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A Model for HIV/AIDS Risk Behaviors of Students in Armenia

Talin Babikian

LOMA LINDA UNIVERSITY
Graduate School

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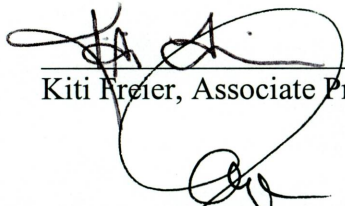
A thesis submitted in partial satisfaction of
the requirements for the degree of
Master of Arts in Psychology

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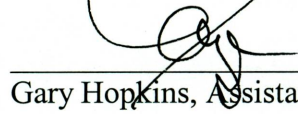
August 2001

Each person whose signature appears below certifies that this thesis in his/her opinion is adequate, in scope and quality, as a thesis for the degree of Master of Arts.

_____, Chairperson
Kiti Freier, Associate Professor of Psychology and Pediatrics

_____
Gary Hopkins, Assistant Clinical Professor of Health Education and Promotion

_____
Matt Riggs, Professor of Psychology

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ABSTRACT OF THE THESIS

A Model for HIV/AIDS Risk Behaviors of
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by

Talin Babikian

Master of Arts, Graduate Program in Psychology
Loma Linda University, August 2001
Dr. Kiti Freier, Chairperson

Without a cure in now its third decade, AIDS is a concern for both the medical and social science disciplines. Most at risk for a nationwide AIDS epidemic are developing countries, which often lack the necessary resources and knowledge to minimize the spread of the disease. There are an estimated 1500 HIV cases in Armenia, 81.5% of which occur in the 20-39 age group. Armenia's current economic and political instability, increase in sexually transmitted infections (STI), prostitution, and injecting drug use, and the alarming incidence rates in neighboring countries amplify its risk for a national epidemic.

The goals of this study were to 1) determine the prevalence of sexual risk behaviors of students from five higher education institutes in Yerevan, Armenia (ages 17 to 21), 2) evaluate the HIV/AIDS knowledge base, and 3) test the feasibility of theoretical constructs when predicting risk behaviors within the cultural setting. Sexual risk behaviors, including early sexual initiation, high number of lifetime sexual partners, and frequency of casual sex were prevalent, particularly among male students. Although knowledge regarding HIV transmission through sexual activity and injecting drug use were adequate, myths regarding alternate means of virus transmission still prevailed.

Theory of Reasoned Action (TRA)-based psychosocial variables were used to examine sexual risk behaviors of students where intentions to engage in behaviors mediated the relationship between attitudes/perceived norms and behavior. Attitudes, subjective norms (of peers, parents, and other adults), and HIV/AIDS knowledge were used to predict intentions to engage in sexual activity, accounting for 63% of the variance. Furthermore, the hypothesis that gender and sexual history would systematically influence the relative predictive values of attitudes and subjective norms was supported. Namely, attitudes and peer norms were the strongest predictors of intentions for males and non-virgins, peer norms for virgins, and parent and peer norms for females. HIV/AIDS knowledge, however, was not a significant predictor of risk behaviors in any group except for virgin males, implying that knowledge-based educational programs alone are not an effective method for prevention. The results obtained from this study provide need and sample based information for school AIDS prevention programs in Armenia.

INTRODUCTION

Without a cure in now its third decade, AIDS poses a challenge not only for the

biomedical and the social science disciplines, but also to the very fabric of human

societies, including economies, politics, and public policies. Since there are no biological

measures available to prevent the spread of the virus to date, the only method of

prevention is through minimizing the prevalence of risk-behaviors. More than half of all

new HIV infections worldwide occur in 15-24 year olds (UNAIDS, 2000). It is believed

that members of this age group feel invincible and are therefore at greater risk for

HIV/AIDS since they are more likely to engage in unprotected sex, sex with multiple

partners, injecting drug use, and alcohol abuse. Furthermore, high-risk behaviors

established in youth often extend into adulthood making intervention at a younger age

imperative to prevent chronic risk behaviors (Carasso, 1998). Young people are also

most likely to benefit from intervention since their behavioral patterns, compared to older

individuals, are not yet solidified (Aggleton and Rivers, 1999). It is therefore crucial to

target this population when designing prevention efforts in both developed and

developing countries.

Although the AIDS epidemics in Africa and Asia have been well documented,

Eastern Europe was spared from the HIV epidemic until 1994 (UNAIDS, 1998). The

AIDS epidemic and related psychosocial factors have been widely studied in

industrialized nations such as the United States. However, the AIDS epidemic in Eastern

Europe has only now been recognized and the number of new cases is rapidly growing

(UNAIDS, 1998). Economic hardship and lack of knowledge place such countries at

high-risk for a national epidemic. In Armenia, a sovereign republic of the former Soviet

Union, there are an estimated 1500 HIV cases, 81.5% of which occur in the 20 to 39 age group (Ministry of Health, 2000). Officials believe that these numbers are conservative and that the actual figures are much higher since not enough people know about the virus to inquire about testing and those who do know are afraid of the social stigmas associated with it (Noyan Tapan News Agency, 1999; Ministry of Health, 2000).

Although Armenia is a low incidence country compared to regions where the AIDS epidemic is well under way, its prevalence is threatening since no immediate educational or medical interventions are in place to prevent an epidemic. The risk of a full-blown epidemic is further increased by the current economic and political situation of Armenia. The sudden social, political, and economic changes following the collapse of the former Soviet Union are speculated to be responsible for the "deflation of moral values" in Armenia (Atomvyan, 2001). As a result, economic hardships, prostitution, and substance abuse suggest that a national epidemic may be well on its way as has been the case in neighboring former Soviet republics such as Russia and the Ukraine (UNAIDS, 1998). Furthermore, the world's steepest curve for the increase of HIV was recorded in the newly independent states of the former Soviet Union where the infected population doubled between 1997 and 1999 (UNAIDS, 1999).

THE THEORY OF REASONED ACTION (TRA)

General Principles

The importance of studying health-risk behaviors and their antecedents in adolescents has been a focus in recent literature. However, most health risk behavior studies have been descriptive and correlational, focusing on demographic variables such as age, gender, socioeconomic status, and knowledge. Although these variables are important, the consensus in the literature is that effective intervention requires an understanding of mechanisms above and beyond demographic information to predict risk behaviors (Murphy, Rotheram-Borus and Reid, 1998; Terry, et al., 1993, p. 137). This is especially true in adolescence where adults and peers play a significant, though often conflicting, role as sources of influence in young peoples' lives.

A good theory, therefore, explaining high-risk behavior must be comprehensive and attempt to incorporate the cumulative effects of several pertinent sources of influence on behavior. A theoretical approach is also necessary so that the body of literature in the area can converge and adequate preventive measures can be taken. However, such theoretical models have limitations since the motivational complexity of human behavior along with the difficulties of planning spontaneous interactions need to be incorporated for adequate behavioral predictions. It is for this reason that media and knowledge-based interventions alone have not been successful in changing high-risk sexual behaviors in teens (Abraham & Sheeran, 1994).

Several theories have attempted to predict high-risk behaviors within a psychosocial framework. The Theory of Reasoned Action (TRA), first introduced in 1967 by Ajzen and Fishbein, has been one of the most extensively researched and

validated social cognitive models for the study of high-risk behaviors (Abraham, Sheeran, & Orbell, 1998).

The basic premise of the TRA is that "people make behavioral decisions on the basis of a reasoned consideration of the available information" (Terry et al., 1993, p. 7). This premise suggests that people's knowledge systematically affects their behavior. It is therefore assumed that people do not spontaneously make decisions to act. Rather, their actions are based on both the perceived consequences of their behavior and on what others will think. The views of significant others, collectively known as subjective norms in the TRA, are perceived social pressures and the extent to which others (parents, peers, etc...) would want them to perform a certain behavior. These perceived norms are consistently linked with high-risk behaviors (Basen-Engquist, 1992). These results have generalized across cultures, including to the Asian and Pacific Islander adolescent populations (Hou & Basen-Engquist, 1997). Furthermore, several studies and models of intervention have held normative beliefs to be key in HIV intervention programs (Terry et al., 1993). Although the TRA has been used to predict condom use and other risk behaviors (Reitman, 1996; Rosenthal, 1999; Sneed, 1998; Sutton, 1999), it has also successfully been applied to understand other health behaviors such as vaccination, breastfeeding, drunk driving, compliance with medication, smoking, and family planning (Basen-Engquist, 1992).

The TRA suggests that the immediate antecedent to behavior is the individual's intention to perform the behavior. These intentions are based on two components: attitudes and subjective norms. Attitudes are a person's evaluation of performing or not performing a behavior and are composed of particular behavioral beliefs and belief

strengths. In general, the more a behavior is thought to lead to positive outcomes, the more favorable the attitude. Subjective norms, on the other hand, are subjective evaluations of whether or not significant others would or would not approve of a particular behavior. Peer, parent, and beliefs of other significant adults are therefore a significant source of both positive and negative social pressure for adolescents (Basen-Engquist & Parcel, 1992 and DiClemente, Hansen, & Ponton, 1996). These perceptions of others' expectations are predictors of one's intentions to perform the behavior.

According to the TRA model, both attitudes and normative beliefs are direct antecedents of intentions for a behavior and intentions are, in turn, the immediate determinants of behavior. Simply stated, intentions are mediators between a person's behavioral beliefs (attitudes and subjective norms) and their behavior (Baron & Kenny, 1986). Figure 1 is an illustration of part of the original TRA model proposed by Fishbein and Ajzen (1975).

Figure 1.

Fishbein and Ajzen's (1975) Original TRA Model
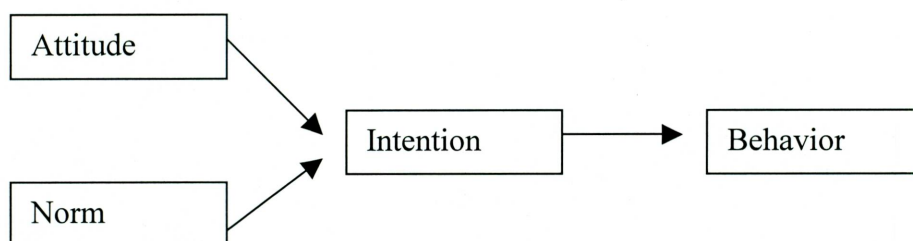
A meta-analysis of studies including the Theory of Reasoned Action and Planned Behavior was conducted in which 96 data sets examining condom use (N of approximately 23,000) were analyzed (Albarracin, Johnson, Fishbein, and Muellerleile, 2001). The authors concluded that condom use was related to intentions (r = .45) and

intentions, in turn, were related to subjective norms (r = .39) and attitudes (r = .58). The authors made a further distinction between past and future behaviors and proposed the following model based on Fishbein and Ajzen's (1975) original TRA model (Figure 2). In this model, intentions for condom more strongly correlated with past behavior (r = .57) than with future behavior (r = .45), although both were significant at p < .001 (Albarracin et al., 2001). Therefore, it can safely be concluded that measuring intentions for future behavior is related to not only past behavior but also with future behavior. The current study is based on the slightly modified model proposed by Albarracin et al. (2001) where past behaviors and intentions for future behaviors, along with attitudes and norms, are measured. It is assumed that future behaviors can safely be estimated based on these parameters.

Figure 2.

Revised TRA Model
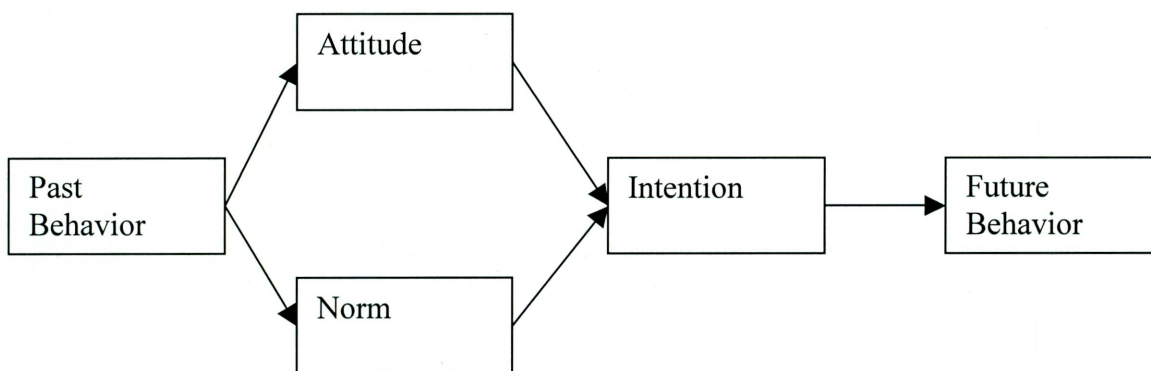
Relative Contribution of Attitudes and Subjective Norms

Although both attitudes and subjective norms are significant predictors of intentions (Ajzen & Fishbein, 1980), the relative influence of attitudes versus subjective norms on intention shift depending on the sample, cultural context, demographic

variables, or the behavior in question (Sneed & Morisky, 1998). For instance, Fishbein (1990) found that white males' (United States sample) intentions to use condoms were mostly under normative control (peer influences) while for their Mexican counterparts, intentions to use condoms were under attitudinal control (based on their own beliefs). The recognition of such relative weights is important since prevention can be focused on one or the other of the behavioral influences, especially when time and additional resources are limited. These relative weights can also be used to explain why certain intervention programs work well with one group and not with others (Fishbein, 1990). Furthermore, identifying the relative weights of attitudes and subjective norms will help focus efforts on the role of particular behavioral influences. For example, if subjective norms of peers are found to have significantly more influence on behavioral intentions in males, then male peers can be positive sources in prevention efforts (Greene & Hale, 1997). As will be discussed below, important grouping variables regarding high-risk sexual behaviors in the context of HIV/AIDS have included gender (Basen-Engquist & Parcel, 1992; Fishbein & Middlestadt, 1989; Greene & Hale, 1997; Murphy, Rotheram-Borus, & Reid, 1998; and Sneed & Morisky, 1998) and past experiences (Abraham & Sheeran, 1994; Albarracin, Fishbein, & Middlestadt, 1998; and Greene & Hale, 1997).

