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# DETERMINANTS OF TEENAGE PREGNANCY IN DAVAO CITY: AN EXPLORATORY FACTOR ANALYSIS

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#### **ABSTRACT**

This study aimed to identify the factors of pregnancy among teenagers as well as the development of a framework utilizing an Exploratory Factor Analysis (EFA) technique. The study was conducted in Davao Region with 173 students from different universities and colleges in the region as sample respondents. Students were chosen as respondents of the study because they have a direct experience of this problem thus making them a reliable source of information. A modified questionnaire was utilized as the research instrument in the gathering the data and was presented to an examiner for content validity. Rotated component matrix discarded 23 items out of 50 and categorized the remaining 27 items into 5 dimensions. The contributing reasons to pregnancy among teenagers revealed five different factors which include peer-pressure, lack of social involvement, poor parental guidance, sociocultural, and temptation. Thus a framework on the contributing factors to pregnancy among teenagers was developed.

### **Keywords:**

Teenage pregnancy, Exploratory Factor Analysis, Peer-Pressure, Lack of Social Involvement, Poor Parental Guidance, Family History and Influence, Temptation, Philippines.

#### INTRODUCTION

The United Kingdom has the highest rate of teenage pregnancies in Western Europe and higher rates are found among women who live in areas of higher deprivation and have other factors such as lower educational achievement or living in state care homes (Cook and Cameron, 2015). In Sub-Saharan Africa, Yakubu & Salisu (2018) attributed the high level of pregnancies among teenagers to three factors. These factors are sociocultural and economic, individual, and health-service related factors. In addition, according to the study conducted by Christ Centered Counseling Network (CCCN) in 2017, the following are the causes of teenage pregnancy:

# **IJETRM**

## **International Journal of Engineering Technology Research & Management**

poverty, broken home, separation of couples, single parent, death, peer pressure or influence, lust, religious beliefs, rape and sexual abuse, alcoholism and drug abuse, lack of knowledge, environmental influence, and pornography. In the Philippines, Galeon (2018) mentioned that the incidence of teenage or adolescent pregnancies remains at a significant rate based on the National Demographic and Health Survey (NDHS 2017) of the Department of Health (DOH). Also, in a study conducted by the NDHS in 2013, one out of every young Filipino women age 15 to 19 is already pregnant. According to Salvador, et al (2016), lack of sufficient education and poverty can be blamed to the fast rate of teenage pregnancies that often result to single parenthood. Lastly, based on the findings of the study conducted by Natividad (2013), it showed that there are more teenagers now are getting pregnant compared to earlier cohorts. He also added that there are a lot of factors that contribute to this event such as a trend toward younger age at menarche and changing norms and practices with regard to premarital sexual activity among teenagers.

#### **Background Information**

Surprisingly, Davao City has the highest incidence of teenage pregnancy, with a rating of 15.9%. such a problem could indeed lead to more dropouts among teenage girls who become pregnant due to their child's need of motherhood (Galeon, 2018). As for the case of the babies, it may lead to incidences of child abandonment or even abortion. Such a problem lead one senator in the Philippines to file a bill known as "An Act Providing for a National Policy on Preventing Teenage Pregnancies, Institutionalizing Social Protection for Teenage Parents, and Providing Funds Therefore" in order to help decrease the incidence of teenage pregnancy.

While acting upon this problem through counter measures, it is still important to discover and find the underlying factors as to why teenage pregnancy occurs. For that, this research was conducted.

#### Purpose of the study

The study was conducted to determine the factors of pregnancy among teenagers and to develop a framework which would help represent these factors.

### **Research questions**

- 1. What are the major factors which influence teenage pregnancy?
- 2. What are the students' perceptions regarding teenage pregnancy?

### Literature review

This literature review shows the major factors which affect the incidence of pregnancy among teenagers.

Peer pressure is one factor. High rate of teenage pregnancy is recorded in America and there have been studies that peer pressure can be the contributing factor to this issue. Teenagers are pressured to engage in sex even if they don't fully understand the act and its consequences. They think doing this action would make them more desirable and cool (Santiago, 2017). According to the Commission on Population, peer pressure and the information that teenagers see on social media are the factors that contribute to the increase in cases of teenage pregnancies in Western Visayas (Pineda, 2017).

Lack of social involvement may also contribute to teenage pregnancy. As stated by Loop (n.d.) socializing refers to the process in which a child learns about other people through any type of interaction. On the other hand, children who lack socialization (limited, with bare minimum or no interactions with other people or peers including one's parents) are often neglected and isolated. However, this does not necessarily mean that a parent is not present. According to Cook and Cameron (2015), the United Kingdom has the highest rate of teenage pregnancies in Western Europe and higher rates are found among women who live in areas of higher deprivation and have other factors such as lower educational achievement or living in state care homes.

