The relationship between conceptual level and moral development of substance abuse prevention professionals working in higher education and their comprehensiveness of programming

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THE RELATIONSHIP BETWEEN
CONCEPTUAL LEVEL AND MORAL DEVELOPMENT
OF SUBSTANCE ABUSE PREVENTION
PROFESSIONALS WORKING IN HIGHER EDUCATION
AND THEIR COMPREHENSIVENESS OF PROGRAMMING

A Dissertation Presented to
The Faculty of the School of Education
The College of William and Mary in Virginia

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by

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November 2001
THE RELATIONSHIP BETWEEN CONCEPTUAL LEVEL AND MORAL DEVELOPMENT OF SUBSTANCE ABUSE PREVENTION PROFESSIONALS WORKING IN HIGHER EDUCATION AND THEIR COMPREHENSIVENESS OF PROGRAMMING

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Abstract

Alcohol, tobacco, and other drugs are prevalent on American college and university campuses. The higher education literature is replete with research on prevalence rates (Johnston, O'Malley, and Bachman, 1999; Presley, Meilman, and Cashin, 1998; Wechsler, Lee, Kuo, and Lee, 2000), substance abuse prevention theories (Gonzales, 1994), history of substance abuse prevention (Gianini and Nicholson, 1994; O'Bryan and Daughtery, 1992), efficacy of services (Anderson and Milgram, 1998), and descriptions of prevention programming (Anderson and Milgram, 1996; Mills-Novoa, 1994). There is, however, little research on the substance abuse prevention professionals who are charged with developing and offering prevention programming in higher education.

This study is one of the first to examine the substance abuse prevention professional in higher education. It explored the relationships between substance abuse prevention professionals’ conceptual level, moral development, substance abuse prevention education, and the delivery of comprehensive prevention programming. The theoretical framework for this study included: moral development as introduced by Lawrence Kohlberg (Kohlberg, 1969), conceptual development as introduced by David Hunt (Hunt, 1966), and comprehensiveness of programming from the Promising Practices: Campus Alcohol Strategies Task Force Planner (Anderson and Milgram, 1998).
A national sample of substance abuse prevention professionals was randomly drawn from member institutions of the Higher Education Center's Network for Colleges and Universities on the Elimination of Alcohol and Other Drug Problems. The sample of 305 substance abuse prevention professionals were asked to complete the Defining Issues Test (DIT), the Paragraph Completion Method (PCM), the Task Force Planner Survey (TFPS) and the Demographic Survey. A total of 97 or 31% of substance abuse prevention professionals in the sample responded. The mean for the DIT N score was 44.91 and the mean for the PCM was 1.96. The TFPS was developed for this study from the Promising Practices: Campus Alcohol Strategies Task Force Planner (Anderson and Milgram, 1998) and may lack reliability. The respondents were predominantly female, had a mean age of 41, an average of 3 years in the field and 6 years at a college or university, and 90% held advanced degrees.

One hypothesis was supported; there was a significant relationship between substance abuse prevention workshops and conferences attended, professional certifications and comprehensiveness of programming. No significant relationships were found between the conceptual level, as measured by the PCM, moral development, as measured by the DIT, education of substance abuse prevention professionals and the comprehensiveness of substance abuse prevention programming by substance abuse prevention professionals. A secondary analysis revealed the five most widely held trainer qualifications by substance abuse prevention professionals in higher education to be: BACCHUS, TIPS, OCTAA, counseling certification, and prevention certification. The five most frequently listed job responsibilities in prevention services were: alcohol and other drug prevention and education, training
and supervision of student leaders, social norms marketing campaigns, sanctioned education, and dorm programs.

The results support continued investigation into this vital profession. New research on the substance abuse prevention professional may be the missing link for understanding prevention efficacy and comprehensiveness. Although continued research is needed regarding the substance abuse prevention message, further efforts are needed to understand the substance abuse prevention messenger.
Chapter 1

The Problem

Overview

This chapter will review substance abuse issues for colleges and universities in the United States and the substance abuse prevention professionals who address these issues by offering substance abuse prevention programming. This chapter will also address the need for studying substance abuse prevention professionals via a cognitive and moral development theoretical framework. Included will be a definition of terms, research hypothesis and a description of the research methods.