<div align="center">Gender Differences</div>

Behavioral influences help target adequate and persuasive intervention campaigns (Green & Hale, 1997). Until recently, demographic variables such as gender were not studied as contributors to high-risk sexual behaviors. It is for this reason that little is known about gender effects on the relative importance of attitudes and subjective norms

on intentions in the context of sexual behaviors (Murphy, Rotheram-Borus, & Reid, 1998).

There have been very few studies examining the relative role of attitudes and subjective norms in determining intentions. The few studies that have looked at these differences have, for the most part, concentrated on predicting condom use and not specifically predicting high-risk sexual behaviors. However, Green and Hale (1997) examined the relative role of attitudes and subjective norms (those of peers, parents, and significant other adults) in determining intentions to reduce high-risk sexual behaviors. They reported that attitudes were stronger predictors of intentions for females while subjective norms were stronger in males. However, this study looked at the combined effects of peer, parent, and other adult subjective norms and did not examine the relative contribution of each of the subjective norms for predicting intentions.

Factors contributing to such gender differences are not clear in the existing literature. Furthermore, it is likely that gender and past sexual experience (discussed below) are strongly related, especially in more traditional cultures where double standards in gender roles have been an important part of one's socialization process. Such differential socialization patterns and subsequent views on sexuality for boys and girls will be key in understanding the mechanisms for any perceived gender differences.

Past Experiences

Another key variable in the relative influence of attitudes and subjective norms in predicting intentions is past experience. It is important to know what the population of interest is doing so that intervention can be tailored to the specific behaviors that either need to be modified or reinforced (Fishbein, 1990). For example, if working primarily

with a non-sexually group of adolescents, intervention approaches can encourage abstinence. However, fostering values and encouraging abstinence in a sexually active population is extremely difficult (DiClemente et al., 1996). Consequently, interventions with a sexually experienced group should identify key determinants of behaviors so that views towards less risky behaviors (i.e. condom use, fewer number of partners, and longer length of time before engaging in sexual intercourse) are modified and perceived as more favorable. Fishbein (1990) suggests that such data is needed from different countries and in varying cultural contexts to tailor prevention efforts specifically for the target population.

Past behavior is a significant predictor of future behavior (Abraham & Sheeran, 1994). Only recently have studies attempted to systematically analyze past sexual experiences and their effect on the relative importance of attitudes and subjective norms when predicting intentions to engage in sexual activity. Albarracin, Fishbein, and Middlestadt (1998) examined whether past behavior had a direct or indirect effect on intentions to use condoms with attitudes and subjective norms mediating this relationship. Fifty-eight percent of the variance in intentions to use condoms was explained by attitudes and subjective norms. However, when past condom use was also used to predict intentions, the percentage of explained variance was increased by four, indicating that past behavior is important in predicting future behavior. This study, however, did not investigate the relative role of attitudes and norms based on an individual's past condom use. Greene and Hale (1997), however, specifically examined the relative role of attitudes and norms and reported that in sexually active adolescents, attitudes were better predictors of both intentions to engage in sexual activity and to use condoms.

There are very few studies that have looked at the relative contribution of attitudes and norms and these, in turn, report varying results. The lack of consensus in the literature may be due to several reasons, including 1) related but different behaviors (i.e., engaging in sex vs. condom use) may be governed by various factors and entail different dynamics, 2) demographic variables, such as socio-economic status (SES), age, culture, and subculture, can potentially influence the role of attitudes and subjective norms on beliefs, and 3) studies have used different referents to measure subjective norms; while some investigated the role of peers on one's behavioral intentions, others have examined the combined contribution of parents, peers, and significant other adults (Greene & Hale, 1997). Furthermore, none of these studies have examined the individual contribution of each of the referents in comparison with attitudes.

ARMENIA

Historical and Cultural Factors

Before applying theory-based psychosocial constructs to a given population, it is essential for relevant historical and cultural factors, which significantly impact these variables, to be considered. This is especially true for Armenia since traditional roles and behavioral beliefs have a pivotal contribution to contemporary societal views on sexuality and gender roles.

Armenia is a country the size of the state of Maryland landlocked by Georgia on the north, Turkey on the west, Azerbaijan on the east, and Iran on the south. Its location has historically been the root of its political, social, and economic detriment because of centuries long conflicts with its Muslim neighbors and more recent economic blockades from Turkey. It is a small Christian pocket famous for its architecturally unique churches. As a popular crossroad, Armenia has for centuries wavered back and forth under the rule of powerful neighboring empires and as such, has served as the battleground for their wars (Hovannisian, 1997, p. 15).

In more recent history, Armenia was a republic of the former Soviet Union until 1991 when its fall resulted in Armenia's declaration of independence. Although this change was a dream come true for many, it had significant political and economic implications since, once again, Armenia became a small country surrounded by its hostile neighbors. The country's economic blockades and lack of internal resources have limited access to necessary resources mostly to those few things produced within Armenia. Not surprisingly, these hardships have resulted in higher rates of drug and alcohol abuse, as

well as prostitution (Melikyan, 1999). It is in this context that the factors affecting the transmission of HIV/AIDS will be studied in Armenia.

Historically, Armenian attitudes regarding sexual mores have been quite conservative and consistent with the familiar male-female double standard (McCormick et al., 1982, p. 386). Part of maintaining honor involved ensuring the "purity" of the women in the family. Women who had "been around" were not considered good marriage material (Bakalian, 1993). However, this trend is gradually changing, especially after the fall of the USSR, since the former republics are increasingly becoming influenced by western cultural ideologies. Exposure to the media and the Internet, along with an increase in travel has resulted in more open views of sexuality, especially in the younger generation. This change has also been documented in other former Soviet states, including Georgia, Russia, and the Ukraine (UNAIDS, 1998).

<u>A Country at Risk</u>

Although Armenia does not have alarming HIV incidence rates, it is a country at high risk for and AIDS epidemic for several key reasons. First, the country is geographically centered in a volatile region surrounded by countries struggling with the epidemic. Scarcity of resources for HIV testing and counseling also contribute to its vulnerability for an epidemic. Furthermore, increasing poverty and drug trafficking have also contributed to the risk. Currently, there are between 19,000 to 23,000 registered drugs users (10% of whom are injecting users), with an HIV incidence rate of 5.8% in this population (Ministry of Health, 2000).

Although the AIDS virus is more efficiently transmitted through intravenous drug use, the most frequent mode of transmission is sexual activity (UNAIDS, 1998 and

Ministry of Health, 2000). Various economic and psychosocial factors in Armenia contribute to the need to target sexual behaviors as a means for prevention. These factors include lack of knowledge and education about sexually transmitted infections (STI's) and their mode of transmission, a rise in STI rates, postponements of marriage, and liberalization of sexual behavior (including sex outside of marriage) (UNAIDS, 1998). A gradual increase in the incidence rates of STIs such as syphilis and gonorrhea indicate the risk for HIV infection since the prevalence patterns of these diseases are often parallel (Harutyunyan, Ghukasyan, Chilingaryan, Hovhannisyan, Manukyan, and Petrosyan, 1998). Approximately 32% of patients visiting dispensaries in 1998 were registered with a diagnosis of syphilis as opposed to 17.5% in 1994 (UNAIDS, 2000).

In a recent study, commercial sex work was not only revealed to be relatively common in the capital city of Yerevan, but it also was found to be a significant risk factor for the spread of the virus (Melikyan, 1999). Approximately 10% of the commercial sex workers in the study reported consistent condom use and most perceived themselves not to be at risk for acquiring STIs. There are approximately 7000 to 8000 female sex workers in Armenia and the HIV prevalence rate in this group is approximated by the Ministry of Health (2000) to be around six percent. UNAIDS (2000) figures exceed this approximation and estimate the prevalence rate of HIV in sex workers to be between 9-19%. Fifty-two percent of the prostitutes have been diagnosed with four or five STIs and approximately half of them are under the age of 28 (Atovmyan, 2001).

Furthermore, military conflict and labor migration are identified by UNAIDS as factors which place countries at high risk for an AIDS epidemic. Migrations within the former Soviet states is also a common threat to Armenia since 20-22% of Armenians

work or live part-time in the Ukraine or Russia, the two countries most affected by the AIDS epidemic in the region (UNAIDS, 2000). Based on these statistics, efforts for the prevention of HIV transmission should focus on the sexual behaviors and attitudes of the population considered to be at risk.

Research Needs in Armenia

Before mass effective intervention programs can be implemented, a thorough surveillance system for HIV/AIDS is necessary. Research on the formative needs of the target population is also necessary. In order to successfully apply sound theoretical models to a population, fundamental constructs from the model should be tested within the specific cultural framework to investigate the possibility of generalizing intervention efforts that have demonstrated potential for change in other cultural contexts. It is therefore crucial to explore the underlying psychosocial constructs responsible for high-risk behavior in a particular cultural context. These constructs include an analysis of the contribution of personal, situational, and environmental factors, which drive behavior. It is only when such formative research is conducted that behavioral researchers can apply parts of or entire theories and intervention models with a potential to generate meaningful data and offer effective interventions.

The epidemiological information and the review of the literature have indicated a pressing need for HIV/AIDS knowledge and intervention in Armenia. AIDS is no longer a homosexual and drug user's disease. Following trends similar to western countries, AIDS in Eastern Europe is becoming a heterosexual disease (Abraham & Sheeran, 1994). Since the population most at risk is youth and the primary mode of transmission for this age group is sexual activity, intervention should be focused in this area. Furthermore,

before one can effectively intervene, significant predictors of sexual activity must be identified.

Various behavioral models have attempted to conceptualize predictors of sexual behavior, including the TRA, where an individual's attitudes and perceived social norms, mediated by behavioral intentions, predict high-risk sexual behaviors. Adolescents' attitudes, and perceived norms of their peers, parents, and other adults regarding sexual behaviors, in addition to HIV/AIDS knowledge will be used as predictors of intentions to engage in such behaviors. These intentions, when adequately measured, are believed to be important predictors of high-risk sexual behaviors (Fishbein, 1990).

PROBLEM STATEMENT

The following study is designed to investigate the potential of psychosocial variables similar to those in the TRA in explaining adolescents' intentions to engage in high-risk sexual behaviors in Armenia. Furthermore, gender differences and the role of past sexual experiences (defined in this study as virginity) will be investigated so that the relative weights of attitudes and subjective norms as predictors of intentions to engage in high-risk sexual behaviors will be identified. The subjective norms explored in this study include those of peers, parents, and significant other adults. All three are considered to be major sources of influence on an adolescent's behavior. Furthermore, the relative role of HIV/AIDS knowledge will be explored in relation to its contributing role in risk behaviors.

In this study, students' attitude scores included the degree to which they believed sexual behavior is acceptable and their perception of its consequence on their social environment. Subjective norm scores, on the other hand, included students' perceptions of the extent to which their peers, parents, and other adults believe premarital sex is acceptable. An HIV/AIDS knowledge scale was also used to predict high-risk sexual behaviors. Intention scores determined the degree to which students planned on engaging in sexual activity in the near future. The items used for the attitude, subjective norms, and intentions scales in this study were based on items used on the National Adolescent Student Health Survey (NASHS) (American School Health Education, 1989) and include: 1) having premarital sex, 2) having premarital sex with someone they have known for a long time, and 3) having premarital sex with individuals they do not know very well. Finally, the high-risk behavior scale used in this study was derived from

relevant items on the Center for Disease Control's (CDC) Youth Risk Behavior Survey (YRBS) and the NASHS. The scale included students' past sexual experience (virginity), number of lifetime sexual partners, age of first sexual intercourse, and the length of time they get to know their partner before engaging in sexual intercourse.

The information gathered from this study will be imperative in the design and implementation of a need and sample specific prevention effort based on the prevalence of risk behaviors, HIV/AIDS knowledge base, and identified sources of their behavioral influences. The immediate objectives of this study are to identify the sources of influence in the decision to engage in sexual intercourse in by group (male vs. female and virgin vs. non-virgin). In the future, these results may be used to develop a program for HIV/AIDS prevention for the youth in Armenia.

<u>Hypotheses</u>

Based on the literature review outlined above, the following hypotheses are proposed:

Hypothesis 1a – attitudes, peer, parent, and other adult subjective norms are hypothesized to mediate the relationship between past behaviors and behavioral intentions. As such, in addition to significant correlations among these variables, the proportion of variance explained by past behaviors in behavioral intentions will be significantly reduced once the psychosocial variables are introduced in the regression equation. This hypothesis will test theory-based constructs in the particular cultural context of Armenia using a portion of the modified TRA model proposed by Albarracin et al. (2001).

Hypothesis 1b – it is hypothesized that HIV/AIDS knowledge scores will be inversely related to both high-risk behaviors and behavioral intentions.

Hypothesis 2 – gender is hypothesized to mediate the relationship between attitudes, peer, parent, and other adult subjective norms and behavioral intentions. As such, in addition to significant correlations among these variables, the proportion of variance explained by the psychosocial constructs in behavioral intentions will be significantly reduced once gender is introduced in the regression equation.

Hypothesis 3 – virginity is hypothesized to mediate the relationship between attitudes, peer, parent, and other adult subjective norms and behavioral intentions. As such, in addition to significant correlations among these variables, the proportion of variance explained by the psychosocial constructs in behavioral intentions will be significantly reduced once virginity is introduced in the regression equation.

Hypothesis 4 – Attitudes, peer, parent, and other adult norms, and HIV/AIDS knowledge will predict intentions to engage in high-risk sexual behaviors in both males and females. However, gender will moderate this relationship since differences are hypothesized to exist in the relative weights of these five predictors. It is not hypothesized a priori where these differences will be. Greene and Hale (1997) reported that peer subjective norms were more predictive of intentions to use condoms in males while attitudes are more predictive in females in a primarily Caucasian United States sample. It is not clear if these differences will generalize cross-culturally to the youth in Armenia. Furthermore, since the subjective norms of peers, parents, and significant other adults were used collectively as a single predictor in this study, the relative contribution of each of these variables to the explained variance in intentions is not clear.

Hypothesis 5 – Attitudes, peer, parent, and other adult subjective norms, and HIV/AIDS knowledge will predict intentions to engage in high-risk sexual behaviors in both non-virgins and virgins. However, past sexual experiences will moderate this relationship since differences are hypothesized to exist in the relative weights of these five predictors. It is not hypothesized a priori where these differences will be. The literature is not consistent in regards to the relative strengths of attitudes and subjective norms and past experiences.

