

Rowan University

Rowan Digital Works

Theses and Dissertations

8-10-2009

Sexual behaviors of students studying abroad

Jenna Smith

Rowan University

Follow this and additional works at: <https://rdw.rowan.edu/etd>



Part of the [Psychology Commons](#)

Recommended Citation

Smith, Jenna, "Sexual behaviors of students studying abroad" (2009). *Theses and Dissertations*. 669.
<https://rdw.rowan.edu/etd/669>

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact graduateresearch@rowan.edu.

SEXUAL BEHAVIORS OF STUDENTS STUDYING ABROAD

by:
Jenna Smith

A Thesis

Submitted in partial fulfillment of the requirements of the
Master of Arts Mental Health Counseling Degree
of
The Graduate School
at
Rowan University
August 10, 2009

Thesis Chair: Dr. D.J. Angelone

© 2009 Jenna Smith

ABSTRACT

Jenna Smith
RISKY SEXUAL BEHAVIOR OF STUDENTS STUDYING ABROAD
2008/09
Dr. D.J. Angelone
Master of Arts in Mental Health Counseling

The purpose of this study was to explore the risky sexual behaviors of students studying abroad, given that prior research has shown that individuals on vacation and international travelers are engaging in riskier sexual behavior while away from home. Participants included NJ university students, between the ages 18-50, who are currently or have studied abroad within the past 6 years. Student information was obtained from Rowan University and each individual was emailed a link to an anonymous online survey. The survey included questions from the Rosenberg Self-Esteem Questionnaire, Relationship Scale Questionnaire, Relationship Questionnaire and questions based on prior research (Milhausen et al, 2006). The Triandis Model of Interpersonal Behavior was used to predict the sexual behavior using attachment style, self-esteem, peer relationships, situational factors and intentions. It was hypothesized that students studying abroad would engage in more risky sexual behavior while abroad than while they are home. Using a series of multiple regressions, the following were all found to be significant in predicting risky sexual behavior in study abroad students: intentions, (Wald = 10.50), habit (Wald = 3.395), and situational conditions (Wald = 3.593, 20.053). These findings may aid in understanding what tools young travelers should be equipped with prior to their journey in order to help prevent unsafe sexual behavior in young adults.

TABLE OF CONTENTS

List of Figures	v
List of Tables	vi
CHAPTER	PAGE
I. Introduction	1
Statement of the Problem	1
Purpose of the Study	1
II. Literature Review	2
III. Methodology	14
Participants	14
Definitions	14
Questionnaire Development	14
Materials	15
Procedure	19
IV. Findings	20
Prior and Abroad Sexual Behavior Experiences	20
Predicting Intentions Correlations	20
Predicting Behaviors Correlations	21
Predicting Intentions to Engage in Sexual Behavior While Abroad Analyses	24
V. Summary, Conclusions and Recommendations	27
Summary	27

Conclusions	27
Limitations	30
Recommendations	32
References	34
Appendices	37
Appendix A Theory of Interpersonal Behavior Model	37
Appendix B Correlation Tables	38
Appendix C Questionnaire	48

LIST OF FIGURES

FIGURES		PAGE
Figure 1	Triandis Theory of Interpersonal Behavior Model	37

LIST OF TABLES

TABLE		PAGE
Table 1	Predicting Intentions in Males	38
Table 2	Predicting Intentions in Females	38
Table 3	Predicting Behavior in Males – Oral Sex	38
Table 4	Predicting Behavior in Females – Oral Sex	38
Table 5	Predicting Behavior in Males – Vaginal Sex	38
Table 6	Predicting Behavior in Females – Vaginal Sex	38
Table 7	Predicting Behavior in Males – Anal Sex	38
Table 8	Predicting Behavior in Females – Anal Sex	38
Table 9	Predicting Behavior in Males – Condom Use	38
Table 10	Predicting Behavior in Females – Condom Use	38

CHAPTER I

Introduction

Statement of the Problem

Risky sexual behavior has been defined as entering into sexual intercourse, without the use of a condom (Forehand, Gound, Armistead, Longand, & Miller, 2005; Maticka-Tyndale, Mewhinney, Herold, 1998; Milhausen, Reece, Perera, 2006).

Additionally, some researchers have suggested that casual sex, having sexual intercourse with an individual just met that day or evening, can be classified as a subcategory of risky sexual behavior (Egan, 2001). Some individuals have reported more engagement in risky sex while they are traveling, as opposed to at home, due to factors such as situational conditions and peer influences (Egan, 2001). One large group of travelers is students who are studying abroad. These students have a heightened probability of engaging in risky sexual behavior and experiencing the subsequent negative consequences (Arvidson, Hellberg, Mardh, 1996).

Purpose of the Study

The purpose of this study was to explore the factors influencing a student's decision to engage in risky sexual behavior while studying abroad. Further understanding in this population may aid in the application of preventative measures possibly reducing the subsequent negative consequences of engaging in risky sexual behavior.

CHAPTER II

Literature Review

Sexual behaviors have changed considerably over the last century. For example, there has been an increase in the number of women engaging in sex by early adulthood. Between 1900 and 1930 the number of women who reported engaging in premarital sex by the age of 19 increased from 14% to 36% (Kinsey, Pomeroy, & Martin, 1953). This pattern of increase continued from the 1950s up until the mid 1980s, with the number of women having sex by age 20 rising from 48% to 72% (Finer, 2007). In 2000, approximately 74% of men and women reported engaging in sexual intercourse by the time they were 20 years old (Finer, 2007). This rise in adolescent sexual activity suggests that individuals are engaging in more sexual activity, and demonstrates increased comfort in reporting their age of sexual onset.

However, this increase in young adult sexual behavior may be associated with negative health consequences, such as contracting a sexually transmitted disease (STD). Lack of condom use during sexual intercourse increases an individual's risk of acquiring an STD (Morbidity and Mortality Weekly Report, 1997). Furthermore, it has been reported that STDs can be spread by a core group of individuals who do not use a condom, a small portion of whom are unaware of their infection. These individuals are thought to have many sexual partners, unknowingly infecting each one (Henderson, 1977). A larger number of the infected core group, however, is thought to be aware of their infection, but show little to no concern, do not use a condom and fail to tell their partners of the infection. These individuals tend to be slower in seeking treatment when

an STD is contracted, and do not complete treatment as directed, resulting in reinfection (Henderson, 1977). Individuals falling into this category do not seem to be consistent when it comes to informing their sexual partners of their infections, which heightens the risk of further spreading STDs. Educating individuals about these subgroups as well as the danger of risky sex could aid in decreasing the number of sexually transmitted disease cases.

Sexually transmitted diseases are a growing concern for adolescents, given their increased sexual activity among adolescents. Currently, the average age adolescents are first engaging in sexual intercourse is 15 years old (Kuo, St. Lawrence, 2006). Individuals that are having sex at younger ages also run a higher risk of engaging in risky sexual behavior because they are under informed of the possible health risks of engaging in sexual intercourse (Atwood, 2006). For example, becoming sexually active at the age of 15 would potentially increase the number of sexual partners compared to someone becoming sexually active in their twenties. Increasing the number of lifetime sexual partners increases the risk of contracting an STD (Mellanby, Phelps, Lawrence & Tripp, 1992). Of adolescents that are sexually active, 80 to 90% do not use condoms regularly (Forehand et al, 2005), which dramatically increases the risk of contracting an STD. In fact, about one quarter of the estimated 15 million new cases of sexually transmitted diseases reported annually in the U.S. occur in adolescents (Ozer, Brindis, Millstein, Knopf, & Irwin, 1998).

These risky sexual behaviors seem to be occurring in adolescent subgroups such as international backpackers (Egan, 2001), college students on spring break (Maticka-Tyndale et al, 1998) and college students on vacation (Milhausen et al, 2006). For

example, during Mardi Gras in New Orleans, 16% of participants reported engaging in oral sex, about one third (32%) engaged in vaginal sex and six percent engaged in anal sex with someone they met at Mardi Gras (Milhausen et al, 2006).

