

Prevention and Intervention Programs for Alcohol Use and Risky-Sex Among College Students

Laura R. Burkholder

Submitted to the Psychology Department, Allegheny College

In partial fulfillment of the requirements for the degree of

BACHELOR OF SCIENCE

April 19, 2011

Prevention and Intervention Programs for Alcohol and Risky-Sex of College Students

A Senior Comprehensive Project

Presented by

Laura Renae Burkholder

Pledge: _____

Approved:

Patricia Rutledge, Ph.D

Deborah Dickey, Ph.D

ACKNOWLEDGMENTS

This project had involved the assistance and encouragement of many people but I would like to thank both Professor Rutledge and Professor Dickey for helping me through this entire process. I really appreciate all they have done for me and all they have helped me with for this Senior Comprehensive Project. I would also like to thank my friends for encouraging me and being there for me throughout this process. I would also like to thank my boyfriend and my family for being very supportive. I would also like to thank Allegheny College for giving me the opportunity to create this paper and giving me the opportunity to further my education in the Psychology Department.

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ABSTRACT

The present paper examined the consumption of alcohol and its effects on college students on their sexual experiences by collecting research and information about college students' views on alcohol consumption occurrence and the relevance of alcohol and sexual intercourse. This present paper includes information on the prevention and intervention programs available in order to investigate what program would be most useful for Allegheny College. Researching alcohol consumption and risky sex in colleges will help relate students' reasoning and needs on Allegheny College's campus giving specific needs for Allegheny College to lower the rates of abusive alcohol consumption and risky sex.

Prevention and Intervention Programs for Alcohol and Risky-Sex of College Students

Chapter 1 - Introduction

Alcohol Consumption and Risky Sex

The consumption of alcohol and its effects on college students on their sexual experiences were examined in the context of prior research. Collecting information about college students' views on alcohol consumption regularity and the relevance of alcohol and sexual intercourse will help show how often risky-sex and binge drinking occur on college campuses, allowing the further investigation of what prevention programs and what intervention programs would help improve college campuses rates of alcohol consumption and risky sex. Researching alcohol consumption and risky sex in colleges will help relate the students' reasoning and needs on Allegheny College's campus, giving specific needs for Allegheny College to lower the rates of abusive alcohol consumption and risky sex. Every college needs prevention and intervention programs to support the student body, which in this paper will be addressing which program or programs would decrease alcohol consumption and risky sex rates at Allegheny College. Finding what programs would help Allegheny College could improve our student body by bringing our students closer and having a more comfortable environment, give students someone to go to and talk about these subjects, making the campus a safer, healthier community. The prevention and intervention programs discussed in this paper will be used on the campus to collect data, create group talks, courses, and counseling sessions to improve alcohol consumption to less hazardous amounts and higher the rates of condom use for sexual intercourse. The introduction of this paper includes background information on risky sex in college involving alcohol showing how much there is a need for prevention and intervention programs in colleges. The first chapter of this paper includes prevention programs not only used in colleges across the United States but also in

different countries for the prevention of HIV and AIDS followed by a summary. These prevention programs are brought up in order to find a program that would work well at Allegheny College. The second chapter of this paper includes intervention programs used not only in the United States but also in different countries for the intervention of HIV and AIDS followed by a summary. The third chapter of this paper includes prevention and intervention programs that are currently used at Allegheny College including what would work out of the prevention and intervention programs researched in previous chapters followed by a summary.

Risky Sex and Condom Use

Carroll (2005) found that alcohol impairs many different cognitive processes that narrow the perceptual field so that salient cues are more noticeable than peripheral cues. Since alcohol impairs the thinking and memory processes of the brain, it is no surprise that alcohol is a contributor to risky sexual decision making. With this said, alcohol has been known to affect sexual arousal not only among college students as young adults but older adults as well. Although alcohol is involved in many sexual experiences during college, it is not the only thing that contributes to the risky-sex of college students (Carroll, 1995). Risky- sex in most instances would be putting yourself at risk for sexually transmitted diseases, pregnancy, or regret, among many other risks, but it is very hard to define. All these sexual experiences are considered risky because each occurrence was not thought out completely weighing the pros and cons. Abbey (2005) found that during the AIDS epidemic, alcohol was a major contributor to risky-sexual decision making. Because alcohol has an effect on sexual arousal among college students, it seems that the risk of getting infected with a sexually transmitted disease does not have a large effect on whether a person has sex while under the influence of alcohol. Individuals are aware of these risks, yet while intoxicated salient cues are more noticeable, reacting to more immediate

superficial cues which in this case would be sexual arousal with instigation from either party. For example, Weschler (2002) showed that 10% of a national sample of college students said that during the current academic year, there had been at least one time when they did not use any protection during sex while being intoxicated. That percentage only includes students who admitted to not using condoms, let alone the entire population of people who did not use protection and answered incorrectly.

Changing Habits

Carroll (1995) showed that it is important for people, especially college students, to understand exactly what risky-sex practices can lead to; things that could change the rest of their lives. Students need to be much more careful in the decisions made starting with drinking alcohol underage to risky-sex practices. In order for colleges to understand completely what is going on in the students' personal lives, studying how much of an effect alcohol has on their sexual experiences would be very beneficial (Carroll, 1995). Although there are many prevention and intervention programs at colleges across the United States, that does not mean the programs actually help the students or lower the levels of alcohol consumption and risky-sex. Every college is very different considering the population of students enrolled at that college, meaning that every college may need a different program to reach out to those certain students who need extra guidance in the alcohol and risky-sex areas. Alcohol has a huge impact on college students and it is important to research why and how this could be changed through prevention and intervention programs to not only lower the rates, but show the students how alcohol does not need to be so important or prominent in their lives (Carroll, 1995). This research will hopefully tell how much Allegheny College students drink and how much it is related to risky-sex allowing the further investigation of what type of prevention and intervention program would work at

Allegheny College. It is also very difficult to change the drinking habits of college students because it is looked at as the time during their lives where drinking, sex, and drugs are experiences that they are able to get away with, although they are highly mistaken (Abbey, 2005). So if we as a college try to reiterate making smarter decisions while drinking, we may change or lower risky-sex experiences. Taking drinking completely out of the college students lives is not the way to improve these rates because it will only make these students want to rebel more, but giving students ideas that are smart and useful while drinking would hopefully lead the students to better decisions while drinking; not putting themselves in bad situations (Weschler, 2002).

Regret and Bad Situations

Students, both men and women, have a hard time distinguishing bad ideas and safe ideas especially when surrounded by peer pressure (Abbey, 2005). These show there are also gender differences on how men and women feel about protection during intercourse, about diseases, and pregnancy. Abbey (2005) showed that women in general are more concerned with the consequences of risky-sex such as pregnancy and many sexually transmitted diseases. In the same light, Abbey (2005) found that men are more interested in casual sex rather than mutual relationships at the college age level. Along with having sex while intoxicated, there comes sexual regret in college students especially. This may be because of alcohol, family views, morals, or pressure from a partner among other variables. Oswalt (2005) showed that among students who were sexually active, the majority regretted their decision to engage in risky-sex at least one time. In this same study, 31.7% acknowledged that alcohol had an influence on their sexual activity and 25.5% did not use a condom. Oswalt (2005) also found that it was more common to feel regret rather than worry about pregnancy or sexually transmitted diseases.

Acting on sexual impulse either while drinking or sober, has a greater effect on regret. People who are more likely to act on impulse for any situation are more likely to engage in risky behavior. Velez-Blasini (2008) showed that risky-sex behaviors go consistently with the fact that people who seek impulsive sensations are more likely to be involved in risky-sex experiences rather than people who do not seek instant satisfaction of sexual sensations. Impulsiveness is just one personality trait that may affect a person's alcohol intake, sexual activity, and decision making (Velez-Blasini, 2008). College students are at the age where these decisions made will affect their future lives, but it is also the time where they want to experience the unknown and grow into their given personalities. That is why it is so important to investigate the levels of risky-sex to further understand why students feel the need to drink to excess and put themselves into bad, risky situations. If successful prevention and intervention programs were used at Allegheny College, the students would be able to take the lessons learned in college and use them for the rest of their lives and share the same information with others.

