Influence of Socio-cultural and Economic Environment on Adolescents' Sexual Behavior as Mediated by Knowledge, Attitude and Beliefs

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Abstract- This study determined the influence of socio-cultural and economic environment on adolescents' sexual behavior. Knowledge, attitude and beliefs were used as mediating variables to environment factor and adolescents' sexual behavior. The study used the descriptive-correlation research design. Two hundred ninety adolescents ages 11 -19 years old from two high schools and two universities from Region IV-A in the Philippines, chosen through simple random sampling were the respondents of the study. The results show that socio-cultural (school) environment, attitude and knowledge were significantly related to sexual behavior. Meanwhile, family and community socio-economic environments were negatively related to sexual behavior. Sexual behavior of adolescents differed when their age and gender were considered. Males who are in their late adolescence tend to engage more in risky sexual behaviors than those who were in their mid- adolescence and in their early adolescence. Attitude, age, gender and economic environment predict adolescent's sexual behavior. Based on model generated socio-cultural environment, socio-economic environment had indirect effect to sexual behaviors of the adolescents. Knowledge fully mediates the relationship between socio-cultural (school) environment and sexual behavior. Beliefs and attitude were not found to be significant mediators.

Index Terms- socio-cultural; economic environment; adolescent's sexual behavior; sexuality education program.

I. INTRODUCTION

The transitions that take place during the adolescent period are biological, intellectual, psychosocial, psychological as well as economic and these are shaped by the social environments where the changes take place. These environments provide opportunities, barriers, role models and support for the individuals' health and development (Hockenberry & Wilson, 2007). Medina (2005) says that the family is the micro world of the Filipino and thus the family performs the very important functions of providing biological support, emotional security, protection and status to its members. Through its socialization function, the family plays an important role in the transmission of cultural values, beliefs and customs, especially in the molding of the personality and character of its members, and in ensuring conformity to norms.

On the other hand, these subjects according to Pillitterri (2007) often scare parents. Parents are either inhibited or embarrassed to tackle these matters or they may be uncomfortable exploring the topics with their adolescent children. Literature has shown that the changing of family environment as well as the liberalization of attitude toward sexuality and the seemingly lessening power of religious groups make the youth more vulnerable to risky sexual behavior and its problematic consequences, including pregnancies and sexually transmitted diseases and human immunodeficiency virus-acquired immunodeficiency syndrome (HIV-AIDS). It has been established by Zablan, Marquez and Laguna (2003) and Cruz and Raymundo (2004) that engagement in premarital sex, commercial sex, multiple-partner sex and unprotected sex endangers adolescents who may contract serious reproductive health problems symptomatic of sexually transmitted diseases.

A survey done by University of the Philippine's Population Institute shows that 23 percent of Filipino ages 15 – 24 engaged in premarital sex in 2002. The prevalence of high-risk sexual behavior among adolescents rose from 20 percent in 1994 to 27 percent in 2002. This age group now accounts for 17 percent of all induced abortions in the nation. A study conducted by the World Bank in 2010 yielded a statistical data of 64,000 abortions annually in the Philippines despite considerations that abortion is illegal (Icban, 2011).

School and community settings as well as economic resources play a significant role in the behavior and well-being of adolescents. In school, students learn a broader perspective which helps them to take a role in the world beyond the family. As a primary agent of socialization, one of the chief functions of the school is to sort adolescents into the adult roles thought appropriate for them, as well as teach them attitudes and skills that match their roles (Recio, Mejico & Anonuevo, 2004). School and community resources, according to Hockenberry and Wilson (2007), influence the type and number of health risks faced by adolescents. Concern about the negative outcome as well as the rising levels of risky sexual behavior and sexual activities motivated the researchers to explore on the environment of family, school, peer group, socio-economic status, knowledge, religion, attitude, belief, gender and age in the sexual behavior and socialization of adolescents. Thus, this study was conceptualized.

II. METHODS

Research Design

The study employed the descriptive-correlation design to determine the relationships among the variables. Descriptive studies describe the general characteristics of the respondents in terms of their socio-cultural and economic environments (family, peer group, school and community). Knowledge, attitudes and beliefs on adolescents' sexuality behavior were considered as mediator variables. The correlation design was utilized to determine the relationship of the socio-cultural and economic environments,
knowledge, attitude and beliefs to sexual behavior among the respondents.

Population and Sampling Technique

The study utilized 290 adolescent respondents who are studying in different schools. Simple random sampling method was used to collect the data from the two high schools and the two universities. Adolescents who were chosen as respondents were based on the set criteria such as adolescents who were currently enrolled in school, Filipino, 11 – 19 years old, irrespective of gender and have not experienced living abroad.