Lack of condom use is a major concern regarding individual's sexual behavior while traveling. While over 50% of international backpackers reported carrying condoms while traveling because they expected to have sex, only two thirds of them actually used a condom during sexual intercourse while traveling (Egan, 2001). In addition, 65.5% of tourists in England reported engaging in sex without protection (Eiser & Ford, 1995). The lack of condom use amongst travelers is problematic because the possibility of contracting an STD is increased. In fact, women who engage in sex while traveling have a more active STD history than women who have no sexual experience while traveling (Arvidson et al, 1996).

Given that travelers seem to be engaging in risky sexual behaviors, as evidenced by decreased condom use with individuals in which they have no committed relationship (Egan, 2001; Maticka-Tyndale et al, 1998; Milhausen et al, 2006), attempts have been made to understand why individuals are more likely to engage in risky sex while traveling as opposed to home. It has been suggested that individuals on vacation see it as an opportunity to experience or experiment with things that they normally would not do at home (Bloor, 1998). In fact, when individuals were asked in what situation they had engaged in sexual activity with someone they met that day or evening, 46% reported while away on vacation (Herold & Mewhinney, 1993). One explanation for the lowered inhibition could be the perception that there is no accountability or rules when on vacation (Bloor, 1998). Another possible explanation is people view themselves as a

different person while on vacation (Eiser and Ford, 1995). This sense of disinhibition may prompt an individual to act uncharacteristically, in an attempt to escape from their everyday routine.

As previously stated, many individuals are engaging in sexual behavior by age 15 (Kuo, St. Lawrence, 2006). This engagement at an early age increases the risk of negative consequences, such as contracting an STD. It is thought that many adolescents are not fully educated about STDs and safe sex when they become sexually active (Atwood, 2006). This lack of information is one factor that increases the risk of engaging in risky sexual behavior. A second factor that increases the risk of engaging in risky sexual behavior is multiple partners. When individuals engage in sex at younger ages, the number of potential sexual partners one might have is increased more as opposed to someone who waits until they are older (Mellanby, Phelps, Lawrence & Tripp, 1992). Individuals who engage in risky sexual behavior as an adolescent may be likely to continue the pattern into young adulthood, which could become problematic if that individual experiences the disinhibiting effects of travel.

Risky sexual behaviors of young adult travelers has been a recent area of interest among researchers. In order to understand the influences that affect the decision to engage or not engage in a certain behavior, researchers have developed predictive models. One model, the Triandis Theory of Interpersonal Behavior (TIB), attempts to identify factors that predict a wide variety of social behaviors. These factors include intentions, situational conditions and personality traits (Milhausen et al, 2006; Triandis, 1977). The TIB has been used to predict risky sexual behavior of young adult travelers in an effort to reduce the risk of negative health consequences, such as contracting an STD

(Maticka-Tyndale et al, 1998; Milhausen et al, 2006; Triandis, 1977). The TIB proposes a two part model (Appendix A). The first part of the TIB model suggests that attitudinal beliefs, social normative beliefs and personal normative beliefs combine to form an individual's intentions to engage in a particular behavior. The second part states that intentions, along with habit, and facilitating conditions enhances the predictability of engaging in a particular behavior.

As stated, attitudinal beliefs, social normative beliefs and personal normative beliefs predict intentions (Milhausen et al, 2006; Triandis, 1977). Attitudinal beliefs focus on the cognitive and affective elements of an individual by looking at the emotions and beliefs they have regarding the specific behavior (Milhausen et al, 2006; Triandis, 1977). More specifically, the cognitive element focuses on the possible consequences of engaging in the behavior (good/bad, responsible/irresponsible). On the other hand, the affective element focuses on the feelings an individual might expect to have if they engage in the particular behavior (Milhausen et al, 2006). Social normative beliefs refer to the perception one has regarding their peers. For example, it is common for individuals to attempt to predict whether or not their friends will approve of a particular behavior (Milhausen et al, 2006). Personal normative beliefs are views an individual has about self. These can be demonstrated in an individual's personal morals or values, as well as self identity (Triandis, 1977).

The second part of the TIB model is behavior. Intentions, made up of the previously stated constructs, combine together with habit and situational conditions to predict behavior (Triandis, 1977). Habit is characterized as previous behavior. It is considered to be a strong influence when the predicted behavior is similar to a previous

behavior that occurs frequently (Milhausen et al, 2006; Triandis, 1977). There is a large foundation of social psychological research supporting the proposal that environment, or situational conditions are considered to be an influential variable on human behavior (Lewin, 1951; Triandis, 1977). For example, an individual wishes to engage in risky sexual behavior but needs to drink alcohol first in order to relax. If alcohol is available, the chance of the individual engaging in risky sexual behavior increases. However, if no alcohol is present, the probability of engaging in the behavior decreases.

As previously stated, sexual behaviors of young adult travelers have been an area of interest among researchers, and the guiding framework for many studies has been the TIB (Maticka-Tyndale et al, 1998; Milhausen et al, 2006). Researchers found that cognitive elements, affective elements and social norms were strongly related to intentions in predicting sexual behaviors of young adults attending Mardi Gras (Milhausen et al, 2006). In addition both intentions and facilitating conditions were significant predictors of engagement in sexual behavior. Similarly, in a study of students on spring break in Canada and Daytona, Florida, it was found that intentions and social normative beliefs correctly classified students who did and did not engage in sexual behavior (Maticka-Tyndale et al, 1998).

College students studying abroad are an underexplored group that may be at risk for engaging in risky sexual behavior. In the aforementioned studies, individuals have traveled in a system where there is no authority, and engaged in risky sexual behaviors. Students studying abroad share many similarities with backpackers, college students on spring break and college students on vacation. For example, students are in another country, away from family and friends, and may have the opportunity to experiment with

different experiences and situations, without the risk of possibly damaging their character or reputation with poor decisions.

As research has indicated, the risk of engaging in risky sexual behavior increases while traveling. This rise in risky sex may be associated with individuals engaging in sexual intercourse at a younger age with decreased condom use and ultimately aiding in the spread of sexually transmitted diseases. Prior research has suggested that alcohol use, attachment styles, past experiences and peer relations can influence an individual's decision to engage in risky sex while traveling (Egan, 2001; Maticka-Tyndale et al, 1998; Milhausen et al, 2006). In addition, students studying abroad are an underexplored group that share many similarities with travelers on vacation such as being in a different country, away from their family friends, with the opportunity to try new experiences. However, students studying abroad must follow rules and guidelines laid down by the university if they wish to stay in the program, which could alter the mindset that many travelers adopt while on vacation away from home. Thus, study abroad students are an underexplored group in which research could aid in gaining foundational insight into the factors that influence decision making for these individuals.

One factor that may influence intentions to engage in risky sexual behavior while traveling abroad is attitudinal beliefs, or the combination of cognitive and affective components (Triandis, 1977). The TIB defines cognitive components as judgments someone has regarding a specific behavior and its consequences (Milhausen et al, 2006; Triandis, 1977). The cognitive elements act as a filter for making decisions. Individuals compare the positive and negative aspects of a situation before coming to a conclusion. Generally, before someone engages in a behavior, they must find some benefit, gain or

attraction greater than the negative consequences. This has been demonstrated in young adults attending Mardi Gras. Individuals' cognitive beliefs were strongly related to their intentions to engage in oral, anal and vaginal sex (Milhausen et al, 2006).

Affective components are defined as the anticipated feelings an individual might expect to have if they engage in a particular behavior (Milhausen et al, 2006; Triandis, 1977). Individuals experience emotions or feelings once they have engaged in a behavior. The feelings that are invoked are dependent upon the individual beliefs regarding the behavior. For example, if a person is against drinking and one night gets drunk, they may experience feelings of guilt or shame. These affective beliefs are thought to be important in an individual's decision to engage in risky sexual behavior (Triandis, 1977).

A second factor that may influence intentions to engage in risky sex while traveling abroad is the conduct and beliefs of an individual's peers. As previously stated, the Theory of Interpersonal Behavior proposes social normative beliefs influence an individual's likelihood to engage in a behavior. Peer groups are one form of social normative beliefs. The perception that an individual's same sex friends had sex with someone they met at Mardi Gras was the most significant predictor of engaging in oral and vaginal sex for individuals met at Mardi Gras (Milhausen et al, 2006). In many instances people view going on vacation as a chance to get away and try new experiences. When individuals go away with friends, the standard of acceptable and unacceptable behavior becomes altered. In many instances, if one friend views engaging in a risky sexual experience as acceptable, other members of the group will likely adopt the same attitude. The support of friends could lower inhibitions, and in many cases may

be a factor aiding in individuals becoming more aggressive in seeking out a risky sexual experience to keep up with the rest of their friends. Along those lines, men's intentions to engage in risky sex on spring break were most strongly influenced by the perceived endorsement they would receive from their peers. In fact, 46% of men on spring break who made a pact to engage in sexual behavior had more risky sex than men that did not make a pact (Maticka-Tyndale et al, 1998).