Introduction

Alcohol, tobacco, and other drugs are prevalent on American college and university campuses. Nationally, 67% of college presidents rate alcohol abuse by students as a moderate to major problem at their college or university (Carnegie Foundation, 1989). Efforts to track college student alcohol, tobacco and other drug use began over thirty years ago with the Monitoring the Future Survey. This survey indicated a consistent annual prevalence rate for alcohol use at 83% (Johnston, O’Malley, and Bachman, 1999). The 1997 Core Survey (Presley, Leichliter, and Meilman, 1998) reported 45.6% of college students engaged in binge drinking one or
more times. Binge drinking is defined as five or more drinks at one sitting in the two weeks prior to the survey. The 1997 Core Survey also reported that frequent marijuana use, which they defined as three times per week or more, rose from 29.8% in 1995 to 32.3% in 1997. The data also indicated a higher use pattern by traditionally aged, full-time college students than their same age cohorts not enrolled in college (Presley, Leichliter, and Meilman, 1998). The Harvard School of Public Health College Alcohol Study reported an increase in binge drinking from 23.4% in 1993 to 28.1% in 1999 (Wechsler, Lee, Kuo, and Lee, 2000). Annual prevalence rates for alcohol are highest among white students, at 87%, followed by Native American students at 83%, Hispanic students at 82% and the lowest rates are for Black and Asian students at 70% and 69% respectively (Presley, Meilman, and Cashin, 1996). A 1999 national survey reflected similar ethnic prevalence rates for alcohol except the Asian group rates increased, thus passing the Black student rates (Wechsler, et al., 2000).

In response to these alcohol abuse rates by college students, alcohol education programs first expanded in American colleges and universities with the “50 Plus 12 Project” sponsored by the National Institute of Alcohol Abuse and Alcoholism in the mid 1970’s (Gonzalez, 1994). These alcohol education programs were offered in each state and were expanded to include other drugs of abuse in the 1980’s. With the advent of limited federal funding to colleges and universities in the early 1990’s, it was necessary to evaluate program effectiveness, replicate best practices, and offer the most effective programs with streamlined budgets and staff. Termed substance abuse prevention programs, these projects were mandated in 1986 by the Drug-Free
Schools and Campuses Act, public law 99-570, for all institutions of higher education. The Surgeon Generals' Office recently mandated colleges to reduce rates of college binge drinking by 50% within the next nine years (Wechsler, 2001).

The higher education literature is replete with assessment (Berkowitz, 1994 and Presley, et al., 1998), theories (Gonzales, 1994) and descriptions of best practices (Anderson and Milgram, 1996) for comprehensive substance abuse prevention programs. What little is known about the effectiveness of substance abuse prevention programs is often disputed (Anne Roche, 1998).

Key variables for outcome effectiveness of substance abuse prevention programs include targeted programs as well as community-wide programs that are comprehensive, research-based, value-free, student run, intermittent, and humorous combined with a balance of substance abuse facts and behavioral strategies (DeJong and Wechsler, 1995). The Promising Practices: Campus Alcohol Strategies Task Force Planner, in Appendix A, was developed by Anderson and Milgram in 1998. It suggests program components and resources for building an effective higher education prevention program. The suggested program components include policies and implementation, curriculum, awareness and information, support and intervention, enforcement, assessment and evaluation, training, staffing and resources. The suggested ten program resources, who serve as program sponsors, include campus leadership, coordinator, health and counseling, student life, police and security, faculty, residence life, student government, and the community. In a 1994 qualitative study of five institutions of higher education, Beverly Mills-Novoa found thirteen success factors that correlate with effective substance abuse prevention.
programs. These success factors include: administrative support, institutionalization of the prevention program, policy formation and enforcement, personalization of issues and involvement of many campus groups, a marketing approach, capitalization on other initiatives, support of non-alcohol and other drug use for underage students and support of responsible decision making, linking substance abuse prevention to health and alternative activities, designing strategies for the diverse campus culture, utilizing needs assessments, being aligned organizationally with a department, selecting program staff for his/her special skills and dedication and lastly, using sound planning and evaluation. Neither the Mills-Novoa study nor the Promising Practices: Campus Alcohol Strategies Task Force Planner describes the professional characteristics necessary to deliver comprehensive prevention programming.

There is relatively little research on the relationship between the characteristics of substance abuse prevention professionals in higher education and the subsequent comprehensiveness of their substance abuse prevention programs. One of the first references on the importance of prevention professionals cited characteristics of "source [sic] credibility, gender, age, attractiveness, trustworthiness, and perceived power" (Smart and Fejer, 1974, p.10) which determined the quality of prevention programs. Since this reference to the importance of substance abuse prevention professionals in program delivery there has been little research on this professional population. Jones, Kline, Habkirk, and Sales (1990) surveyed schoolteachers, university researchers and drug program specialists regarding characteristics and competencies related to substance abuse prevention. They found "agreement [on effective substance abuse prevention professional characteristics] to
be rare and empirical support non-extant” but teacher-student relations, like communication and interpersonal skills, were found to be the most important factor for substance abuse prevention work (Jones, et al., 1990, p.180). A more recent article by Morin and Collins (2000) suggests substance abuse prevention professionals and the field of prevention science assess the efficacy of programs, question the rationale for policy and programs, consider new policy options and communicate new findings to policy makers. These suggestions exceed the substance abuse prevention professional characteristics of just knowing substance abuse facts and delivering canned programs. David Hanson’s exhaustive work, Alcohol Education-What We Must Do (1996), provides longitudinal and comparative research on sixteen substance abuse prevention programs; however, it does not include the training, role, or effectiveness of the preventionist.

