

CORRELATE OF EXOSYSTEM INTERACTION AND ADOLESCENTS SEXUAL RISK BEHAVIOURS IN ANAMBRA STATE, NIGERIA

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ABSTRACT

Understanding ecological factors that influence risky sexual behavior of adolescents is vital in designing and implementing sexual risk reduction interventions in specific contexts. Interventions undertaken without understanding the critical factors may not produce the desired results. This study determined the relationship between Exosystem and sexual risk behaviours of adolescents in Anambra State. The study determined the percentage of secondary school student on the mesosystem, their percentage on sexual risk behaviours and the relationship between the Exosystem and their sexual risk behaviours of adolescents in Anambra State. The study was guided by one research question and one null hypothesis. Correlational research design was used and the population of the study consisted of 49,284 secondary school students in Anambra State. The sample consisted of 1470 senior secondary school students of SS1 and SS2 classes selected using multi-stage procedure. The instruments for data collection were, Exosystem of Secondary School Questionnaire (ESSQ), made up of exosystem. It gave reliability coefficient of .81 of 8 items and Sexual Risk Behaviours Questionnaire (SRBQ), made up of 23 items gave reliability coefficient of .88. Research questions 1 and 2 were answered using percentages, research questions 3 was answered using Pearson's Product Moment Correlation while the hypothesis was tested using simple regression analysis. The results showed that majority of the adolescents had good interactions in their exosystem. Also the adolescents had bad sexual risk behaviours. There is significant difference between exosystem and adolescents sexual risk behaviours. Based on the findings, it was concluded that adolescents had good interactions with exosystem. Health educators should find innovative ways of educating the adolescents on the dangers of sexual risk behaviours, using peer and media since it has been found to be a predictor of sexual risk behaviours.

Keywords: Adolescents, Exosystem, Bronfenbrenners, Sexual risk behaviours.

INTRODUCTION

Adolescence is defined both in terms of age (spanning the ages of 10 to 19 years) and in terms of phase of life by special attributes. These attributes include rapid physical growth and development, physiological, social and psychological maturity, but not all at the same time (World Health Organization (WHO) 2015; Nwankwo and Nwoke, 2009); while correlate is a causal, complementary, parallel, or reciprocal relationship, especially a structural, functional or quality correspondence between two comparable entities for example a correlation between drug abuse and crime. On the other hand, sexual behaviour is a form of physical intimacy that may be directed to reproduction (one possible goal of sexual intercourse), spiritual transcendence, and or the enjoyment of any activity involving sexual gratification. Sharma (2003) reported that adolescents practice a wide variety of sexual behaviours, having

masturbation as the commonest manifestation. Mutual masturbation among same sex adolescents is also common. Sharma further noted that among the sexually active adolescents, one may observe that many have single partners; others have multiple partners at a time. Adolescents' sexual activities were clearly not and never had been without risks (Nwankwo and Nwoke, 2009). These risks include but not limited to unplanned pregnancy, dropping out of school, unsafe abortion and sexually transmitted infections/HIV/AIDS, which are the major implications of sexual risk behaviours considering its grave consequences. Sexual risk behavior predisposes young people to a variety of sexuality associated problems including HIV. Strategies to prevent the spread of HIV and other sexually transmitted infections have focused on abstinence, being faithful, condom use and delayed sexual activity. However available evidences show that significant proportion of adolescents are engaged in risky sexual behaviors that expose them to a variety of sexually transmitted infections including HIV (CDC, 2009). Approximately half of the new HIV infections globally occur in the age group 15 to 24 years (UNAIDS, 2010). In Ethiopia about 90% of the people living with HIV are believed to have acquired the infection before the age of 25 mainly through unprotected sexual intercourse (UNITED NATIONS, 2010).