A third factor that may influence intentions to engage in risky sex while traveling abroad is the self esteem of an individual. Self esteem can be considered as self identity, or the view of one's self. Triandis explained that self identity is a personal normative belief that influences behavior. Self esteem can effect an individual's engagement in sexual activity in many different ways, and has been shown to be multidirectional in effect. For example, self esteem has shown to be important in an individual's development of healthy sexuality (Taylor-Seehafer & Rew, 2000). It has been assumed that individuals with higher self esteem engage in more sexual activity. Men on a college campus reported that the higher their self esteem, the more engagement in sexual intercourse (Stimson, Stimson, Dougherty, 1980). One possible reason for the increased intentions to engage in sexual activity is that individual's with high self esteem see the amount of sexual intercourse they have as an esteem booster.

On the other hand, low self esteem can also increase an individual's intentions to engage in risky sexual behavior. For example, in a vacation setting, many individuals can become disinhibited and see themselves as a different person. Individuals with low self esteem may use this to their advantage and view the vacation as their chance to demonstrate they are capable of trying new experiences. This feeling of disinhibition

could possibly act as their momentum in breaking their routine, which could lead them to engage in risky sexual behavior. In contrast, self esteem can also play a role in how individuals handle a situation in which sexual intercourse can be unsafe. For example, 20% of individuals felt that they did not have enough confidence to discuss the use of condoms to prevent AIDS when other types of contraception were being used (Rosenthal, Moore, Flynn, 1991). Furthermore, individuals who claimed they would use condoms during intercourse, did not have enough confidence to carry condoms with them for fear that they would be labeled as “promiscuous” (Rosenthal et al, 1991).

Habit, as per Triandis, is considered to be a previous behavior that occurs frequently. Attachment style is one type of habit that is part of every individual’s interpersonal communication and behavior that could influence risky sexual behavior. Attachment Theory suggests that an individual’s attachment style may aid in predicting sexual attitudes and behaviors, while recognizing the importance of individual differences in relationship values and experiences (Feeny, Peterson, Gallios & Terry, 1998). There is substantial evidence that adolescents who report weak attachment to their parents are more likely to be involved in early sexual activity (Smith 1997; Walsh 1993). Evidence has shown that there is a likely link between adult attachment style and sexuality (Feeny et al, 1998). For example, individuals who were more attached to their parents were more likely to abstain from sexual intercourse. Promiscuous individuals, however, showed a weak attachment to their parents (Walsh, 1993). Furthermore, secure individuals are less likely to engage in a one night stand, whereas avoidant individuals are more apt to engage in more risky, non committal sex (Feeny & Noller, 1996). An individual’s attachment style could potentially exacerbate the level of inhibition they

develop. For example, if an avoidant individual goes on vacation, their inhibition would be lower than a secure individual since they could engage in risky sex and have less risk of seeing that person again, as opposed to if they were home. This type of risk free environment coupled with lowered inhibition may heighten involvement in risky sexual behavior.

A second type of habit is previous sexual experience. As stated, habit is a frequently occurring behavior an individual engaged in (Triandis, 1977). Anecdotally, individuals who have previously engaged in risky sex on repeated occasions may not have strong negative views regarding this behavior. Thus, it is possible the likelihood of these individuals engaging in risky sex is increased as opposed to those who do not have prior experience (Milhausen et al, 2006).

The TIB also notes the importance of situational conditions. Alcohol or illicit drug use is a situational factor that may influence risky sex while traveling abroad. Many individuals on vacation immerse themselves in the relaxing environment, which in many cases, can involve the use of alcohol or illicit drugs. Pairing drug and alcohol use with a lowered inhibition increases the likelihood of engaging in risky sexual behavior. For example, when asked to rank the factors that influenced the decision to have risky sex, both male and female international backpackers ranked drinking and being drunk amongst the highest (Egan 2001). In addition, when looking at the behavior of individuals who attended Mardi Gras in New Orleans, over one third of individuals surveyed reported that they were always drinking before “fooling around” in a sexual way with people they had just met at Mardi Gras (Milhausen et al, 2006).

The purpose of this study was to explore the factors influencing a student’s

decision to engage in risky sexual behavior while studying abroad. As previously stated, the first part of the TIB proposes that attitudinal beliefs, social normative beliefs and personal normative beliefs combine to predict an individual's intentions. Attitudinal beliefs are measured by affective and cognitive beliefs. It was expected that individuals with positive affective and cognitive beliefs regarding risky sexual behavior while studying abroad would have increased intentions to engage in risky sexual behavior. Social normative beliefs are measured by peer beliefs. Similarly, it was proposed that individuals who believe their friends have or will approve of engagement in risky sexual behavior will also have increased intentions to engage in risky sexual behavior while studying abroad. Given that the effect of self esteem on risky sexual behavior could be bidirectional, it was expected that self esteem would influence intentions to engage in risky sex, although the specific direction was not identified. Taken together, these predictors were expected to influence intentions, increasing the probability of individuals engaging in risky sexual behavior while studying abroad.

The second part of the TIB proposes that intentions, habit and situational conditions will enhance the predictability of risky sexual behavior of students studying abroad. It was expected that engagement in risky sexual behavior prior to traveling would increase the likelihood of an individual engaging in risky sex while abroad. In terms of attachment style, it was predicted that individuals with secure attachment would have a decreased probability of engaging in risky sexual behavior. Conversely, individuals with fearful, preoccupied or dismissing attachment styles would have an increased probability of engaging in risky sexual behavior. Finally, it was expected that high levels of drug and alcohol use would be associated with engagement in risky sexual behavior.

CHAPTER III

Methodology

Participants

Participants were individuals who attended a NJ state university for at least one semester and have studied abroad within the past six years. A total of 235 participants completed the survey. Thirty-nine participants were omitted due to incomplete data, leaving a total of 186 valid participants (56 males, 130 females). The mean age was 20.9 years (range 17-37) with 61% of participants 20-21 years old. Participants were incoming and outgoing students from 15 different countries, with 75% natives of the United States. Participants ranged in grade levels from freshman to graduated, with 89% identified as juniors or seniors. Majority (70%) of participants studied abroad within the past two and a half years.

Definitions

In this study, risky sexual behavior was defined as individuals having anal, oral or vaginal intercourse without a condom, under the influence of a substance or alcohol or with someone the individual knew for a short period of time. Casual sex was defined as anal, oral or vaginal intercourse with an individual with no promise or commitment to have an ongoing relationship.

Questionnaire Development

The questionnaires used in this study were based on prior studies conducted by Milhausen, Reece, and Perera, (2006) as well as, Baker, Morrison, Gilmore and Schock, (1995). Questionnaires based on alcohol and illicit drug use during sexual intercourse

was developed by a research team specifically for their study (Baker et al, 1995). Questionnaires based on the study examining behavior at Mardi Gras (Milhausen et al, 2006) were adapted to accommodate the differing parameters of the study abroad population. In an effort to improve the validity of the questionnaires, a focus group comprised of individuals who had studied abroad within the past three years was formed to elicit the key features of the study abroad environment. Similarly, a focus group comprised of international students was formed to resolve possible language issues that could cause confusion for incoming study abroad students.

Materials

Demographics

Participants were asked questions regarding their gender, home country, education level, major, sexual orientation, current age and age while studying abroad. Participants were also asked in months how long they were abroad, which country or countries they studied abroad in, which countries they visited while studying abroad, where they lived while studying abroad, if they left their home school (1) by themselves, (2) with a friend, (3) with a family member, or someone else, and reason for studying abroad. Participants were asked their relationship status before leaving to study abroad, during their study abroad experience and their current dating status.

