.397	0.083 ns
	Victory – Sto. Nino	- 6.333	1.000 ns
	Victory - Buenavista	- 8.619	1.000 ns
	Sto. Nino – Buenavista	2.286	1.000 ns

*-significant ns- not significant at 5% Level

Based on the table above, the difference between adolescents in barangays of Lourdes–Buenavista and La Suerte–Buenavista and the economic status is statistically significant, indicating that economic status influences adolescents in barangays Lourdes–Buenavista and La Suerte–Buenavista more than other independent variables and barangays. As indicated from the table above, there was no significant difference between the economic status and barangays of the respondents like Lourdes–La Suerte (test statistics = -1.833, p = 1.000, p > 0.05), Lourdes–Calabayan (test statistics = -1.889, p = 1.000, p > 0.05), Lourdes–Victory (test statistics = -15.667, p = 0.398, p > 0.05), Lourdes–Sto. Nino (test statistics = -22.000, p = 0.058, p > 0.05), La Suerte – Calabayan (test statistics = -0.056, p =

1.000, p > 0.05), La Suerte – Victory (test statistics = -13.833, p = 0.752, p > 0.05), La Suerte – Sto. Nino (test statistics = -20.167, p = 0.122, p > 0.05), Calabayan – Victory (test statistics = -13.778, p = 1.000, p > 0.05), Calabayan – Sto. Nino (test statistic = -20.111, p = 0.191, p > 0.05), Calabayan–Buenavista (test statistic = -22.397, p = 0.083, p > 0.05), Victory–Sto. Nino (test statistics = -6.333, p = 1.000, p > 0.05), Victory–Buenavista (test statistics = -8.619, p = 1.000, p > 0.05), and Sto. Nino–Buenavista (test statistics = 2.286, p = 1.000, p > 0.05), thus leading to accepting the null hypothesis of the study. While there was a significant difference between the economic status and barangays of the respondents, such as Lourdes–Buenavista (test statistic = -24.286, p = 0.021, p < 0.05) and La Suerte–Buenavista (test statistic = -22.452, p = 0.048, p < 0.05), thus rejecting the null hypothesis.

With the table shown above, it concludes that economic status affects adolescents in barangays of Lourdes–Buenavista and La Suerte–Buenavista. The finding met the study of BMC Reproductive Health on "Early union, 'disgrasya,' and prior adversity and disadvantage: pathways to adolescent pregnancy among Filipino youth" that poverty is one of the underlying causes of adolescent pregnancy. According to the UNICEF Progress and Prospect Report in 2013, teenage pregnancy was found to be a global public health issue occurring more likely in marginalized communities and is often driven by poverty and the lack of access to jobs. According to Natividad (2013), predominantly poor teenagers residing in rural areas increases the chances of early pregnancy.

Difference Between the Educational Status of the Respondents and the Factors that will lead to Adolescent Pregnancy

Table 5. *Difference Between the Educational Status of the Respondents and the Factors that will lead to Adolescent Pregnancy*

Sub-Variable	Education Status						H	p-value
	Elementary Graduate	Elementary Undergraduate	Junior High School Graduate	Junior High School Undergraduate	Senior High School Graduate	Senior High School Undergraduate		
Personal	31.50	33.30	27.13	34.05	3.50	7.60	14.04*	0.02
Parental	30.70	30.60	27.53	29.57	32.50	22.60	1.0	0.96
Environmental	15.80	9.90	32.16	30.86	51.50	31.40	13.25*	0.02
Economic Status	22.30	30.60	30.87	31.36	4.00	16.50	7.07ns	0.22

*-significant ns- not significant at 5% Level

Table 5 above shows the difference between the educational status of the respondents and the factors that will lead to adolescent pregnancy. The table revealed significant differences among the independent variables such as personal (H = 14.04, p = 0.02, p < 0.05) and environmental (H = 13.25, p = 0.02, p < 0.05) across the age group, which led to the rejection of the null hypothesis of the study. While there is no significant difference between the independent variables like parental (H = 1.07, p = 0.96, p > 0.05) and economic status (H = 7.07, p = 0.22, p > 0.05), thus, accepting the null hypothesis of the study. This shows that personal and environmental factors affecting adolescent pregnancy across education status are significantly different and denotes that not all sample means are equal. To identify exactly which groups differ from each other or to see which pair is statistically significant, post hoc analysis using pairwise comparisons of educational status (Bonferroni correction) is utilized, as shown in Table 5a below.