Poor parental guidance is one major factor especially because many teenagers still rely on parental support. Many parents today dedicate their time finding money. They do not have time taking care of their child. As a result, the child is barely monitored at home and even exposed to all kinds of movies and television programs which really need parental guidance. In connection, parents ignore their responsibility of educating the child



## **International Journal of Engineering Technology Research & Management**

sexually. Parents often forgot the importance providing emotional and sexual education to their children because they focus more on their jobs. This make the children fall into hands of men who have difficulty in controlling their libidos. Many teenagers become pregnant due to the lack of good educational background, employment opportunities, or help from loved ones (Selby, 2010). Parental guidance is the most important tool in preventing teenage pregnancy. According to the 2004 report by the University of California Cooperative Extension, teenagers who had firm family ties were less likely to get pregnant. It means that having firm ties with parents make communication more open to teenagers. Thus, it is important that open communication exists in the family so that parents can monitor and guide their children (Kamalasanan, 2012).

Family history and influence can also be a factor. Pregnant teens often have a family background on teenage pregnancy. Feelings of repression, sadness and indifference to their parents have led to unsafe sexual interactions without fear of getting pregnant. (Sámano et. al, 2017). However, young women with records and family history of adolescent births; whose sister had a teenage birth, and those with a sister and a mother with cases of teenage births, are more likely to engage in teenage pregnancy (odds ratios, 4.8 and 5.1, respectively) (East et. al, 2007).

Last of all, the temptation that teenagers receive can allow the risk of being pregnant. Teenagers are becoming more and more inclined to sex as they are not able to control their sexual urges. The main reason for this is the explosion of sex in the media. Despite knowing that sex can lead to pregnancy, teenagers still engage in it because of the excitement it brought. Also, intense sexual urge gets the better of them, leading them towards the climax of sex too early, thus leading them to teenage pregnancy (Anand, 2012). According to Necavernice (2015) teenagers nowadays are experiencing sexual temptation due to the separation of parents. Poor parental guidance occurs due to the relationship problems between parents. As a result, children are not properly guided leading them learn by themselves ending to difficulty in distinguishing good from bad. Consequently, as they grow up and become teenagers they lead to sexual temptation that almost all of them usually feel. Thus, because of sexual temptation, they lead themselves engage in sex and eventually cause to teenage pregnancy. Lastly, Yakubu & Salisu (2018) found out that individual factors can be attributed to the high level of teenage pregnancy. These factors include excessive use of alcohol, substance abuse, educational status, low self-esteem, and inability to resist sexual temptation, curiosity, and cell phone usage.

### Methodology

The study utilized Exploratory Factor Analysis (EFA) with 173 tertiary students from different universities and colleges in Davao City as sample respondents..

### **Data Collection Methods**

The study used modified questionnaire and was validated by competent person in the field. Primary data were gathered with the use of modified questionnaire duly accomplished by the respondents

### **Data Analysis**

Keiser Meyer-Olkin measure of sampling adequacy was used to test the magnitude of partial correlations among variables. Bartlett's test of sphericity was also utilized to test whether the correlation matrix is identity matrix or not. Lastly, scree test was used to determine the number of factors to be retained in a factor analysis or principal components analysis



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#### **Discussion of Findings**

This section shows the analysis and interpretation of the gathered data.

**KMO and Bartlett's Test.** Shown below is the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's Test of Sphericity. The Kaiser-Meyer-Olkin result of .871 implies high correlation and accuracy of study. As shown below, the Bartlett's test of Sphericity of 4.78 and a significant value of .000 allows it to proceed in factoring the underlying determinants of teenage pregnancy among college students.

KMO and Ba	rtlett's Test <sup>a</sup>	
Kaiser-Meyer-Olkin Measure of Sampling Adequa	acy.	.871
	Approx. Chi-Square	4.777E3
Bartlett's Test of Sphericity	Df	1225
	Sig.	.000

**Scree Plot.** Figure 1 shows the graphical explanation of the total variance explained and the graph of the Eigen values against all the factors. The Scree Plot shows the gradual trailing of the Eigen values and identifies the relatively fit of each component base on its relative importance. This illustration is very useful to determine which of the factors will be retained. The point of interest is where the curve flattens. The curve gets flatter as it reaches component number five. Therefore, there are only five dimensions considered as structures retained.