Affective and Cognitive Components

Seven point semantic differential scales consisting of adjective pairs describing the experiences and consequences of engaging in risky or casual sex while studying abroad measured the affective and cognitive attitude components. To ensure that this is a measure of attitude towards sex while studying abroad and not toward condom use,

participants were told to make their appraisal despite the use of a condom. The adjective pairs measuring feelings about having sex with someone while studying abroad incorporated words such as: sexually liberated/sexually conservative, empowered/disempowered. Participants responded on a seven point Likert scale and were summed to create a mean total score. High scores indicated positive feelings regarding having risky sex with someone the participant met while studying abroad. The Cronbach's Alpha for the affective measure was .74 (Milhausen et al, 2006).

The adjective pairs measuring cognitive evaluations of having sex with someone while studying abroad included words such as: good/bad, responsible/irresponsible. Participants' responded on a seven point Likert scale and were summed to create a mean total score. High scores indicated positive evaluations of having risky sex with someone the participant met while studying abroad. The Cronbach's Alpha for the cognitive measure was .54 (Milhausen et al, 2006).

Social Normative Beliefs

Peer Sexual Activity. Triandis emphasized that internalized perceptions of one's peer group can influence behavior. Therefore, two measures of perceived peer sexual activity were added as predictors of sexual behavior while studying abroad. The first measure assessed the amount of risky sexual behavior of the individual's peer group while studying abroad. Participants were asked, "How many of your same sex friends had sex with someone they met while studying abroad?" Response choices were (a) none, (b) a few, (c) about half, (d) more than half, (e) most, and (f) don't know.

The second measure of peer sexual activity assessed the individual's perception of how much their close peer group would approve or disapprove of their decision to engage

risky sexual behavior with an individual met while abroad. A summed score of three items on a 7 point Likert scale ranging from extremely likely to extremely unlikely was used. A sample question is: "If you met someone who is sexually attractive while studying abroad, how likely would it be that (a) your close male friends will think you should have sex with this person?" High score indicated the participant perceived their peer group to be supportive of engaging in risky sexual behavior with someone they met while studying abroad. The Cronbach's alpha for this measure was .83 (Milhausen et al, 2006).

Personal Normative Beliefs

Self Esteem. The TIB notes the importance of personal normative beliefs in predicting intentions to engage in behavior. *As such*, all participants were asked to complete a measure of global self esteem using Rosenberg's Self-Esteem Scale (Rosenberg, 1965). This scale contains 10 items such as, "on the whole I am satisfied with myself" with response options on a four point Likert scale ranging from *strongly agree* to *strongly disagree*. The self-esteem scale is coded so that higher scores indicate higher levels of global self-esteem. The scale has high reliability with test-retest correlations ranging from .82 to .88. The Cronbach's alpha for various samples range from .77 to .88.

Habit

Attachment Style. Triandis stressed the importance of measuring and individual's habits in predicting behavior. In this study, habit will be measured by looking at individual attachment styles. Attachment styles of participants were measured with the Relationship Questionnaire (RQ, Bartholomew & Horowitz, 1991). The RQ measures an

individual's perceived attachment pattern in adult peer relationships by allowing the participant to choose one of four paragraphs that best describes their attachment style. These paragraphs represent four different attachment styles: secure, dismissing, fearful and avoidant. The construct validity of the Relationship Questionnaire was evaluated by determining whether the scales correlated with external criteria consistently in all possible cultures. In almost all cultural regions for which correlations could be computed, scores were positively correlated with self-esteem scores ranging from .32 to .61, providing cross-cultural evidence for its near universal convergent validity.

Prior Experience

The Triandis Theory specifies that measures used to evaluate prior experiences estimate the behavior of interest as closely as possible. Items were used to measure prior experience with oral, anal and vaginal intercourse with someone the participant did not have an ongoing relationship with. A sample question participants were asked is, "Prior to studying abroad, have you had the following with a casual partner: (a) oral sex, (b) vaginal sex, (c) anal sex?"

Situational Conditions

Alcohol/Substance Use During Sex. Triandis discussed the important role situational conditions have on influencing behavior. Situational conditions were measured by examining alcohol/substance use during sex. Participants were asked six questions, on a five point scale, with the response choices, (1) never, (2) less than half the time, (3) half the time, (4) over half the time and (5) every time. The questions were asked twice, the first time in regards to a casual partner (someone the participant does not have an ongoing relationship with), and the second time with a steady partner (someone

the individual has an ongoing relationship with, i.e., husband/wife, girlfriend/boyfriend).

Two sample items that were asked are, (a) how often have you used alcohol before having sex? (b) how often have you used recreational drugs before having sex?

Predicted Behavior

Risky Sex. To measure risky sexual behavior, participants were asked two questions regarding condom use while studying abroad, with the response choices, (1) never, (2) less than half the time, (3) half the time, (4) over half the time, (5) every time. The items were, “While studying abroad how often did you use a condom during anal, oral or vaginal sex with a casual partner?” and “While studying abroad, how often did you use a condom during anal, oral or vaginal sex with a steady partner?”

Procedure

Student information was obtained from the international program at Rowan University and each student and alumni who studied abroad within the past six years was emailed a link to an online survey via Survey Monkey. The survey was anonymous and was expected to take no longer than 15 minutes to complete.

Prior to analysis, participant responses were checked for completion and validity. Any survey with omitted responses to questions regarding beliefs about sex, peer beliefs and behaviors, self esteem, attachment style, prior sexual behavior, drug and alcohol use, sexual behavior and partners while abroad or condom use was not used for analysis. Similarly, any responses considerably greater than the median were considered outliers and also omitted from analysis.

CHAPTER IV

Findings

Prior and Abroad Sexual Behavior Experiences

Nearly three quarters of males (73%) and over half of females (53%) reported engaging in oral sex prior to studying abroad. Similarly, over half of men (66%) and half of women (50%) reported engaging in vaginal sex prior to studying abroad. Furthermore, approximately one quarter of participants (25%) reported engaging in anal sex prior to studying abroad. Of these sexually active participants, only one third (34%) of males and less than one third of females (29%) reported always using condoms during sexual intercourse prior to studying abroad.

In general, men (63%) were two times more likely than women (31%) to report intentions of engaging in sexual behavior with an individual they met while studying abroad. Over half of men (64%) reported engaging in oral sex with someone they met while abroad, compared to nearly one third of females (32%). Similarly, males (52%) engaged in more vaginal sex than females (38%) while abroad. Additionally, men (14%) engaged in more anal sex than women (4%). Of those sexually active participants, only 27% of men and 14% of women always used condoms while studying abroad. Additionally, 9% of men and less than 1% of women always used a condom during anal sex while studying abroad.

Predicting Intentions Correlations

In order to examine the preliminary relationship amongst the constructs associated with intentions to engage in risky sexual behaviors, a series of Pearson product

correlation analyses were conducted between attitudinal beliefs, social normative beliefs, personal normative beliefs and intentions to engage in sexual behavior while abroad (See tables 1 & 2). Affective beliefs were found to be positively correlated with intentions to engage in sexual behavior while studying abroad. This positive relationship suggests that individuals endorsing positive anticipated feelings towards sexual behavior while studying abroad were more likely to engage in sexual behavior while abroad. Affective beliefs were also positively correlated with cognitive beliefs. This relationship suggests that individuals anticipating positive feelings regarding sexual behavior while studying abroad were more likely to have positive feelings towards the act of engaging in sexual behavior while studying abroad. Conversely, affective beliefs were negatively correlated with drug and alcohol use in females. Cognitive beliefs were positively correlated with intentions to engage in sexual behavior while studying abroad. Individuals with positive feelings towards engaging in sexual behavior while studying abroad had an increased probability of engaging in sexual behavior while abroad than individuals with negative beliefs towards abroad sexual behavior.

Predicting Behaviors Correlations

In order to examine the preliminary relationship amongst the constructs associated with predicting engagement in risky sexual behaviors, a series of Pearson product correlation analyses were conducted between intentions to engage in sexual behavior while abroad, habit and situational conditions to determine significant relationships resulting in increased probability of engaging in risky sexual behavior (See tables 3 - 10).