Exosystem

Bronfenbrenner (1977) described an exosystem as an extension of the mesosystem that embraces other specific social structures, both formal and informal and that do not themselves contain the developing person but impinge upon or encompass the immediate setting in which that person is found. The exosystem is further defined by Bronfenbrenner as a larger community in which the adolescent lives, although he or she does not directly participate in the exosystem decision making, these decisions do have a direct and sometimes indirect influence on the adolescent. The structures in this layer impact the child's development by interacting with some structure in his/her microsystem (Berk, 2000). Parent workplace schedules or community-based family resources are examples. The child may not be directly involved at this level, but they do feel the positive or negative force involved by others in the larger community.

Bronfenbrenner (1994) opined that the main exosystems that indirectly influence youth through their family include: school and peers, parents' workplace, family social networks and neighborhood community contexts; local politics and industry. Exosystems can be empowering (example: a high quality child-care programme that benefits the entire family) or they can be degrading (example: excessive stress at work affects the entire family). In studying the sexual risk behaviour the exosystem may help to understand the influence. The school is viewed as the exosystem because it has its own culture and may provide opportunities for adolescent to learn and engage in sexual risk behaviour. Schools with broad socialization are more likely to place emphasis on discipline and those with narrow socialization would demonstrate inverse characteristics.

PURPOSE OF THE STUDY

The main purpose of this study was to determine the relationship between the components of Bronfenbrenner's ecological model and sexual risk behaviours of secondary school students in Anambra State. Specifically, the study determined:

1. percentage of secondary school students' on the Exosystem.
2. percentage of secondary school students' on their sexual risk behaviours.

3. relationship between exosystem and secondary school students' sexual risk behaviours.

RESEARCH QUESTIONS

The following research questions guided the study.

1. What percentage of secondary school students are on the Exosystem?
2. What percentage of secondary school students engaged in sexual risk behaviours?
3. What is the relationship between exosystem and secondary school students' sexual risk behaviours?

HYPOTHESES

The following null hypotheses guided the study and were tested at 0.05 levels of significance;

1. Exosystem of the secondary school students' will not significantly predict their sexual risk behaviours.

Research Question 1

What are the percentage of secondary school students' on components of Bronfenbrenner ecological model in Anambra state?

Table 1: Range of Scores of adolescents on their Exosystem (n=1405)

Components	Range of Score	n	%	Remarks
Exosystem	7 - 17	254	18.1	Poor interaction
	20 - 32	1150	81.9	Good interaction

Table 1 shows that the scores ranging from 20 to 32, 1150 (81.9%) of the students had good interaction with exosystem while 254 (18.1%) other students who scored between 7 and 17 had poor interaction with exosystem

Research Question 2

What are the percentage of secondary school students' on their sexual risk behaviours in Anambra state?

Table 2: Range of Scores on Adolescents Sexual Risk Behaviours (n=1405)

Range of scores	N	%	Remarks
23 – 57	1281	91.2	Good sexual risk behaviour
58 – 92	124	8.8	Bad sexual risk behaviour

In table 2 it was observed that scores ranging from 23 to 57, 1281(91.2%) of secondary school students had good sexual risk behaviours, while 124(8.8%) students who scored between 58 and 92 had bad sexual risk behaviours.

Research Question 5

What is the relationship between exosystem and secondary school students sexual risk behaviours in Anambra State?

Table 3: Pearson's Product Moment Correlation of Relationship Between Exosystem and Secondary School Students Sexual Risk Behaviours in Anambra State (n=1405)

Component	SRB
Exosystem	Pearson Correlation -.039
	Sig. (2-tailed) .149

Table 3 reveals that the exosystem of the secondary school students had correlation with their sexual risk behaviours of ($r = -0.039$), $p > 0.05$. This indicates that exosystem was a very low predictor of secondary school students sexual risk behaviours in Anambra State.

Null Hypothesis 1

Exosystem of adolescents will not significantly predict their sexual risk behaviours.

