

PREDICTING CONDOM NEGOTIATION EFFICACY IN ECONOMICALLY DISADVANTAGED ADOLESCENTS

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ABSTRACT

The present study uses the Theory of Reasoned Action (TRA) to examine predictors of condom negotiation efficacy (CNE) within an ethnically diverse sample (n=381) of economically disadvantaged high school students. Consistent with the TRA, students' attitudes toward condom use as well as perceived peer norms about condom use were positively predictive of CNE. The variance in CNE accounted for by attitudes and peer norms was significant. Findings provide further evidence of the usefulness of the TRA in studies of HIV/AIDS – related behaviors; in addition, findings suggest that the TRA is a useful framework for examining predictors of risky behaviors in economically disadvantaged adolescent populations.

KEYWORDS: Condom, Negotiation Efficacy, Risky behaviors, adolescents

INTRODUCTION

It can be said that dramatic progress has been made in the prevention and management of Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS). Despite the continuously growing knowledge base regarding HIV/AIDS, this disease remains incurable. For now, condom use stands as one of the most effective preventative measures. However, we still know relatively little about how adolescents negotiate the use of condoms. The present study advances psychological science by examining condom negotiation efficacy within an ethnically

diverse sample of adolescents from low socioeconomic backgrounds.

HIV/AIDS is a global issue, and within the United States, the prevalence of HIV/AIDS continues to escalate in adolescent populations (Jemmott & Jemmott & 2007). According to the Center for Disease Control and Prevention (2005), there were 3,762 diagnoses of HIV/AIDS among adolescents in 2004, which represents an increase of 11% from 2003. HIV/AIDS prevention must remain a priority for psychologists, since prevention is still the most effective weapon in battling the disease.

Self-efficacy is the belief that individuals can produce a desired effect

through their own actions (Bandura, 1997). *Condom negotiation efficacy (CNE)* is the belief in one's ability to convince one's sexual partner to use condoms. This construct is consistent with Bandura's (1997) more general notion of self-efficacy, in that the context in which the behavior occurs and the perceived difficulty of performing the behavior are important determinants of CNE. Additionally, research indicates that CNE is predictive of condom use among adolescents (Basen-Engquist & Parcel, 1992; Jemmott, Jemmott, & Fong, 1992).

One of the highest risk groups for HIV/AIDS is low SES adolescents. Whereas many studies have examined predictors of CNE (e.g. Farmer & Meston., 2006), few have examined these relations for low SES adolescents. In the present study, we specifically examine predictors of CNE in a large sample of low SES adolescents.

Theoretical Framework

The Theory of Reasoned Action (TRA) has been established as a sound theoretical framework, particularly in behavioral studies of HIV/AIDS (e.g. Jemmott, Jemmott, & Fong, 1992, 1998, 1999; Jemmott, Jemmott, Braverman, & Fong, 2005). Developed by Fishbein and Ajzen (1975), the TRA focuses on the determinants that predict a given behavior, and has served as the basis for many health-related interventions (Ajzen & Albarracin, 2007). These behavioral determinants are one's *attitudes*—feelings toward performing the target behavior, and *subjective norms*—how significant others feel about the individual performing the target behavior.

Specifically, in the present study, we use the TRA as a guiding theoretical

framework. We examined students' attitudes toward the actual practice of condom use, and the perceived subjective norms, or the social pressure associated with condom use, within an adolescent's peer group. It was therefore hypothesized that positive attitudes and positive subjective norms towards condom use will predict CNE in an ethnically diverse sample of low SES adolescents.

METHOD

This chapter gives information and describes the research methodology, it is further divided into sub-headings such as participants, instruments, procedures, and design/statistics.

Participants

Data for this study were collected during the winter of 2007 as part of a larger study of adolescent sexual behavior (Zimmerman & Anderman, 2002). The participants used for this study sample consisted of 381 high school students enrolled in freshman health education classes from seven high schools in two Midwestern states (Michigan & Kentucky), in the United State. Fifty-five percent were female and 45% male, ranging from 13-18 years of age (80% of the sample were 14 and 15 years old). Seventy-four percent of all students were ninth graders (Junior Secondary School –JSS3). In terms of ethnicity, 50.8% were Caucasian, 37.4% African American, 1.3% Asian/Pacific Islander, 5.5% Latino, and 5% reported being multiracial or of other ethnic backgrounds. Surveys were administered to all participants at two time points (during the fall and winter of 2007).

Instruments

Five instruments were used to measure the various variables of interest. Descriptions of the

measures used in the surveys and their psychometric properties are presented in Table 1 below.