Oral Sex

Intentions to engage in sexual behavior while abroad were positively correlated with male and female participants' engagement in oral sex while studying abroad. Intentions to engage in sexual behavior while abroad were also positively correlated with males and females alcohol and drug use. As previously stated, there were two different measures of habit, including attachment style and previous sexual behavior. The first measure, attachment style, was positively correlated with previous sexual experience in both males and females. In addition, the second measure, previous sexual behavior, was positively correlated with females' drug and alcohol use while studying abroad. Previous behavior was also positively correlated with females' engagement in oral sex while studying abroad. Furthermore, alcohol and drug use was positively correlated to both males' and females' engagement in oral sex while abroad.

Vaginal Sex

Intentions to engage in sexual behavior while abroad were positively correlated with females' engagement in vaginal sex while studying abroad. Intentions to engage in sexual behavior while abroad were also positively correlated with both males' and females' alcohol and drug use while studying abroad. Habit, measured as previous sexual behavior, was positively correlated with engagement in vaginal sex while studying abroad for males and females, as well as alcohol and drug use and previous sexual behavior in female participants. Situational conditions, measuring alcohol and drug use, was positively correlated with engagement in vaginal sex while abroad for both males and females.

Anal Sex

Intentions to engage in sexual behavior while abroad were positively correlated with females' engagement in anal sex while studying abroad. Intentions to engage in sexual behavior while abroad were also positively correlated with both male and female participants' alcohol and drug use while studying abroad. As previously stated, there were two different measures of habit, including attachment style and previous sexual behavior. The first measure, attachment style, was positively correlated with previous sexual experience in female participants. This relationship suggests that women who have previously engaged in sexual behavior prior to studying abroad were more likely to have an insecure attachment style.

Condom Use

Intentions to engage in sexual behavior while abroad were positively correlated with females' engagement in unprotected vaginal and anal sex while studying abroad. Intentions to engage in sexual behavior while abroad were also positively correlated with male and female participants' alcohol and drug use while studying abroad. Habit, as measured by previous sexual behaviors, was positively correlated with females' intentions to engage in unprotected sex while studying abroad. Similarly, previous sexual behavior was positively correlated with engagement in vaginal sex while studying abroad without the use of a condom for both male and female participants. Drug and alcohol use, (i.e., situational conditions), also had a positive relationship with both male and female participants' engagement in vaginal sex while studying abroad, without the use of a condom. Additionally, drug and alcohol use was positively correlated with previous sexual behavior or both males and females. Engagement in vaginal sex while abroad

without the use of a condom was positively correlated with engagement in anal sex while abroad without the use of a condom for both male and female participants.

Predicting Intentions to Engage in Sexual Behavior while Abroad Analyses

A series of Logistic Regression analyses were conducted between affective beliefs, cognitive beliefs, peer influences, self esteem and intentions to engage in sexual behavior while abroad to determine significant relationships resulting in increased probability of intentions to engage in risky sexual behavior.

The predictors proposed in the TIB explained 21% of the variance in predicting females' intentions to engage in risky sexual behavior while studying abroad ($X^2 = 26.84$, $p = .05$). Affective beliefs were significant in predicting females' intentions of engaging in risky sexual behavior while studying abroad ($p = .000$, Wald = 12.581).

Predicting Behaviors while Abroad Analyses

A series of Logistic Regression analyses were conducted between intentions to engage in sexual behavior while abroad, habit and situational conditions to determine significant relationships resulting in increased probability of engaging in risky sexual behavior.

Oral Sex

The predictors proposed in the TIB explained 33% of the variance in females' engagement in oral sex while studying abroad ($X^2 = 51.09$, $p = .05$). Intentions to engage in risky sexual behavior while studying abroad significantly predicted women's engagement in oral sex ($p = .001$, Wald = 10.501). Furthermore, analysis for women who endorsed engaging in risky sexual experience prior to studying abroad approached

significance in predicting engagement in oral sex with someone met while abroad ($p = .065$, Wald 3.395).

The predictors proposed in the TIB explained 28% of the variance in men's engagement in oral sex while studying abroad ($X^2 = 17.06$, $p = .05$). Increased drug and alcohol use was found to be significant in predicting both men ($p = .004$, Wald = 8.079) and women's ($p = .001$, Wald 10.219) engagement in oral sex with someone met while abroad.

Vaginal Sex

The predictors proposed in the TIB explained 49% of variance in females' engagement in vaginal sex while studying abroad ($X^2 = 83.24$, $p = .05$). Analysis for female participants with positive intentions were significant in predicting females' engagement in vaginal sex ($p = .001$, Wald = 10.618). Similarly, analysis found increased drug and alcohol use significant in predicting females' engagement in vaginal sex with someone met while abroad ($p = .000$, Wald = 20.053).

The predictors proposed in the TIB also significantly predicted males' engagement in vaginal sex ($X^2 = 24.85$, $p = .05$) while accounting for 40% of the variance. Increased drug and alcohol was significant in predicting males' engagement in vaginal sex while studying abroad ($p = .041$, Wald = 4.191).

Anal Sex

There were very few participants that endorsed engagement in anal sex while studying abroad. Due to these low numbers, analyses were not conducted for lack of generalizability to the current sample.

Condom Use

The second measure of risky sexual behavior examined individuals who engaged in vaginal and anal sex with someone they met while abroad, without the use of a condom. A series of Regression analyses were conducted between intentions to engage in sexual behavior while abroad, habit and situational conditions to determine significant relationships resulting in increased probability of engaging in unprotected condom use while studying abroad. Intentions to engage in sexual behavior while abroad, previous experience and alcohol and drug use were significant in predicting vaginal sex without the use of a condom.

The predictors proposed in the TIB explained 33% of the variance in predicting females' condom use while studying abroad ($F [5, 128] = 15.72, p = .005$). Similarly, the TIB explained 13% of the variance in predicting males' condom use ($F [5, 56] = 2.47, p = .005$). Intentions toward engaging in risky sexual behavior were found to significantly predict vaginal sex without the use of a condom for females ($p = .022, \beta = .200$). A similar pattern was shown with previous experience. Vaginal sex without the use of a condom prior to studying abroad was significant in predicting vaginal sex without the use of a condom while studying abroad for females ($p = .005, \beta = .005$). Previous experience approached significance in men ($p = .067, \beta = .266$), such that men who previously engaged in sex without a condom may be at a higher risk of having vaginal sex without the use of a condom while studying abroad. Analysis also found increased alcohol and drug use significantly predicted women's engagement in vaginal sex without the use of a condom ($p = .000, \beta = .391$), and approached significance in men ($p = .067, \beta = .266$).

CHAPTER V

Summary, Conclusions, and Recommendations

Summary

The purpose of this study was to assess the extent to which the Triandis Model of Interpersonal Behavior explained sexual decision making in college students studying abroad. The Triandis Theory of Interpersonal Behavior has been successful in predicting sexual behavior in young adults in similar environments, and was, therefore, an appropriate model for exploring individuals studying abroad.

While sexual behavior and decision making of young travelers have been examined (Egan 2001; Maticka-Tyndale et al 1998; Milhausen et al, 2006) from a theoretical and empirical perspective, there is a paucity of research on study abroad students. Further understanding of sexual behaviors and decision making in study abroad students could aid in preventative strategies to fight against potential harmful casual sexual behaviors and their consequences.

Conclusions

The primary outcome variables of interest in this study were participants' past experiences of sexual activity at home, expectations to engage in, as well as actual reports of sexual activity with someone they met and had no promise or commitment of an ongoing relationship while studying abroad. Individuals on vacation have been noted to engage in riskier sexual behavior than when at home (Egan 2001; Maticka-Tyndale 1998; Milhausen et al, 2006). Participants reported high expectations for engaging in risky sexual behavior. As expected, males (63%) were almost two times more likely to engage

in risky sexual behavior while studying abroad than females (31%). Participant intentions were good indicators of engagement in risky sexual behaviors while studying abroad with over half of men and one third of females engaging in oral (64%, 32%) and vaginal sex (52%, 38%) while studying abroad.

The Triandis Theory of Interpersonal Behavior proposed that attitudinal beliefs combined with social and personal normative beliefs predict an individual's intentions to engage in risky sexual behavior while studying abroad. The first factor, attitudinal beliefs, was found to be a significant influence in predicting an individual's intentions to engage in risky sexual behavior. Specifically, affective elements were found to be significant in predicting females' intentions to engage in risky sex with someone the individual met while studying abroad. However, the model did not significantly predict male intentions to engage in risky sex. It is understandable that affective beliefs were significant in predicting intentions because individuals make daily decisions based upon how they feel about the anticipated consequences. If participants felt favorable towards engaging in risky sex, they were more likely to report engaging in risky sexual behavior.