METHODS

Subjects

Archival data gathered for a larger project involving other risk behaviors were utilized in this study (N = 442). The subject pool was drawn from five higher education institutes in Yerevan, Armenia, including the State University (faculties of law and psychology), Physical Education, Medicine, Arts, and Theater/Cinema (the latter two will be combined under the heading of Arts in the remainder of this paper). The ratio of males to females was approximately 1:1 in each institution except in the Physical Education Institute and the Social Sciences faculty of the Yerevan State University where males and females, respectively, were over-represented. The inclusion criteria were students from the four institutes between the ages of 17 and 21 who consented to participating in the study. The exclusion criteria used was students outside of the 17 to 21 age range or those who refused to participate in this study (only a few students chose not to participate).

Materials

The questionnaires used in the larger study included demographic data in addition to the prevalence of the following health risk behaviors: tobacco, alcohol, drug use, and sexual activity. Only sections addressing the sexual behaviors and the HIV/AIDS knowledge scale were used in the analyses of this study. Items from the NASHS (1989) were used to assess attitudes and normative beliefs about high-risk sexual behaviors. Questions addressing the prevalence of risk behaviors were derived from the CDC's YRBS. The questionnaire was translated into Armenian and back-translated to English to

minimize any translation issues which may have resulted in sensitive differences in the way questions were interpreted (Appendix A).

Attitude and Belief Scales

Students were asked to rate each item measuring their attitudes and subjective norms regarding sexual activity on a five-point Likert-type scale from "Definitely Agree" to "Don't Agree at All" for each referent (their own attitudes, peer, parent, and other adult beliefs). They were then asked to rate their intentions to engage in each of the behaviors and about their actual behaviors.

The items used for this study were:

1- it is OK to have premarital sex
2- it is OK to have premarital sex with someone if we know each other very well
3- it is OK to have premarital sex with someone whom I do not know very well

Reliability coefficients of the items included for each construct were as follows: attitudes Chronbach's $\alpha = 0.73$, peer norms Chronbach's $\alpha = 0.78$, parent norms Chronbach's $\alpha = 0.81$, other adult norms Chronbach's $\alpha = 0.79$.

The measure was considered to have face validity for attitudes, peer, and adult subjective norms since the items directly asked about the student's own beliefs (attitudes) and about the perceived beliefs of their peers, parents, and other adults (peer, parent, and other adult subjective norms) about sexual activity. Content validity was established by introducing the items to a team of experts experienced in the area of adolescent sexual risk behaviors during the formulation of the survey items. Concurrent validity was established by studying the relationship between the constructs used in this study. As expected, inexperienced individuals had less supporting attitudes towards sexual intercourse, older students perceived less conservative norms about sexual intercourse,

girls indicated more conservative norms about sexual intercourse, older students had attitudes which were more supportive of sexual behaviors, and girls had attitudes that were less supportive of sexual behaviors. Finally, construct validity was approximated by all of the above and, in addition, conducting a series of confirmatory factor analyses.

Reliability for assessing the students' intentions to engage in high-risk sexual behaviors was estimated, Chronbach's $\alpha = 0.82$. This measure demonstrated face validity since the items ask directly about the students' plans to engage in high-risk sexual behaviors in the near future. Furthermore, concurrent validity was established since, as expected, these items were positively correlated with past high risk behaviors.

Reliability for the high-risk sexual behavior scale was estimated, Chronbach's $\alpha = 0.89$. The items on this scale included previous sexual experience (virginity), average time of dating partner before engaging in sexual intercourse, age of first sexual intercourse, and number of total lifetime sexual partners. Past sexual experiences and age of first sexual experience were reverse coded, and scores from all four items were standardized and summed, resulting in a sexual high-risk behavior score, with a higher score representing riskier behavior. As expected, this score was highly correlated with students' intentions to engage in these behaviors.

HIV/AIDS Knowledge Scale

Twelve items were selected from existing scales to assess students' HIV/AIDS knowledge base. Students were asked to mark "True" or "False" on statements about HIV/AIDS and its transmission. Additionally, students were given the option of marking "I Do Not Know" to minimize guessing effects. Relevant items were reverse coded so that higher scores on the knowledge scale were considered to be correct responses and

vice versa. The "I Do Not Know" responses were recoded as incorrect. Each correct response was recoded as 1 and each incorrect response as 0. The individual knowledge scores were summed and used in subsequent analyses, with a range of 0 to 12 and a mean of 7.1 (s.d. 2.83).

The reliability coefficient for the AIDS knowledge scale was, Chronbach's α = .77, suggesting that the inter-correlations of the items were strong enough to warrant the use of a single combined score representing HIV/AIDS knowledge. Results from a subsequent factor analysis suggested that there were three meaningful clusters of knowledge scores, namely: 1) sexual transmission, 2) intravenous transmission, and 3) myths about transmission.

Procedure

Prior to the implementation of the larger study, the Institutional Review Board (IRB) of Loma Linda University reviewed and approved the protocol, questionnaire, and consent form (OSR # 40204, Appendix B).

Approval from the Ministry of Education in Armenia was attained (Appendix C). The Ministry of Education prepared letters addressed to the Deans of each participating institute. These letters were personally delivered to the respective Deans in a scheduled meeting during which the basic objectives of the study and methodological issues were discussed. The institutes participating in the study were chosen on the basis of the judgment of the Ministry of Education and the researchers. Consideration was given to accessing a diverse population of students from various fields within the boundaries of limited resources, including time. On this basis, the Institutes of Physical Education, Arts, and Theatre/Cinema, Medicine, and two faculties (Law and Social Science) from

the Yerevan State University, were selected. Once the institutes were selected, a convenience sample representative of the total number of students from each institute was drawn.

Informed consent was acquired from participating students (Appendix D). The consent was in Armenian. Only those participants who gave consent participated in the study. Participating students were reminded that it was very important for them to answer the questions honestly and that no measures would ever be taken to identify them. They were told that they were free to skip questions they found uncomfortable to respond to.

American University of Armenia

Although considered a culturally sensitive issue, it was imperative that the perceptions and behaviors of youth regarding their sexual practices be addressed in the survey items. Measures were taken to address cultural sensitivity by having local professional contacts review all study related materials and methods.

The staff from the Center for Health Sciences Research (CHSR) of the American University of Armenia (AUA) served as collaborators in this study. Specifically, Anahid Demirdjyan, MD, MPH, served as the Armenian project manager and had a key role in contacting the Ministry of Education and Institute Deans, resolving translation issues, and editing the final version of the questionnaire and consent form.

Both the questionnaire and consent forms were piloted with a group of approximately 25 students enrolled in a Public Health course at AUA. Their input regarding ambiguities in wording and format were taken into account before a final version of the questionnaire was produced.

The questionnaires were coded and entered into SPSS by CHSR staff. A double entry method was used for data entry to minimize errors. The final database was sent in electronic format to Loma Linda University for analysis. The original questionnaires remain at the CHSR. Original copies of the consent forms were brought back to Loma Linda University.

RESULTS

Design

A quasi-experimental-correlational design was used in this study. This design allowed analysis of group differences (male vs. female and virgin vs. non-virgin) and relative strengths of study variables when predicting intentions to engage in sexual activity. According to TRA-based principles, attitudes and subjective norms predict intentions to engage in high-risk sexual behaviors. In this study, the attitude/norm link to intention was moderated by gender and virginity. It was hypothesized that gender and virginity would systematically influence the relative predictive values of attitudes and subjective norms.

Statistical Analyses

Screening of the Data

The data was screened and normality was approximated for almost all study related variables, including knowledge, attitudes, peer norms, other adult norms, and high-risk sexual behaviors. However, perceived parent norms were slightly positively skewed, indicating that most of the parents, as expected in this cultural context, were perceived to have less favorable attitudes towards premarital sexual activity. No univariate outliers were found, jeopardizing the integrity of further statistical analyses.

Demographic Variables

The mean age for the respondents was 18.3 (s.d. 0.91), N = 442. Table 1 lists the total number of participants from each institute.

Table 1

Sample Distribution Across Academic Institutes

Institute	#	%
Arts (Craft and Cinema)	65	14.7
Medicine	118	26.7
Physical Education	108	24.4
Yerevan State University – Law	102	23.1
Yerevan State University – Social Sciences	49	11.1
Total	442	100.0

Although most institutions offer four-year programs, 96% of the students were in their second or third year of study. Gender was approximately equally represented in the sample (52.5% male and 47.5% female) and across the institutes, except in the Physical Education institute where 90% of the sample consisted of male students and in the Social Science faculty of the Yerevan State University where 94% of the students were female. Only 1.7% of the students were married at the time of the survey. Approximately two-thirds of the respondents were originally from the capital city of Yerevan; the rest were from various rural and urban areas in Armenia.

Sexual Activity

Approximately 42% of the respondents reported having had sexual intercourse at some point in their lives. Table 2 illustrates the breakdown of gender by virginity.

Table 2

Distribution of Grouping Variables

	Gender	
Sexual History	Male	Female
Virgin	50 (23%)	190 (93%)
Non-virgin	165 (77%)	14 (7%)
Total	215 (100%)	204 (100%)

The mean age for first sexual intercourse was 16 (s.d. 1.9) with an average number of lifetime sexual partners of 7 (s.d. 9.3). Approximately 51% of the sexually active respondents reported that they get to know their partner no more than a few days before engaging in sexual intercourse. Contrary to the high rate of abortions in Armenia, namely 1 in 2.5 pregnancies (Henshaw, Singh, and Haas, 1999), no female students reported ever having an induced abortion. However, 7% of the male students reported having impregnated their partner while 9% reported not being sure (none of these respondents were married). Table 3 summarizes the sexual behaviors of the respondents.

Table 3

Summary of Sexual Behaviors

Sexually active students	42%
Average age of first sexual intercourse	16 (s.d. 1.9)
Average number of lifetime sexual partners	7 (s.d. 9.3)
Sexually active students who take no more than a few days to know their partner before engaging in sex	51%
Number of reported abortions and pregnancies by female respondents	0
Percent of males students who reported impregnating a partner	7%
Male students who reported not being sure of ever impregnating a partner	9%

Noteworthy gender differences were observed in regards to students' sexual behaviors; 78% of the male students reported being sexually active compared to only 7% of the females. Of the sexually active students, the average age for sexual initiation was 15.9 (s.d. 1.9) for males and 17.5 (s.d. 1.6) for females. The average number of lifetime sexual partners was 7.3 (s.d. 9.7) for males and 1.3 (s.d. 0.9) for females. Table 4 summarizes gender differences in sexual activity.

Table 4

Sexual Activity by Gender

			Analysis		
Behavior	Male	Female		df	p
Ever had sexual intercourse	77%	7%	χ^2=208.9	1	< .001
Age of first experience[a]	15.9 (1.9)[b]	17.5 (1.6)	t = -3.18	166	= .008
Number of lifetime sexual partners[a]	7.3 (9.7)	1.3 (0.9)	t = 5.85	108	< .001

Note. [a]Based on sexually active respondents.
[b]Mean and standard deviation (in parentheses).

Condom Use

The most popular method of contraception reported during students' last sexual intercourse was condom use (78%); 16% of the students admitted not using any form of contraception during their last sexual intercourse and 6% reported using the withdrawal method. The most common reason for not using condoms was sexual inactivity. Eighty-six percent of the sexually active students reported using condoms during sex. Among the reasons for not using condoms in the sexually active group were 1) "condoms are not necessary" (8%), 2) "another form of birth control is used" (5%), and 3) "condoms are not acceptable to me or to my partner" (4%). None of the sexually active students

reported cost or availability of condoms as a factor in their decision to use condoms.

Approximately 50% of sexually active students reported that the use of condoms was

sometimes or never associated with how well they knew their partner. Furthermore, 67%

of these students reported inconsistent condom use (never, sometimes, or frequently)

during sexual intercourse. Table 5 summarizes the contraceptive practices of the

respondents.

Table 5

Contraceptive Use Among Sexually Active Students

	Percent of Respondents[a]
Method of contraception used during last sexual intercourse	
Condoms	70
No Method	15
Withdrawal Method	5
Frequency of Condom Use	
Never	5
Sometimes	23
Frequently	40
Always	32
Reasons for not using condoms regularly	
Not consider it necessary	8
Other method of contraception used	5
Not acceptable to me or my partner	4
Use condoms most of the time	86

Note. [a]Based on sexually active students only.

HIV/AIDS Knowledge

The HIV/AIDS knowledge base was variable in this student population. Although the students demonstrated a fairly good understanding of the risks associated with sexual activity and transmission of the virus, their knowledge was weaker regarding intravenous transmission: 91% correctly indicated that one can contract HIV if they engage in sexual intercourse and 91% also identified a risk associated with engaging in sexual intercourse with an infected individual. However, only 78% correctly indicated that sharing needles to inject drugs is a risk factor in acquiring HIV and only 34% believed that using sterile instruments during a blood test does not pose a risk of infection. Furthermore, even though some students were able to identify the risks for infection, there were still many myths reported in regards to the transmission of the virus. For instance, only 45% correctly identified that public toilets were not a risk for transmission and 31% identified that AIDS is not only a homosexual disease. Additionally, approximately 60% still believe that there is a cure for AIDS (Table 6).

Table 6

HIV/AIDS Knowledge

Area of Knowledge	Percentage[a]
Sexual Activity	
One can get AIDS when not using condoms during sex	91
If you have AIDS, you can infect your partner during sex	91
You can reduce the chances of infection if you remain abstinent	77
Intravenous Transmission	
One can get AIDS when sharing needles to inject drugs	78
One can reduce chances of infection by not having sex with an injecting drug user	49
One can get infected during a blood test even when using sterile instruments	34
Myths about HIV/AIDS Transmission	
Can get AIDS by using public toilets	45
Can get AIDS by holding hands with an infected individual	70
Only homosexuals can get AIDS	31
One can get AIDS through a mosquito bite	30
There is a cure for AIDS	40
Pregnancy	
An infected pregnant woman can infect her baby	68

Note. [a]Percentage of students who responded correctly.

Considering that the student population surveyed in this study is comprised of the most educated youth in Armenia, one can safely assume that the knowledge base of HIV/AIDS in the general population is less.

Students reported a variety of sources for their HIV/AIDS knowledge. Table 7 summarizes their responses.