Substance abuse prevention professionals in higher education have many challenges. They must adapt to campus culture, norms, social climate, historical traditions, and a new population every four years. They often need to import prevention strategies that were developed for high school students and adapt them to college students. Substance abuse prevention professionals have to extend beyond their discipline to pair substance abuse issues with other critical issues like sexual assault and violence while networking with a larger on and off campus community. Like other preventionists, they must keep abreast of the literature, be sensitive to multicultural issues, and look for new prevention technologies. The dynamic nature of the substance abuse prevention task implies that substance abuse prevention professionals in higher education need the following to be effective: flexibility to
respond to the changing science of substance abuse prevention, positive interpersonal skills and role modeling, the use of complex, critical thinking skills, autonomy, and moral fortitude (Kelly, 1992; Jones, et al., 1990).

Substance abuse prevention professionals play the central role in dealing with substance abuse issues. They often collaborate with other on and off campus resources to deliver prevention programming. As mentioned earlier, the Promising Practices: Campus Alcohol Strategies Task Force Planner lists 10 program resources that share prevention tasks with and collaborate with substance abuse prevention professionals. The substance abuse prevention professional serves as the hub of a wheel with the spokes representing other resources. Although substance abuse prevention professionals are the crucial, central piece in prevention programming we know little about them. The prevention components and programs have been extensively researched, yet substance abuse prevention professionals have been little researched. Similarly, there has been little research on the educational skills, conceptual development and moral development necessary to offer the recommended prevention programs.

Although much is asked of substance abuse prevention professionals, little is known of their characteristics. An attempt to understand and research the prevention professionals would balance the existing efforts of evaluating prevention programming. Roche supports this notion by suggesting that the field of substance abuse prevention incorporate “reflective practice and critical self-examination” (1998, p.95).
Since there is a dearth of research on substance abuse prevention professionals in higher education, this study will draw upon research from the counseling profession. Counseling professionals work in schools, mental health agencies and in private practice with individuals, families, and groups. The similarities between counselors and substance abuse prevention professionals include: emphasis on interpersonal skills, type of relationship with target audience, desired outcome goals for target audience, pre-service and in-service education, the need for standards and professional credentialing, and an often isolated work environment without supervision. Kelly (1992) reminds the field of community psychology that process and personal qualities are as important as content. Tobler and Stratton (1997) found that the credentials of the mental health clinicians might not be as important as whether he or she can facilitate group interactions.

Professionals offering substance abuse prevention programs in higher education have been slowly evolving into a unique service field. They have borrowed from other counseling professionals and adapted substance abuse prevention materials to suit their population. Substance abuse prevention professionals have demonstrated an ability to adapt, flex, perform complex tasks, serve as role models, and confront morally laden issues such as substance use and abuse. They are creating a new science in an environment steeped in tradition and often slow to change. Substance abuse prevention professionals in higher education will need high levels of conceptual development in order to offer comprehensive prevention programs. This study will examine the relationship between levels of conceptual development by
substance abuse prevention professionals and the subsequent delivery of comprehensive prevention programs.

The cognitive-developmental theories of David Hunt (1970) and Lawrence Kohlberg (1976) provide a useful framework for the examination of substance abuse prevention professionals. To date, no research has been found on the conceptual level or moral development of substance abuse prevention professionals in higher education. Such research could examine the relationship between conceptual level and moral development of substance abuse prevention professionals and the comprehensiveness of his/her prevention programs.

**Need for the Study**

The application and funding of substance abuse prevention programs in higher education is relatively new. The first large scale federal funding for alcohol and other drug issues came in 1986 with the Omnibus Anti-Drug Bill. Also passed that year was the Higher Education Act Amendment, which required institutions receiving federal financial student aid to verify that they had established prevention programs for all members of the college community. The 1988 Drug-Free Workplace Act required all institutions which received federal grants and contracts to achieve a drug-free workplace. This was followed by the 1989 national Drug-Free Schools and Communities Act Amendments requiring institutions to verify that they had adopted and implemented substance abuse prevention policies and programs (Gianini and Nicholson, 1994).
Many colleges and universities complied with this legislation by enlisting new substance abuse prevention professionals. These prevention professionals have had to respond to an evolving science of substance abuse prevention. This science now includes: research and efficacy, prolonged and repeated prevention programs, interdisciplinary prevention programs, diverse target populations, cost effectiveness, balancing individual resistance with environmental efforts, and the employment of new technologies.

In higher education there are many competing interests and viewpoints regarding substance abuse issues. Funding sources are focusing on effective prevention strategies while the parents of college students are looking for security through the "in loco parentis" principle. Administrators are examining liability risks and the right to notify parents after a substance abuse infraction. Students are concerned about loss of freedom and tightening intervention while many national fraternities are planning alcohol-free dorms. Prevention professionals likewise are searching for the most promising technologies and the most effective programs. Students have a right to these programs and institutions have a responsibility to offer these programs. Of grave concern are the quality, persistence, comprehensiveness, availability, and integrity of these services.