College Environment

Along with personality, alcohol, and peer pressure, the environment in which a person is affiliated with has an impact on college students. The environment in which someone grows up in and goes to high school in has a large impact on how people react in certain situations (Velez-Blasini, 2008). Because everyone grows up in a different environment, especially meeting new people from different cultures in college, gives students many reasons why or why they should not drink. Zamboanga (2009) shows that there are not many restraints on alcohol consumption in college, and, oppositely, a supportive drinking climate exists within social traditions and parties which put these students into the position to drink hazardously. Sororities, fraternities, and sport groups give students opportunities to drink with fellow students, engaging more people

in hazardous drinking. College life has a lot to do with why young adults do the things they do even when the situation is risky (Zamboanga, 2009). For example, college life consists of being on your own, having new responsibilities and being able to experience things you could not before. The risks of hazardous drinking are very high for college students because there is a positive drinking climate and Abbey (2005) shows that around 20 to 50% of college students are at risk for being hazardous drinkers because of possible peer pressure. Although college students will not completely stop drinking or completely stop having sex because of a prevention program which is unrealistic, but a successful, “new” aged program may help the hazardous drinking levels for students on and off campus which will be addressed in the second chapter.

Drinking and Sex

Carroll (1995) found that both men and women in college behaved similarly in that they are both drinking heavily and both engaging in risky-sexual behavior. Men and women have been found to engage in risky behaviors but in order to control this in colleges, there needs to be some kind of program in order to allow some kind of order for the students. Cooper (2002) found that alcohol consumption was a strong contributor to risky-sexual decision making, but was inconsistently related to using any type of protection. Cooper (2002) also showed that the individuals’ decision to engage in sexual behavior was found in both between and within person’s analyses meaning that it cannot be explained by any one individual difference or one personality type. Ingersoll (2008) showed that almost all sexually active women used some kind of protection, but some of those women did not use it properly putting them at risk for disease and pregnancy. These different contraception methods were ineffective because their protection methods were based solely on the partner’s decision to use protection during sexual intercourse and alcohol consumption. Ingersoll’s (2008) study found that a large amount of college women

were drinking hazardously and using ineffective contraception or failing to use any type of protection. In another study, Lewis (2009) found that the majority of college students continue to have multiple sex partners, do not use condoms or any type of protection consistently even though these students are very knowledgeable about sexual diseases, it was found that they do not change their contraception methods. O'Hare (2005) found that students drank excessively before and during these sexual encounters because they felt the alcohol heightened the sexual experiences. It is also important to see that during these sexual encounters, the men were drinking to cope with negative emotions that they had been feeling (O'Hare, 2005). The studies addressed show the inconsistency of contraceptive methods of college students showing that there is a need for not only prevention programs, but most importantly intervention programs.

Women's Drinking Level High

A study by Grucza (2009) found three simultaneous demographic trends that contribute to binge drinking which are, individuals younger than 20 years have experienced marked reductions in risk for binge drinking, saying that changes in the MLDA (minimal legal drinking age), as well as other policy changes and public health campaigns have been successful. Also, countering the previous trend, risk for binge drinking among girls and young women has been rising, with risk increasing faster for minorities than for whites (Grucza, 2009). The reduction in risk for binge drinking among youths has not reached college students (Grucza, 2009). This means that students in college still have a large problem with drinking that needs to be addressed. This is not saying that drinking in college has not been addressed at all, but there needs to be a lot more emphasis put on binge drinking and risky sex and how it may affect future life. Also in this study, it was found that male and female college students drank on average more than people their same age not enrolled in college. This is an interesting find which does

make college seem to have a lot of influence on how students or people in that age group drink a lot heavier and a lot more in one sitting. It seems that peer pressure is a large factor influence whether young adults drink in excess in order to fit in a group, not because they actually like drinking. There has been no reduction in drinking for men in college, but there has been a large increase in the drinking of college women which may be related to peer pressure, or maybe it is more socially accepted for this generation (Grucza, 2009). Women have increased their drinking a lot but men have always been drinking to large amounts, which for this age group does not help the rates of risky sex of either men or women.

Condom Use While Drinking

A study by Leigh (2008) found that drinking before sex was unrelated to condom use. It did not matter whether students were intoxicated or drunk, the students did not use a condom either way. If students are not using condoms drunk or sober, it means students are not being careful with their sexual choices either way (Leigh, 2008). This study also wanted to study a day to day log of every sexual encounter rather than having a student recollects one specific instance but even though these students were writing in a log it still may not cover every instance or sexual encounter. This study also determined that students viewed drinking and having sex as only with casual partners, but sober sex was only for actual relationships or primary partners (Leigh, 2008). Also, this study found that there were a higher percentage of students who did not use a condom and if they did not use a condom in the first sexual encounter they did not use a condom in another encounter (Leigh, 2008). In the same way, if a student did use a condom in one sexual encounter they did use a condom in another encounter (Leigh, 2008). It is also interesting to know that both men and women used condoms more for prevention of pregnancy and not sexually transmitted diseases, but women were more likely to use a condom with casual

partners than with primary partners or boyfriends (Leigh, 2008). In this way, an intervention program of letting the students know how important it is to wear a condom not only when drinking or with casual partners, but with every instance of sexual intercourse whether drunk or sober and with a primary partner.

Sexual Cues

In another study of O'Hare's (2001), students reported that sex was more enjoyable while drunk and without a condom than being sober and safe (O'Hare, 2001). Men also reported that there are a lot of misconceptions of women's "friendly" cues, thinking the women want to hook up with them when in reality the women are just trying to act friendly (O'Hare, 2001). But, it would be very difficult for men or women to be able to tell the difference between these types of salient cues. This is also seen in LaBrie's (2003) study where females overestimated how much males want their female friends, dates, and sexual partners to drink, and men found it more attractive when females drank less. It was also found that males wanted their female friends and sex partners to drink more than a girl they are dating (LaBrie, 2003). This is very confusing to women, for example, men do not like it when the girl they are dating drinks, but it is okay for a sexual partner or a friend to drink more because they may turn out to be a sexual partner (LaBrie, 2003). If women knew men did not want women to drink to risky levels for the most part, it may change the way they drink and consume alcohol to unhealthy levels (LaBrie, 2003). Sex may be thought of as more enjoyable while intoxicated, but why does that mean it is okay to have sex without using protection and making sure your body does not get harmed. Like in LaBrie's (2003) study, Harrel's (2009) study found that the motivation to drink is to "feel high" which could be strongly related to alcohol-related problems among college males compared to females, because this motivation is a part of the way that young men are socialized to use alcohol. But for

women, affective domains are more relevant than is motivation for drinking when talking about problem-behavior. It is a problem either way for men and women to be socialized into drinking alcohol.

Expectations for Women

According to O'Hare (2001), men and women both expect sexual relations while drinking, but men who drink more in intimate circumstances appear to be more likely to engage in risky sexual behavior. It is interesting how this study says that risky sexual behavior while intoxicated happens less for women, but risky sex involves two people. As for women, another study by LaBrie (2002) found that women drink more in college on average than any other time in their life. But, because women physically metabolize alcohol slower women have a higher risk for heart and liver disease. This is a scary thought knowing that women have had a large increase in their drinking levels even though their physical build makes them more likely to get liver or heart disease among other alcohol related diseases (LaBrie, 2002). Labrie (2002) also found that sexually experienced women held higher levels of both drinking motives and drinking expectancies such as sexual intercourse entering college, meaning women who drink have higher sexual expectancies and want to drink in order to "hook-up" (LaBrie, 2002). This may be because women may be more inclined to embrace impulsive or sensation seeking personal styles, which are linked to greater alcohol intake and negative consequences (LaBrie, 2002). The pressure to make friends not only for men but mostly for women and create a social circle in which underage drinking is widespread may be particularly risky for sexually experienced young women who may be drawn toward risky drinking situations and reckless decision making, whether sexual or nonsexual (LaBrie, 2002).

Drinkers and Abstainers

Every college student does not drink on a regular basis; there are a lot of student drinkers and abstainers. In Huang's (2011) study, he found that abstainers have more personal reasons for not drinking while heavy drinkers have situational reasons for not drinking on a certain occasion such as driving home or too much homework. When asked, the abstainer students in this study had a much larger number of reasons for not drinking alcohol than the students who were heavy drinkers (Huang, 2011). Overall, abstainers believed that alcohol caused people to act inappropriately or lose control which was looked at as unattractive (Huang, 2011). Also, the abstainers in this study had a lower peer approval while the heavy drinkers had a high peer approval meaning that the students feel drinking is seen as a good thing and abstaining from drinking is not as popular (Huang, 2011). In Corbin's (2011) study, like Huang's (2011), it was found that social motivation may contribute to risk because individuals who are more socially motivated may drink to build a larger social circle. For example, students who had strong social motives during high school would be more likely to engage in heavier drinking when they transition to college in order to make friends and a social group (Corbin, 2011). Given the social contexts in which most college drinking occurs, membership in heavy drinking social groups may also provide increased opportunities for experiencing negative consequences associated with heavy alcohol use (Corbin, 2011). Meaning that sororities and fraternities have a lot of opportunities alone for drinking at social functions in order to bring their organization of individuals together and get to know each other better. In Coll's (2011) study, it was found that smaller institutions may in fact have similar problems of alcohol use and abuse as do larger schools. This is very similar to Allegheny College's campus because it is a smaller institution, which Coll's (2011) study suggests that smaller schools have the opportunity for the teachers to

get to know the students a lot better, building a relationship with students and recognizing behavioral patterns associated with drinking which could be very beneficial and create steps towards an intervention program.