Table 7

Sources of HIV/AIDS Information

Source	% of students
School	37
Parent(s)	31
Friend(s)	43
Teacher(s)	21
Other adult(s)	25
Doctor(s)	12
Books or Newspapers	56
TV or Radio	65
Other[a]	7

Note. [a]Included organized lectures and the internet.

Attitudes, Beliefs, and Intentions

In addition to HIV/AIDS knowledge scores, attitudes, peer, parent, other adult subjective norms were used to predict intentions to engage in sexual intercourse. The means and standard deviations for these variables are summarized in Table 8.

Table 8

Descriptive for Study Variables by Group

Variable	Range	Mean All	Mean Male	Mean Female	Mean Non-V	Mean Virgin
Attitudes	4 - 20	11.3 (2.8)	12.4 (2.4)	10.0 (2.7)	12.5 (2.2)	10.0 (2.8)
Parent Norms	3 - 15	5.8 (2.8)	6.8 (2.9)	4.7 (2.2)	6.8 (2.8)	5.0 (2.5)
Peer Norms	3 - 15	8.8 (3.3)	10.7 (2.4)	6.8 (2.9)	10.9 (2.4)	7.3 (3.1)
Other Adult Norms	3 - 15	8.1 (3.0)	9.7 (2.4)	6.4 (2.6)	9.7 (2.5)	6.9 (2.8)
AIDS knowledge	0 - 12	7.1 (2.8)	6.8 (2.9)	7.5 (2.7)	6.7 (2.9)	7.4 (2.7)
Intentions to engage in sex	3 - 15	7.6 (3.4)	9.9 (2.7)	5.3 (2.4)	10.1 (2.6)	5.7 (2.7)
Risky behavior (standardized scores)	-4 to 15	-1.0 (4.3)	2.3 (4.4)	-3.3 (2.1)	4.7 (2.7)	-3.7 (1.1)

Note. Standard deviations listed in parentheses.

Statistically significant differences were observed between males/females and virgin/non-virgins for all of the variables used in this study ($p < .001$ for all, except for

AIDS knowledge: male/female, p = .02 and virgin/non-virgin, p = .04). These differences suggest that males have 1) riskier attitudes toward sex, 2) report more liberal perceived parent, peer, and other adult norms, 3) have intentions to engage in riskier sex in the future, 4) report a riskier sexual past, and 5) have a slightly lower knowledge base in regards to HIV/AIDS. Similarly, non-virgin respondents report the same pattern of attitudes, norms, and behaviors as the male respondents. Similarities between the male and non-virgin groups and also between the female and virgin groups were not surprising since 77% of the males and only 7% of the females reported a sexual history.

<u>Testing of Hypotheses</u>

The following analyses were performed for each hypothesis:

<u>Full Model.</u>

H1- The correlation matrix in Figure 3 illustrates the relationship between past high-risk sexual behaviors, psychosocial variables of attitudes and norms, HIV/AIDS knowledge, and intentions to engage in sexual activity.

Figure 3

Correlations Among Study Variables
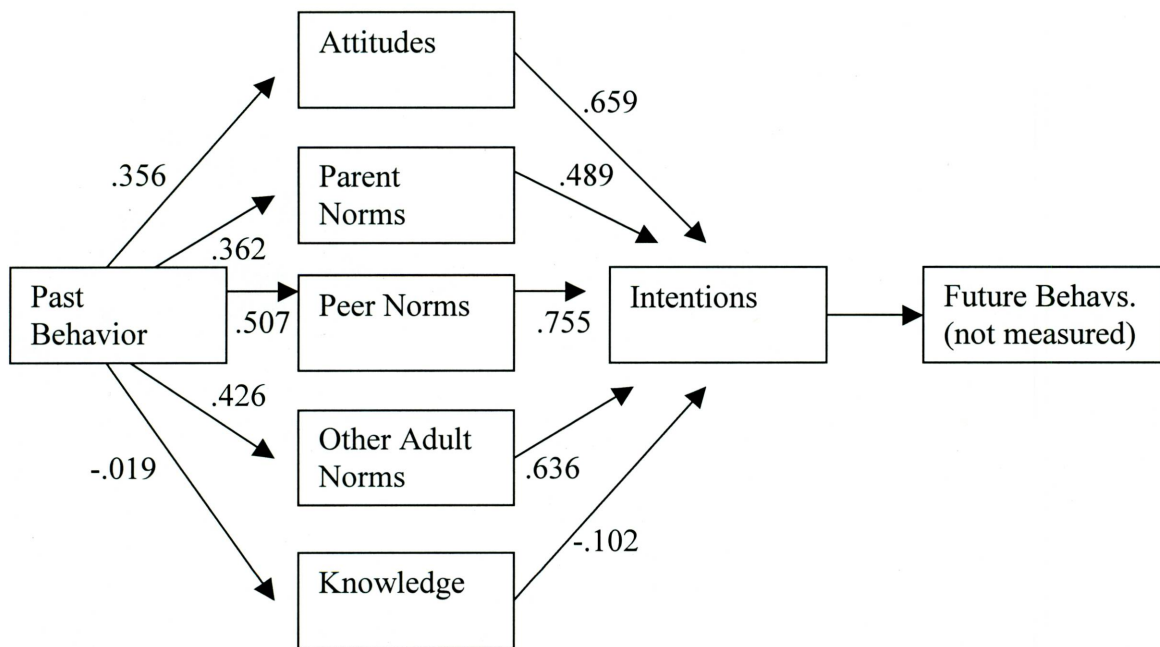
Note. All correlations were statistically significant at p < .01, except for those involving knowledge scores (p = ns). Past behaviors were directly correlated with intentions to engage in sexual activity (r = .644, p < .01). A correlation coefficient is not available for the relationship between intentions and future behavior since the latter was not measured in this study. However, a meta-analysis exploring the intention/future behavior relationship for condom use was reported as r = .54 (Albarracin et al., 2001).

Past high-risk sexual behaviors were both positively and significantly correlated with student attitudes (r = .365), parent (r = .362), peer (r = .507), and other adult (r = .426) norms and these variables, in turn, were correlated with intentions to engage in sexual intercourse: attitudes (r = .659), parent (r = .489), peer (r = .755), and other adult (r = .636) norms. However, knowledge about HIV/AIDS was minimally correlated both with past risky behavior (r = -.019) and intentions to engage in sexual activity (r = -.102), suggesting that knowledge has a relatively insignificant role in predicting behavior.

The correlation matrix indicates that the theoretical model using TRA-based psychosocial variables has a strong predictive ability considering the cultural context of Armenia and can be a useful tool in understanding antecedents of risky sexual behavior.

Furthermore, attitudes, peer, parent, and other adult norms were found to be mediating the relationship between past behaviors and behavioral intentions. Past behaviors explained 41% of the variance in intentions ($F = 213.370$, $p < .001$). However, when attitudes and norms were entered into the regression equation first, past behaviors subsequently accounted for 7% more of the variance above and beyond the psychosocial constructs ($\triangle F = 72.957$, $p < .001$). The drop in the relative predictive value of past behaviors when the psychosocial variables were introduced into the regression equation first identified these variables to be partial mediators in the past behavior and behavioral intention link.

H2 – It was hypothesized that gender would mediate the relationship between the predictor variables and intentions to engage in sexual activity. A hierarchical multiple regression analysis was conducted to explore this hypothesis. The predictor variables explained 64% of the variance in intentions ($F = 164.613$, $p < .001$). However, when gender was entered into the regression equation first, attitudes and norms subsequently accounted for 25% more of the variance above and beyond gender ($\triangle F = 76.424$, $p < .001$). The drop in the relative predictive value of attitudes and norms when gender was introduced into the regression equation first identified gender to be a partial mediator in the model.

H3 – It was hypothesized that past experiences would mediate the relationship between the predictor variables and intentions to engage in sexual activity. A

hierarchical multiple regression analysis was conducted to explore this hypothesis. The predictor variables explained 64% of the variance in intentions ($F = 164.613$, $p < .001$). However, when past experience (namely virginity) was entered into the regression equation first, attitudes and norms subsequently accounted for 30% more of the variance above and beyond gender ($\triangle F = 92.137$, $p < .001$). The drop in the relative predictive value of attitudes and norms when past experience was introduced into the regression equation first identified virginity to be a partial mediator in the model.

The impacts of gender and past experiences on the relationship of the study variables is consistent with the literature (Abraham & Sheeran, 1994; Albarracin et al., 1998; Basen-Engquist & Parcel, 1992; Greene & Hale, 1997; Murphy et al., 1998; and Sneed & Morisky, 1998) and should not be ignored in comprehensive risk behavior models.

<u>Gender Differences</u>

H4- Two separate standard multiple regression equations were used to explore the power of the psychosocial variables and knowledge scores to predict intentions for males and females, respectively. The model explained 45% ($p < .001$) of the variance in intentions for males (11%, $p = .028$, of the explained variance directly by past behaviors). In this group, most significant contributors (in terms of standardized beta weights) to the overall variance explained were attitudes ($\beta = .404$, $p < .001$), peer norms ($\beta = .278$, $p = .001$), and knowledge ($\beta = -.179$, $p = .004$). Parent norms ($\beta = -.032$, $p = .627$) and other adult norms ($\beta = .115$, $p = .142$) were relatively insignificant contributors. For females, all five variables explained 54% ($p < .001$) of the variance in intentions (7%, $p = .028$, of past behaviors directly) to engage sexual activity. Based on standardized beta weights,

student attitudes (β = .258, p < .001), parent (β = .327, p < .001) and peer (β = .313, p < .001) norms, strongly contributed to the percentage of explained variance; other adult norms (β = -.004, p = .954) and knowledge (β = .054, p = .294) were statistically insignificant contributors to the overall percentage of variance explained. In summary, attitudes, followed by peer norms, were the strongest predictors of intentions for males while parent, followed by peer, norms were stronger for females.

Past Experiences

H5- Two separate standard multiple regression equations were used to explore the power of the psychosocial variables and knowledge scores to predict intentions for virgins and non-virgins. The model explained 42% (p < .001) of the variance in intentions for non-virgins (6%, p = .506, of the explained variance directly by past behaviors). For non-virgins, most significant contributors to the overall variance explained were attitudes (β = .365, p < .001), peer norms (β = .297, p = .001), and other adult norms (β = .166, p = .047). Knowledge (β= -.109, p = .124) and parent norms (β = .003, p = .969) were insignificant contributors. For virgins, all five variables explained 53% (p < .001) of the variance in intentions (6%, p = .030, of behaviors directly) to engage sexual activity. Based on the standardized beta weights, student attitudes (β = .257, p < .001), parent (β = .236, p < .001) and peer (β = .349, p < .001) norms strongly contributed to the percentage of explained variance; other adult norms (β = .046, p = .504) and knowledge (β = -.065, p = .181) were statistically insignificant contributors to the overall percentage of variance explained. In summary, attitudes, followed by peer norms, were stronger predictors for non-virgins (as in males) and in virgins, peers, followed by attitudes, were relatively stronger predictors of intentions.

Summary of Results

The multiple regression analyses above specified the stronger predictors of intentions to engage in sexual activity among the five variables for all the respondents and broken down by gender and virginity. The results are summarized in Table 9.

Table 9

Relative Contribution of Predictor Variables by Group

	All (N = 442) $R^2 = 64$ p < .001	Males (N = 215) $R^2 = 45$ p < .001	Females (N = 204) $R^2 = 54$ p < .001	Non-virgins (N = 179) $R^2 = 42$ p < .001	Virgins (N = 240) $R^2 = 53$ p < .001
Attitudes	.291 (.000)	.404 (.000)	.258 (.000)	.365 (.000)	.257 (.000)
Parent	.125 (.002)	-.032 (.627)	.327 (.000)	.003 (.969)	.236 (.000)
Peer	.408 (.000)	.278 (.001)	.313 (.000)	.297 (.001)	.349 (.000)
Other Adults	.119 (.020)	.115 (.142)	-.004 (.954)	.166 (.047)	.046 (.504)
Knowledge	-.070 (.038)	-.179 (.004)	.054 (.294)	-.109 (.124)	-.065 (.181)

Note. Relative strength of each predictor variable is represented by standardized beta weights and respective p values (in parentheses) when predicting intentions to engage in sexual intercourse, by group.

In summary, all five variables were statistically significant contributors to the percentage of variance explained in intentions as a whole. However, peer norms followed by students' own attitudes were relatively stronger predictors, followed by parent and other adult norms, and finally, knowledge. However, with a standardized beta ($\beta = -.070$, p = .038), knowledge had little practical significance as a contributor to intentions. When broken down by group, student attitudes and perceived peer norms were consistently statistically and practically significant contributors to the overall explained variance in intentions to engage in sexual activity.

Although the contribution of perceived norms of other adults towards intentions may seem insignificant at first, a closer look at a likely statistical artifact may suggest otherwise since adult norms were found to be highly correlated with intentions to engage

in sexual activity ($r = .636$, $p < .001$). Since peer norms and other adult norms were significantly correlated ($r = .735$, $p < .001$) and also because the standardized beta weights in multiple regression equations are based on unique variance only, it is probable that once a percentage of accounted variance was explained by peers, very little unique variance was left for other adult norms, thus explaining the insignificant contribution of adult norms to the overall regression equation.

The role of perceived parent norms on intentions to engage in sexual activity and past behavior had a varying role depending on students' gender and sexual history: parents were considered important contributors to respondents' intentions and involvement in sexual activity both for female and virgin students, but not for male and sexually experienced students. Similarly, although knowledge was a weak predictor of intentions for three of the four groups, it was a statistically significant predictor of intentions to engage in sexual intercourse for males only (subsequent post hoc analyses will address this inconsistency).

Post Hoc Analyses

Gender and sexual history (virginity) were demonstrated to have an impact on intentions to engage in sexual activity. In order to further explore the role of gender and past sexual experiences on the relative strengths of the predictor variables, three additional standard multiple regression equations were used to compare the new groups combining gender and virginity: virgin/males ($N = 50$), non-virgin/males ($N = 165$), virgin/females ($N = 190$). Although the fourth group, non-virgin/female, would have been an interesting one to investigate, no further analyses were conducted with this group since with a sample size of 14, no meaningful statistics could be computed.