Table 5a. *Post Hoc Analysis Using Pair-wise Comparisons of Educational Status (Bonferroni Correction)*

Variables	Educational Status	Test Statistics	Adj. p-value
Personal	Senior High School Graduate – Senior High School Undergraduate	- 4.100	1.000ns
	Senior High School Graduate – Junior High School Graduate	23.632	1.000ns
	Senior High School Graduate – Elementary Graduate	28.000	1.000ns
	Senior High School Graduate – Elementary Undergraduate	29.800	1.000ns
	Senior High School Graduate – Junior High School Undergraduate	30.548	0.963ns
	Senior High School Undergraduate –	19.532	0.239ns

	Junior High School Graduate		
	Senior High School Undergraduate – Elementary Graduate	23.900	0.286 ns
	Senior High School Undergraduate – Elementary Undergraduate	25.700	0.176 ns
	Senior High School Undergraduate – Junior High School Undergraduate	26.448	0.015 *
	Junior High School Graduate - Elementary Graduate	4.368	1.000 ns
	Junior High School Graduate - Elementary Undergraduate	6.168	1.000 ns
	Junior High School Graduate - Junior High School Undergraduate	- 6.916	1.000 ns
	Elementary Graduate - Elementary Undergraduate	- 1.800	1.000 ns
	Elementary Graduate - Junior High School Undergraduate	- 2.548	1.000 ns
	Elementary Undergraduate - Junior High School Undergraduate	- 0.748	1.000 ns
Environmental	Elementary Undergraduate – Elementary Graduate	5.900	1.000 ns
	Elementary Undergraduate – Junior High School Undergraduate	- 20.957	0.140 ns
	Elementary Undergraduate – Senior High School Undergraduate	- 21.500	0.538 ns
	Elementary Undergraduate – Junior High School Graduate	- 22.258	0.094 ns
	Elementary Undergraduate – Senior High School Graduate	- 41.600	0.286 ns
	Elementary Graduate – Junior High School Undergraduate	- 15.057	0.927 ns
	Elementary Graduate – Senior High School Undergraduate	- 15.600	1.000 ns
	Elementary Graduate – Junior High School Graduate	- 16.358	0.668 ns
	Elementary Graduate – Senior High School Graduate	- 35.700	0.664 ns
	Junior High School Undergraduate – Senior High School Undergraduate	- 0.543	1.000 ns
	Junior High School Undergraduate – Junior High School Graduate	1.301	1.000 ns
	Junior High School Undergraduate – Senior High School Graduate	- 20.643	1.000 ns
	Senior High School Undergraduate – Junior High School Graduate	0.758	1.000 ns
	Senior High School Undergraduate – Senior High School Graduate	20.100	1.000 ns
	Junior High School Graduate – Senior High School Graduate	- 19.342	1.000 ns

*-significant ns- not significant at 5% Level

Based on the table above, the difference in educational status of senior high school undergraduate-junior high school undergraduate and personal status is statistically significant, more than other independent variables and educational status. The table revealed that no significant Personal Status of the respondents such as Senior High School Graduate – Senior High School Undergraduate (Test statistics = - 4.100, p = 1.000 , p > 0.05), Senior High School Graduate – Junior High School Graduate (Test statistics = 23.632, p =1.000 , p > 0.05), Senior High School Graduate – Elementary Graduate (Test statistics = 28.000, p = 1.000 , p > 0.05),Senior High School Graduate – Elementary Undergraduate Test statistics = 29.800, p = 1.000 , p > 0.05), Senior High School Graduate – Junior High School Undergraduate Test statistics =30.548, p = 0.963 , p > 0.05), Senior High School Undergraduate – Junior High School Graduate Test statistics =19.532, p = 0.239 , p > 0.05), Senior High School Undergraduate – Elementary Graduate Test statistics =23.900, p = 0.286 , p > 0.05),Senior High School Undergraduate – Elementary Undergraduate Test statistics =25.700, p = 0.176, p > 0.05), Senior High School Undergraduate – Junior High School Undergraduate Test statistics =26.448, p = 0.015, p > 0.05), Junior High School Graduate - Elementary Graduate Test statistics = 4.368, p = 1.000, p > 0.05; Junior High School Graduate - Elementary Undergraduate Test statistics = 6.168, p = 1.000, p > 0.05;