Table 4: Simple Regression Analysis of the relationship between exosystem of the Secondary School Students and Their Sexual Risk Behaviours (1405)

Variable	R	R ²	R ² Adj	B	% variance	Cal. F	df	Crit. F	Remark
Exosystem	0.039	0.001	0.122	0.39	0.1	2.09	1403	3.84	NS

Table 4 reveals that exosystem of secondary school students had R² Adjusted of 0.122. This indicates that exosystem had the predictive power of 0.1 percent for sexual risk behaviours of the secondary school students. Also at 1df numerator, 1403 df denominator and 0.05 level of significant, the calculated F value 2.09 was less than the critical F value of 3.84. Therefore, the secondary school students' exosystem was not a significant predictor of their sexual risk behaviours.

DISCUSSION

This finding was not surprising because students' community and neighbourhood that promote positive adolescent development through mentoring, tutoring, leadership and community services give opportunities for the students' to modeling behaviour. This finding was in line with the findings made by Yates and Masten (2004) that efforts geared through targeted interventions to circumvent the potentially adverse effects of presumably less than optimal family forms. For example, linking adolescents with positive adult models to promote prosocial behaviour is considered as protective. This finding was in agreement with Rhodes et, al. (2000) that mentoring, tutoring and encouragement, provide the guidance and support that improve parent-adolescent relationship and lead to associated improvements in academic and behavioural outcomes. The association between mentors and parents could have a positive impact on adolescents' improvement in several domains and perhaps mitigate the negative effects attributed to growing up in a risk behaviour way. Secondary school students who feel

cared for or connected to others like neighbours are significantly less likely to engage in premature sexual activity or risk behaviours. This is also in connection that caring adults have more profound impacts on the life course of children and adolescents than any threat by specific risk factors (Werner and Johnson, 2004). Furthermore, the results also showed that most of the secondary school students had good interaction in exosystem. This finding was not surprising because students' community and neighbourhood that promote positive adolescent development through mentoring, tutoring, leadership and community services give opportunities for the students' to modeling behaviour. This finding was in line with the findings made by Yates and Masten (2004) that efforts geared through targeted interventions to circumvent the potentially adverse effects of presumably less than optimal family forms. For example, linking adolescents with positive adult models to promote prosocial behaviour is considered as protective. This finding was in agreement with Rhodes et, al. (2000) that mentoring, tutoring and encouragement, provide the guidance and support that improve parent-adolescent relationship and lead to associated improvements in academic and behavioural outcomes. The association between mentors and parents could have a positive impact on adolescents' improvement in several domains and perhaps mitigate the negative effects attributed to growing up in a risk behaviour way. Secondary school students who feel cared for or connected to others like neighbours are significantly less likely to engage in premature sexual activity or risk behaviours. This is also in connection that caring adults have more profound impacts on the life course of children and adolescents than any threat by specific risk factors (Werner and Johnson, 2004).

The results of this finding showed that exosystem which comprised of neighbourhood and community was a predictor of the secondary school students' sexual risk behaviours. It also showed that exosystem had the predictive power of 0.1 percent for their sexual risk behaviours. Students' community and neighbourhood where everyone is accepted and adults are role models could less likely contribute to their participation in sexual risk behaviour. This result was at variance with the findings of Stephenson (2009) that living in a community where adult have more tolerant attitudes towards sexual risk behaviour may be passing the knowledge to the younger people. This will be discouraging them from engaging in sexual risk behaviours. The implication of this finding is that adults in the community and neighbourhood of adolescents should act as role models to them by their lifestyle. This is in agreement with Miller (2010) who found out that residing in a disorganised or dangerous neighbourhood elevates adolescents to sexual risk behaviour.

The result also showed that the secondary school student's exosystem was not a significant predictor of their sexual risk behaviours. This result is not surprising because at the students' exosystem, even though it does affect the child, but the child is not directly involved in the decision making. This is also in the contention that caring adults have more profound impacts on the life course of children and adolescents than any threat by specific risk factors (Werner & Johnson, 2004). The finding was in agreement with the findings of Kirby, Lapore and Ryan (2005) that disorganised communities will lead the adolescents in those communities to engage in sexual risk behaviours. The finding was also supported by Oxfam (2016) that protective community networks have excellent educational systems, nurturing teacher-child relationships, safe housing and neighbourhoods and available adult models to promote good interaction in the exosystem.