The virgin/females and the non-virgin/males were strikingly similar to the virgin and non-virgin groups, respectively, in terms of the relative strengths of the standardized beta weights when predicting intentions. However, the virgin/male group was unique in that it differed from the analyses performed for both gender differences and past sexual experiences. Although attitudes were significant contributors to students' intentions to engage in sexual activity, for this virgin/male group, peers were not significant influencers. Instead, HIV/AIDS knowledge was found to be a significant predictor. Table 10 demonstrates the results from these post hoc analyses.

Table 10

Post Hoc Analyses by New Groups

	Males/Virgin (N = 50) $R^2 = 51, p < .001$	Females/Virgin (N = 190) $R^2 = 51, p < .001$	Male/Non-virgins (N = 165) $R^2 = 36, p < .001$
Attitudes	.380 (.028)	.294 (.000)	.367 (.000)
Parent	.044 (.757)	.291 (.000)	-.036 (.655)
Peer	.215 (.250)	.279 (.002)	.291 (.002)
Other Adults	.103 (.588)	.005 (.947)	.133 (.140)
Knowledge	-.322 (.012)	.065 (.246)	-.126 (.105)

Note. Relative strength of each predictor variable is represented by standardized beta weights and respective p values (in parentheses) when predicting intentions to engage in sexual intercourse, by group.

The post hoc analyses examining the relative predictive strengths of the study variables for the new grouping variables suggest that there is a potential interaction effect of gender and virginity when predicting intentions. For the most part, the female and virgin groups and the male and non-virgin group demonstrated similar results. This was expected since the correlation between gender and virginity was high (r = .70, p < .001). Slight differences, however, are witnessed in the virgin/male group where HIV/AIDS knowledge replaces the predictive ability of perceived peer norms. Additional analyses

need to be conducted to further clarify the combined role of gender and past sexual

history on current intentions and behavior.

DISCUSSION

Conclusions

The weak economy and unstable political situation in Armenia contribute to its increased vulnerability to a nationwide HIV/AIDS epidemic. For several key reasons, including liberalization of sexual behavior, postponement of marriage, military conflict, and an increase in prostitution, substance use, and sexually transmitted infections, young people in Armenia are particularly at risk for contracting and spreading the virus.

In this study, knowledge about AIDS and the transmission of HIV among students attending higher education institutes in Yerevan was adequate with respect to the transmission of the virus through sexual activity and injecting drug use. Conversely, certain myths regarding the transmission of the virus were found to be prevalent. However, though important, knowledge was not significantly related to sexual risk behaviors. The correlation between HIV/AIDS knowledge and past high-risk sexual activities was minimal, $r = -.02$ ($p = ns$). This statistic suggests that there was no relationship between students' HIV/AIDS knowledge and their sexual behaviors, suggesting that knowledge alone is not sufficient to deter risky behavior. Significant correlations, however, were found between the measured psychosocial variables and past high-risk behaviors.

Although knowledge is a key component of any behavioral intervention, it alone is not enough to modify a health risk behavior. In addition to a sound knowledge base, factors, which more successfully predict behavior in a particular cultural setting must be identified and measured. Therefore, any HIV/AIDS prevention module for Armenia should begin with improving the knowledge base of the target population by purveying

information about the virus and its mode of transmission, while also taking into account the role of personal beliefs, socialization processes, cultural factors, and societal and peer pressures.

Furthermore, sexual behaviors were examined in this study to determine the level of risk present in the student population. Significant gender differences were found in sexual history, including virginity, age of first sexual intercourse, and number of lifetime sexual partners. Clearly, the males in this sample were at a much higher risk than were the females, with a sexual initiation age of about 16 and average number of lifetime sexual partners of approximately seven. The average age of sexual initiation for the non-virgin females (7% of the females), was 17.5 with 1.3 average lifetime sexual partners. This information is critical for the design of prevention modules since such a gender discrepancy is not typical in samples where intervention programs have been implemented and evaluated. It is important for intervention efforts to take into consideration the behavioral history of the target population (DiClemente et al., 1996). Since gender and sexual history are so closely inter-related in this sample and because past behaviors are strong predictors of future behaviors, gender differences must be addressed in prevention programs.

The social network of young people, including parents and peers, in addition to individuals' own attitudes regarding their behaviors, were found in general to be significant predictors of intentions to engage in high-risk sexual activity. The relative importance of these referents differed depending on key variables, including gender and past experiences. In summary, contrary to the findings of Greene and Hale (1997) when predicting intentions to limit the number of sexual partners, this study found that attitudes

were stronger predictors of intentions in males than for females. However, consistent with the findings of Greene and Hale (1997) but inconsistent with those of Albarracin, Fishbein, and Middlestadt (1998), behavioral intentions were better predicted by peer norms for virgins and by attitudes for non-virgins. Furthermore, the perceived norms of parents were found to significantly predict behavioral intentions in both females and virgins. This effect was more pronounced in females, where parental norms were found to be more significant than any other variable measured.

The role of significant other adults for intentions to engage in sexual activity was statistically insignificant. However, since peer norms and other adult norms were significantly correlated ($r = .735$, $p < .001$) and also because the standardized beta weights in multiple regression equations are based on unique variance only, the insignificant contribution of other adults norms is likely a statistical artifact. The high correlation between peer and other adult norms is not surprising since the students in this study ranged in age from 17 to 21, and most likely considered their peers to be adults. A more pronounced difference between peer and other adult norms would be expected in a younger sample where other adults would include teachers and other members of the community instead of peers.

HIV/AIDS knowledge was also found to be an insignificant contributor to intentions. The exception to this was the role of knowledge in predicting intentions for males, specifically male virgins. Post hoc analyses indicated that the limited contribution of knowledge for males resulted from its effect in the male and virgin group where peers were found to no longer be significant. Instead, the contribution of knowledge to the overall standardized regression equation replaced that of peer norms. Based on this

finding, there seems to be a subset of males to which the generalizations above do not apply. Subsequent analyses demonstrated that this group of virgin males is not more knowledgeable about HIV/AIDS than the non-virgin males (p = .48). However, when compared in terms of educational institute, the former group was more represented in the medical institute (where 53% of males were virgins) compared to physical education and arts/crafts where the respective percentages were 21% and 20%. Although it is not clear from the data in this study why knowledge, although not higher, is more predictive of intentions to engage in risky behavior, possible explanations include differences in personality, motivation and goal orientation, and an interest in or understanding of biological and physiological processes.

The literature examining the relative role of the various factors addressed in this study is sparse. However, the few studies that have dealt with this area have either used one referent (i.e. peers) or have used a single measure to represent the norms of others (i.e. combined peers, parents, other significant adults). This study examined the individual contributions of each of these psychosocial variables. By doing so, it was possible to determine the relative role of these variables across gender and across sexual history. Parent norms were the strongest predictors of behavioral intentions in females whereas they did not have any contributing role for males. This finding is not surprising given the cultural and socializational characteristics that have traditionally defined the Armenian milieu. A certain deference or respect is expected of daughters, and of Armenian women in general, toward authority, particularly to the male members of the immediate family. Males, on the other hand, have traditionally been raised to uphold

more of a "macho" mentality. They are "guarded" less by their families, and are thus indirectly encouraged to be more independent and exploratory in their behaviors.

Attitudes and peers were also found to be significant influences of behavioral intentions in both males and females. However, these variables, especially that of peer norms, probably have a different function depending on gender. The circle of peers for males can serve as a bonding environment where risk behaviors in general, including sexual activity, can be discussed and even encouraged. For females, on the other hand, the network of peers can help to reinforce cultural and traditional roles and expectations.

Finally, this study demonstrated that psychosocial models of high-risk behavior can be used in Armenia. Schools are a good starting point for an intervention, since 1) in general, AIDS is a problem of youth, 2) educational institutions offer easy access to young people and provide a relatively efficient forum for communicating pro-health messages, 3) young people are most likely to benefit from behavioral interventions since their behaviors and attitudes are less solidified, 4) young people have more potential to be influenced by others including their social environment and the media and, as demonstrated in this study, especially by their peers, and 5) today's youth will have great influence in their society in the near future as leaders, teachers, and parents.

Furthermore, officials from the Ministry of Education, the deans and professors from the educational institutes, and particularly the students, appeared to be open to the possibility of a school based intervention program. All but five students reported positive opinions about the study and a majority indicated that their participation in this survey was an educational experience in and of itself and that and HIV/AIDS intervention is vital for the health and well-being of today's youth in Armenia.

Limitations

A few limitations of this study are important to address. First, risky sexual behaviors, including number of partners, inconsistent condom use, early sexual initiation, and casual sex (engaging in sexual intercourse after no more than a few days of knowing partner) were evidenced in this study, particularly by the male respondents. It is important to note, however, that this sample may be considered less risky among the young adult population in Armenia. According to the Ministry of Science and Education, the students in the higher education institutes represent anywhere from 1/3 to 1/2 of the secondary school graduates in Armenia (Gasparyan, 2000). A majority of the youth, therefore, does not pursue higher education after secondary schooling. Instead, these young males pursue work, including traveling to other countries, join the military, or do neither, while young females pursue marriage. Based on this information, it is reasonable to assume that the sample in this study is a more conservative cross section of the larger youth population of Armenia.

Second, intentions to engage in sexual activity and a risky sexual history were among the constructs measured in this study. Intentions to engage in sexual activity involved the degree to which students intended to engage in 1) sex, 2) sex with a known partner only, 3) sex with an unfamiliar partner. Similarly, behaviors were considered risky with reports of 1) greater number of lifetime sexual partners, 2) earlier initiation of sexual intercourse, 3) sexual history (non-virgin vs. virgin), and 4) the length of time they got to know their partner before engaging in sexual intercourse. All of these factors can be considered risky under the assumption that adequate protection is not used during every sexual encounter. Since, of the sexually active students, approximately 25%

indicated not having used condoms during their last sexual intercourse and 51% reported

engaging in sexual intercourse after knowing their partner for less than a few days, it is

reasonable to assume that the above factors are an adequate measure of sexual risk taking

behavior.

Future Directions

The attitude/norm, intention, and behavior relationship has been adequately

examined in the literature, both in the context of the TRA and in other behavioral models.

Exploring the relationship of the predictor variables among each other (vertical model)

instead of the linear model used with attitudes/norms, intentions, and behaviors, should

be explored (DiClemente, 2001). This type of analysis has the potential to demonstrate

the associative relationship between one's own attitudes and the perceived beliefs of

one's social network.

Furthermore, since gender was found to be a key variable contributing to attitudes

and subjective norms, perhaps a theoretical model that is more sensitive to gender role

differences will provide greater insight in this regard.

Concluding Remarks

Although the fall of the former Soviet Union and the economic and political

instability of Armenia have contributed to the current threat for an epidemic, it is crucial

to realize that these changes also serve to provide an infrastructure supporting

intervention measures. The mass media and local and/or international non-governmental

organizations can have a significant role in communicating pro-health messages, both to

the public at large and in various institutional settings such as schools and the military.

This study shows it would be important to do so.

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Appendix A

Questionnaire

HIV/AIDS risk and protective factors of youth in Armenia

AIDS is a serious problem that threatens the lives of tens of millions of people around the world. This survey has been designed to identify the extent of risk behaviors of some of the young people in your community.

Please answer all questions as honestly as possible.

Please do not write your name anywhere on the survey. There will never be any attempt to identify anyone who completes this survey.

Instructions: Please **circle** the letter corresponding to the response that you choose for each of the following questions. Circle **only one** response for each question. Do not circle between responses.

In some questions you will be asked to make use of rating scales with four places; you are to choose the space on your response form which best describes your feelings or attitudes.

For example, if you were asked to rate how much you agree with the statement, "I enjoy school," you would pick from the following:

definitely disagree	disagree	neither agree nor disagree	agree	definitely agree
1	2	3	4	5

If you definitely agree with the statement, you would circle the number 5.
If you agree, you would circle the number 4.
If you neither agree nor disagree, you would circle the number 3.
If you disagree, you would circle the number 2.
If you definitely disagree, you would circle the number 1.

Thank you for your participation!

Questions 1 through 5 ask about personal information

1. A. What institute are you studying at? _____   B. Which department?_____

   C. What year?_____

2. A. How old are you? _____

   B. Are you married? _____   1. Yes   2. No

3. What is your sex?   1. Male   2. Female

4. What region or city in Armenia is your family from? _____

5. Which type of family structure best characterizes the family that you were raised in? Please choose only ONE of the following

   1. I was raised by both parents living in the same home.
   2. I was raised by both parents who did not live in the same home.
   3. I was raised in a one-parent home by my mother.
   4. I was raised in a one-parent home by my father.
   5. I was raised by one or both of my grandparents.
   6. I was raised by other family.
   7. Other (please specify _____)

Questions 6 through 9 ask about who you feel comfortable talking to.

6. When you want to discuss sensitive issues (i.e. relationships, sex, drugs) which parent do you feel more comfortable talking to?
   1. Mother
   2. Father
   3. Neither
   4. Either mother or father, depending on the topic.

7. Do you have **friends** with whom you feel comfortable discussing sensitive issues?
    1. Yes
    2. No
    3. I'm not sure

8. Do you have **teachers** with whom you feel comfortable discussing sensitive issues?
    1. Yes
    2. No
    3. I'm not sure

9. Besides your parents and your teachers at school, is there any **other adult** in your life with whom you feel comfortable talking about sensitive issues (i.e. relationships, marriage, sex, drugs)?
    1. Yes
        9a - If yes, how many are related _____   9b- how many are non-related _____
    2. No

| Questions 10 through 16 ask about smoking cigarettes. |

10. Have you ever tried cigarette smoking, even one or two puffs?
    1. Yes
    2. No

11. How old were you when you smoked a whole cigarette for the first time?

    1. I have never smoked a whole cigarette
    2. 10 or less
    3. 11 or 12 years old
    4. 13 or 14 years old
    5. 15 or 16 years old
    6. 17 or 18 years old
    7. 19 or 20 years old
    8. 21 years or older

12. During the past **30 days**, on how many days did you smoke cigarettes?

    1. No days
    2. 1 or 2 days
    3. 3 to 5 days
    4. 6 to 9 days
    5. 10 to 19 days
    6. 20 to 29 days
    7. All 30 days

13. During the past 30 days, on the days you smoked, how many cigarettes did you smoke **on average per day**?
    1. I did not smoke cigarettes in the past 30 days
    2. Less than 1 cigarette per day
    3. 1 cigarette per day
    4. 2 to 5 cigarettes per day
    5. 6 to 10 cigarettes per day
    6. 11 to 20 cigarettes per day
    7. More than 20 cigarettes per day

14. Have you ever tried **to quit** smoking cigarettes?

    1. Yes   2. No   3. I have never smoked

15. From the listed relatives or other close people in your life, which one has ever smoked or is now smoking CIGARETTES?