The second factor, social normative beliefs, was not found to be a significant influence in predicting an individual's intentions to engage in risky sexual behavior. One possible reason significance was not reached is approximately 70% of participants reported studying abroad alone. Social normative beliefs examine the behaviors an individual engages in based upon the perception of their friends' approval. If majority of participants studied abroad alone, the influence of their close friends would not be a factor in their decision to engage in risky sexual behavior.

The third factor, personal normative beliefs was not found to be a significant influence in predicting an individual's intentions to engage in risky sexual behavior. Self esteem was predicted to be a multidirectional measure, increasing some individuals' engagement in risky sexual behavior while studying abroad, and decreasing others. It is possible that self esteem supported the original hypothesis and enhanced half of the individuals' engagement in risky sexual behavior while reducing the other half's engagement. This would split the participants' responses, allowing for no significance in either direction.

The Triandis Theory of Interpersonal Behavior proposed that intentions, combined with habit and social factors would predict an individual's engagement in risky sexual behavior. The first factor, intentions, was found to be significant in predicting females' engagement in oral and vaginal sex. These findings coincide with research that suggests an individual's intention to engage in a risky sexual behavior has a significant influence on their actual engagement (Maticka-Tyndale et al, 2005).

The second factor, habit, was found to approach significance in predicting females' engagement in oral sex while studying abroad. In the current study, habit was measured by sexual behavior prior to studying abroad. Females who engaged in oral and vaginal intercourse prior to studying abroad were at an increased risk of engaging in oral sex while studying abroad. The results in the current study support research suggesting individuals are more likely to engage in risky sexual behavior if they have engaged in the behavior frequently in the past. Individuals with prior experience may possibly be more comfortable with the behavior, resulting in a reduced concern of negative health consequences.

The third factor, situational conditions was found to be significant in predicting males' and females' engagement in risky sexual behavior. This environmental piece has been supported repeatedly in young adults on vacation or traveling. The influence of situational conditions was consistent with the findings in the current study. Alcohol and illicit drug use was significant in predicting both males' and females' decision to engage in oral sex with an individual they met while abroad. Additionally, substance use was significant in predicting females' decision to engage in vaginal sex with someone they met while abroad, whereas the prediction for males approached significance. Alcohol and drug use also significantly predicted females' decision to use a condom during vaginal sex with an individual they met while abroad. These findings support research that suggests alcohol and drug use exacerbates the individual's intentions to engage in sex, inhibiting individuals to take necessary precautionary steps to protect from negative consequences.

Limitations

As with any study, there may be some limitations. One limitation could be the possibility of a memory bias amongst participants. Participants qualified for the survey if they studied abroad within the past six years. Once qualified, they were then asked to remember how they felt prior to studying abroad. It is possible that participants may have forgotten how they felt prior to studying abroad, and instead, responded how they currently feel. This lapse in memory is a concern, however, it is important to note that 70% of the participants studied abroad within the past two and a half years. Anecdotally, participants that studied abroad two and a half years ago will have a more accurate

memory of their feelings prior to studying abroad, as opposed to those that studied six years ago, which likely reduces memory bias.

A second limitation is the use of self reports for data collection. Participants were asked to complete an online survey regarding their sexual behavior prior to and while studying abroad. It is possible that participants attempted to respond in a socially desirable way, and intentionally reported fewer sexual partners than they had. Similarly, participants may have also inflated the number of sexual partners they had. Both instances would cause a misrepresentation in the data. Prior to analysis, the data was examined, and all outliers were omitted in an attempt to control for misrepresentation.

A third limitation is the possibility of a language barrier. The participant population consisted of both incoming and outgoing students studying abroad. It is unknown how well each incoming student spoke and understood English. Furthermore, the words or phrases used in American culture could be very different than those in each student's home country. Both of these issues could create a misrepresentation in participant responses. Prior to the survey, international students were asked to read over the questionnaires to find potential language issues. Many of the student's suggestions were implemented into the surveys in an effort to minimize the potential language barrier.

A fourth limitation is the omission of a definition of sex. After research was concluded, several participants stated they disagreed on what counted as sexual intercourse. For example, some participants defined vaginal sex as penetration, others believed a minimum of "five thrusts" was required, while others felt "gratification" needed to be reached. The omission of this definition was found to be problematic because it allowed each participant to respond to the questions according to their own

standards. The same is thought to have happened with oral and anal sex. Individual participant definitions of sex create a discrepancy within the questions measuring sexual behavior. Future research might look at instituting a broad definition of sex to encompass the majority of individual definitions.

Recommendations

Future research might examine sexual behaviors other than anal, oral or vaginal intercourse. One behavior that was excluded from the present study is the amount of partners participants kissed or engaged in sexual foreplay with. Anecdotally, kissing and foreplay precede oral, anal or vaginal intercourse. The results in the present study suggest that individuals engage in risky sexual behavior while they are studying abroad. There is a strong likelihood that these same individuals are engaged in kissing and foreplay with an increased amount of partners as well. Researching these behaviors may give additional understanding in the decision making of individual engagement in risky sexual behavior.

A second behavior that was not identified in the present study is homosexual behavior. Although homosexual behavior was not intentionally excluded from the study, there were no specific questions asked regarding the behavior. It is unknown if the participants' answers are detailing heterosexual or homosexual experiences. An individual's engagement in homosexual behavior is similar to the concept of risky sexual behavior. When individuals are away from home and the expectations that are placed on them, they have the opportunity to experience new things. Young adults may not have the courage to engage in homosexual behavior at home with all of their friends and family, however, while abroad, they have more anonymity and may feel more

comfortable experimenting. Homosexual behaviors could result in negative health consequences if proper precaution is not taken. Research in this area of behavior could assist in gaining understanding of individuals' decision to engage in homosexual behavior as well as aid in preventative strategies to fight against potentially harmful consequences.

Ultimately, the Triandis Theory of Interpersonal Behavior has provided a useful foundation into understanding males' and females' intentions to engage in risky sexual behavior while studying abroad, as well as their actual engagement in risky sex. Affective beliefs specifically appear to be significant in predicting intentions to engage in risky sexual behavior for both males and females. Habit, was found to be significant in predicting females' engagement in oral sex while studying abroad. Furthermore, situational conditions was found to be a significant predictor for both males' and females' engagement in risky sexual behavior while studying abroad.

References

- Arvidson, M., Hellberg, D., Mardh, P. (1996). Sexual Risk Behavior and History of Sexually Transmitted Diseases in Relation to Casual Travel Sex During Different Types of Journeys. *Acta Obstet Gynecol Scand*, 75, 490-494.
- Atwood, J., (2006). Mommy's Little Angel, Daddy's Little Girl: Do You Know What Your Pre-Teens Are Doing? *The American Journal of Family Therapy*, 34, 447-467.
- Baker, S., Morrison, D., Gillmore, M., Schock, M., (1995). Sexual Behaviors, Substance Use, and Condom Use in a Sexually Transmitted Disease Sample. *The Journal of Sex Research*, 32, 37-44.
- Bloor, M., Thomas, M., Hood, K., Abeni, D., Goujon C., Hausser, D., Hubert, M., Kleiber, D., Nieto, J. (1998). Differences in Sexual Risk Behavior Between Young Men and Women Traveling Abroad from the UK. *The Lancet*, 352,1664-1668.
- Egan, C., (2001). Sexual Behaviors, Condom Use and Factors Influencing Casual Sex Among Backpackers and Other Young International Travelers. *The Canadian Journal of Human Sexuality*, 10, 41-58.
- Eiser, J.R., Ford, N. (1995). Sexual Relationships on Holiday: A Case of Situational Disinhibition? *Journal of Social and Personal Relationships*, 12, 323-339.
- Feeney, J., Peterson, C., Gallios, C., Terry, D., (2000). Attachment Style as a Predictor of Sexual Attitudes and Behavior in Late Adolescence. *Psychology and Health*, 14,1105-1122.
- Feeney, J.A., & Noller, P. (1996). *Adult attachment*. Thousand Oaks: Sage.