Substance abuse prevention programs are crucial for students in higher education. Thus, all variables that could improve program quality should be explored. Examining the professionals implementing the programs would be a logical step. This study began to examine the conceptual development and education of the substance abuse prevention professional in relation to the comprehensiveness
of prevention programming. It explored the relationship between characteristics such as conceptual level, moral development, and substance abuse prevention education, which included pre-service education, in-service trainings, conferences, workshops and professional memberships, and the delivery of comprehensive prevention programming. The relationship between pre-service and in-service prevention training of substance abuse prevention professionals and the subsequent delivery of comprehensive prevention programming was also examined. It is unclear if prevention pre-service and in-service training programs adequately prepare prevention professionals with effective knowledge, attitudes, and skills while advancing conceptual and moral development. This study also examined these variables.

There are other challenges for substance abuse prevention professionals in higher education. Substance abuse prevention professionals lack a centralized voice, a professional organization, and a credentialing organization with higher education guidelines. Often no clear state guidelines or national mandates exist for prevention professionals. There is often no enforcement of the federal legislation. Substance abuse prevention professionals must therefore develop their own set of unique survival skills.

The effective delivery of comprehensive prevention programs requires a high level of skill and development. This skill and development includes autonomy, integrity, creativity, flexibility, and the ability to deal with the complex values associated with substance abuse. Moral development, as outlined by Lawrence Kohlberg, is an appropriate tool for measuring professional growth, substance abuse
prevention values, moral complexity, and accountability. Conceptual development, as outlined by David Hunt, is an appropriate tool for measuring professional flexibility, creativity in matching individual students with effective learning environments, autonomy and adaptability.

**Theoretical Framework**

There are two theories that can be employed to understand substance abuse prevention professionals in higher education. These theories include moral development, as introduced by Kohlberg (1969), and conceptual development, as introduced by Hunt (1966). Both theories address cognitive development, have been well researched and measured by reliable and valid instruments, are universally applied to adult populations, and relate to professional skills.

**Moral Development**

Lawrence Kohlberg was a major contributor to the field of moral development. His research describes development along a continuum of intentional cognitive and behavioral moral accomplishments or stages. Thus, the more an individual develops, the more other variables such as integrity, coping, character, tolerance, autonomy, goal attainment, self motivation and regulation, and ability to deal with complexity are developed. According to Kohlberg's six stages, with one corresponding to the beginning stage and six the most developed stage, most adults function at Stage 4 and some adults function at the advanced stages of five and six. The variables upon which the moral development theory is based will be measured by
Rest's Defining Issues Test 2 (DIT) (Rest, Narvaez, Thoma, and Bebeau, 1999), in Appendix B.

**Conceptual Development**

David Hunt is the major contributor to the field of conceptual development. For this research Hunt's theory (1966) was chosen on the basis of his concept of the "matching" of the individual with the environment that reflects characteristics of autonomy, complexity, adaptive capacity, and flexibility. This theory is descriptive, not predictive, as it describes the individual's present stage of conceptual development or conceptual level, emphasizes a process, and addresses the relationship between the individual and his/her environment (Hunt and Sullivan, 1974). The variables for this theory on conceptual development will be measured by Hunt's Paragraph Completion Method (PCM) (Hunt, Butler, Noy and Rosser, 1978), included in Appendix C.

Hunt's theory of conceptual levels compliments Kohlberg's moral development theories. For example, when assessing moral development by stage, the underlying reasoning process, conceptual complexity and route of decision making are just as important as the final content solution (Hunt and Sullivan, 1974). It is postulated that individuals who score higher on Hunt's dimensions of cognitive flexibility and complexity as measured by conceptual level also score higher on Kohlberg's measures of moral development. In other words, "moral stage is related to cognitive advance" (Kohlberg, 1976, p.32). These developmental theories explain growth, adaptation, individual differentiation, complex decision-making and the ways
in which personal success can be translated into professional success. These theories identify individuals at higher levels of moral and conceptual development who possess greater creativity, flexibility, and reasoning and who consequently experience greater professional effectiveness. Hunt’s and Kohlberg’s developmental theories correlate highly with each other and create a comprehensive picture of some of the characteristics needed for substance abuse prevention professionals in a higher education setting.

Definition of Terms

Comprehensive substance abuse prevention programs: Comprehensive programming includes the following eight components: policies and implementation, curriculum, awareness and information, enforcement, support and intervention, assessment and evaluation, training, and staffing and resources. These components are offered by the following 10 stakeholders: campus leadership, coordinator, health and counseling, student life, police and security, faculty, residence life, student government, student groups, and community (Anderson and Milgram, 1998). For this study, comprehensive substance abuse prevention programs were measured by the Task Force Planner Survey (TFPS) in Appendix D.