   1. Mother
   2. Father
   3. Brother(s)
   4. Sister(s)
   5. Aunt(s)
   6. Uncles(s)
   7. Grandfather
   8. Grandmother
   9. Close Friends
   10. Spouse

Questions 16 through 26 ask about ALCOHOL use. This includes drinking beer, wine, oghi, cognac, champagne, and others liquors. For these questions, drinking a few sips of alcohol during festive occasions do not count.

16. I BELIEVE THAT

		definitely disagree	disagree	neither agree nor disagree	agree	definitely agree
a.	it is OK for me to drink alcohol once in a while	1	2	3	4	5
b.	it is OK for me to say "No" to drinking when **friends** offer me a drink	1	2	3	4	5
c.	it is OK for me to say "No" to drinking when **family members** offer me a drink	1	2	3	4	5
d.	it is OK for me to drink when I'm alone	1	2	3	4	5
e.	alcohol is harmful to my health	1	2	3	4	5
f.	alcohol is harmful to my relationships	1	2	3	4	5
g.	it is OK for me to get drunk every once in a while	1	2	3	4	5

17. MY PARENTS BELIEVE THAT

a.	it is OK for me to say "No" to drinking when **family members** offer me a drink	1	2	3	4	5
b.	it is ok for one to drink every once in a while	1	2	3	4	5
c.	it is ok to get drunk every once in a while	1	2	3	4	5

18. MY FRIENDS BELIEVE THAT

a.	it is OK for me to say "No" to drinking when **friends** offer me a drink	1	2	3	4	5
b.	it is ok for one to drink every once in a while	1	2	3	4	5
c.	it is ok to get drunk every once in a while	1	2	3	4	5

19. OTHER ADULTS BELIEVE THAT

a.	it is OK for one to drink every once in a while	1	2	3	4	5
b.	it is OK for one to get drunk every once in a while	1	2	3	4	5

20. I PLAN TO

a.	sometimes drink alcoholic beverages	1	2	3	4	5
b.	say "No" to drinking alcohol when my **friends** offer me a drink	1	2	3	4	5
c.	say "No" to drinking alcohol when my **family members** offer me a drink	1	2	3	4	5
d.	sometimes drink alone	1	2	3	4	5
e.	sometimes get drunk	1	2	3	4	5

21. HAVE YOU EVER

a.	said "No" to your **friends** when they offered you alcohol	1. YES	2. NO	3. haven't asked
b.	said "No" to **family members** when they offered you alcohol	1. YES	2. NO	3. haven't offered
c.	used alcohol when you were alone	1. YES	2. NO	3. haven't offered
d.	had health problems because you used alcohol	1. YES	2. NO	3. haven't offered
e.	had relationship problems because you used alcohol	1. YES	2. NO	3. haven't offered
f.	been drunk	1. YES	2. NO	3. I don't know

22. How often do you drink alcohol?

1. I never drink alcohol
2. Once a month or less
3. A few times a month
4. Once a week
5. A few times a week
6. Every day

23. How old were you when you had your first drink of alcohol other than a few sips?

1. I have never drank alcohol
2. 10 or less
3. 11 or 12 years old
4. 13 or 14 years old
5. 15 or 16 years old
6. 17 or 18 years old
7. 19 or 20 years old
8. 21 years or older

24. During the past 30 days, on how many days did you have at least **one** drink of alcohol?

1. 0 days
2. 1 or 2 days
3. 3 to 5 days
4. 6 to 9 days
5. 10 to 19 days
6. 20 to 29 days
7. All 30 days

25. During the past 30 days, on how many days did you have **5 or more** drinks of alcohol in a row, that is, within a couple of hours?

1. 0 days
2. 1 day
3. 2 days
4. 3 to 5 days
5. 6 to 9 days
6. 10 to 19 days
7. 20 or more days

26. From the listed relatives or other close people in your life, which one has ever had problems with drinking?

1. Mother
2. Father
3. Brother(s)
4. Sister(s)
5. Aunt(s)
6. Uncles(s)
7. Grandfather
8. Grandmother
9. Close Friends
10. Spouse

		definitely disagree	disagree	neither agree nor disagree	agree	definitely agree

27. I BELIEVE THAT

		definitely disagree	disagree	neither agree nor disagree	agree	definitely agree
a.	it is ok to have premarital sex	1	2	3	4	5
b.	it is OK to have premarital sex ONLY with someone you have known for a long time	1	2	3	4	5
c.	it is OK to have premarital sex with someone whom they do not know very well	1	2	3	4	5
d.	in order to protect oneself from STD's, one should use a condom during sex	1	2	3	4	5
e.	someone my age should use condoms ONLY if he/she does not know his partner very well	1	2	3	4	5
f.	my social environment will relate to me negatively if I have premarital sex	1	2	3	4	5
g.	unprotected sexual activity may pose harm to my health	1	2	3	4	5

28. MY PARENTS/GUARDIANS BELIEVE THAT

a.	it is ok to have premarital sex	1	2	3	4	5
b.	it is OK to have premarital sex with someone ONLY if one knows them very well	1	2	3	4	5
c.	it is OK to have sex with someone whom you don't know very well	1	2	3	4	5

29. MY FRIENDS BELIEVE THAT

a.	it is ok to have premarital sex	1	2	3	4	5
b.	it is OK to have premarital sex with someone ONLY if one knows them very well	1	2	3	4	5
c.	it is OK to have sex with someone whom you don't know very well	1	2	3	4	5

30. OTHER ADULTS BELIEVE THAT

a.	it is ok to have premarital sex	1	2	3	4	5
b.	it is OK to have premarital sex with someone ONLY if one knows them very well	1	2	3	4	5
c.	it is OK to have sex with someone whom you don't know very well	1	2	3	4	5

31. I PLAN TO

a.	have premarital sex	1	2	3	4	5
b.	only have sex when I've known my partner for a long time	1	2	3	4	5
c.	have sex with someone even if I've known them for a short time	1	2	3	4	5
d.	use a condom during sex so that I can protect myself from STDs	1	2	3	4	5
e.	use condoms only if I do not know my partner very well	1	2	3	4	5

32. Have you ever said "No" to someone who asked you to have sex?   1. YES   2. NO   3. Haven't offered

33. Dave you ever had sexual intercourse?   1. YES   2. NO

34. Do you know what a condom is?
      1. Yes   2. No

35. Have you usually use condoms?
      1. I don't know what that is
      2. yes
      3. no

      A. If no, state why, mark yes or no for each.

            1. I don't have sex
            2. condoms are expensive
            3. condoms are hard to find
            4. I don't find them to be necessary
            5. it is not acceptable to me or to my partner
            6. I use other methods of contraception
            7. other (please note _____

36. Is your decision to use a condom dependent on how well you know your partner?

            1. Never   2. Sometimes   3. Often   4. Always   5. I don't have sex

37. If you have sex, how often do you use condoms?

            1. Never   2. Sometimes   3. Often   4. Always   5. I don't have sex

38. How often do you date someone before you have sex with them?

      1. a few days   2. A few months   3. More than 6 months   4. I don't have sex

39. How old were you when you had sexual intercourse for the first time?

      1. I was _____ years old
      99. I have never had sex

40. During your life, with how many people have you had sexual intercourse?

      1. with _____ people
      99. I have never had sex

41. The last time you had sex, which ONE method of contraception did you or your partner use?

      1. I have never had sex
      2. we didn't use any methods
      3. birth control pills
      4. condoms
      5. withdrawal
      6. rhythm method
      7. other methods (please note which _____)
      8. I don't know

Do not answer if you are male.
42. Have you ever had an abortion

      1. yes   if yes, how many times (42a) _____
      2. no

43. have you ever been pregnant or gotten someone else pregnant?

      1. yes   if yes, how many items (43a)
      2. no
      3. I'm not sure

Questions 44 through 48 ask about the use of illegal drugs.

44. Have you ever tried drugs such as hashish, opium, cocaine, methamphetamines, and others?

    A. Yes

        Please specify any drugs you have ever tried (list all)

        44a_____ _____

    B. No

45. During your life, how many times have you used drugs?

    1. 0 times
    2. 1 or 2 times
    3. 3 to 9 times
    4. 10 to 19 times
    5. 20 to 39 times
    6. 40 to 99 times
    7. 100 or more times

46. How old were you when you first tried drugs?

    1. I have never tried drugs
    2. 10 or less
    3. 11 or 12 years old
    4. 13 or 14 years old
    5. 15 or 16 years old
    6. 17 or 18 years old
    7. 19 or 20 years old
    8. 21 years or older

47. During the past 30 days, how many times have you used drugs?

    1. 0 times
    2. 1 or 2 times
    3. 3 to 9 times
    4. 10 to 19 times
    5. 20 to 39 times
    6. 40 or more times

48. From the listed relatives or other close people in your life, which one has ever had problems with drugs?

    1.   Mother
    2.   Father
    3.   Brother(s)
    4.   Sister(s)
    5.   Aunt(s)
    6.   Uncles(s)
    7.   Grandfather
    8.   Grandmother
    9.   Close Friends
    10.   Spouse

Questions 49 through 62 ask about your knowledge of AIDS.

49. Have you ever been taught about AIDS or HIV infection in school?	1. YES	2. NO	3. Don't know
50. A person can get AIDS from sharing needles to inject drugs.	1. True	2. False	3. Don't Know
51. A person can get AIDS from using public toilets.	1. True	2. False	3. Don't Know
52. A person can get AIDS from having a blood test even if the instruments are sterile.	1. True	2. False	3. Don't Know
53. A person can get AIDS from having sex without using a condom.	1. True	2. False	3. Don't Know
54. A person can get AIDS from holding hands with someone.	1. True	2. False	3. Don't Know
55. People can reduce their chances of becoming infected with the AIDS virus by not having any kind of sex with an IV drug user.	1. True	2. False	3. Don't Know
56. Anyone who has the AIDS virus can infect someone else during sex.	1. True	2. False	3. Don't Know
57. A pregnant woman who has the AIDS virus can infect her unborn baby.	1. True	2. False	3. Don't Know
58. Only men who have sex with other men get AIDS.	1. True	2. False	3. Don't Know
59. People can reduce their chances of becoming infected with the AIDS virus by not having any kind of sex (being abstinent).	1. True	2. False	3. Don't Know
60. A person can get AIDS from being bitten by mosquitoes/ insects.	1. True	2. False	3. Don't Know
61. There is a cure for AIDS.	1. True	2. False	3. Don't Know

62. From where or from who did you learn about AIDS?

    A.   Your parent(s)
    B.   Your friend(s)
    C.   Your teacher(s)
    D.   Other adults
    E.   Your doctor
    F.   From books or newspapers
    G.   TV or Radio
    H.   Other (please specify _____)

63. Please state your opinion about the importance of this _____
_____
_____
_____
_____
_____

Thank you for your participation!

ՁԻԱՀ -ի (ՍՊԻԴ-ի) ռիսկի և պաշտպանության գործոնների գնահատման հետապոտություն Հայաստանի երիտասարդության շրջանում

Ձեռքբերովի իմունանբավարարության համախտանիշը (ՁԻԱՀ կամ ՍՊԻԴ) լուրջ պրոբլեմ է, որն ապառնում է տասնյակ միլիոնավոր մարդկանց կյանքին ողջ աշխարհում: Այս հետապոտությունը նպատակ ունի պարզելու ՁԻԱՀ-ով վարակվելու առումով վտանգավոր վարքագծերի տարածվածության աստիճանը Հայաստանի երիտասարդության շրջանում:

Խնդրում ենք պատասխանել հնարավորին չափ անկեղծ սույն հարցաթերթիկում առաջադրված բոլոր հարցերին:

Ձեր անունը հարցաթերթիկի վրա մի գրեք: Համոզված եղեք, որ ոչ ոք երբեք փորձ չի անի կարկելու որևէ հարցաթերթիկ լրացնողի ինքնությունը:

Ինչպես լրացնել հարցաթերթիկը. Յուրաքանչյուր հարցին պատասխանելիս շրջանակի մեջ վերցրեք Ձեր ընտրած պատասխանի դիմաց գրված թիվը: Յուրաքանչյուր հարցի համար ընտրեք միայն մեկ պատասխան: Որոշ հարցերում Ձեզանից կպահանջվի արտահայտել Ձեր համաձայնության աստիճանը 5 նիշանի սանդղակի միջոցով: Դուք պետք է ընտրեք այդ 5 նիշերից այն, որը լավագույնս ներկայացնում է Ձեր կարծիքը:

Օրինակ. Երե Ձեզ առաջարկվում է պատասխանել, թե որքանո՞վ եք համաձայն «Ես հաճույքով եմ հաճախում դասախոսություններին» պնդման հետ, ապա Դուք պետք է ընտրեք հետևյալ պատասխաններից որևէ մեկը.

բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
1	2	3	4	5

Երե բոլորովին համաձայն չեք պնդման հետ, շրջանակի մեջ վերցրեք 1 թվանշանը:
Երե համաձայն չեք, շրջանակի մեջ վերցրեք 2 թվանշանը:
Երե ոչ համաձայն եք, ոչ էլ՝ ոչ, շրջանակի մեջ վերցրեք 3 թվանշանը:
Երե համաձայն եք, շրջանակի մեջ վերցրեք 4 թվանշանը:
Երե լիովին համաձայն եք, շրջանակի մեջ վերցրեք 5 թվանշանը:

1-ից 5 հարցերը Ձեր անձնական տվյալների մասին են:

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1. A. Ո՞ր ԲՈՒՀ-ում եք սովորում. ----------------- B. Ո՞ր Ֆակուլտետում եք սովորում. -----------------

   C. Ո՞ր կուրսում եք սովորում. -----------------

2. A. Քանի՞ տարեկան եք. -------------- B. Արդյոք Դուք ամուսնացա՞ծ եք.   (1). Այո   (2). Ոչ

3. Ի՞նչ սեռի եք պատկանում.   (1). Արական   (2). Իգական

4. Հայաստանի ո՞ր մարզում է բնակվում Ձեր ընտանիքը. ----------------------

5. Ինչպիսի՞ն է ընտանիքը, որում Դուք մեծացել եք: Խնդրում ենք ընտրել հետևյալներից միայն ՄԵԿԸ.