Justifications

In Vander Ven's (2009) study of getting drunk and hooking up, he found that college students make a lot of alcohol related excuses and justifications after they were intoxicated of sexual encounters or casual coupling episodes. These excuses are coming from their intoxicated self rather than their true self, which makes their lives even more complicated and stressful with lying to themselves about regret they have from a previous drunk night. Also in this study, students admitted to enjoying the feeling of being drunk only until it led to sex in which they regretted it, even though students thought drinking in order to hook-up was not the intention (Vander Ven, 2009). As for prevention, the students took care of each other through the development of support groups in which many of the students entered risky environments with friends who would stick together throughout the night having fun with each other, but also helping each other avoid negative consequences (Vander Ven, 2009).

Program Search

There are many reasons to assume that alcohol intake does have an effect on risky sex practices of college students among other age groups, but this research will be conducted specifically on college students to hopefully further understand why these things happen and what can be done to help the situation. This study will include research on whether college student's alcohol intake affects engaging in sexual intercourse in order to further understand why or why they are not using some type of contraception to protect themselves from the consequences of risky-sex and what type of prevention and intervention programs would work

best for Allegheny College. It is difficult to stop college students from drinking, but if the risky-sex among these enrolled students lowered, the college would be a much safer atmosphere and at a much lower risk for transmitting sexual diseases, lowering self-regret, and lowering self-esteem. Finding a specific prevention or intervention program, or combining multiple programs would hopefully lower the rates of alcohol consumption and risky-sex on and off campus. We will then as a college be able to form sex-groups, or focus groups that will help all of us open up to the idea of risky-sex so that we are able to talk about such things without these topics being unmentionable or embarrassing. This will hopefully help our college become more aware of risky-sex consequences from a more personal level to help and protect ourselves.

Chapter 2 – Prevention

Positive Approach Programs

Prevention of alcohol abuse and risky sex in college is much needed in the United States and should be addressed because the risk of alcohol-related diseases and sexually transmitted diseases is very high. Inman (2011) found that sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence. In order for these programs to work effectively, the programs content must be focused on clear health goals, including the prevention of sexually transmitted diseases, HIV infection, and pregnancy among many others described in this chapter (Inman, 2011). The programs should also concentrate on specific types of behavior leading to these health goals of abstaining from sexual intercourse or using condoms in order to protect ourselves from sexually transmitted diseases, HIV, and pregnancy. The program should also be focused on sexual psychosocial risks and protective factors of knowledge, perceived risks, values, attitudes, perceived norms, and self-efficacy

(Inman, 2011). Inman (2011) states that school settings offer a great opportunity to provide a prevention program for alcohol abuse and risky sex meaning Allegheny College could have prevention programs and reach others as well, not only students (Inman, 2011). In order for these programs of prevention to be successful, there are six steps of implementation that should be used including exploration, installation, initial implementation, full implementation, innovation, and sustainability (Inman, 2011). Not only should these six steps be taken very seriously in order for these prevention programs to work, there also must be a careful staff selection, pre-service, in-service training, staff performance evaluation, ongoing coaching and consultation, data systems, facilitative administrative supports, and system interventions (Inman, 2011). There are some programs in which promote the prevention of alcohol use such as, *Protecting You/Protecting Me* which aids in the prevention of alcohol use, is school based, and has an outcome of reduction of alcohol use and increased protective behaviors (Inman, 2011). *Life Skills Training* is another program that promotes the prevention of substance abuse and violence, is school based, and has an outcome of reduction of abuse, increased knowledge, and improved drug refusal skills (Inman, 2011). Another program is *CASASTART* which aids in the prevention of alcohol use, is school based, and has an outcome of reduction of alcohol and drug use, reduced drug trafficking, decreased association with delinquent peers, improved school performance and reduced violent offenses (Inman, 2011). The *Class Action/Project Northland* programs aids in the prevention of substance abuse, is school based, and has outcomes of decreased likelihood of alcohol use and decreased binge drinking. *Project ALERT* is a program that promotes the prevention of substance abuse, is school based, and has an outcome of decreased likelihood of substance abuse, behavior change, attitude, resistance and skill building) (Inman, 2011). All of these prevention programs would help individual students understand their unhealthy life

patterns and retrieve knowledge of how to improve themselves and become healthier individuals inside and out.

Motivation

In a study by Skewes (2011), it was found that students who were heavy drinkers wanted to improve their drinking habits more than students who drank in moderation. The students who reported having a lot of motivation to change their ways did actually improve themselves (Skewes, 2011). Although the heavy drinkers with motivation improved, the students who were really heavy drinkers and had less motivation did not improve and showed no reduction in their drinking habits (Skewes, 2001). The reason for this may be that the students think their drinking problem is already progressed to the point that they could not pull themselves out, but if there were an individual based prevention program there could be more one-on-one contact to help improve their specific situation. Motivation is a very important predictor of treatment outcomes and Skewes (2011) research suggests that readiness to change predicts drinking outcomes for students with varying levels of alcohol use. Prevention and intervention programs should really address motivation to change the students' risky behavior because it is a very important construct of predicting successful outcomes. Motivation of individuals can really be improved with these types of programs through interviewing or similar strategies (Skewes, 2011). Also, relapse prevention strategies may prove to be effective and important components of harm reduction interventions (Skewes, 2011). Motivation is a huge predictor of whether a program will work or prove to be successful and once the motivation is there for that individual, like in Skewes (2011) study said, the students are more likely to improve.

Science Based Prevention

According to a study by Ott (2011), there should be a science-based prevention program

facilitated in high schools for sexual health promotion, traditional sex education, and youth development. A high school prevention program would inform the youth instead of waiting until college which by that time, it may be too late because young adults form habits early. Sexual health promotion would be based on self-respect, respecting one's body and for women attaining equal power and footing in relationships, healthy relationships, and communication about abstinence and sex. This type of curriculum emphasized relationship and communication skills (Ott, 2011). For the high school prevention programs, health education goals included puberty and HIV education so that when the students start to make decisions about sex they can have enough knowledge to base their decisions off of (Ott, 2011). The youth development programs focus on general communication and relationship skills, encouragement to focus on school and vocational and life goals which would hopefully translate into healthier sexual behavior and improved public health outcomes (Ott, 2011). As found in other studies, Ott (2011) talks about how there is a higher risk for pregnancy and sexually transmitted diseases for people who are not educated about these types of preventions, so that is why it is very important for young children to have the sexual education at an earlier stage rather than when it is too late. Ott (2011) talks about the *Postponing Sexual Involvement* program that has human sexuality curricula including how to take care of your body, *Wise Guys* which teaches students about their masculinity, peer pressure, and how to say no in a way that is socially acceptable, and *Baby Think It Over* which uses infant simulators for pregnancy prevention in order for young adults to understand the consequences of getting pregnant at a young age (Ott, 2011). One thing schools have problems with when it comes to prevention programs is that schools want to mandate abstinence only, when in actuality, they should be teaching how to use contraceptives and why it is so important to use contraceptives, which would be much more effective. There is a need for both funding and

technical assistance in program development, selection, adaptation, and evaluation which is seen in much of the research, and well worth the cost (Ott, 2011). A solution might be for the state and local funders to identify a limited number of curricula that they are able to support but there would be a risk of suppressing creativity and innovation but even with this problem, it would be still worth having a program (Ott, 2011). There is much more room for a self-developed curriculum but these programs would need to hold the standards of science-based practices in terms of evaluation and outcomes meaning if the programs are presented and positive outcomes are not occurring the programs would be taken away which is why these programs need to be taken very seriously (Ott, 2011).