Respondents' Demographic Profile

Of the 290 respondents, majority (72 or 24%) is 16 years old and belonged to middle-adolescents range. In terms of gender, most of them were female (158 or 54.5%). In terms of religion, 175 (60.3%) were Roman Catholics and for family gross income, majority (113 or 39%) did not know the family gross income per month. Most of the respondents who participated came from School C (102 or 35.2%).

Instrumentation

A self-constructed questionnaire based on the literature was utilized in this study. The research instrument consisted of four parts. The first part is the demographic profile of the respondents. The respondents were requested to provide data such as age, gender, religious affiliation, estimated family gross income per month, and the respondents' school. The second part describes the socio-cultural environment of the respondents which includes the family, peer group, school and community. The third part is the instrument for socio-economic environment of the respondents which includes the family, the school, and the community. The fourth part sought to assess the level of knowledge, attitudes and beliefs of the respondents towards sexuality. The fifth part sought to assess the respondents' sexual behavior.

Statistical Treatment

Frequency distribution and percentage were used to determine the respondents' socioeconomic environment, level of knowledge, sexual behavior and the demographic profile. The mean and standard deviation were used to determine the socio-cultural environments, attitudes, and beliefs of the respondents towards sexuality. Structural Equation Modelling (SEM),
a model that links regression analysis to factor analysis, through the Analysis of Moment Structures (AMOS) was utilized to determine the mediation effect on the relationship between the socio-cultural and economic environments as mediated by knowledge, attitude and beliefs. Multiple regression analysis was used to determine the predictor of the adolescents'
sexual behavior.

III. RESULTS

The Socio-cultural Environment of the Respondents

The results show that family environment (M= 3.61; SD= 0.55) was rated as *good*, peer environment (M= 1.76; SD= 0.46) as *fair*, school environment (M=3.37; SD=0.77) as *fair* while community environment (M=3.56; SD=0.82) and the over-all family environment were rated as *fair* (M=3.47; SD=0.50).

The Socio-economic Environment of the Respondents

As for the socio-economic environment in terms of family of the respondents, the result reveals that college education is the highest level of education attained by their father and mother. The majority occupations of the fathers were white collars while the mothers were blue collar jobs. The school and the community when relating to the socio-economic status have amenities, both technological and physical. Thus, socio-economic environment is non-poor.

Level of Knowledge, Attitude and Beliefs of Respondents Towards Sexuality

The result shows that the respondents have moderate (M=9.73; SD=3.23) level of knowledge. This implies that the respondents lack deeper knowledge on sexuality. As for the respondents' attitude, the result suggests that they have positive (M=2.29; SD=0.42) attitude towards sexuality which implies that they disagreed to inappropriate sexual behaviors and agreed to the appropriate sexual behaviors. For the beliefs, the grand mean was 2.90 with a standard deviation of 0.56. This suggests that respondents are positive in the beliefs on sexual practices, activities and relationships.

Relationship between Adolescent's Socio-cultural Environment and Sexual Behavior

The result indicates that there is a positive significant relationship between the school environment and the sexual behavior of the respondents (p =.011). But, there was no significant relationship between the socio-cultural environment in terms of family (p= 0.790), peer (p= 0.849) and community environment (p= 0.423) and the adolescents' sexual behavior.

Relationship of the Socio-economic Environments to Respondents' Sexual Behavior

The result suggests a significant negative relationship of the socio-economic environments such as family (r= *-142*, p=.015) and community (r = -.090 p=.000) to respondents' sexual behavior. This implies that the lower the socio-economic environment of the family is, the higher is the risk for engaging in risky sexual behavior. Further, the lower the community environment, the higher the risk for sexual behavior.

Relationship of Knowledge, Attitude, Beliefs to the Sexual Behavior of the Respondents

The result indicates a significant positive relationship between knowledge (r=.196, p=.001), attitude (r = .457, p=.000) and sexual behavior. This implies that the higher the level of knowledge is, the higher is the tendency to engage in risky sexual behaviors. Further, the more the respondents' positively

agree to the attitudinal statements, the higher will be their tendency to engage in risky sexual behavior. But, no significant relationship was found between beliefs and sexual behavior (*r = .057, p=.335*). This implies that beliefs do not significantly influence adolescents' sexual behavior.