Conceptual level: The theory of conceptual level was introduced by Hunt to describe an individual’s cognitive complexity, that includes differentiation, discernment, integration, adaptation, flexibility and maturity, which includes interpersonal skills, self-definition, autonomy, and self-responsibility (Hunt and Sullivan, 1974). There
are four conceptual levels. The Paragraph Completion Method measures conceptual level which assigns a 0 to the lowest level, from the youngest person, and 3 to the highest level, from the oldest person.

**Higher Education:** Higher education is post-secondary education that includes two or four year colleges and universities for undergraduate or graduate degrees.

**Moral development:** Moral development theory posits that moral decision making is culturally relative with universal, invariant stages of thinking, feeling, interacting, deciding and acting such that higher stages infer higher stages of development. Moral development results from the interaction of age, psychological and social maturation, education and environment (Kohlberg, 1981). Moral development is measured by the Defining Issues Test.

**Substance:** A substance is any chemical, obtained legally or illegally, that produces a psychoactive effect when ingested and is used for a non-medicinal, recreational reason. Substances include but are not limited to alcohol, nicotine, hallucinogens, stimulants, depressants, inhalants, over-the-counter-medicines, and prescription medicines.

**Substance abuse:** Substance abuse is the high-risk use of any substance that can lead to either health problems (for example, psychological dependence, tolerance, or
physical addiction) or impairment problems (for example, driving under the influence, missed work, or academic under-achievement).

**Substance abuse prevention:** Prevention is an intentional, proactive process that helps to counteract potential negative issues before problems occur (National Mental Health Association, 1986). The Center for Substance Abuse Prevention recently relabeled the three traditional primary, secondary, and tertiary approaches to prevention to include the new terms universal, selective, and indicated prevention.

**Substance Abuse Prevention Professional:** These professionals are trained staff who specialize in the development, delivery, and evaluation of various substance abuse awareness, education, prevention and referral services typically through a Student Affairs Office such as the Health Center, Counseling Center, Sport Psychology Office, or Residence Life.

**Research Hypothesis**

Substance abuse prevention is a relatively new science that has been recently adapted to higher education. Substance abuse prevention professionals who have worked in the field for the past few decades may not have received pre-service training, while newer prevention professionals may have received a pre-service course. Both veteran and novice prevention professionals are exposed to post-service trainings or conferences. State and national organizations are attempting to standardize the training and certification of prevention professionals although there is
limited documentation that college employers require certification for employment. It is yet to be established how knowledge, attitudes and skills derived from pre-service education, post-service trainings, moral judgement, high conceptual levels, certifications and age all combine to influence the substance abuse prevention professional and comprehensive prevention programming. This study will examine the relationship between conceptual level, as measured by Hunt’s Paragraph Completion Method, moral development, as measured by Rest’s Defining Issues Test, and the delivery of comprehensive prevention programs in a higher education setting, as measured by the TFPS.

The research hypotheses are:

(1) There will be a relationship between the conceptual development and moral development of substance abuse prevention professionals in a higher education setting and the comprehensiveness of substance abuse prevention programming by substance abuse prevention professionals.

(2) There will be a relationship between the conceptual development and moral development of substance abuse prevention professionals in a higher education setting and education which included substance abuse prevention classes, workshops and conferences.

(3) There will be a relationship between education of substance abuse prevention professionals in a higher education setting, which included substance abuse prevention classes, workshops and conferences, certifications, and memberships in professional organizations and comprehensiveness of prevention programming.
Sample Description and General Data Gathering Procedures

College substance abuse prevention professionals were the population examined in this study. The sample for this study was drawn from the member institutions of the Higher Education Center’s Network for Colleges and Universities on the Elimination of Alcohol and Other Drug Problems (www.edc.org/hec/network). Colleges and universities voluntarily join the Network for Colleges and Universities on the Elimination of Alcohol and Other Drug Problems and there are currently 1,600 members representing all states and territories. The sample was generated from a list of substance abuse prevention professionals from the Network for Colleges and Universities on the Elimination of Alcohol and Other Drug Problems.

Quantitative data was collected via three instruments and one survey. Rest’s DIT was used to measure stages of moral development and Hunt’s PCM was used to measure conceptual level. A checklist, called the TFPS, that corresponds to the Coordinator section of the Promising Practices: Campus Alcohol Strategies Task Force Planner, was used to measure comprehensiveness of substance abuse prevention programming. The Demographic Survey in Appendix E, developed by this researcher, collected information on substance abuse prevention professionals that included: age, number of years in the field of substance abuse prevention, amount of pre-service and in-service education, conference and workshop attendance, professional certifications and professional memberships. The Demographic Survey also collected institutional information that included: type of substance abuse prevention programs offered, number of undergraduate students, number of...
professionals in the network, and number of substance abuse prevention professionals at the institution.