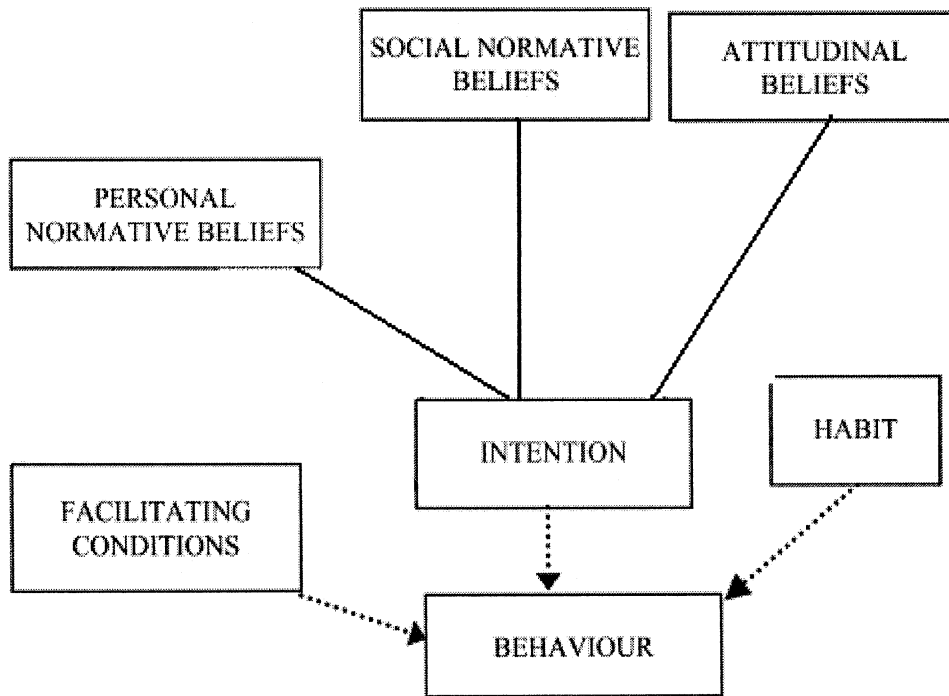
- Finer, L., (2007). Trends in Premarital Sex in the United States, 1954-2003. *Public Health Reports*, 122, 73-78.
- Forehand, R., Gound, M., Armistead, L., Longand, N., & Miller, K. S. (2005). Sexual Intentions of Black Preadolescents: Associations With Risk and Adaptive Behaviors. *Perspectives on Sexual and Reproductive Health*, 37, 13–18.
- Henderson, R.H., (1997). Control of Sexually Transmitted Diseases in the United States – A Federal Perspective. *British Journal of Venereal Diseases*, 53, 211-215.
- Herold, E., Mewhinney, D. (1993). Gender Differences in Casual Sex and AIDS Prevention: A Survey of Dating Bars. *The Journal of Sex Research*, 30, 36-42.
- Kinsey, A., Pomeroy, W. D., & Martin, C. E. (1953). *Sexual Behaviors in the Human Female*. Philadelphia: W.B. Saunders Company.
- Kuo, W., St. Lawrence, J. (2006). Sexual Behavior and Self-Reported Sexually Transmitted Diseases (STDs): Comparison Between White and Chinese American Young People. *Culture, Health and Sexuality*, 8, 335-349.
- Lewin, K. (1951) *Field theory in social science; selected theoretical papers*. D. Cartwright (ed.). New York: Harper & Row.
- Maticka-Tyndale, E., Mewhinney, D., Herold, E. (1998). Casual Sex on Spring Break: Intentions and Behaviors of Canadian Students. *The Journal of Sex Research*, 35, 254-264.
- Mellanby, A, Phelps, F., Lawrence, C., Tripp, J.H., (1992). My choice: Teenagers and the risks of sexually transmitted diseases: a need for the provision of balanced information. *Genitourin Med*, 68, 241-244.
- Milhausen, R., Reece, M., Perera, B., (2006). A Theory-Based Approach to

- Understanding Sexual Behavior at Mardi Gras. *The Journal of Sex Research*, 43, 97-106.
- Morbidity and Mortality Weekly Report (1997). *Contraceptive practices before and after an intervention promoting condom use to prevent HIV infection and other sexually transmitted diseases among women — selected U.S. sites, 1993–1995*, 46, 373-378.
- Ozer, E. M., Brindis, C. D., Millstein, S. G., Knopf, D. K., & Irwin, C. E., Jr. (1998). *America's Adolescents: Are they healthy?* San Francisco: University of California, San Francisco, National Adolescent Health Information Center.
- Rosenberg, Morris. 1989. *Society and the Adolescent Self-Image*. Revised edition. Middletown, CT: Wesleyan University Press.
- Rosenthal, D., Moore, S., Flynn, I. (1991) Adolescent Self-Efficacy, Self-Esteem and Sexual Risk Taking. *Journal of Community & Applied Social Psychology*, 1, 77-88.
- Smith, C. (1997). Factors Associated with Early Sexual Activity among Urban Adolescents. *National Association of Social Workers*, 42, 334-346.
- Stimson, A., Stimson, J., Dougherty, W. (1980). Female and Male Sexuality and Self Esteem. *The Journal of Social Psychology*, 112, 157-158.
- Taylor-Seehafer, N., Rew, L. (2000). Risky Sexual Behavior Among Adolescent Women. *Journal, of the Society of Pediatric Nurses*, 5, 15-24.
- Triandis, H.C. (1977). *Interpersonal Behavior*. Monterey, CA: Brooks/Cole
- Walsh, A. (1993) Drug Use and Sexual Behavior: Users, Experimenters and Abstainers. *Journal of Social Psychology*, 132, 691-693.

APPENDIX A

Theory of Interpersonal Behavior Model

Figure 1.



APPENDIX B

Correlation Tables

Table 1

Predicting Intentions in Males (n = 56)

	1	2	3	4	5
1. Intentions	--	-.256	.079	.078	-.089
2. Affective Beliefs	--	--	.568**	-.264	-.005
3. Cognitive Beliefs	--	--	--	.122	.045
4. Peers Beliefs	--	--	--	--	.075
5. Self Esteem	--	--	--	--	--

**p<.01

* P<.05

Table 2

Predicting Intentions in Females (n = 129)

	1	2	3	4	5
1. Intentions	--	-.310**	.255**	.039	.084
2. Affective Beliefs	--	--	.610**	-.230**	-.667
3. Cognitive Beliefs	--	--	--	.084	.005
4. Peers Beliefs	--	--	--	--	.039
5. Self Esteem	--	--	--	--	--

**p<.01

* p<.05

Table 3

Predicting Behavior in Males – Oral Sex (n = 56)

	1	2	3	4	5
1. Intentions	--	.046	.142	.286*	.293*
2. Prior Experience	--	--	.349**	.136	.222
3. Attachment Style	--	--	--	.132	-.031
4. Drug & Alcohol Use	--	--	--	--	.472**
5. Oral Sex Abroad	--	--	--	--	--

**p<.01

* P<.05

Table 4

Predicting Behavior in Females – Oral Sex (n = 129)

	1	2	3	4	5
1. Intentions	--	.092	.064	.549**	.493**
2. Prior Experience	--	--	.194*	.220*	.213*
3. Attachment Style	--	--	--	.064	-.013
4. Drug & Alcohol Use	--	--	--	--	.525**
5. Oral Sex Abroad	--	--	--	--	--

**p<.01

* P<.05

Table 5

Predicting Behavior in Males – Vaginal Sex (n = 56)

	1	2	3	4	5
1. Intentions	--	-.054	.142	.286*	.089
2. Prior Experience	--	--	-.078	.209	.478**
3. Attachment Style	--	--	--	.132	-.068
4. Drug & Alcohol Use	--	--	--	--	.334*
5. Vaginal Sex Abroad	--	--	--	--	--

**p<.01

* P<.05

Table 6

Predicting Behavior in Females – Vaginal Sex (n = 129)

	1	2	3	4	5
1. Intentions	--	.162	.064	.549**	.546**
2. Prior Experience	--	--	.220*	.374**	.343**
3. Attachment Style	--	--	--	.064	-.009
4. Drug & Alcohol Use	--	--	--	--	.674**
5. Vaginal Sex Abroad	--	--	--	--	--