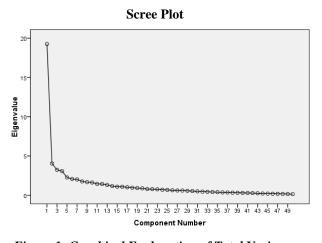


Figure 1: Graphical Explanation of Total Variance

### ROTATED COMPONENT MATRIX

Table 1 shows the rotated component matrix with group attributes of peer pressure. There are five reasons why teenagers engage in sex due to peer pressure. These are the following: teenagers receive pressure from peers with the loading of .842; teenagers engage in sex in exchange of money with the loading of .803; teenagers are influenced by peers with a loading of .725; teenagers believe their friends are sexually active with a loading of .638; teenagers engage in sex, thinking it is how love looks like with a loading of .678; and boyfriends of teenage girls force their partners to engage in sex with a loading of .605. According to Santiago (2017) high rate of teenage pregnancy is recorded in America and there have been studies that peer pressure can be the contributing

# **JETRM**

## **International Journal of Engineering Technology Research & Management**

factor to this issue. Teenagers are pressured to engage in sex even if they do not fully understand the act and its consequences. As he added, they think doing this action would make them more desirable and cool.

Table 1: Rotated Component Matrix With Group Attributes of Peer Pressure

Factor	Attributes	Loadings
	Teenagers receive pressure from peers	.842
	Teenagers engage in sex in exchange of money	.803
Peer Pressure	Teenagers are influenced by peers	.725
recriressure	Teenagers believe their friends are sexually active	.638
	Teenagers engage in sex thinking it is how love looks like	.678
	Boyfriends of teenage girls force their partners to engage in sex	.605

Table 2 shows the rotated component matrix with group attributes of lack of social involvement. It can be seen in the table below that due to lack of social involvement teenagers opt to engage in sex because they feel that they are *not involved with family, school, or community* with a loading of .882, because they do not have any *commitment to education* with a loading .879. also, it is important to include other factors such as *feeling alone* or feeling of rejection among school or community with a loading of .835; having little social support such as care from family or friends with .785; and drug use with a loading of .610. Loop (n.d.) defined socializing as a process in which a child learns about other people through any type of interaction. On the other hand, children who lack socialization (limited, with bare minimum or no interactions with other people or peers including one's parents) are often neglected and isolated. However, this does not necessarily mean that a parent is not present. In addition, Cameron (2015) mentioned that the United Kingdom has the highest rate of teenage pregnancies in Western Europe and higher rates are found among women who live in areas of higher deprivation and have other factors such as lower educational achievement or living in state care homes.

Table 2: Rotated Component Matrix With Group Attributes of Lack Of Social Involvement

Factor	Attributes	Loadings
	Not feeling involved with family, school, or community	.882
	Dropping out of school or not having a commitment to education	.879
Lack of Social Involvement	Feeling alone or feeling of rejection among school or community	.835
	Having little social support such as care from family or friends	.785
	Drug use	.610

Table 3 shows the rotated component matrix with group attributes of poor parental guidance. It can be seen that poor parental guidance can be a factor to teenage pregnancy. This is because *parents may not be open about the topic regarding the use of contraceptives at home* with a loading of .692; *parents don't open up about the possible consequences of sex* with a loading of .702; *limited communication between parents and teens* with a loading of .668; *poor parental supervision* with a loading of .645; *low levels of education among the parents with a loading* of .668; and last of all *parents are hesitant with the use of contraceptives* with a loading of .528. These results coincide to the statement made by Selby (2010) that many parents today dedicate their time finding money. They do not have time taking care of their child. As a result, the child is barely monitored at home and even exposed to all kinds of movies and television programs which really need parental guidance. In

# **JETRM**

## **International Journal of Engineering Technology Research & Management**

connection, parents ignore their responsibility of educating the child sexually. Parents often forgot the importance providing emotional and sexual education to their children because they focus more on their jobs. This make the children fall into hands of men who have difficulty in controlling their libidos. Many teenagers become pregnant due to the lack of good educational background, employment opportunities, or help from loved ones. Also, Kamalasanan (2012) discussed that parental guidance is the most important tool in preventing teenage pregnancy. According to the 2004 report by the University of California Cooperative Extension, as cited by Kamalasanan, teenagers who had firm family ties were less likely to get pregnant. It means that having firm ties with parents make communication more open to teenagers. Thus, it is important that open communication exists in the family so that parents can monitor and guide their children.