Summary

Chapter 1 reviewed the prevalence of alcohol, tobacco or other drug use problems in higher education and the subsequent development of substance abuse prevention programming. There is research on substance abuse prevention programs targeting college students but little research on the substance abuse prevention professionals who provide the substance abuse prevention programming. Thus, a need to research the substance abuse prevention professional was identified. This research included the development of substance abuse prevention professionals and the comprehensiveness of their substance abuse prevention programming.

Chapter 2 offers a selected literature review. It will cover a broad history of substance abuse prevention in higher education and the characteristics of substance abuse prevention professionals. Chapter 2 will offer additional research on the theories of conceptual development and moral development as well as the instruments used to measure those theories.
Chapter 2

Selected Review of the Literature

Overview

The preceding chapter describes substance abuse prevention professionals in a higher education setting. There is limited research on this profession and on the interplay between substance abuse prevention professionals and comprehensive prevention programming. Thus, there is a need for research that explores the relationship between conceptual and moral development of substance abuse prevention professionals and their comprehensiveness of substance abuse prevention programs in a higher education setting.

This selected literature review begins with background on substance abuse prevention and its application in higher education. Research on counseling professionals will be included since their professional training, development, and the application of their skills is similar to that of substance abuse prevention professionals. This literature review will also include research on conceptual development, as posited by David Hunt, and on moral development, as posited by Lawrence Kohlberg and evaluated by James Rest.
Background on Comprehensive Prevention Programs

Substance abuse prevention programs have reflected the political, social, legal, and economic climate of the country. These programs began with community-wide efforts then later targeted school aged children, parents and eventually college students. The Prevention Research Institute, in their curriculum On Campus Talking About Alcohol (O'Bryan and Daughtery, 1992), describes the history of substance abuse prevention. Table 1 provides a chronology of prevention models in the United States.

Table 1  Chronology of Prevention Models

<table>
<thead>
<tr>
<th>Prevention Models</th>
<th>Brief Description of the Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperance</td>
<td>This movement was launched in the 1780’s when some forms of alcohol were seen as a source of strength and abstainers were charged more for insurance. Problems were thought to occur from distilled liquor only due to high use rates and problems.</td>
</tr>
<tr>
<td>Prohibition</td>
<td>During the mid 1800’s non-use and non-availability were emphasize through scare tactics and activism. Contempt for the drinker polarized the country.</td>
</tr>
<tr>
<td>Disease</td>
<td>Physicians first identified this model in the 1870’s when it was thought dependence was a disease and that recovery was possible. The public did not accept the Disease Model until the 1950’s.</td>
</tr>
<tr>
<td>Information</td>
<td>In the mid 1950’s new information for each new and promising drug was released. It was believed that changes in knowledge lead to changes attitudes and behaviors.</td>
</tr>
<tr>
<td>Normative</td>
<td>In the 1960’s the alcohol issue was stigmatized and sociologists began to study it. The National Institute of Mental Health funded a study marking the beginning of the scientific era of prevention. The study recommended lowering the drinking age and responsible use of alcohol via education, policy and norms.</td>
</tr>
<tr>
<td>Developmental</td>
<td>In the mid 1960’s there was a shift from a social to an individual emphasis with blending of past models. The user was seen as deviant, pathological or lacking certain psychosocial skills thus affective education was emphasized.</td>
</tr>
<tr>
<td>Responsible Decision Making</td>
<td>In the 1970’s there was a blending of past models and targeted programs to younger and younger students. The model backfired and parents began to teach abstinence.</td>
</tr>
</tbody>
</table>
Public Health  In the 1970’s this generic model of agent, host, and environment was applied to substance abuse. The goal of decreased consumption by the host was influenced by control of the agent and the environment. This model influenced later models.

Peer  In the 1980’s it was thought that young people wanted to avoid drugs and that positive peer influence would help. This model recognized the power of social groups.

Lifestyle Risk  Also in the 1980’s, the Prevention Research Institute developed this model whose goal was to increase abstinence for a lifetime, delay onset, and reduce high risk choices through individual appraisal, persuasion, and peer influences.

Prevention services in higher education were first mandated by the federal Drug Free Schools and Campuses Act of 1986, codified as Part 86 of EDGAR (34 CFR Part 86). This act required colleges to enact policies to prevent the unlawful possession, use, or distribution of alcohol and illicit drugs by students and employees (DeJong and Wechsler, 1995). Colleges were later required to certify their adoption and delivery of prevention and education services in 1989 when the Drug Free Schools and Communities Act was amended (Wechsler, Isaac, Grodstein, and Sellers, 1994). Prevention services flourished on college campuses in the late 1980’s and early
1990s with funding by Funds for the Improvement of Post Secondary Education grants from the Department of Education. This funding led to campus based prevention positions, increased research, data collection from students, program replication, consortium development, and technology transfer. Most of this college funding ended in the middle 1990s but not before Congress urged institutions to reduce college binge drinking (Wechsler, 2001).