   (1).   Ինձ մեծացրել են միևնույն տանը ապրող երկու ծնողներս:
   (2).   Ինձ մեծացրել են երկու ծնողներս, որոնք միևնույն տանը չէին ապրում:
   (3).   Ինձ մեծացրել է մայրս մեկ ծնողով տան մեջ:
   (4).   Ինձ մեծացրել է հայրս մեկ ծնողով տան մեջ:
   (5).   Ինձ մեծացրել են տատս կամ պապս միասին, կամ նրանցից մեկը:
   (6).   Ինձ մեծացրել է այլ ազգական:
   (7).   Այլ (խնդրում ենք նշել) --(q5a)

6. Երբ ուզում եք նորը հարցերի մասին վրուցել (օրինակ՝ սիրային հարաբերություններ, սեքս, թմրադեղերի գործածություն), ձեր ծնողներից որի ՞ հետ եք ավելի անկեղծ կարողանում վրուցել:

(1).   Մորս   (3).   Ոչ մեկի
(2).   Հորս   (4).   Մորս կամ հորս՝ կախված թեմայից

7. Ունե ՞ք արդյոք **ընկերներ (նշանած, ամուսին)**, որոնց հետ կարող եք անկեղծ վրուցել խիստ անձնական հարցերի մասին:

(1).   ԱՅՈ
(2).   ՈՉ
(3).   Վստահ չեմ

8 . Ունե ՞ք արդյոք **դասախոս(ներ)**, որոնց հետ կարող եք անկեղծ վրուցել խիստ անձնական հարցերի մասին:

(1).   ԱՅՈ
(2).   ՈՉ
(3).   Վստահ չեմ

9 . Ձեր կյանքում կա ՞ որևէ այլ չափահաս, որի հետ կարող եք անկեղծ վրուցել խիստ անձնական հարցերի մասին (օրինակ՝ սիրային հարաբերությունների, սեքսի, թմրադեղերի):

(1).   ԱՅՈ
         Եթե այո, քանի ՞ն են ձեզ ազգական (q9a)————————— Քանի ՞ն են ձեզ ոչ–ազգական (q9b)————————
(2).   ՈՉ

10 . Երբևէ փորձե ՞լ եք ծխել, թեկուզ՝ մեկ-երկու անգամ ծունխը ներս քաշել:

(1).   ԱՅՈ
(2).   ՈՉ

11 . Քանի ՞ տարեկան էիք, երբ առաջին անգամ մեկ լրիվ ծխախոտ ծխեցիք:

(1).   Երբեք մեկ լրիվ ծխախոտ չեմ ծխել
(2).   10 տարեկան կամ ավելի փոքր
(3).   11 - 12 տարեկան
(4).   13 - 14 տարեկան
(5).   15 - 16 տարեկան
(6).   17 - 18 տարեկան
(7).   19 - 20 տարեկան
(8).   21 տարեկան կամ ավելի մեծ

12 . Վերջին **30 օրվա ընթացքում** քանի ՞ օր եք ծխախոտ ծխել:

(1).   Ոչ մի օր
(2).   1–ից 2 օր
(3).   3 –ից 5 օր
(4).   6 –ից 9 օր
(5).   10–ից 19 օր
(6).   20–ից 29 օր
(7).   Բոլոր 30 օրերը

3. Վերջին **30 օրվա ընթացքում**, այն օրերին, երբ ծխել եք, միջինում օրեկան քանի ՝ հատ ծխախոտ եք ծխել:

(1). Վերջին 30 օրվա ընթացքում ծխախոտ չեմ ծխել
(2). 1 ծխախոտից պակաս
(3). 1 ծխախոտ
(4). 2–ից 5 ծխախոտ
(5). 6–ից 10 ծխախոտ
(6). 11-ից 20 ծխախոտ
(7). 20 ծխախոտ ից ավելի

4. Երբևէ փորձե ՝լ եք ամբողջովին թողնել ծխելը:

(1). ԱՅՈ (2). ՈՉ (3). Երբեք չեմ ծխել

5. Նշեք, թե Ձեր հետևյալ հարապատներից կամ մտերիմներից ո ՝վ է երբևէ **ծխախոտ** ծխել.

A. Մայր
B. Հայր
C. Եղբայր(ներ)
D. Քույր(եր)
E. Մորա–հորաքույր(ներ)
F. Մոր–հորեղբայր(ներ)
G. Պապ
H. Տատ
I. Մտերիմ ընկեր(ներ)
J. Ամուսին

16-ից 26 հարցերը վերաբերվում են ալկոհոլի գործածությանը: Դա ներառում է գարեջուրը, գինին, օղին, կոնյակը, շամպայնը և լիկյորները. (*Այս հարցերը չեն վերաբերվում հանդիսավոր առիթով մի քանի կում խմելուն:*)

շեք, խնդրեմ, թե որքանո ՝ վ եք համաձայն հետևյալ կարծիքներից յուրաքանչյուրին.

ւ. Ես կարծում եմ, որ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). Ընդունելի է, որ ես երբեմն ալկոհոլային խմիչք խմեմ	1	2	3	4	5
(b). Ընդունելի է, որ մերժեմ **ընկերներիս**, երբ առաջարկեն ինձ խմել	1	2	3	4	5
(c). Ընդունելի է, որ մերժեմ **ընտանիքիս անդամներին**, երբ առաջարկեն ինձ խմել	1	2	3	4	5
(d). Ընդունելի է, որ ես երբեմն միայնակ խմեմ	1	2	3	4	5
(e). Ալկոհոլը վնասակար է իմ առողջության համար	1	2	3	4	5
(f). Ալկոհոլը կարող է խանգարել շրջապատի հետ իմ փոխհարաբերություններին	1	2	3	4	5
(g). Ընդունելի է, որ ես երբեմն հարբեմ	1	2	3	4	5

17. Իմ ծնողները կարծում են, որ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). Ընդունելի է, որ մերժեմ **ընտանիքիս անդամներին**, երբ առաջարկեն ինձ խմել	1	2	3	4	5
(b). Ընդունելի է, որ մարդ երբեմն խմի	1	2	3	4	5
(c). Ընդունելի է, որ մարդ երբեմն հարբի	1	2	3	4	5

18. Իմ ընկերները կարծում են, որ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). Ընդունելի է, որ մերժեմ **ընկերներիս**, երբ առաջարկեն ինձ խմել	1	2	3	4	5
(b). Ընդունելի է, որ մարդ երբեմն խմի	1	2	3	4	5
(c). Ընդունելի է, որ մարդ երբեմն հարբի	1	2	3	4	5

19. Իմ շրջապատի մարդիկ կարծում են, որ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). Ընդունելի է, որ մարդ երբեմն խմի	1	2	3	4	5
(b). Ընդունելի է, որ մարդ երբեմն հարբի	1	2	3	4	5

20. Ես մտադիր եմ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). երբեմն ալկոհոլային խմիչք գործածել	1	2	3	4	5
(b). հրաժարվել ընկերներիս առաջարկով խմելուց, եթե չեմ ցանկանում	1	2	3	4	5
(c). հրաժարվել ընտանիքիս առաջարկով խմելուց, եթե չեմ ցանկանում	1	2	3	4	5
(d). երբեմն խմել, երբ միայնակ եմ	1	2	3	4	5
(e). երբեմն հարբել	1	2	3	4	5

21. Դուք երբևէ.

(a). «ոչ» ասե՞լ եք, երբ **Ձեր ընկերն** առաջարկել է Ձեզ խմել	(1). ԱՅՈ	(2). ՈՉ	(3). Չեն առաջարկել
(b). «ոչ» ասե՞լ եք, երբ **Ձեր ընտանիքի անդամն** առաջարկել է Ձեզ խմել	(1). ԱՅՈ	(2). ՈՉ	(3). Չեն առաջարկել
(c). ալկոհոլ օգտագործե՞լ եք, երբ մենակ եք եղել	(1). ԱՅՈ	(2). ՈՉ	
(d). ալկոհոլ օգտագործելու պատճառով առողջական խնդիրներ ունեցե՞լ եք	(1). ԱՅՈ	(2). ՈՉ	(3). Չեն առաջարկել
(e). ալկոհոլ օգտագործելու պատճառով շրջապատի հետ փոխհարաբերությունների խնդիր ունեցե՞լ եք	(1). ԱՅՈ	(2). ՈՉ	(3). Չեն առաջարկել
(f). հարբե՞լ եք	(1). ԱՅՈ	(2). ՈՉ	(3). Չգիտեմ

22.. Սովորաբար որքա ՞ն հաճախ եք Դուք ալկոհոլային խմիչք օգտագործում

(1).   երբեք չեմ օգտագործում
(2).   ամիսը 1 անգամ կամ ավելի հազվադեպ
(3).   ամիսը մի քանի անգամ
(4).   շաբաթը 1 անգամ
(5).   շաբաթը մի քանի անգամ
(6).   ամեն օր

23. Քանի ՞ տարեկան էիր, երբ առաջին անգամ ալկոհոլային խմիչք խմեցիր, չհաշված մի քանի կումը

(1).   Ես երբեք մի քանի կումից ավելի շատ ալկոհոլային խմիչք չեմ խմել
(2).   10 տարեկան կամ ավելի փոքր
(3).   11 - 12 տարեկան
(4).   13 - 14 տարեկան
(5).   15 - 16 տարեկան
(6).   17 - 18 տարեկան
(7).   19 - 20 տարեկան
(8).   21 տարեկան կամ ավելի մեծ

24. Վերջին **30 օրվա** ընթացքում քանի ՞ օր եք առնվազն **մեկ** բաժակ ալկոհոլային խմիչք խմել

(1).   Ոչ մի օր
(2).   1–ից 2 օր
(3).   3 –ից 5 օր
(4).   6 –ից 9 օր
(5).   10–ից 19 օր
(6).   20–ից 29 օր
(7).   Բոլոր 30 օրերը

25. Վերջին **30 օրվա** ընթացքում քանի ՞ օր եք իրար ետևից **5 կամ ավելի** բաժակ ալկոհոլային խմիչք խմել ընդ–ամենը մի քանի ժամվա ընթացքում

(1).   Ոչ մի օր
(2).   1 օր
(3).   2 օր
(4).   3 –ից 5 օր
(5).   6–ից 9 օր
(6).   10–ից 19 օր
(7).   20 օր կամ ավելի

26. Նշեք, թե Ձեր հետևյալ հարազատներից կամ մտերիմներից ո ՞վ է երբևէ **հարբեցողության** պրոբլեմ ունեցել.

A.   Մայր
B.   Հայր
C.   Եղբայր(ներ)
D.   Քույր(եր)
E.   Մորա–հորաքույր(ներ)
F.   Մոր–հորեղբայր(ներ)
G.   Պապ
H.   Տատ
I.   Մտերիմ ընկեր(ներ)
J.   Ամուսին

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27. Ես կարծում եմ, որ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). Կարելի է արտամուսնական սեռական հարաբերություն ունենալ	1	2	3	4	5
(b). Կարելի է արտամուսնական սեռական հարաբերություն ունենալ **միայն** այն մարդու հետ, որին երկար ժամանակ ճանաչում ես	1	2	3	4	5
(c). Կարելի է արտամուսնական սեռական հարաբերություն ունենալ **քիչ** ծանոթ մարդու հետ	1	2	3	4	5
(d). Որպեսզի մարդ պաշտպանվի սեռական ճանապարհով փոխանցվող հիվանդություններից, պետք է պահպանակ (պրեզերվատիվ) օգտագործծի	1	2	3	4	5
(e). Մարդ պետք է պահպանակ (պրեզերվատիվ) օգտագործծի **միայն** այն դեպքում, երբ իր զուգընկերոջը վատ է ճանաչում	1	2	3	4	5
(f). Իմ շրջապատը ինձ վատ կվերաբերվի, եթե ես ապրեմ արտամուսնական սեռական կյանքով	1	2	3	4	5
(g). Չպաշտպանված սեռական հարաբերությունները կարող են վտանգ ներկայացնել իմ առողջության համար	1	2	3	4	5

28. Իմ ծնողները կարծում են, որ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). Կարելի է արտամուսնական սեռական հարաբերություն ունենալ	1	2	3	4	5
(b). Կարելի է արտամուսնական սեռական հարաբերություն ունենալ **միայն** այն մարդու հետ, որին երկար ժամանակ ճանաչում ես	1	2	3	4	5
(c). Կարելի է սեռական հարաբերություն ունենալ **քիչ** ծանոթ մարդու հետ	1	2	3	4	5

29. Իմ ընկերները կարծում են, որ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). Կարելի է արտամուսնական սեռական հարաբերություն ունենալ	1	2	3	4	5
(b). Կարելի է արտամուսնական սեռական հարաբերություն ունենալ **միայն** այն մարդու հետ, որին երկար ժամանակ ճանաչում ես	1	2	3	4	5
(c). Կարելի է սեռական հարաբերություն ունենալ **քիչ** ծանոթ մարդու հետ	1	2	3	4	5

30. Իմ շրջապատի մարդիկ կարծում են, որ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). Կարելի է արտամուսնական սեռական հարաբերություն ունենալ	1	2	3	4	5
(b). Կարելի է արտամուսնական սեռական հարաբերություն ունենալ **միայն** այն մարդու հետ, որին երկար ժամանակ ճանաչում ես	1	2	3	4	5
(c). Կարելի է սեռական հարաբերություն ունենալ **քիչ** ծանոթ մարդու հետ	1	2	3	4	5

31. Ես մտադիր եմ.