Difference on Sexual Behavior when Age, Gender and Religion are Considered

The result found a significant difference on the level of sexual behavior when age (*F*= 29.90, *p*=.000;) was considered. The post hoc analysis shows that late adolescents have the highest risk for sexual behavior than early adolescents and middle adolescents. Considering gender (*t=3.74*, *p*=.000;), there is a significant difference on the level sexual behavior. Male tend to be more sexually active and tend to engage in risky sexual behavior than female respondents. The result shows no significant difference when religion was considered.

Predictors of Adolescents' Sexual Behavior

Four variables, namely attitude towards sexuality, age, gender, and socio-economic status of the community were identified as predictors of adolescents' sexual behavior as results of regression analysis. These four variables predict 41.4 percent of the total variance in the sexuality behavior of the respondents. Attitude towards sexuality has a t-value of 7.914 and a p-value of 0.000. It accounts for 23.5 percent of the variation of the respondents' sexual behavior. The positive relationship between attitude and sexual behavior implies that the more positive the respondents' attitude towards sexuality is, the greater is the tendency to engage in risky sexual behavior.

Age is the second variable that entered the regression analysis. It has a t-value of 7.273 and p-value of 0.000, contributing 14.2 percent of the variance to sexual behavior. The positive correlation of age to sexual behavior indicates that the older the respondents, the higher the tendency to engage in risky sexual behavior.

Gender is the third variable to enter the regression analysis, with a t-value of -3.3317, and a p-value of 0.001, contributing 2.3 percent of the variance to sexual behavior. The negative correlation means that male respondents tend to engage in risky sexual behavior compared to female respondents.

The fourth to enter the regression is the socio-economic status of the community (t =-2.426, p = 0.016), contributing 1.3 percent to the total variance of sexual behavior. The negative correlation signifies that the lower the socio-economic status of the community is, the higher is the tendency of the respondents to engage in risky sexual behavior.

Relationship between Socio-cultural and Socio-economic Environments and Adolescents' Sexual Behavior as Mediated by Knowledge, Attitude and Belief

The relationship of socio-cultural and socio-economic environments and sexual behavior as mediated by knowledge, attitude and beliefs were determined by the Structural Equation Modeling (SEM) using Analysis of Moment Structures (AMOS) software. The final model generated by AMOS is shown in Appendix A. It indicates that there is a positive significant relationship between socio-cultural environments, specifically school and knowledge as evidenced by the p-value of

0.000. This implies that the higher the socio-cultural environment specifically that of the school, the more knowledgeable the respondents. However, there is no significant relationship (r = , p =.125) between socio-cultural environment, specifically the school and the sexual behavior. It is also shown that there is a positive significant relationship between knowledge and sexual behavior as proven by the p-value of 0.031. This means that the higher the knowledge, the more the respondents tend to engage in risky sexual behavior.

Moreover, a significant negative relationship was shown between the socio-economic environment specifically the community and sexual behavior as evinced by the p-value of 0.010, implying the poorer the socio-economic environment of the community is, the higher is the tendency of the respondents to engage in risky sexual behaviors.

The model in Figure 1 shows the significance of knowledge as a mediating variable of school environment and sexual behavior as well as the socio-economic variable, specifically the community and sexual behavior. As shown by the result, socio-cultural factors, specifically the school, have the coefficient of 0.09 in relation to the sexual behavior, meaning an increase of 1 in school influence produces 0.09 increase in sexual behavior, 0.20 when related to knowledge increase of 1 in school influence reflects 0.20 increase in sexual behavior. This implies that when knowledge increases, the higher the sexual behavior becomes.

It has been shown in this current study that knowledge mediates the relationship between socio-cultural (school) and economic (community) environments. Knowledge, according to Adepoju (2005), is a great weapon against ignorance. A sound foundation of sexual knowledge helps the individual to dispel sexual myths, superstitions and misinformation that hinder proper understanding or create confusion. Accurate information enables the individual to think critically, to make sound decisions and to take responsibility for sexual health. Knowing and feeling that one is normal can go a long way to increasing the sense of personal worth and self-esteem.

IV. CONCLUSION

Based on the findings of the study, it was concluded that the respondents described socio-cultural (family and community) environment as good. Their socio-economic environment which includes the family, school and community was *non-poor*. Respondents' knowledge level was *moderate*. Also, the result suggests that the better the family and the community socio-economic environment are, the better is the sexual behavior of the respondents. Attitude, age, gender and the socio-economic status of the community predict the adolescents' sexual behavior. Furthermore, males who are older and who come from communities with poor socio-economic status and have positive attitude toward sexuality (positively disagree with the items in the questionnaire) tend to engage in risky sexual behaviors.

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APPENDIX A. Modified Model Analysis Results Using AMOS