Table 1
Psychometric Properties of Measures

Description	Citation	# Items	Alpha	Sample Item
Condom Negotiation Efficacy	Adapted from Brien et al., 1994	4	.90	“[I am sure I would be able to] talk about using a condom if I were unsure of my partner’s feelings about condoms.”
Condom Attitudes	Sacco et al., 1991	13	.73	“Sexual partners who use condoms are being very responsible.”
Knowledge	Anderman et al., 2002	11	-	“[True or false,] the best way to put on a condom is to pull it on tight.”
Perceived norms about condom use	Zimmerman et al., 2002	5	.69	“[Most of my friends who are sexually active] are more likely to have sex without condoms after using drugs.”
Impulsive Decision Making	Donohew et al., 2000	12	.80	“I do the first thing that comes to my mind.”

Note: For complete and exhaustive explanation of measures refer back to the references.

Procedure

Surveys were administered in health classrooms, extra care was taken to ensure privacy and confidentiality for the participants. Questionnaires were handed to students in envelopes identified with a label indicating the

identity of each student; as the survey was handed to the student, the label was removed from the envelope, so that confidentiality would be maintained. Each survey contained an identification number written in invisible ink, which was then viewed under an ultraviolet

light and coded once surveys were returned to the research office. All students had parental permission to participate, and all surveys and procedures were reviewed and approved by an Institutional Review Board.

Design and Statistics

The design of this study is a multiple regression design, which involves determining and learning about the relationship between several independent or predictor variables and a dependent or criterion variable. The statistics used for this study are both descriptive statistics and inferential statistics. The descriptive statistics shows the central tendency and measure of dispersion. The inferential statistics shows the significant relationship among the variables, specifically using hierarchical regression and Pearson product moment correlation.

Results

This chapter summarizes the result of the study highlighting the mean, standard deviation, correlation, and predictive association of all the variables. To examine the extent to which students' demographics, condom use attitudes and peer norms about condom use predicted condom negotiation efficacy (CNE).

In the relationship between variables, the descriptive statistics and bivariate correlations for all the variables are presented below in Table 2. Based on the zero-order correlation coefficients, condom negotiation efficacy is positively correlated with gender, age, and educational expectation, peer norms about condom use, condom use attitudes, and knowledge of the use of condom. The relation was significantly high with gender, educational expectation, and peer norms about condom use, condom use attitudes, and knowledge of the use of condom. On the other hand, condom negotiation efficacy is negatively correlated with ethnicity and impulsivity.

Table 2
Descriptive Statistics and Bivariate Correlations in Predictors and Outcome Variable

	Mean	S.D.	1.	2.	3.	4.	5.	6.	7.	8.
1. Condom Negotiation Efficacy	3.95	1.19	-	-	-	-	-	-	-	-
2. Gender	-	-	.15*	-	-	-	-	-	-	-
3. Age	-	-	.06	-.05	-	-	-	-	-	-
4. Educational Expectations	4.76	1.34	.10*	.14*	-.15*	-	-	-	-	-
5. Ethnicity	-	-	-.05	-.01	.06	.12*	-	-	-	-
6. Impulsivity	2.79	.58	-.10	-.06	.09	-.07	-.11*	-	-	-
7. Peer Norms	2.87	1.03	.12*	-.01	-.08	-.07	.22***	-.13*	-	-
8. Condom Attitudes	4.41	.67	.32***	.12*	.09	-.03	-.06	-.08	.01	-
9. Knowledge	4.86	2.61	.16**	.07	.13*	.17*	-.11*	.05	-.19***	.18***

Note. Gender-coded males = 1, females = 2. Ethnicity-coded other = 0, black = 1.

* $p < .05$; ** $p < .01$; *** $p < .001$

A hierarchical regression analysis was conducted also – in which case condom negotiation efficacy (CNE) was entered as the dependent variable in the regression. The analysis included two steps: The variables entered into Step 1, were sexual experience, educational expectations, impulsivity and grade; at Step 2, we added condom use attitudes, peer norms, and knowledge. This hierarchical

approach to the analysis provided information about students' CNE after demographics and other variables were controlled statistically. Therefore, coefficients reported in Step 2 predicted residual variance in CNE, unexplained by the variables in Step 1. The results of the analysis are displayed in Table 3 below

Table 3
Hierarchical Regression Predicting Condom Negotiation Efficacy in
Low SES Students

	β Step 1	β Step 2
Step 1		
Gender	.14*	.10
Age	.10	.07
Educational Expectations	.10	.11
Ethnicity	-.08	-.08
Impulsivity	-.10	-.06
Step 2		
Peer Norms	-	.16*
Condom Attitude	-	.29***
Knowledge	-	.10
	-	-
R ²	.03*	.14***
Change in R ²	-	.11***

Note. β indicates standardized regression coefficient.