Targeting High School Students First

Like in Ott's (2011) study, LaBrie (2011) found that preventive initiatives targeting high school students in order to prevent or minimize risky behavior patterns would significantly help the outcome of their behaviors later in life. Labrie (2011) also found that it would be helpful to supplement high school based preventative efforts with collegiate interventions to coincide with college freshman's new sense of freedom from adult supervision and introduction to different cultures with different views of young adult drinking. If curricula in high school were able to have a preventative program that covers multiple subjects of alcohol consumption and risky sexual behaviors and the negative consequences that occur because of these decisions, it would decrease the numbers of regretful sex and sexually transmitted diseases not only their first year of college but the years to follow (LaBrie, 2011). LaBrie (2011) also found that in college it would be useful for there to be a campus support program for the incoming freshman, particularly those who are sexually experienced and are considered "at risk" to hopefully help these students better understand how they may be persuaded to abuse alcohol and to cope with

the challenging transitional periods as well as minimize dependency on drinking to cope with personal problems. This idea of prevention in high school would need to progress into college with either prevention or intervention programs in problem spots such as coping with personal problems or academic related stress. Because there is a problem of programs from high school to college, Tobin (2010) found that one of the challenges of either prevention or intervention programs is the ability to sustain the effect beyond the months the students were treated. In this aspect, not only would students need the programs in high school, but the students would also need a follow up in their years in the college environment (Tobin, 2010). In order for these programs to work, there would need to be complete contact with the student and complete contact with the program from the student that is involved (Tobin, 2010). There would also need to be no interruptions during the practices and skill exercises, in which the interruptions would be excluded when there are one-on-one interaction between counselor and student (Tobin, 2011). The *Step into Action* program really helped the students in the fact that they were able to increase their communication about risky sex and the negative outcomes (Tobin, 2011). Within this program, the educators were trained individuals who focused on the reduction of sexually transmitted diseases with conversation in their personal risk environment which helped these individuals a lot more than general peer-based focused conversation (Tobin, 2011). This program was designed to incorporate behavior change into their everyday lives within conversation and daily activities within a natural social setting to get the individuals comfortable talking about their personal, sexual problems (Tobin, 2011). What really helped the individuals in this program was the repeated conversations about prevention that proved to reinforce the identity of the peer health educator, which helped improve the conversations between the individuals themselves having a safe, honest environment (Tobin, 2011).

Sensation Seekers

Perry (2011) found that many of the prevention programs are directed towards drug abuse consisting of educational, family or peer-based programs only aimed at middle and high school aged adolescents rather than another age group. Perry (2011) also found that “targeted” programs that are designed specifically for a group of people, like Allegheny College students, would be a lot more successful in having a particular prevention and intervention program addressing the student body of this campus rather than another campus. Some types of targeted approaches would be teaching refusal skills as well as reinforcing specific choices that would promote a healthier lifestyle (Perry, 2011). There are many mass media campaigns that target high sensation seekers with high arousal messages that reliably decrease risky decision-making involving alcohol use and risky sex (Perry, 2011). Perry (2011) also states that one of the best ways for a prevention program to be ultimately successful would be to have attention-intensive formats for the individuals so that they know the intention of the program, which is to help them specifically with their personal and intimate problems. Risky behaviors by adolescents are thought to be impulsive due to the immaturity of their pre-frontal cortex (Perry, 2011). Knowing this, implementing training exercises that engage the pre-frontal cortex of areas involved in decision-making may present as useful prevention strategies (Perry, 2011). This type of prevention would be directed toward specific individuals who have high sensation seeking tendencies or anxiety (Perry, 2011). Other successful strategies would include lessons on the consequences of coping strategies that centered around high-risk personality dimensions such as sensation seeking, recognizing automatic thoughts, and engaging in group exercises based on real-life scenarios (Perry, 2011).

Motivation, Education and Parenting

Truncali (2010) found that students who were tested on a computer about their knowledge of risky sexual behavior and alcohol abuse tested a lot higher than students who did not test on the web module. But, even though these students had a lot of knowledge on the subject matter being tested on, students had a lower performance score in the motivational impact domain meaning students may know all the preventative aspects on these topics, but are not acting upon what they know because they show no motivation to do something about these issues (Truncali, 2010). The students that were tested had high confidence scores because they tested well on the educational domain of the test, but their performance scores did not reflect their confidence levels, meaning that these students were well educated but did not act upon their knowledge (Truncali, 2010). Going along with the topic of knowledge and education, Ha (2011) found that parents wanted their children to be taught in detail about morality, heterosexual relationships, contraception, HIV/AIDS and STD prevention, but not until the children were at least fifteen years old and the parents did not want to be the one who educated their children on these topics. On the contrary, the parents did not want their children to learn about sexual intercourse, abortion, rape, or masturbation, which are very important topics for children and adolescents (Ha, 2011). Ha (2011) also found that young adolescents who are well informed about sexual behavior, sexual health, contraception and the prevention of sexually transmitted diseases make more informed decisions about putting themselves into sexual relationships, experience sexual intimacy as more pleasurable, and are at a lower risk of risky sexual behaviors. Ha (2011) thinks that basic information about puberty, menstruation, HIV/AIDS, sexually transmitted diseases, sexual harassment and rape should be taught in primary years of children. Masturbation, contraception, abortion, clinics and services, infertility, pregnancy and birth, sexual life and sexual dysfunction should be taught in secondary school and sexual violence and

reproductive health disease prevention would be taught in high school (Ha, 2011). But, although these topics are taught in basic and elementary schooling, there still should be programs during college not only to inform students on new, innovative ways to protect themselves from harm but to also have a support team during this time when these students are going through a difficult, stressful time in their lives (Ha, 2011). Ha (2011) also found that if a students' desire to receive information on these topics of sex, sexual health, contraception and prevention of STD/HIV/AIDS is denied, it not only increases their vulnerability but also undermines trust in such social institutions, health system, and government officials and families. This goes along with the issue of parents being able to talk to their children at a young age to inform them of what to do and what not to do when it comes to sex and alcohol. These prevention programs would not only help students to open up, but it would also help parents to feel more comfortable talking to their children about these topics. On parent involvement, Byrnes (2010) found that peer pressure and the child's neighborhood environment can change the level of the parent's influence on the children. This means that if the children are raised in a neighborhood where the parents are somewhere close when they are playing outside or at a friend's house, this lowers the chance of that child being involved while alcohol or risky sex (Byrnes, 2010). If the parents do not have to ask their children where they are or where they are going, because they are around their child often, lowers the problems that the children are involved in (Byrnes, 2010). Byrnes (2010) also found that maximum rule setting in the household does not change the child's behavior, in fact, it makes the child want to rebel. This means that once students graduate from high school and are planning on attend college, if the rules of the parents are "too" strict and that is all they know, there may be a better chance of the child rebelling when they start going to college, which is why these programs would be helpful.

STI (Sexually Transmitted Infection) Prevention

Burks (2011) found that most people who seemed knowledgeable on the topics of sexually transmitted infections and alcohol wanted there to be weekend or after hours for HIV/AIDS clinics because it is difficult to make an appointment with everyone's busy schedules. Also, for the most part, the people in this study did not know where the most local clinic was compared to where they lived (Burks, 2011). This is a problem in the fact that if people do not know where to go to get tested or how they should go about being tested, not many people will make a large effort to find out, which is where the problem in lies (Burks, 2011). If students entering college are moving to a completely new city, it would have to be the campus or student body who shares with the incoming freshman the spots they should go if they want to get tested for sexually transmitted infections or anything along those lines (Burks, 2011). Going along with protection, Brown (2011) found that there are a lot less positive attitudes when it comes to using condoms among college students because the students think it is embarrassing to use a condom. The reasoning behind this inconsistency of condom use is predicted by clinical status, unemployment, and the absence of peer support for condom use (Brown, 2011). Brown (2011) also found that the main reasons students use or do not use condoms is because of the importance of peers during young adulthood and the influence of norms on behavior for all young people. It would be beneficial for prevention programs to consider college student's perception of their peers' attitudes towards condom use and either encourage them towards making independent judgments to protect themselves or reshape perceptions of peer expectations and norms (Brown, 2011). It was also found in Brown (2011) that personal beliefs have less influence on condom use than factors such as the discussion and negotiation of condom use meaning the embarrassment of talking about condom use would rather be avoided by students (Brown, 2011).

