

ECOLOGICAL PERSPECTIVE PEER-TO-PEER PRESENTATION

Salzaar, L.F. , Bradley, E. L. P. , Younge, S. N. , Daluga, N. A. , Crosby, R. A. , Lang, DiClemente, R. J. (2010). Applying ecological perspectives to adolescent sexual health in the United States: Rhetoric OR Reality? Health Education Research Presentation Paper.

Study Purpose: The growing prevalence of sexually transmitted diseases among adolescents is attributable to sexual risky behaviors. According to the Centers Of Disease And Control (2011), twenty-four percent of high school students reported having had four or more sexual partners by graduation, while approximately forty percent of sexually active students did not use condoms during their last intercourse. Evidence-based interventions implemented to address these issues and designed on the basis of health behavior theories are proving to be not as effective as intended. More recent studies on adolescent sexual risk behavior point toward the ecological model as a more effective approach for designing interventions, since it allows for a more comprehensive understanding of the myriad of critical factors influencing adolescent sexual behaviors.

The purpose of this paper is to identify studies that have incorporated an ecological framework to address adolescent sexual risk behaviors.

Theoretical Model: The ecological approach to assessing adolescent risky sexual behaviors is based on the ecological model. This model, which posits that individuals are influenced by their social environment (i.e., family, peers, school and community), consists of four levels, viz.; individual, relationship, community and society. At the individual level, factors such as age, knowledge, attitudes, beliefs, skills, perceptions, self-efficacy, personal history and perceptions are considered (Hayden, 2014). At the interpersonal level relationships with friends, relatives and peers are examined to see how these influence risky sexual activity. At the community levels, characteristics such as schools, workplaces, and neighborhoods are examined to determine how much these contribute to the behaviors. At the societal level, health, economic, educational and social policies are explored. From the coordinated input of all of these interventions are designed to address the problem.

Design and Methods: Content analysis was done on 324 abstracts to identify inclusion criteria for ecological factors. These abstracts were extracted from peer reviewed health and science journals published from January 1990 to December 2007. These articles were examined only if

they met the following four inclusion criteria: 1) adolescent participants; 2) the sample was English speaking and US based; 3) participants were not special needs identified; and 3) the study reported sexual risk as an outcome. The next step was to identify abstracts for ecological factors by using the following four factors: relational, familial, community, and societal. This was then followed by the 'level of analysis' classification: individual, systems, organizational, and community societal.

Samples from this study included non-random, random probability, and other. The study sample was identified through the following three categories: affiliation, gender, and racial/ethnic diversity.

At the final step, studies based on sexual outcomes – such as general classification of sexual risk, number of sexual partners, age of sexual debut, unprotected sex, STD outcomes, condom use, and pregnancy outcomes – were categorized.

Analysis: A coding system was developed to identify the following variables: ecological levels, levels of analysis, sampling method, sampling composition, sample affiliation, gender, ethnic/racial diversity of the sample, STD outcomes and pregnancy outcomes.

Results: The study utilized an index from zero (i.e., no ecological factors) to four (i.e., the study included relational, familial, community and societal level influences). Results showed that fifty percent of the studies had an index of zero, while the remaining fifty ranged from 1 to 3. This highlights that even though consideration of ecological factors is known to provide a significantly superior analysis of adolescent risk behavior, many studies have not employed this approach. Results from the level of analysis variable showed that most studies were coded at the individual level and did not completely represent the ecological approach. The sample composition was convenient, recruited through nonrandom techniques, mixed gender and mostly minorities. The results from the behavioral, STD and pregnancy outcomes showed that use or nonuse of condom was the most frequently measured behavioral outcome, followed by sexual risk.

Conclusions: Findings confirm that many studies claiming to employ an ecological framework as part of the study designed to address adolescent sexual risk might not be actually doing so. Despite the proven value this approach provides, a large majority of studies remain at the individual level. Results from 95% of these studies show that ecological factors were included, however, the level of analysis was done mainly at the

intrapersonal level. A true ecological approach should include interrelationships and interactions between systems.

Limitations of the Study: The study had a number of limitations, such as method of recruitment of sample, self-reporting measures and use of study abstracts. Samples in the majority of the studies were recruited from schools, clinics and community organizations. These were convenient samples and therefore may not fully represent the adolescent population. In addition, few of these studies included biomarkers for measuring STD and pregnancy outcomes. These are important factors in adolescent sexual outcome, yet these were self-reported measures in most of these studies. This study was a content analysis of adolescent sexual health literature. It is very likely that some studies might have been omitted that met the criteria. A better sampling technique could have been utilized to ensure generalizability.

Implications of Study: This study contributes to the growing body of evidence that the utilization of an ecological framework is needed to address sexual risky behaviors in adolescent. This study also confirms that attention must be paid to understanding the role of contextual factors through an ecological framework. Additionally, this will help to inform the design of appropriate interventions.

Implications of Study for My Work: The ecological systems theory provides a comprehensive understanding of factors that influence adolescent's sexual and reproductive health. I will use this approach to conduct research studies in the Caribbean on risks factors that are associated with STIs and HIV. Similar studies are needed in the Caribbean that is to take a multilevel approach.

Reference

1. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance – United States, 2011. MMWR 2012;61 (SS-4): 1–162.
2. Hayden, J (2014). Introduction to health behavior theory. Burlington, MA: Jones and Bartlett