**p<.01

* P<.05

Table 7

Predicting Behavior in Males – Anal Sex (n = 56)

	1	2	3	4	5
1. Intentions	--	.014	.142	.286*	-.057
2. Prior Experience	--	--	-.156	.278	.210
3. Attachment Style	--	--	--	.132	-.264
4. Drug & Alcohol Use	--	--	--	--	.205
5. Anal Sex Abroad	--	--	--	--	--

**p<.01

* P<.05

Table 8

Predicting Behavior in Females – Anal Sex (n = 129)

	1	2	3	4	5
1. Intentions	--	.086	.064	.549**	.314**
2. Prior Experience	--	--	.331**	.131	-.044
3. Attachment Style	--	--	--	.064	.048
4. Drug & Alcohol Use	--	--	--	--	.105
5. Anal Sex Abroad	--	--	--	--	--

**p<.01

* P<.05

Table 9

Predicting Behavior in Males – Condom Use (n = 56)

	1	2	3	4	5	6
1. Intentions	--	.103	.142	.286*	.098	-.213
2. Prior Experience		--	.098	.363*	.335*	.243
3. Attachment Style		--	--	.132	.146	-.008
4. Drug & Alcohol Use		--	--	--	.379**	-.148
5. Abroad Vaginal Condom Use		--	--	--	--	.297*
6. Abroad Anal Condom Use						

**p<.01

* P<.05

Table 10

Predicting Behavior in Females – Condom Use (n = 129)

	1	2	3	4	5	6
1. Intentions	--	.207*	.064	.549**	.455**	.247**
2. Prior Experience		--	.139	.222*	.333**	.171
3. Attachment Style			--	.064	.015	.059
4. Drug & Alcohol Use				--	.547**	.115
5. Abroad Vaginal Condom Use					--	.490**
6. Abroad Anal Condom Use						

**p<.01

* P<.05

APPENDIX C

Questionnaire

Present Age: _____

Age while studying abroad: _____

Gender: M/F

Home Country: _____

Home University: _____

Current Education Level: Freshman/Sophomore/Junior/Senior/Graduated

Education Level While Studying Abroad: Freshman/Sophomore/Junior/Senior

Major: _____

What year and semester did you study abroad? Fall/Spring/Summer
02/03/04/05/06/07/08

What country or countries did you study abroad in? _____

In months, how long were you abroad? _____

What countries did you visit while traveling abroad?

Who did/are you studying abroad with?

No one Friend(s) Family Other _____

Reason for studying abroad: _____

Relationship Status Prior to Studying Abroad:

- Single – Not dating
- Single – Casual Hookups
- Single – Regular Casual Hookups
- Single – Monogamous partner
- Engaged
- Married

29. I feel that I'm as person of worth,
at least on an equal plane with others SA A D SD
30. I wish I could have more respect for myself SA A D SD
31. All in all, I am inclined to feel that I am a failure SA A D SD
32. I take a positive attitude toward myself SA A D SD

Attachment Style

A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

D. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

Personal Normative Beliefs

Instructions: For the following questions, think back to how you felt before you left to study abroad. Please answer as accurately as possible.

5. What do you think about having sex with someone you meet while studying abroad?

I would feel guilty

- 1 2 3 4 5 6 7

Strongly Agree
Strongly Disagree

It would be against my values

- 1 2 3 4 5 6 7

Strongly Agree
Strongly Disagree

Subjective Social Norms

Instructions: For the following questions, think back to how you felt before you left to study abroad. Please answer as accurately as possible.

6. If you met someone who is sexually attractive while studying abroad how likely would it be that

(A) Your close male friends think you should have sex with this person?

1 2 3 4 5 6 7

Extremely Likely

Extremely Unlikely

(B) Your close female friends think you should have sex with this person?

1 2 3 4 5 6 7

Extremely Likely

Extremely Unlikely

(C) The friends you are studying abroad with will think that you should have sex with this person?

1 2 3 4 5 6 7

Extremely Likely

Extremely Unlikely

Role Beliefs

Instructions: For the following questions, think back to how you felt before you left to study abroad. Please answer as accurately as possible.

7. What do you think about having sex with someone you meet while studying abroad?

(A) It's ok for someone young like me to have sex w/someone they meet while studying abroad.

1 2 3 4 5 6 7

Strongly Agree

Strongly Disagree

(B) It's ok for someone not in a relationship back home to have sex w/someone they've met while studying abroad.

1 2 3 4 5 6 7

Strongly Agree

Strongly Disagree

(C) It's ok for someone of my gender to have sex w/someone they've met while studying abroad.

1 2 3 4 5 6 7

	1	2	3	4	5	6	7
Fun							Not fun
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Positive	1	2	3	4	5	6	Negative
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smart	1	2	3	4	5	6	Stupid

Prior Experience

Prior to studying abroad how many steady partners (someone you had an ongoing relationship with, i.e., husband/wife, boyfriend/girlfriend) did you have? _____

9. Prior to studying abroad, have you had the following with a partner you did not have an ongoing relationship with:

Oral sex Yes No

-If you answered yes, on the line below please fill in the number of partners for which you did not have an ongoing relationship with.

Vaginal Sex Yes No

-If you answered yes, on the line below please fill in the number of partners for which you did not have an ongoing relationship with.

Anal sex Yes No

-If you answered yes, on the line below please fill in the number of partners for which you did not have an ongoing relationship with.

Prior to studying abroad how often did you use condoms during anal or vaginal intercourse with a casual partner (someone you did not have an ongoing relationship with)?

Never Less than Half the Time Half the Time Over Half the Time Every Time

Prior to studying abroad how often did you use condoms during anal or vaginal intercourse with a steady partner (someone you had an ongoing relationship with, i.e., husband/wife, boyfriend/girlfriend)?

Never Less than Half the Time Half the Time Over Half the Time Every Time

Outcome variables

Intention

1. Did you expect or intend to engage in oral, vaginal or anal sex with a new partner while studying abroad?

___ Yes ___ No

Behavior

2. Did you engage in oral, vaginal or anal sex with someone you met while studying abroad?

___ Yes ___ No

Alcohol/Substance Use During Sex

For the following questions, please answer as accurately as possible how often you engaged in the following experiences while you were studying abroad.

With a Casual Partner (Someone known for less than a week and you did not have an ongoing relationship with)

11. How often have you used alcohol before having sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

12. How often have you used recreational drugs before having sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

13. How often were you feeling the effects of alcohol or drugs when you had sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

14. How often have your partners used alcohol before having sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

15. How often have your partners used recreational drugs before having sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

16. How often have your partners felt the effects of alcohol or drug use while having sex?

Never Less than Half Half the Time Over Half the Every Time

the Time

Time

With a Steady Partner (Someone you had an ongoing relationship with: Husband/Wife, Gf/Bf)

17. How often have you used alcohol before having sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

18. How often have you used recreational drugs before having sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

19. How often were you feeling the effects of alcohol or drugs when you had sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

20. How often have your partners used alcohol before having sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

21. How often have your partners used recreational drugs before having sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

22. How often have your partners felt the effects of alcohol or drug use while having sex?

Never Less than Half the Time Half the Time Over Half the Time Every Time

While studying abroad how often did you use condoms during anal or vaginal intercourse with a casual partner (someone you did not have an ongoing relationship with)?

Never Less than Half the Time Half the Time Over Half the Time Every Time

While studying abroad how often did you use condoms during anal or vaginal intercourse with a steady partner (someone you had an ongoing relationship with, i.e., husband/wife, girlfriend/boyfriend)?

Never Less than Half the Time Half the Time Over Half the Time Every Time

While studying abroad how many casual partners did you hav (someone you did not have an ongoing relationship with)?? _____

While studying abroad how many steady partners did you have (someone you had an ongoing relationship with, i.e., husband/wife, girlfriend/boyfriend)?

Peer Sexual Activity

10. How many of your same sex friends have had sex with someone they met while studying abroad? For example, if you are a male, how many of your male friends engaged in sex with someone they met while abroad?

- (A) None
- (B) A few
- (C) About half
- (D) More than half
- (E) Most
- (F) Don't know