Sensation Seeking and Alcohol-Sex Expectancies

Patrick (2009) found that oral sex is more likely to happen from the disinhibitory effects of alcohol, where penetration sex is more often defined by other factors such as the strength of the interpersonal relationship. According to Patrick (2009), more oral sex occurs before the individuals have penetration sex because it supposedly suggests less commitment than penetration sex. College men and women would rather give oral sex because there is less of a commitment to a relationship, but condoms are used much less during oral sex and it is also putting yourself at a higher risk for sexually transmitted infections (Patrick, 2009). It is possible that college students would also rather give oral sex than penetration sex, because when oral sex is being performed there is only the risk of sexually transmitted infections, when having penetration sex there is also the risk of pregnancy (Patrick, 2009). Patrick (2009) found that alcohol-sex expectancies had a direct association with perceived positive consequences of sex. But, the positive consequences of sex expectancies were only on a short-term bases meaning the students had positive thoughts about engaging in sex but once it occurred it was likely that the student regretted their sexual encounter the next day (Patrick, 2009). Patrick (2009) also found that on days that college students reported drinking, they consumed more than five drinks over half the time, and on days they had penetrative sex, they did not use condoms half the time. This statement from Patrick (2009) is a very serious find in the fact that there needs to be some kind of prevention or intervention program that changes the views of these students perspective on sex and alcohol. Overall, Patrick (2009) found that alcohol use and sexual behavior were related particularly among people who expected that alcohol would facilitate sexual interaction and sexual drive. When it comes to prevention and intervention programs, institutions should be cautious about public health messages implying that alcohol use has a causal effect on sexual

behavior, because strong statements that lead people to think that alcohol is completely associated with sexual behavior may have an effect by reinforcing alcohol-sex expectancies and thereby increasing health risk behaviors (Patrick, 2009). Having alcohol-sex expectancies can lead to sexual intercourse, but there also needs to be an initial arousal according to Norris (2009). Norris (2009) found that there is a link between high intoxication levels and sexual arousal in predicting risky sex intentions. Also in this study it was found that there is a direct effect on early sexual arousal and an indirect effect on later sexual arousal meaning someone may be giving another someone sexual cues directly, which may turn into penetration sex indirectly (Norris, 2009). Also found in Norris (2009) was that HIV prevention programs should continue to emphasize teaching women to insist on condom use wherever feasible which also goes along with any type of sexually transmitted disease prevention. Teaching women to say no to unprotected sex, that is, to have a gatekeeper role, is part of the prevention process, but women also need to be proactive in protecting themselves by asserting their desire to use condoms (Norris, 2009). Norris (2009) also found that prevention programs can benefit from making women aware of the importance of sexual arousal in making sexual decisions which can help motivate them to exert personal control with a sexual encounter. Addressing the role of early sexual arousal can be discussed in a wide range of settings that are particularly apt for HIV prevention programming (Norris, 2009). Prevention efforts should stress how alcohol consumption may play a role in sexual risk taking through an effect on sexual arousal (Norris, 2009). By continuing to stress the importance of insisting on condom use and teaching a broad range of sexual refusal skills, that is, how to begin to say no before the point of sexual penetration, prevention programs can show women how to manage potentially risky situations to their advantage even when sexually aroused (Norris, 2009).

Chapter 2 – Prevention Summary

This chapter addresses positive approach programs which include six steps of implementation including exploration, installation, initial implementation, full implementation, innovation, and sustainability (Inman, 2011). There are some programs in which promote the prevention of alcohol use such as, *Protecting You/Protecting Me* which promotes the prevention of alcohol use, is school based, and has an outcome of reduction of alcohol use and increased protective behaviors. *Life Skills Training* promotes the prevention of substance abuse and violence, is school based, and has an outcome of reduction of abuse, increased knowledge, and improved drug refusal skills. *CASASTART* promotes the prevention of alcohol use, is school based, and has an outcome of reduction of alcohol and drug use, reduced drug trafficking, decreased association with delinquent peers, improved school performance and reduced violent offenses. *Class Action/Project Northland* promotes the prevention of substance abuse, is school based, and has outcomes of decreased likelihood of alcohol use and decreased binge drinking. *Project ALERT* promotes the prevention of substance abuse, is school based, and has outcomes of decreased likelihood of substance abuse, behavior change, attitude, resistance and skill building.

Prevention and intervention programs should really address motivation to change students' behaviors because it is a very important part of predicting successful outcomes. Motivation of individuals can really be improved from these types of programs through interviewing or similar strategies (Skewes, 2011). Also, relapse prevention strategies may prove to be effective and important components of harm reduction interventions (Skewes, 2011). Motivation is a huge predictor of whether a program will work or prove to be successful and once the motivation is there for that individual, like in Skewes (2011) study, they are more likely

to improve. Ott (2011) talks about the *Postponing Sexual Involvement* program that has human sexuality curricula, *Wise Guys* which teaches students about their masculinity and peer pressure, and *Baby Think It Over* which uses infant stimulators for pregnancy prevention (Ott, 2011).

These programs could be taken into consideration for Allegheny College's prevention/intervention programs.

Labrie (2011) found that it would be helpful to supplement high school based preventative efforts with collegiate interventions to coincide with college freshman's new sense of freedom from adult supervision and introduction to different cultures with different views of young adult drinking. The *Step into Action* program really helped the students, in fact, during the study they were able to increase their communication about risky sex and the negative outcomes (Tobin, 2011). Perry (2011) also found that "targeted" programs that are designed specifically for a group of people, like Allegheny College students, would be a lot more successful in having a particular prevention and intervention program addressing the student body of this campus rather than another campus.

Ha (2011) also found that if a students' desire to receive information on these topics of sex, sexual health, contraception and prevention of STD/HIV/AIDS is denied, it not only increases their vulnerability but also undermines trust in such social institutions, health system, and government officials and families. Patrick (2009) found that on days that college students reported drinking, they consumed more than five drinks over half the time, and on days they had penetrative sex, they did not use condoms half the time. Prevention efforts should stress how alcohol consumption may play a major role in sexual risk taking through its effect on sexual arousal (Norris, 2009). By continuing to stress the importance of insisting on condom use and teaching a broad range of sexual refusal skills, that is, how to begin to say no before the point of

sexual penetration, prevention programs can show women how to manage potentially risky situations to their advantage even when sexually aroused (Norris, 2009).

Chapter 3 – Intervention

Intervention of Alcohol and Mood

Barton (2011) found that it is the hazardous and harmful college drinkers who show the most social harm to society, it is not the alcoholic dependent people in treatment. Alcoholics get more of the attention of the treatment providers which is helpful, but it is the hazardous and harmful college drinkers that need more of the attention and are in desperate need of intervention (Barton, 2011). This is very important because for the most part, alcoholics in treatment know they have a drinking problem but hazardous and harmful college drinkers fail to recognize they are using alcohol to harm themselves and do not understand the negative future consequences (Barton, 2011). In Barton's (2011) intervention study, student's life styles were screened and the students were provided with information and a brief counseling session aimed at highlighting hazardous or harmful drinking. Also, the Alcohol Use Disorders Identification Test (AUDIT) was given to the students to provide an accurate measure of risk across gender, age and culture (Barton, 2011). The AUDIT identifies four types of alcohol consumption including safe consumption where, by definition, alcohol is consumed in a manner that does the drinker and those around little harm, hazardous consumption where, by definition, the pattern of alcohol consumption increases the risk of harmful consequences to the user and others, harmful consumption where, by definition, alcohol consumption results in consequences for mental and physical health, and dependent consumption where there are clusters of behavioral, cognitive and physiological phenomena that may develop with repeated alcohol use (Barton, 2011). All of these levels of drinking include strong desire to consume alcohol, limited control over its use and

increased tolerance amongst other symptoms (Barton, 2011). This specific public health intervention is aimed at alerting people of the negative impact their drinking behavior has on their health and social well-being (Barton, 2011). Most hazardous or harmful drinking occurs because emotions play a major role in the development, maintenance, and termination of substance use disorders and Witkiewitz (2011) found that there is a high rate of alcohol use pairing with affective disorders. Witkiewitz (2011) also found that when someone drinks alcohol to the point of dependence it does not seem as satisfying when they drink socially so the users want and use even more which can alter the user's regular routine creating more emotional instability. This study proposes an affective model of drug motivation in which the students must avoid negative affect during withdrawal to not result in relapse (Witkiewitz, 2011). Witkiewitz's (2011) study provides support for the Coping with Craving and Urges module as an intervention that targets responses to negative mood and reduces the impact of negative mood on heavy drinking days. If a change in craving can occur in these individuals by using this module, it is very likely that the individuals will be able to alter the relation between negative mood and heavy drinking frequency which will lessen the dependence on alcohol while upset (Witkiewitz, 2011). When talking about negative mood, Nduna (2010) found evidence that depressive symptoms predicted some sexual risk. This implies that there should be upstream interventions to prevent depressive symptoms and associated risky sexual behaviors (Nduna, 2010). If there were an intervention treatment program for both sexes, there would be a reduction of risky sexual behaviors relating to alcohol in or out of a conceptual relationship (Nduna, 2010).