Junior High School Graduate - Junior High School Undergraduate Test statistics = 6.916, p = 1.000, p > 0.05; Elementary Graduate - Elementary Undergraduate Test statistics = 1.800, p = 1.000, p > 0.05; Elementary Graduate - Junior High School Undergraduate Test statistics = 2.548, p = 1.000, p > 0.05; Elementary Undergraduate - Junior High School Undergraduate Test statistics = 0.748, p = 1.000, p > 0.05; thus, accepting the null hypothesis.

With the table shown above, it concludes that Environmental status that revealed that no significant Environmental Status of the respondents such as Elementary Undergraduate – Elementary Graduate Test statistics =5.900 , p = 1.000, p > 0.05), Elementary Undergraduate – Junior High School Undergraduate Test statistics =20.957, p = 0.140, p > 0.05), Elementary Undergraduate – Senior High School Undergraduate Test statistics =21.500, p = 0.538, p > 0.05),Elementary Undergraduate – Junior High School Graduate Test statistics =22.258, p = 0.094, p > 0.05),Elementary Undergraduate – Senior High School Graduate Test statistics =41.600, p = 0.286, p > 0.05),Elementary Graduate – Junior High School Undergraduate Test statistics =15.057 p = 0.927, p > 0.05), Elementary Graduate – Senior High School Undergraduate Test statistics =15.600 p = 1.000, p > 0.05), Elementary Graduate – Junior High School Graduate Test statistics =16.358 p = 0.668, p > 0.05), Elementary Graduate – Senior High School Graduate Test statistics =35.700 p = 0.664, p > 0.05),Junior High School Undergraduate – Senior High School Undergraduate Test statistics =0.543 p = 1.000, p > 0.05), Junior High School Undergraduate – Junior High School Graduate Test statistics =1.301 p = 1.000, p > 0.05), Junior High School Undergraduate – Senior High School Graduate Test statistics =20.643 p = 1.000, p > 0.05), Senior High School Undergraduate – Junior High School Graduate Test statistics =0.758 , p = 1.000, p > 0.05), Senior High School Undergraduate – Senior High School Graduate Test statistics =20.100 , p = 1.000, p > 0.05),Junior High School Graduate – Senior High School Graduate Test statistics =19.342, p = 1.000, p > 0.05) thus, accepting the null hypothesis. According to Frank (2005), teenage pregnancy is a universal social and educational concern in developed, developing, and underdeveloped countries. It is not a new phenomenon, but it is surprising that in the era of sexual literacy and availability of contraception, teenage pregnancy is still a major problem throughout the world. Many countries continue to experience a high prevalence of teenage pregnancy regardless of the implementation of intervention strategies to reduce teenage pregnancy, such as sex education in schools and community awareness programs.