With the passage of the Drug-Free Schools and Communities Act, colleges and universities have enlisted a broader range of prevention services and programs to address the issue of student substance abuse (Anderson and Milgram, 1998). Substance abuse prevention is a complex practice that borrows from other disciplines such as sociology, political science, psychology, public health, marketing, economics and biology. Prevention programs are “multi-component” which can be challenging to implement and evaluate (West and Aiken, 1997, p. 168). Substance abuse prevention programs have also evolved, based on research and practice, from scare tactics and prohibition to social learning theory, alternatives, life skills and most recently to an environmental model (Conyne, Wagner, Hadley, Piles, Schorr-Owen, and Enderly, 1994). The research by Werch, Lepper, Pappas and Castellon-Vogel (1994) found that the 400 federally funded prevention programs in higher education employed one or more of the following theoretical models: information dissemination, affective education, alternatives, resistance skills training, personal and social skills trainings and environmental approaches. Werch, et al., found a broader range of theoretical models employed over previous years and a trend toward
more comprehensive, eclectic prevention programming. Substance abuse prevention professionals must therefore be multi-skilled and adaptable.

Substance abuse prevention programs in higher education have been challenging to implement. Initially, colleges and universities replicated and adapted substance abuse programs designed for younger students before compiling their own best practices and technologies. There has long been debate on the efficacy of these various prevention, awareness, education, and early intervention efforts. Research spawned by the National Institute on Drug Abuse in the early 1980's found comprehensive prevention programs effective in reducing use. These comprehensive programs used multiple anti-drug messages to reach multiple sources, such as schools, homes, etc. (National Institute on Drug Abuse Notes, 2001). This research built upon the efforts in the 1970's that suggested "multidimensional, differential programs" (Cornacchia, Smith, and Bentel, 1978, p. v). The literature indicates variability within prevention programs, few applications of theory to practice, and process evaluation that outnumbers outcome evaluations (Gonzales, 1994). Wechsler, Kelly, Weitzman, Giovanni, and Seibring (2000) suggest that effective prevention is multi-component, systemic, comprehensive, and positively related to the concern college administrators have about the substance abuse problem.

Crippen (1983) concluded that prevention services should be broad based, complex, multi-faceted, and delivered by an expert with knowledge in many subjects including the hard and soft sciences. Gonzales (1994) concurred that substance abuse prevention services in higher education should be comprehensive and measurable yet practical.

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Beverly Mills-Novoa (1994) conducted a qualitative study on the substance abuse prevention programs at five different institutions of higher education. Thirteen factors emerged as characteristics of successful programs. These factors include:

1) receives strong administrative support and recognition both vertically and horizontally in the institution;
2) plans to institutionalize itself from the beginning and pursues this objective persistently;
3) affects institutional regulations regarding alcohol and other drug use through policy formation, communication, and enforcement;
4) targets ways to encourage individuals to personalize substance abuse issues and involves many campus groups, creating a ripple effect;
5) creates a strong marketing approach for publicizing the program, its activities, positive role models, and prevention message;
6) capitalizes on local, state, and federal visibility and recognition for program excellence to increase immunity to institutional budget cuts;
7) selects program staff for diversity of skills, strong community ties, broad-based expertise in prevention education with special expertise in substance abuse, excellent communication skills, personal compatibility, enthusiasm, and dedicated, persistent commitment;
8) promotes an institutional environment that supports no use for students under legal age, with an emphasis on responsible, personal decision making; the program also stresses a nonjudgmental, positive, fact-based approach in disseminating information;
9) ties alcohol and other drug use to the impact on personal health, self-esteem, and wellness, promotes activities that reinforce the positive, drug-free elements of student life, and emphasizes alternative activities and natural highs;

10) demonstrates a clear understanding of the special needs of the institution and its culturally diverse student population and finds prevention strategies to fit the campus;

11) uses a needs assessment as a first step to detail alcohol and other drug-related problems or issues (such as acquaintance rape, vandalism, stress) and to identify what resources exist on and off campus to address these issues;

12) is allied organizationally with a department or center that adds credibility to its efforts, promotes a positive image, and contributes information and resources;

13) is based on a sound planning process and reviews and evaluates its efforts on a regular basis (1994, p.68-77).

This list acknowledges the many tasks of the substance abuse prevention professional and lends credence to the diverse, complex, and comprehensive programming issues faced by the substance abuse prevention professional. However, the above list only mentions the characteristics of substance abuse prevention professionals once, in item 7. Little research exists that addresses the substance abuse prevention professionals who deliver substance abuse prevention programs in higher education.
The Promising Practices: Campus Alcohol Strategies Task Force Planner

(Anderson and Milgram, 1998) is an innovative grid with a list of the many possible substance abuse prevention stakeholders or sponsors in higher education matched with suggested comprehensive prevention programming. It is a visual snapshot of the complex network of services that is often managed by the Coordinator or substance abuse prevention professional. The ten stakeholders represent campus leadership, the coordinator, health and counseling staff, student life representatives, police and security staff, faculty, student government, and the community. The term coordinator refers to the substance abuse prevention professional. The eight prevention strategies include policies and implementation, curriculum, awareness and information, support and intervention, enforcement, assessment and evaluation, training, and staffing and resources. The Promising Practices: Campus Alcohol Strategies Task Force Planner offers substance abuse prevention program ideas, strategies, suggestions for collaboration, outreach efforts and target audiences. It is a guide or benchmark for developing or expanding prevention services but is not intended to measure effectiveness of prevention programs or substance abuse prevention professionals. It can, however, be used as a measure for comprehensiveness.