The *Lancet Global Mental Health Group* issued a "call for action" in 2007 to strengthen mental health services across the globe, particularly in low-income countries, and emphasized the prevalence and burden of depressive disorders and low cost of effective interventions

(Nduna, 2010). According to Nduna (2010) mental health investments could have an enormous impact on public health, HIV epidemic, and college sexually transmitted infection transmission. In order for the students to feel comfortable when doing this intervention, there should be encouragement to have a more honest disclosure of participants by assuring them of confidentiality, communication survey legitimacy, and ensured rapport between interviewer and respondents (Nduna, 2010).

Nested Intervention Programs

According to LaBrie (2006) the National Institute on Alcohol Abuse and Alcoholism developed multiple guidelines for effective interventions in dealing with problematic college student drinking, including targeted individual interventions paired with broader campus community involvement. These interventions need to target both high-risk individuals and the broader campus community and also must address alcohol related attitudes and behaviors, use survey data to counter students' misconceptions about their fellow students' attitudes toward excessive drinking and drinking practices, and increase students' motivation to change their drinking habits (LaBrie, 2006). These interventions should be "early" interventions by taking place with incoming freshman to be the most successful in warding off subsequent problems (LaBrie, 2006). Programs that use the strategies of motivational interviewing, implementing nonpunitive, nonconfrontational style, have successfully reduced college student drinking because the interviews provide feedback to change students' perceptions of normative drinking, helping students find inconsistencies between their goals and current behavior, and helping students learn new strategies to deal with high-risk situations (LaBrie, 2006).

Heads UP! involves a nested approach to intervention which targets a high-risk group of students while also providing support and infrastructure for broader campus culture change with

respect to drinking (LaBrie, 2006). This intervention provides community initiatives that encourage and support students in practicing responsible behavior while making choices about alcohol use (LaBrie, 2006). This group intervention is conducted in the style of motivational interviewing that promotes responsible drinking, reduces high-risk drinking, and decrease negative alcohol-related incidents on campus, including violations of campus alcohol policies (LaBrie, 2006). There are multiple techniques involved in a single brief group which involves follow-back measure, social norms feedback, group and individual decisional balances, relapse prevention, expectancy challenges, and the setting of individual behavioral goals about future drinking behavior (LaBrie, 2006). The students are asked to first take a survey of how much they drink or have been drinking each day and to be completely accurate and honest. Once the students have done this, they are asked to keep a diary each day of how much they drink and the quantities they drink. This allows the students to see how much they actually do drink and to see the patterns to make them aware and mindful of these patterns (LaBrie, 2006). After this, the students were asked to form groups and estimate the typical drinking behavior of students on campus, as well as the amount of alcohol-related negative events that occur on campus. Then, the students were given the actual normative drinking data for the campus to correct overestimates of perceived normal drinking behavior (LaBrie, 2006). On average, the students overestimated how much the other students were drinking and underestimated the prevalence of on-campus alcohol-related incidents of violence, forced sex, vandalism, and other negative events (LaBrie, 2006). The students were then asked to write a list of pros and cons of why they should drink less and create a personal decisional balance sheet, rating the strength of their personal pros and cons (LaBrie, 2006). These balance sheets provide and aid the individuals in recognizing their readiness to change, allowing them to examine personal discrepancies between their goals and

behaviors, and allows them to clarify their own motivational factors for changing (LaBrie, 2006). The students are then lead in a group brief, open-ended discussion on the importance of reasons for drinking less, for example, doing better in school, saving money, being in better shape, avoiding hangovers, and avoiding problems with school and legal authorities (LaBrie, 2006). The students are then asked to create a list of all the high-risk situations in which they feel would be hard for them, or others, to avoid drinking in excess. The students were then asked to come up with ways on how to deal with these risky situations as the students also explore their own abusive drinking experiences, identifying their existing skills to effectively deal with risky situations and develop new strategies for effectively reducing risk (LaBrie, 2006). The individuals set personal goals for their drinking levels for the next month and discuss their goals after that assigned month to see if the individuals adhered to their goal setting. The students were then asked to keep a diary for the next month after the intervention to see whether their goals were met and how closely the students met their goals (LaBrie, 2006).

According to LaBrie (2006), in order for the interventions to succeed, there has to be a campus community full of faculty, staff, parents, and student body leaders that are willing to establish an environment that support the intervention and hopefully shift the campus attitudes concerning alcohol use toward more risk-reducing attitudes. If the campus is involved with the intervention, it increases and encourages campus dialogue about alcohol problems impacting students, staff and faculty who did not participate in the intervention (LaBrie, 2006). Before the new freshman class comes to stay for their first year of college, the parents should receive a letter encouraging the parents and students to discuss the role drinking will play in college life prior to arriving at college (LaBrie, 2006). If the parents would follow through with this encouragement and set the institutional tone against irresponsible and harmful drinking the students would

already know prior to coming to college, how much alcohol has an effect on their peers and how important it is not to put themselves into risky situations (LaBrie, 2006). If the resident directors implement several activities and programs across campus to present social norms during mandatory dormitory meetings during the first few months of schools, it will correct the misperceived normative drinking patterns of the college (LaBrie, 2006). If the program administrators give advice on how to include issues related to alcohol in courses and clubs while having the faculty, staff, and student leaders learn motivation tactics to intervene with the students at risk it will create a safe, healthier atmosphere free of discrimination and hurt (LaBrie, 2006). The campus would also need an accessible, approachable campus office where the atmosphere is safe and inviting (LaBrie, 2006). If the campus affiliates would conduct these interventions, according to Carey (2007), these interventions would reduce alcohol for college drinkers, reduce alcohol-related problems and the contrast between students who receive interventions and those in control conditions diminishes over time meaning the intervention would spread the word around campus helping the program (Carey, 2007). Carey (2007) found that alcohol risk reduction interventions of various forms reliably reduce quantity and frequency of drinking by college students. These interventions should incorporate reductions in negative consequences not only to benefit the drinker but also benefit others including alcohol poisoning, property damages, and fights (Carey, 2007). According to Carey (2007), most women do not need drinking “buddies” but men on average have a specific drinking buddy, which within the intervention both individuals would work together to lower their drinking levels so that one peer is not pressuring the other peer. Carey (2007) found that female students are more willing to participate and respond in alcohol interventions compared to males and women who drink heavily respond more positively to brief interventions than do heavy drinking men. Students who

drink in neutral situations, like a bar, are less likely to drink more and students who sit with their friends in their house drink more because they are not driving or going anywhere thinking it is okay to drink more than usual (Carey, 2007). This goes along with the thought that the most intervention work needs to happen with Greek affiliated students and student athletes (Carey, 2007). This is because the Greek members and athlete members have a group of friends within their sister or brotherhood or within their teammates, which creates a lot more reasons to get together as a group and celebrate by drinking (Carey, 2007). Interventions delivered to individuals rather than a group of individuals and interventions that used motivational interviewing, provided feedback on expectancies or motives, normative comparisons, and included decisional balance exercises are more successful at reducing alcohol related problems (Carey, 2007). Brief motivational interventions for alcohol abuse were more successful than skills training or expectancy challenge components. Alcohol related interventions need a lot of time to make a difference in the individual, but if the individual sticks with the intervention program they are very likely to help themselves out of the risky situation in the future (Carey, 2007).

Motivational Enhancement Intervention

Allegheny College is in need of a low-cost, effective program that will reduce heavy drinking and negative sexual consequences in high-risk groups with multiple risk factors, for example, first year students. There are a variety of programs used today for prevention and intervention of alcohol abuse and risky sex, including cognitive-behavioral, educational-informative, and motivational enhancement (LaBrie, 2011). The cognitive-behavioral approach includes an educational component, personal values specific to each student, and normative re-education components which teach specific skills to modify beliefs and behaviors, which is a

helpful program but time consuming and contributes to high attrition rate (LaBrie, 2011). The educational-informative intervention approach is based on the theory that students misuse alcohol due to the lack of knowledge of high risks of heavy drinking and that the awareness of these risks will reduce drinking (LaBrie, 2011). The motivational enhancement is a non-judgmental, client-centered approach that uses the basic principles of developing discrepancy, rolling with resistance, expressing empathy, and supporting efficacy with the goal of increasing internal motivation to change behavior, which is one of the most effective and successful programs (LaBrie, 2011). This motivational approach may help find inconsistencies between goals and current behaviors which will build intrinsic motivation and reduce problem drinking and increase the exploration of new strategies to handle high-risk situations (LaBrie, 2011). This approach not only reduces alcohol and drinking related consequences in a manner like the one-on-one model, but is also appears to work better than an educational-informative intervention (LaBrie, 2011). According to LaBrie (2011), it may be helpful to have separate male and female targeted interventions separated which will help direct the program toward the specific gender information rather than a more general program. Not only does motivational intervention help reduce alcohol intake and risky sex; treatment effects emerge immediately following the intervention (Gwaltney, 2011). According to Gwaltney (2011), if interventions initiate a change over time, it is very likely that the changes will gradually appear. Helpful strategies for these interventions would include debunking the erroneous expectations that drinking will improve sexual encounters. Another strategy would be helping students learn to anticipate the potential risks they may run into in unplanned sexual encounters while drinking and setting specific drinking goals to encourage moderation. Also, students could rehearse assertive behaviors that can reduce excessive alcohol use or avoid unplanned sexual encounters and encouraging self-

monitoring and evaluations as a part of a prevention or early intervention program (O'Hare, 2001).