	բոլորովին համաձայն չեմ	համաձայն չեմ	ոչ համաձայն եմ, ոչ էլ՝ ոչ	համաձայն եմ	լիովին համաձայն եմ
(a). Ունենալ արտամուսնական սեռական հարաբերություն	1	2	3	4	5
(b). Արտամուսնական սեռական հարաբերություն ունենալ **միայն** այն դեպքում, եթե երկար ժամանակ ճանաչում եմ պոտենկ ընկերոջս	1	2	3	4	5
(c). Արտամուսնական սեռական հարաբերություն ունենալ **քիչ** ծանոթ մարդու հետ	1	2	3	4	5
(d). Բոլոր դեպքերում պահպանակ (պրեզերվատիվ) օգտագործել սեռական հարաբերության ժամանակ	1	2	3	4	5
(e). Պահպանակ (պրեզերվատիվ) օգտագործել **միայն** այն դեպքում, երբ պոտենկ ընկերոջս վատ եմ ճանաչում	1	2	3	4	5

32. Դուք երբևէ «ոչ» ասե՞լ եք, երբ որևէ մեկը Ձեզ սեռական հարաբերություն է առաջարկել (1). ԱՅՈ (2). ՈՉ (3). Չեն առաջարկել

33. Դուք երբևէ սեռական հարաբերություն ունեցե՞լ եք   (1). ԱՅՈ   (2). ՈՉ

34. Գիտե՞ք, թե ինչ է պահպանակը   (1). ԱՅՈ   (2). ՈՉ

35. Դուք ընդհանրապես պահպանակ օգտագործու՞մ եք

(1). Չգիտեմ թե դա ինչ է
(2). ԱՅՈ
(3). ՈՉ

A. Եթե ՈՉ, ինչ՞ու չեք օգտագործում (խնդրում ենք նշել բոլոր համապատասխան տարբերակները).

(1). Սեռական հարաբերություն չեմ ունենում
(2). Պահպանակը թանկ է
(3). Պահպանակը դժվար է ճարվում
(4). Անհրաժեշտ չեմ համարում
(5). Ընդունելի չէ իմ կամ պուզրընկերոջս համար
(6). Օգտագործում եմ հղիությունը կանխելու այլ միջոց
(7). Այլ (նշեք---------------------35a7a)

36. Սեռական հարաբերության ժամանակ պահպանակ օգտագործելու որոշումը կախվա՞ծ է այն բանից, թե որքան լավ եք ճանաչում ձեր պուզրընկերոջը

(1). Երբեք   (2). Երբեմն   (3). Հաճախ   (4). Միշտ   (5). Սեռական հարաբերություն չեմ ունենում

37. Երբ սեռական հարաբերություն եք ունենում, որքա՞ն հաճախ եք պահպանակ օգտագործում

(1). Երբեք   (2). Երբեմն   (3). Հաճախ   (4). Միշտ   (5). Սեռական հարաբերություն չեմ ունենում

38. Որքա՞ն ժամանակ եք հանդիպում մեկի հետ նախքան սեռական հարաբերություն ունենալը

(1). Մի քանի օր   (2). Մի քանի ամիս   (3). 6 ամսից ավելի   (4). Սեռական հարաբերություն չեմ ունենում

39. Քանի՞ տարեկան էիք, երբ առաջին անգամ սեռական հարաբերություն ունեցաք

(1). ------------- տարեկան էի

(99). Երբեք սեռական հարաբերություն չեմ ունեցել

40. Ձեր ամբողջ կյանքում քանի՞ հոգու հետ եք սեռական հարաբերություն ունեցել

(1). ------------- հոգու հետ

(99). Երբեք սեռական հարաբերություն չեմ ունեցել

41. Վերջին անգամ, երբ սեռական հարաբերություն եք ունեցել, դուք կամ ձեր պուզրընկերը հղիությունը կանխելու ի՞նչ միջոց եք օգտագործել: (Ընտրեք միայն ՄԵԿ պատասխան):

(1). Երբեք սեռական հարաբերություն չեմ ունեցել
(2). Ոչ մի միջոց չենք օգտագործել·
(3). Հակաբեղմնավորման հաբեր
(4). Պահպանակ (պրեզերվատիվ)
(5). Սեռական ակտի ընդհատում
(6). Օրացուցային մեթոդ
(7). Որևէ այլ միջոց (խնդրում ենք նշել----------------41a)
(8). Չգիտեմ

42. Երբևէ արիեստական վիժում (աբորտ) ունեցե՞լ եք:

    (1). ԱՅՈ   Եթե այո, քան՞ի անգամ----------------------------42a
    (2). ՈՉ

43. Դուք երբևէ հղիացե՞լ եք կամ մեկին հղիացրե՞լ եք   (1). ԱՅՈ   (2). ՈՉ   (3). Վստահ չեմ

    A. Եթե այո, քան՞ի անգամ-------------------------(43a)

44-ից 48 հարցերը վերաբերվում են թմրադեղերի գործածությանը:

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44. Երբևէ հաշիշ, օփիում, կոկաին, մետամֆետամիններ և այլ նման թմրադեղեր օգտագործե՞լ եք

    (1). ԱՅՈ
    (2). ՈՉ
Եթե այո, խնդրում եմ նշեք բոլոր թմրադեղերը, որ Դուք երբևէ օգտագործել եք

    44a--

45. Ձեր կյանքում քանի՞ անգամ եք թմրադեղ օգտագործել

    (1).   Ոչ մի անգամ
    (2).   1–ից 2 անգամ
    (3).   3 –ից 9 անգամ
    (4).   10 –ից 19 անգամ
    (5).   20–ից 39 անգամ
    (6).   40–ից 99 անգամ
    (7).   100 անգամ և ավելի

46. Քանի՞ տարեկան էիք, երբ առաջին անգամ թմրադեղ օգտագործեցիք

    (1).   Երբեք թմրադեղ չեմ օգտագործել
    (2).   10 տարեկան կամ ավելի փոքր
    (3).   11 - 12 տարեկան
    (4).   13 - 14 տարեկան
    (5).   15 - 16 տարեկան
    (6).   17 - 18 տարեկան
    (7).   19 - 20 տարեկան
    (8).   21 տարեկան կամ ավելի մեծ

47. Վերջին **30 օրվա** ընթացքում քանի՞ անգամ եք թմրադեղ օգտագործել

    (1).   Ոչ մի անգամ
    (2).   1–ից 2 անգամ
    (3).   3 –ից 9 անգամ
    (4).   10 –ից 19 անգամ
    (5).   20–ից 39 անգամ
    (6).   40 անգամ կամ ավելի

8. Նշեք, թե Ձեր հետնյալ հարապատներից կամ մտերիմներից ո՞վ է երբևէ **թմրամոլության** պրոբլեմ ունեցել.

    A. Մայր
    B. Հայր
    C. Եղբայր(ներ)
    D. Քույր(եր)
    E. Մորա-հորաքույր(ներ)
    F. Մոր-հորեղբայր(ներ)
    G. Պապ
    H. Տատ
    I. Մտերիմ ընկեր(ներ)
    J. Ամուսին

49-ից 62 հարցերը վերաբերվում են ՁԻԱՀ-ի (ՄՊԻԴ) մասին Ձեր իմացությանը:

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9. Դպրոցում կամ ԲՈՒՀ-ում երբևէ Ձեզ սովորեցրե՞լ են, թե ինչպես են վարակվում ՁԻԱՀ-ով
  (1). ԱՅՈ   (2). ՈՉ   (3). Չեմ հիշում

Նշեք, ճի՞շտ է թե սխալ հետևյալ կարծիքներից յուրաքանչյուրը.

0. ՁԻԱՀ -ով կարելի է վարակվել ուրիշի ասեղով թմրադեղ սրսկվելիս
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

1. ՁԻԱՀ -ով կարելի է վարակվել հասարակական վրգարանիg օգտվելիս
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

2. ՁԻԱՀ -ով կարելի է վարակվել արյան քննություն տալիս, նույնիսկ եթե ասեղը և բոլոր մյուս բժշկական պարագաները ախտահանված են
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

3. ՁԻԱՀ -ով կարելի է վարակվել առանց պահպանակի սեռական հարաբերություն ունենալիս
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

4. ՁԻԱՀ -ով կարելի է վարակվել ՁԻԱՀ-ով հիվանդի ձեռքը բռնելիս
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

5. Մարդիկ կարող են նվապեցնել ՁԻԱՀ -ով վարակվելու հավանականությունը՝ սեռական հարաբերություն չունենալով ներերակային թմրադեղ օգտագործող անձանց հետ
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

6. ՁԻԱՀ -ի վիրուսով վարակված անձը սեռական հարաբերության ժամանակ կարող է վարակել վուգրնկերոջը
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

7. ՁԻԱՀ - ի վիրուսով վարակված հղի կինը կարող է վարակել իր չծնված վավակին
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

8. Միայն այն տղամարդիկ, որ սեռական հարաբերություն են ունենում այլ տղամարդու հետ, կարող են վարակվել ՁԻԱՀ -ով
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

9. Մարդիկ կարող են նվապեցնել ՁԻԱՀ -ով վարակվելու հավանականությունը, եթե պաշտպանված սեռական հարաբերություն ունենան
  (1). ճիշտ է   (2). Սխալ է   (3). Չգիտեմ

Appendix B

Approval: LLU Institutional Review Board

INSTITUTIONAL REVIEW BOARD

Initial Approval Notice - Expedited Review

OSR # 40204

To: **Kiti Freier, PhD**

Department: **Psychology**

Protocol: *An assessment of HIV/AIDS risk and protective factors of adolescents in Armenia: application of the theory of reasoned action.*

Date: 08/17/2000

The protocol and consent form for this study were reviewed and approved administratively on behalf of the IRB. This decision includes the following determinations:

1. Risk to research subjects: **Risk - Minimal**

   . ....oval period begins **08/17/2000** and ends 08/...

3. Conditions of approval are: **<None Specified>**

Consent Form

If a written consent form is required, approval will be indicated by the affixed IRB approval stamp. This now becomes your official consent form for the dates specified and should be used as a master for making the necessary copies.

Adverse Events / Protocol Changes

The IRB should be notified in writing of any modifications to the approved research protocol. All adverse effects, anticipated or not, should be reported to the IRB: serious events should be reported within seven days; all others within 15 days.

Protocol Review

Your protocol is tentatively scheduled for review and renewal at the meeting of the IRB in
To assure uninterrupted approval of this project, you will be sent a status report form to complete and return prior to this date. In addition to reporting the number of subjects enrolled, you may close the study or request renewal at this time.

Records

All records relating to this project, including signed consent forms, must be kept on file for three years following completion of the study.

Please note the PI's name and the OSR number assigned your IRB application (as indicated **above) on any future communications with the IRB about this project. Direct all communications to the IRB c/o the Office of Sponsored Research.**

Thank you for your cooperation in LLU's shared responsibility for the ethical use of human subjects in research.

Signature of IRB Chair/Vice Chair: _____   Date: 8/17/00

Appendix C

Approval: Ministry of Education of Armenia

« 07 » 09 2000թ. N 06-23-141

ԵՐԵՎԱՆԻ Մ.ՀԵՐԱՑՈՒ ԱՆՎԱՆ ԲԺՇԿԱԿԱՆ
ՀԱՄԱԼՍԱՐԱՆԻ ՌԵԿՏՈՐ
ՊԱՐՈՆ Վ.ՀԱԿՈԲՅԱՆԻՆ

Հարգարժան ռեկտոր

Կից ուղարկում եմ Հայաստանի ամերիկյան համալսարանի կողմից ներկայացված «ՁԻԱՀ-ի (ՍՊԻԴ-ի) ռիսկի և պաշտպանության գործոնների գնահատման հետազոտություն Հայաստանի երիտասարդության շրջանում» հարցաթերթիկը:

Խնդրում եմ սեղմ ժամկետում կազմակերպել հարցաթերթիկի լրացման գործը և ներկայացնել Հայաստանի ամերիկյան համալսարան:

Հասցեն՝ Երևան-375019, Մ.Բաղրամյան պող., թ.40:

ՎԱՐՉՈՒԹՅԱՆ ՊԵՏ   Ռ.ԳԱՍՊԱՐՅԱՆ

Appendix D

Informed Consent

Loma Linda University
American University of Armenia

Informed Consent

You are invited to participate in a research study entitled: "A theoretical model for HIV/AIDS risk behaviors of students in Armenia."

<u>Purpose</u>
The purpose of this study is to learn more about the attitudes of young people regarding behaviors that might potentially be harmful to their health. This study is specifically designed to understand behaviors, which might put them at risk. As far as scientists know, some of these behaviors are not as much of a threat in Armenia as they are in other Eastern European countries such as Russia and the Ukraine. However, it is very important to understand the behaviors and attitudes of adolescents that may put their health at risk so that we can develop ways to help prevent such risks.

<u>Procedure</u>
With your consent, you will be given a questionnaire in class asking your opinions on beliefs of sexual activity, drug use, alcohol consumption, and condom use. Participation in the study will take about 45 minutes.

<u>Risks</u>
The types of questions you will be asked are sensitive and may cause some discomfort. However, you may stop at any time. Any information you reveal on this questionnaire will remain completely anonymous, and no effort will ever be made to identify you.

<u>Benefits</u>
The benefits to you are that you will become aware of the potential danger of some behaviors. Furthermore, the data gathered from this study will be used to understand the needs of adolescents in future prevention and education programs. This data can potentially be used to gather funds and resources from the diaspora to aid in the establishment of educational programs.

<u>Confidentiality</u>
No attempts will ever be made to identify individual responses by the researchers or their teachers. No one will be asked any identifiable information. The results will be summarized so that no one can be personally identified. No one will ever know what you report on the survey.

Page 1 of 2 _____ please initial

Participants' Rights
You are free to withdraw from this study at any time. Participation is completely voluntary and has no impact on academic performance in school.

Impartial Third Party Contact
If you wish to contact an impartial third party not associated with this study regarding any complaint you may have about the study, you may reach R. Gasparyan from the Ministry of Education at: 58-95-26.

Informed Consent
Please read the following and sign below for consenting to your participation in this study:

"I have read the contents of the consent form. My questions concerning this study have been answered to my satisfaction. I hereby give voluntary consent to participate in this study. Signing this consent document does not waive my rights nor does it release the investigators, institution or sponsors from their responsibilities. I may call Talin Babikian at 27-43-08 if I have additional questions or concerns."

Signature of Student   Date

_____   _____

LOMA LINDA UNIVERSITY
INSTITUTIONAL REVIEW BOARD
APPROVED 8|17|00 VOID AFTER 8|16|2001
#40204 CHAIR