Table 3: Rotated Component Matrix With Group Attributes of Poor Parental Guidance

Factor	Attributes	Loadings
	Parents may not be open about the topic regarding the use of contraceptives at home	.692
	Parents don't open up about the possible consequences of sex.	.702
Poor Parental Guidance	Limited communication between parents and teens	.668
	Poor parental supervision	.645
	Low levels of education among the parents	.668
	Parents are hesitant with the use of contraceptives	.528

Table 4 shows the rotated component matrix with group attributes of family history and influence as causes of teenage pregnancy, such as: a demand for pregnancy before marriage with loadings of .955; the idea of teenage pregnancy is accepted in the family with loadings of .935; teenagers get pregnant due to the death of their parents with loadings of .682; family history of teenage pregnancies which became a norm with loadings of .628; having supportive friends with loadings of .620, and poor school performance with loadings of .584.

This is supported by Samano, et. al (2017), who cited that pregnant teens often have a family background on teenage pregnancy. Feelings of repression, sadness and indifference to their parents have led to unsafe sexual interactions without fear of getting pregnant. Similarly, East, et. al (2007), mentioned that young women with records and family history of adolescent births; whose sister had a teenage birth, and those with a sister and a mother with cases of teenage births, are more likely to engage in teenage pregnancy (odds ratios, 4.8 and 5.1, respectively).

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Factor	Attributes	Loadings
	There is a demand for pregnancy before marriage.	.955
	Teenage pregnancy is accepted in the family.	.935
	Teenagers get pregnant due to the death of their parents.	.682
Family History and Influence	Teenagers are dating older guys making them submissive.	.648
	There is family history of teenage pregnancies which became a norm.	.628
	Friends were very supportive.	.620
	Poor school performance which causes the teenagers to look for escape like sex.	.584

Table 5 shows the rotated component matrix with group attributes of temptation as a cause of teenage pregnancy. This includes: teenagers who experience rape and sexual abuse with loadings of .760; peers and friends are often permitted by parents to go out late at night resulting to sexual enticement with a factor score of .746; pornography through the internet, TV and magazine with .616 loadings, and engagement in sex out of curiosity with a factor score of .632. Anand (2012) argued that teenagers are becoming more and more inclined to sex as they are not able to control their sexual urges. The main reason for this is the explosion of sex in the media. Despite knowing that sex can lead to pregnancy, teenagers still engage in it because of the excitement it brought. Also, intense sexual urge gets the better of them, leading them towards the climax of sex too early, thus leading them to teenage pregnancy. Also, Yakubu & Salisu (2018) found out that individual factors can be attributed to the high level of teenage pregnancy. These factors include excessive use of alcohol, substance abuse, educational status, low self-esteem, and inability to resist sexual temptation, curiosity, and cell phone usage.

Table 5: Rotated Component Matrix with Group Attributes of Temptation		
Factor	Items	Loadings
	Teenagers experienced rape and sexual abuse	.760
Temptation	Peers and friends are often permitted by parents to go out late at night which could result into sexual enticement	.746
	Pornographic through internet, TV, and or magazines	.616
	The child engaged in sex out of curiosity	.632

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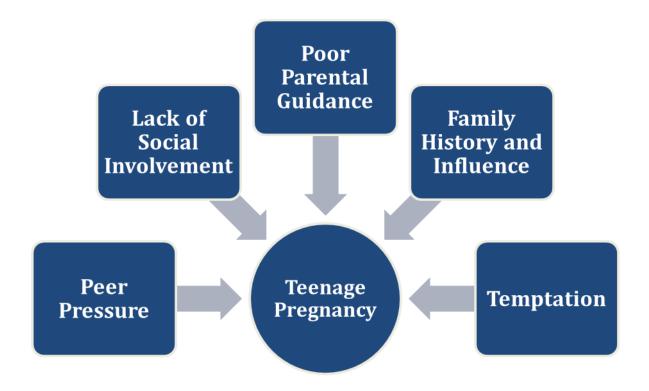
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#### STUDY FRAMEWORK

Presented in Figure 2 is the framework developed based on the findings. The researchers found out that the determinants of pregnancy among teenagers based on the students' perception are peer pressure, lack of social involvement, poor parental guidance, family history and influence, and temptation.

Figure 2: Teenage Pregnancy Framework



### **Conclusion and Recommendations**

Based on the students' perception, the study found out that there are five contributing factors to pregnancy among teenagers in Davao City. These are peer pressure, lack of social involvement, poor parental guidance, family history and influence, and temptation. The researchers recommend that parents should communicate with their children early and often about sex and love. They should be specific and should supervise and monitor their children's activities. Parents should know their children's friends and their families. Parents should help their children have options for the future that are much more attractive than early pregnancy and parenthood. Also, parents should emphasize how much they value education and they should monitor what their kids are doing, watching, reading on the television programs or over the social media. Lastly, parents should try to achieve a relationship that is communicative and affectionate. That is strong in discipline but rich in communication.

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