Computer/Web Based Interventions

Khadjesari (2010) found that computer based interventions were more effective than comparison group interventions at reducing alcohol intake. Non-student populations got a lot more out of the computer based intervention than students in college did (Khadjesari, 2010). A lot like the Alcohol EDU program at Allegheny College presented freshman year, the online surveys are difficult to gage and do not present many preventative strategies. These students would get a lot more out of the motivational interventions than the web based interventions. Another setback for computer based intervention programs is that it is hard to review the web based programs because it is only supported by the mean, or the average (Khadjesari, 2010). Although the web based interventions are often used, there should be some caution using this approach because there is concern on the generalizability of treatment effects (Khadjesari, 2010). According to Mevissen (2011), developing an online intervention with proven effectiveness does not mean that people actually visit the website and stay long enough to process the messages included in the intervention.

Sexually Transmitted Infections Intervention

Mevissen (2011) found that after intervention efforts, students wanted to talk to their partners more about getting tested for sexually transmitted infections than before the intervention. After the intervention at a follow-up, there were higher rates of condom use reported suggesting that motivational interventions are effective in reducing sexually transmitted infections (Mevissen, 2011). The more information the students received from the intervention, the more the individuals thought they were susceptible for sexually transmitted infections which

makes the student more motivated to protect themselves (Mevisen, 2011). This specific intervention included personalized risk information to influence sexually transmitted infection related risk perceptions and motivational interviewing techniques as well as feedback to target motivation, attitude, normative beliefs, self-efficacy and skills towards maintenance of condom use and taking a sexually transmitted infection tests (Mevisen, 2011). According to Mevisen (2011) it was easier for students to accept the fact that their partners may have a sexually transmitted disease but harder for them to think that they personally have a sexually transmitted disease. This should be addressed in the intervention, in order to make the students know it is worth talking to the partner about these situations rather than being embarrassed and contracting a disease. Interventions should also investigate the triggers and prompts that encourage site-visiting and site-use and also the motivation to visit health websites on the topic of sexually transmitted infections (Mevisen, 2011). Two intervention programs that use this curriculum are *Sex Can Wait* and *Brother to Brother* which focus on the importance and benefits of abstaining from risky sexual intercourse, age-appropriate information, and encouraging the values and effectiveness of healthy decision making and communication (Koo, 2011). Koo (2011) found that it is very effective to use an “Anonymous Question Box” in which students place their questions with no names written which the teachers of the interventions will address the questions without names mentioned, which would be very effective in the fact that students will be less embarrassed to ask questions that they are interested in without being made fun of or hurt. During the intervention there should be different sessions on different topics according to Koo (2011) including, *Waiting to Have Sex* which encourages positive attitudes about abstinence by identifying positive reasons to avoid sex and understanding abstinence as a peer norm, *Making Good Decisions* which increases awareness of peer pressure and positive and negative influences

and *Communication* that improves knowledge and demonstration of a good listener and speaking skills which enables students to discuss how peers' values may differ from their own values and how good communication skills can resolve conflicts with such peers (Koo, 2011). Another session would include *Values: What Is Important to Me* where the students learn about personal values and understand how they are important determinants of our decisions, behaviors, and the future and *Media Influences* which discuss important sources of values within and outside the family and how personal values are important determinants of our decisions, behaviors, and future. Another session would include *Taking Care of Your Body: Avoiding Threats to Your Body, Mind, and Spirit* which defines risky behaviors and discusses reasons to avoid such behaviors explaining how various risk behaviors are threats to healthy development and *Taking Care of Yourself and Your Body Sexually* explaining how sexuality consists of more than sexual intercourse encouraging healthy sense of respect and comfort with students' own sexuality (Koo, 2011). The last two sessions would include *Building Health Relationships* which defines the stages of physical affection and promotes values and benefits of postponing sexual involvement which helps students to respond to peer pressure and avoid unwanted sexual involvement and *Birth Control* which encourages the positive attitudes towards birth control methods which explain the effectiveness in preventing pregnancy and where to receive contraception (Koo, 2011) .

Chapter 3 – Intervention Summary

Barton (2011) found that it is the hazardous and harmful drinkers who show the most social harm to society, it is not the clinical alcoholics. Alcoholics get more of the attention of the treatment providers which is helpful but, when it is the hazardous and harmful college drinkers that need more of the attention and are in desperate need of intervention (Barton, 2011).

According to LaBrie (2006) the National Institute on Alcohol Abuse and Alcoholism developed multiple guidelines for effective interventions in dealing with problematic college student drinking, including targeted individual interventions paired with broader campus community involvement. Heads UP! involves a nested approach to intervention which targets a high-risk group of students also while providing support and infrastructure for broader campus culture change with respect to drinking (LaBrie, 2006). This intervention provides community initiatives that encourage and support students in practicing responsible behavior while making choices about alcohol use (LaBrie, 2006). Group interventions are conducted in the style of motivational interviewing which promotes responsible consumption and the reduction of high-risk drinking, and decreasing negative alcohol-related incidents on campus, including violations of campus alcohol policies (LaBrie, 2006). Allegheny College is in need of a low-cost, effective program that will reduce heavy drinking and negative sexual consequences in high-risk groups, freshman students, with multiple risk factors (LaBrie, 2011). There are a variety of programs used today for prevention and intervention of alcohol abuse and risky sex, including cognitive-behavioral, educational-informative, and motivational enhancement (LaBrie, 2011). Interventions should also investigate the triggers and prompts that encourage site-visiting and site-use and also the motivation to visit health websites on the topics of sexually transmitted infections and alcohol consumption (Mevisen, 2011). Two intervention programs include *Sex Can Wait* and *Brother to Brother* which focus on the importance and benefits of abstaining from risky sexual intercourse, age-appropriate information, and encouraging the values and effectiveness of healthy decision making and communication (Koo, 2011). Koo (2011) found that it is very effective to use an “Anonymous Question Box” in which students place their questions with no names written which the teachers of the interventions will address the questions without names mentioned,

which would be very effective in the fact that students will be less embarrassed to ask questions that they are interested in. During the intervention there should be different sessions on different topics according to Koo (2011) including, *Waiting to Have Sex* which encourages positive attitudes about abstinence by identifying positive reasons to avoid sex and understanding abstinence as a peer norm, *Making Good Decisions* which increases awareness of peer pressure and positive and negative influences and *Communication* that improves knowledge and demonstration of a good listener and speaker skills to be able to discuss how peers' values may differ from own values and how good communication skills can resolve conflicts with such peers. Another session would include *Values: What Is Important to Me* where the students learn about personal values and understand how they are important determinants of our decisions, behaviors, and the future and *Media Influences* which discuss important sources of values within and outside the family and how personal values are important determinants of our decisions, behaviors, and future. Another session would include *Taking Care of Your Body: Avoiding Threats to Your Body, Mind, and Spirit* which defines risky behaviors and discusses reasons to avoid such behaviors explaining how various risk behaviors are threats to healthy development and *Taking Care of Yourself and Your Body Sexually* explaining how sexuality consists of more than sexual intercourse encouraging healthy sense of respect and comfort with students' own sexuality. The last two sessions would include *Building Health Relationships* which defines the stages of physical affection and promotes values and benefits of postponing sexual involvement which helps students to respond to peer pressure and avoid unwanted sexual involvement and *Birth Control* which encourages the positive attitudes towards methods of birth control explaining the effectiveness in preventing pregnancy and where to receive contraception.