Difference Between the Number of Children of the Respondents and the Factors that will lead to Adolescent Pregnancy

Table 6. *Difference Between the Number of Children of the Respondents and the Factors that will lead to Adolescent Pregnancy*

Sub-Variable	Number of Children		U	p-value
	1	2		
Personal	29.00	27.13	287.00^{ns}	0.70
Parental	26.46	34.07	224.00 ^{ns}	0.12
Environmental	28.57	28.30	304.50 ^{ns}	0.96
Economic Status	26.93	32.80	243.00 ^{ns}	0.22

*-significant ^{ns}- not significant at 5% Level

Table 6 above shows the difference between the number of children of the respondents and the factors that will lead to adolescent pregnancy. The table revealed there was no significant difference between the independent variables like personal (U = 287.00, p = 0.70, p > 0.05), parental (U = 224.00, p = 0.12, p > 0.05), environmental (U = 304.50, p = 0.96, p > 0.05), and economic status (U = 243.00, p = 0.22, p > 0.05) across the number of children, thus accepting the null hypothesis of the study. This shows that personal, parental, environmental, and economic factors affecting adolescent pregnancy across age groups are significant and that all sample means are equal. According to Xerxes (2021), family background is one of the main risk factors of teenage pregnancy; several studies have noted that living with both parents reduced the risk of teenage pregnancy. Some concluded that teenage pregnancy was more likely to occur in adolescent women raised in a single-parent family than in a two-parent family.

Difference Between the Marital Status of the Respondents and the Factors that will lead to Adolescent Pregnancy

Table 7. *Difference Between the Marital Status of the Respondents and the Factors that will lead to Adolescent Pregnancy*

Sub-Variable	Marital Status			H	p-value
	Single	Married	Live-in		
Personal	32.71	41.00	21.61	6.87 *	0.03
Parental	28.02	5.50	30.27	2.32 ^{ns}	0.31
Environmental	28.76	6.00	29.14	1.97 ^{ns}	0.37

Economic Status	32.38	16.50	23.23	4.88 ns	0.09

*-significant ns- not significant at 5% Level

Table 7 above shows the difference between the marital status of the respondents and the factors that will lead to adolescent pregnancy. The table revealed significant differences among the independent variables, such as personal status (H = 6.87, p = 0.03, p < 0.05) across marital status, which led to the rejection of the null hypothesis of the study. Whereas, there was no significant difference between the independent variables like parental (H = 2.32, p = 0.31, p > 0.05), environmental (H = 1.97, p = 0.37, p > 0.05), and economic (H = 4.88, p = 0.09, p > 0.05) across the marital status, thus accepting the null hypothesis of the study. This shows that personal status affecting adolescent pregnancy across marital status are significantly different and denotes that not all sample means are equal. To identify exactly which groups differ from each other or to see which pair is statistically significant, post hoc analysis using pairwise comparisons of marital status (Bonferroni correction) is utilized, as shown in Table 7a below. According to Amy (2022), pregnancy and teen parenting are prevalent and significant public health issues. Teen parenting also has many social and economic consequences for mothers and families. Single parenthood is associated with increased financial, work, and childcare strains compared to a more traditional family type.

Table 7a. *Post Hoc Analysis Using Pair-wise Comparisons of Marital Status (Bonferroni Correction)*

Variables	Marital Status	Test Statistics	Adj. p-value
Personal	Live-in – Single	11.098	0.037 *
	Live-in – Married	19.386	0.719 ns
	Single – Married	- 8.288	1.000 ns

*-significant ns- not significant at 5% Level

Based on the table above, the difference between marital status and personal factors is statistically significant, more than other independent variables and marital status. The table revealed significant differences among the independent variables, such as personal live-in-single (test statistic = 11.098, p = 0.037, p > 0.05), across the marital status, which led to the rejection of the null hypothesis of the study. While there is no significant difference between the independent variables like personal Live-in-Married (test statistic = 19.386, p = 0.719, p > 0.05) and Single-Married (test statistic = -8.288, p = 1.000, p > 0.05), thus, accepting the null hypothesis of the study.