Gender-coded males = 1, females = 2. Ethnicity-coded other = 0, black = 1.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Overall, these results were consistent with the TRA and the hypothesis that condom use attitudes and peer norms about condom use predict condom negotiation efficacy (CNE). Results of Step 1, revealed that gender was a predictor of CNE, with females reporting higher levels of CNE than males ($B = .14, p < .05$). However, after controlling for demographics, Step 2 revealed only attitudes ($B = .29, p < .001$) and peer norms ($B = .16, p < .01$) were significant predictors of CNE. Specifically, low SES adolescents who report positive peer norms about condom use and who

hold positive attitudes toward condom use report greater CNE. The variance in CNE ($R^2 = .14$), accounted for by attitudes and peer norms was significant, $F(3,268) = 12.14, p < .001$.

DISCUSSION

Summary

The study supported the finding of Manlove, Terry-Human and Ikramullah (2006) who demonstrated lack of positive condom use attitudes and peer norms about condom use, as a

result of sexual debut at a young age is associated with reduced rates of contraceptive use. Thus, it can be speculated that condom negotiation efficacy plays a role in the reduced rates of contraceptive use. In support of this conclusion, our study generally confirmed that adolescents that indicated positive condom use attitudes and peer norms about condom use tends to be more successful in condom negotiation. In addition, Bingham and Crockett (1996) pointed out in their longitudinal study of school aged adolescents, that show poor sexual adjustment (which include negative condom use attitudes and peer norms about condom use) is problematic and are indicators that predict later adjustment to sexual engagement, including, but not limited to deficiency in condom negotiation efficacy (CNE).

Limitation and Suggestions or Future Studies

The present study does have limitations. Although confidentiality was assured to all students, self-reported survey data were collected in classrooms. Students may therefore not feel comfortable answering sensitive questions. We did our best to minimize such risks by administering surveys which did not contain identifying information, spacing students apart enough to answer privately, and using multiple versions of the survey. Future researchers may consider using alternative methods of analysis. According to Jemmott et al. (2007), the next step in this line of work is qualitative investigation of CNE through open-ended surveys, focus groups, and individual interviews to identify potential mediators of behavioral change. Subsequent pilot studies and interventions with low SES adolescents should follow the TPB and incorporate modules grounded in instruction

literature from educational psychology (e.g. de Jong, 2003), as well as attitude and persuasion literature from social psychology (e.g. Petty, Briñol, & Demaree, 2007).

Implication of the Study

The results of this study were consistent with the TRA, providing further evidence for its usefulness in HIV/AIDS prevention research. Conventionally, this theory has not often been applied to understand preventative health behavior in groups such as low SES adolescents (Jemmott et al., 2007). These results therefore extend the condom negotiation efficacy (CNE) literature by illustrating the importance of low SES adolescents' dispositions towards condoms in predicting their ability to avoid becoming HIV positive. Future health interventions serving economically disadvantaged youth should examine the effects of interventions on beliefs about using condoms in order to increase CNE.

Conclusion

Results of this present study indicate that some important sexual-efficacy beliefs are related to Theory of Reasoned Action (TRA), presenting additional indication for its usefulness in HIV/AIDS prevention research. It can be concluded that our study generally confirmed that adolescents that indicated positive condom use attitudes and peer norms about condom use tends to be more successful in condom negotiation. Reflecting the postulation of Bingham and Crockett (1996) who inferred in their longitudinal study of school aged adolescents - that deficiency in sexual adjustment, encompassing negative condom use attitudes and peer norms about condom use are predictive of later adjustment to sexual engagement and preventative health behavior (including, but not limited to poor

condom negotiation efficacy) among adolescents and young people.

Recommendations

Resulting from the findings of this study, the following recommendations are proffered:

1. The government should develop educational programs for young people that promote the use of condoms, with clear message that indicate how the use of condoms are the only methods of birth control that also help to prevent the spread of sexually transmitted infections, including HIV.
2. Teachers in their health and wellness class are also encouraged to reinforce among adolescents and young people the use of condom; including female condoms, every time they have sex to protect themselves from STDs and unwanted pregnancy.
3. In government educational programs or school/teacher health and wellness engagement with young people to appreciate the benefit of condom use – condom negotiation skill should be a crucial part of the syllabus to facilitate belief change and preventative health behavior in groups such as low SES adolescents.

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