Chapter 4 – Discussion

Findings

Inman (2011) found that sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence. These programs must be focused on clear health goals, including the prevention of sexually transmitted diseases, HIV infection, and pregnancy (Inman, 2011). These programs should also be focused on sexual psychosocial risks and protective factors of knowledge, perceived risks, values, attitudes, perceived norms, and self-efficacy with concentration on specific types of behavior leading to these health goals of abstaining from sexual intercourse or using condoms in order to protect yourself. Motivation is an important predictor of treatment outcomes and Skewes (2011) research suggests that readiness to change predicts drinking outcomes for students with varying levels of alcohol use. Prevention and intervention programs should really address motivation to change students' habits because it is a very important predictor of successful outcomes.

According to a study by Ott (2011), there should be a science-based prevention program facilitated in high schools for sexual health promotion, traditional sex education, and youth development. Sexual health promotion would be based on self-respect, respecting one's body, healthy relationships, communication about abstinence and sex, and for women, attaining equal power and footing in relationships. LaBrie (2011) found that preventive initiatives targeting high school students in order to prevent or minimize risky behavior patterns would significantly help the outcome of their behaviors later in life. Labrie (2011) found that it would be helpful to supplement high school based preventative efforts with collegiate interventions to coincide with college freshman's new sense of freedom from adult supervision and introduction to different

cultures with different views of young adult drinking. LaBrie (2011) also found that it would be useful for there to be a campus support program for the incoming freshman, particularly those who are sexually experienced and are considered “at risk” to hopefully help these students better understand how they may be persuaded to abuse alcohol and to cope with the challenging transitional periods as well as minimize dependency on drinking. For prevention programs, there should be complete contact with the student, no interruptions during sessions, one-on-one interaction between counselor and also incorporating behavior change within conversation and daily activities in a natural social setting. Perry (2011) also found that if “targeted” programs were designed specifically for a group of people, such as Allegheny College students, it would be a lot more successful in having a particular prevention and intervention program addressing the student body of this campus rather than another campus. Other successful strategies would include lessons on the consequences of coping strategies that are centered around high-risk personality dimensions such as sensation seeking, recognizing automatic thoughts, and engaging in group exercises based on real-life scenarios (Perry, 2011). Both prevention and intervention programs should be culturally-sensitive for every type of individual enlisted in the program. It would be beneficial for prevention programs to consider college student’s perception of their peers’ attitudes towards condom use and either encourage them towards making independent judgments to protect themselves or reshape perceptions of peer expectations and norms (Brown, 2011).

Teaching women to say no to unprotected sex, that is, to have a gatekeeper role, is part of the prevention process, but women also need to be proactive in protecting themselves by asserting their desire to use condoms (Norris, 2009). Norris (2009) also found that prevention programs can benefit from making women aware of the importance of sexual arousal in making

sexual decisions which can help motivate them to exert personal control with a sexual encounter. By continuing to stress the importance of insisting on condom use and teaching a broad range of sexual refusal skills, that is, how to begin to say no before the point of sexual penetration, prevention programs can show women how to manage potentially risky situations to their advantage even when sexually aroused (Norris, 2009).

Intervention programs are directed at alerting people to the negative impact of their drinking behavior on their health and social well-being (Barton, 2011). There should be encouragement to have a more honest disclosure of participants by assuring them of confidentiality, communication survey legitimacy, and ensured rapport between interviewer and respondents (Nduna, 2010). These interventions need to target both high-risk individuals and the broader campus community, must address alcohol related attitudes and behaviors, use survey data to counter students' misconceptions about their fellow students' attitudes toward excessive drinking and increase students' motivation to change their drinking habits (LaBrie, 2006). These interventions should be taught early taking place with incoming freshman to be successful in warding off subsequent problems (LaBrie, 2006). Programs that use the strategies of motivational interviewing, implementing nonpunitive, nonconfrontational style, have successfully reduced college student drinking because the interviews provide feedback to change students' perceptions of normative drinking, helping students find inconsistencies between their goals and current behavior, and helping students learn new strategies to deal with high-risk situations (LaBrie, 2006). Intervention provides community initiatives that encourage and supports students in practicing responsible behavior when making choices about alcohol use (LaBrie, 2006). Group intervention is conducted in the style of motivational interviewing promoting responsible drinking and decreasing negative alcohol-related incidents on campus,

including violations of campus alcohol policies (LaBrie, 2006). Interventions would include a survey of how much they drink or have been drinking each day being completely honest and accurate, keeping a diary of their drinking habits in order to see the patterns, form groups to estimate the typical drinking behavior of the students on campus and then realizing how much the students overestimated their peers, allowing them to recognize their problems with the possibility and hope of changing their behaviors. According to LaBrie (2006), in order for the interventions to succeed, there has to be a campus community full of faculty, staff, parents, and student body leaders whom are willing to establish an environment that supports the intervention and can hopefully shift the campus attitudes concerning alcohol use toward more risk-reducing attitudes. If the campus is involved with the intervention, it will increase and encourage campus dialogue about alcohol problems, impacting students, staff and faculty who did not participate in the intervention (LaBrie, 2006). Before the freshman class comes to stay for their first year of college, the parents should receive a letter encouraging the parents and students to discuss the role drinking will play in college life prior to arriving (LaBrie, 2006). If the parents would follow through with this encouragement and set the institutional tone against irresponsible and harmful drinking the students would know prior to coming to college how much alcohol has an effect on their peers and how important it is not to put themselves into risky situations (LaBrie, 2006). If the resident directors implement several activities and programs across campus to present social norms during mandatory dormitory meetings during the first few months of schools, it will correct the misperceived normative drinking patterns of the college (LaBrie, 2006). This motivational approach may help in finding inconsistencies between goals and current behaviors, building intrinsic motivation to reduce problem drinking and exploration of new strategies to handle high-risk situations (LaBrie, 2011). This approach not only reduces alcohol and drinking

related consequences in a manner just like the one-on-one model, it also appears to work better than an educational-informative intervention alone (LaBrie, 2011). According to LaBrie (2011) it may be helpful to have separate male and female targeted interventions to direct specific issues to certain genders rather than generalizing intervention materials. Not only does motivational intervention help reduce alcohol intake and risky sex; treatment effects emerge immediately following the intervention (Gwaltney, 2011). Helpful strategies for these interventions would be debunking the erroneous expectations that drinking will improve sexual encounters and helping students learn to anticipate the potential risks they may run into in unplanned sexual encounters while drinking. Other strategies would include setting specific drinking goals to encourage moderation, rehearsing assertive behaviors that can reduce excessive alcohol use or avoid unplanned sexual encounters and encouraging self-monitoring and evaluations as a part of a prevention or early intervention program (O'Hare, 2001). Intervention should include personalized risk information to influence sexually transmitted infection related risk perceptions and motivational interviewing techniques as well as feedback to target motivation, attitude, normative beliefs, self-efficacy and skills towards maintenance of condom use and taking a sexually transmitted infection test (Mevisen, 2011).

Limitations

A limitation of this project would be the inability to have used the CORE Survey Data Summary from Allegheny College. These data would have been very helpful in the fact that there would have been a lot more numbers and percentages of students' consumption of alcohol and the number of risky sexual encounters to take into consideration. Although these data would have given a lot of support to this project, there will always be the problem of whether students would answer the questions correctly and with complete honesty. Another limitation for this

project would be the time constraints of a one semester senior comprehensive project. It would have been nice to incorporate all of the summary data from the CORE Survey and have evaluated all of the statistics, but there was not enough time to complete all of the data collection and interpretation.

Relevance and Importance

Allegheny College does not have many prevention or intervention programs for either alcohol or the prevention of risky sex. Within this paper, prevention and intervention programs were examined to see what programs would work best for Allegheny College students. If Allegheny College used these programs to make one prevention/intervention program for the campus and student body, according to all the research, there is a very good chance that these programs would be successful in lowering the alcohol consumption and lowering the risky sexual encounters connected with alcohol. Although the numbers of alcohol consumption and risky sex are not the highest, the problem still exists and needs to be addressed. If the campus and student body used these prevention and intervention tools to lower the numbers of alcohol consumption and risky sex helping the campus to protect themselves and not spread sexually transmitted diseases resulting in not putting students in hospitals with alcohol poisoning among many other negative consequences. These prevention and intervention programs are very useful and Allegheny College should take advantage of these programs so that the student body can create a healthier, safer community.

Implications for Further Research

Further research would include finding a group of students to create this prevention/intervention program and also researching any new techniques found for these types of programs to further improve the campus. It would also be interesting to return to the college in

a few years and see if there are any improvements on the rates of alcohol consumption and risky sex. Also, if there could be a way to make sure the students being tested or that are enlisted in the program are being honest about all the answers they are giving, it would be a lot easier to be accurate on what type of programs would be more useful and successful.

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