Difference Between the Ethnicity of the Respondents and the Factors that will lead to Adolescent Pregnancy

Table 8. *Difference Between the Ethnicity of the Respondents and the Factors that will lead to Adolescent Pregnancy*

Sub-Variable	Ethnicity			H	p-value
	Ilokano	Ibanag	Tagalog		
Personal	30.43	40.83	19.73	6.17 *	0.05
Parental	29.14	18.33	28.88	1.26 ns	0.53
Environmental	27.75	34.33	29.46	0.52 ns	0.77
Economic Status	28.45	37.83	26.50	1.22 ns	0.54

*-significant ns- not significant at 5% Level

Table 8 above shows the difference between the ethnicity of the respondents and the factors that will lead to adolescent pregnancy. The table revealed significant differences among the independent variables, such as personal status (H = 6.17, p = 0.05, p < 0.05) across ethnicity, which led to the rejection of the null hypothesis of the study. Whereas, there was no significant difference between the independent variables like parental (H = 1.26, p = 0.53, p > 0.05), environmental (H = 0.52, p = 0.77, p > 0.05), and economic (H = 1.22, p = 0.54, p > 0.05) across the ethnicity, thus accepting the null hypothesis of the study. This shows that personal status affecting adolescent pregnancy across ethnicity is significantly different and denotes that not all sample means are equal. To identify exactly which groups differ from each other or to see which pair is statistically significant, post hoc analysis using pairwise comparisons of ethnicity (Bonferroni correction) is utilized, as shown in Table 8a below. According to Richards (2010), maternal age at delivery and race/ethnicity are independently and significantly associated with poor pregnancy outcomes such as low birth weight and premature births. However, young maternal age and race/ethnicity do not appear to interact in a manner that produces a differential effect on the birth outcomes.

Table 8a. *Post Hoc Analysis Using Pair-wise Comparisons of Ethnicity (Bonferroni Correction)*

Variables	Ethnicity	Test Statistics	Adj. p-value
Personal	Tagalog – Ilokano	10.694	0.113 ns
	Tagalog – Ibanag	21.103	0.123 ns
	Ilokano - Ibanag	- 10.408	0.843 ns

*-significant ns- not significant at 5% Level

Based on the table above, the difference between ethnicity and personal factor is statistically significant, more than other independent variables and ethnicity. As indicated from the table above, there was no significant difference between ethnicity and personal factors like Tagalog-Ilokano (test

statistic = 10.694, p = 0.113, p > 0.05), Tagalog-Ibanag (test statistic = 21.103, p = 0.123, p > 0.05), and Ilokano-Ibanag (test statistic = -10.408, p = 0.843, p > 0.05), thus accepting the null hypothesis of the study. According to Allison S. Bryant, women belonging to racial/ethnic minority groups are generally at greater risk of unintended pregnancy, as are women who are poor, young, and single and who have lower levels of education.

IV. CONCLUSION AND RECOMMENDATIONS

Based on the salient findings of the study, it was concluded that adolescent pregnancy in the selected barangays of Angadanan, Isabela, commonly occurs among individuals aged 16 to 19 years, a stage marked by significant developmental changes. Most respondents were junior high school or undergraduate students, with many becoming first-time mothers and unable to continue their education due to childcare responsibilities. The majority identified as single, often due to financial constraints or being minors. Early pregnancy was observed to be more prevalent in barangays with higher populations, such as Lourdes and La Suerte, and among respondents belonging to the Ilokano ethnic group. Economic factors, including low family income, limited livelihood opportunities, and low parental educational attainment, were found to significantly contribute to the occurrence of adolescent pregnancy. Moreover, significant differences were noted in personal and environmental factors when grouped according to age and educational status, while economic factors varied based on place of residence. Personal factors, such as low self-esteem, were also associated with respondents' marital status.

In light of these findings, it is recommended that local government units strengthen programs on adolescent pregnancy prevention and family planning, while healthcare workers continue professional development to better support adolescent mothers. Schools should intensify the implementation of comprehensive sex education and improve access to reproductive health services. Families are encouraged to foster open communication, provide guidance, and serve as positive role models to adolescents. Economic support programs such as the Pantawid Pamilyang Pilipino Program (4Ps) and the Sustainable Livelihood Program may also help address underlying financial challenges. Adolescents are encouraged to build self-esteem, make informed decisions, and choose peer groups that promote positive behaviors. Finally, future researchers are advised to expand the scope of this study to gain deeper insights into the factors influencing adolescent pregnancy.

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