CONCLUSIONS

The study shows that exosystem was not a significant predictor of sexual risk behaviours of secondary school students in Anambra State and thus recommended that government and non-governmental organisations should organise sexual risk reduction programme with specific cultural context using strategies that empower communities to challenge some accepted cultural norms that may predispose the secondary school students to sexual risk behaviours. The school sexual education should be strengthened focusing adolescents as the target group. Local health bodies should work together to address the identified sexual risk behaviours with particular focus on Behaviour change communication, life skill training and peer health education.

REFERENCES

- Berk, L. E. (2000). Child development (5th). Boston: Allyn and Bacon.
- Bronfenbrenner, U. (1977). Towards an experimental ecology of human development. *American Psychologist*, 33, 513-531.
- Bronfenbrenner, U. (1994). Ecological models of human development. *International Encyclopaedia of Education*, 2(3), 1643-1647.
- Centers for Disease Control and Prevention (2009). Youth risk behavior surveillance – United States. *Morbidity and Mortality Weekly Report* 59, 1–142. <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5905a1.htm>
- Centre for Disease Control and Prevention (CDC) (2012). Youth risk behaviour surveillance: United States. *Morbidity and Mortality Weekly Report* 61(4):1-268. www.cdc.gov/mmwr/pdf/ss/ss6104.pdf
- Cherie, A. Mitkie, G. Ismail, S. and Berhane, Y (2005). “Perceived Sufficiency and Usefulness of IEC Materials and Methods Related to HIV/AIDS among High School Youth in Addis Ababa, Ethiopia,” *African Journal of Re-productive Health*, 9, 66-77.
- Joint United Nations on HIV/AIDS (UNAIDS) (2010), “UNAIDS Report on the Global AIDS Epidemic,” Geneva, 2010.
- Kirby, D. Lapore, C. and Ryan, J. (2005). Sexual Risk and Protection factors affecting Teen Sexual Behaviour, Pregnancy, Child Bearing and Sexually Transmitted Diseases: Which are important? Which can you change? Semantic Scholar.
- Miller, B. C. (2010) Family influences on adolescent sexual and contraceptive behavior. *The Journal of Sex Research*, 39 (1):22-6.
- Nwankwo, B. O. and Nwoke, E. A. (2009). Risky sexual behaviours among adolescents in Owerri Municipal: Predictors of Unmet family health needs. *African Journal of Reproductive Health*, 13(1), 141-151.
- Oxfam, G. B. (2016). What is Protection anyway? <http://policy-practice.oxfam.org.uk/blog/2016/03/what-is-protection-anyway>
- Rhodes, G., Hicfor, C. and Jeffery, L. (2000). Sex-typically and attractiveness are Super male and Super-female faces Super-attractive. *British Journal of Psychology*, 91(10). 125 – 140.
- Sharma N (2003). *Understanding Adolescence*. New Delhi: Population council. Retrieved September 13, 2005, <http://www.unfpa.org/about/index.htm>
- Statistical Package for Social Science (SPSS) for Windows version (21.0). SPSS Inc
- Stephenson, R. (2009). Community influences on young people’s sexual behaviour in 3countries. *American Journal of Public Health*, 99(1), 103- 109.

United Nations (UN) (2010). Federal Democratic Republic of Ethiopia, Federal HIV/AIDS Prevention and Control Office, “Report on Progress towards Implementation of the UN Declaration of Commitment on HIV/AIDS,” Addis Ababa.

United Nations Programme on AIDS (UNAIDS) (2006). Report on global AIDS epidemic. www.unasids.org on August 10, 2011.

Werner-Wilson R. J. (2007). Predictors of adolescents sexual attitudes: The influence of individual and family factors. Retrieved January 15, from www.Google.com.

World Health Organisation (WHO) (2015). Adolescents: Health risks and solution. Geneva: WHO. <http://www.who.int/mediacentre/factsheets/fs345/en/>

World Health Organisation (WHO) (2015). Reproductive Health. Geneva: WHO.