The Substance Abuse Prevention Professional

The International Certification and Reciprocity Consortium began to identify essential domains or abilities for all prevention professionals in 1994. The following six domains are described by their accompanying tasks in Appendix F: Program
Coordination, Education and Training, Community Organization, Public Policy, Professional Growth and Responsibility, and Planning and Evaluation. It is Domain 5- Professional Growth and Responsibility that aligns with the research interest of this study. For example, the tasks of Domain 5 includes prevention research and professional standards, collaborative behavior, ethical behavior, sensitivity to community norms, and personal wellness (Heavner, 1994)

There is limited research on the description and development of an effective prevention professional. A study of military prevention specialists investigated role perceptions and job satisfaction (Whorley, 1989). These military prevention specialists work with a similar age group to substance abuse prevention professionals in higher education. According to Whorley, these military prevention specialists demonstrated a positive relationship between role perception and job satisfaction in that the prevention specialists were more concerned about prevention programs and services than about supervisory evaluations. These findings suggest that the military prevention specialist is motivated by the perception of positive outcomes for individuals and organizations that receive services. This suggests an ability to work autonomously without regard to supervisory encouragement or understanding. Jack Pransky (1991), author of several prevention textbooks, builds on these results. He believes substance abuse prevention professionals reflect a certain character with an indefinable spirit and a sense of collective regard. He also believes that a good prevention worker is one who gets results, has commitment, perseverance, flexibility, and openness to overcome any obstacles.
Substance Abuse Prevention Professionals in Higher Education

College substance abuse prevention professionals have a daunting task that can be "intimidating and overwhelming" (Komives, 1988, p.17). Komives (1988) also cited the need to educate prevention professionals in leadership, effectiveness, and ways to preserve as well as increase personal intensity. Substance abuse prevention professionals work with others in the Division of Student Affairs to foster student development, prevent high-risk behaviors by students, offer co-curricular and extra-curricular programs, and serve as positive role models. In this capacity, Student Affairs staff in general, and substance abuse prevention professionals in particular, need: a high level of conceptual and moral development, the ability to manage multiple levels of thinking, the ability to work independently and collaboratively, the ability to implement essential values and standards of practice, good decision-making skills, and efficient organizing skills. Dalton (1993) acknowledged the implications of moral reasoning for college Student Affairs staff since they can “say and not do, do and not say, not say and not do and say and do” (p. 91-93). Although every Student Affairs professional must deal with values, the substance abuse prevention professional must deal with values on a daily basis, especially values related to alcohol, tobacco, and other drug use.

The professionals recruited by colleges and universities to offer prevention services are either novice prevention professionals, secondary school prevention professionals, prevention professionals with higher education experience, or existing higher education staff who accepted expanded duties. There is limited information on
the standards for substance abuse prevention professionals with regards to pre-service education, inservice training on substance abuse prevention skills, prevention related certifications, or membership in professional organizations. All of these variables may be related to the prevention professionals' conceptual level and moral development and the subsequent comprehensiveness of substance abuse prevention programming.

Substance abuse prevention professionals have had to flex and evolve constantly since the field of substance abuse has had to adapt to many changes over the years. For example, the field has observed shifting trends such as the definition of binge drinking and rates of marijuana and cocaine use. According to the 1991 National Household Survey on Drug Abuse, marijuana use peaked in 1979 and cocaine use peaked in 1985. All drug use was down in 1991; however use has since slowly increased (Presley, Leichliter, and Meilman, 1998). Although college annual prevalence rates for alcohol use have remained at a relatively constant rate for the past thirty years (Johnston, O'Malley and Bachman, 1999), there has been a slight increase in binge drinking between 1993 and 1999 (Wechsler, Lee, Kuo and Lee, 2000).

All of these substance abuse statistics have a ripple effect throughout the college community. A national survey by the Carnegie Foundation for the Advancement of Teaching in 1989 found that 67% of college presidents rated alcohol abuse to be a moderate to major problem on their campuses. The research by Presley, et al. (1998) found academic underachievement, threats and actual violence, unwanted sexual intercourse, and ethnic or racial harassment to be related to alcohol
or other drug use. The substance abuse field also must adapt to variables such as political sentiments, fluctuating funding, efficacy of the prevention programs, duration of interventions, consistency of enforcement, availability of counseling and intervention services, and advances in educational and prevention technologies.

To address these substance abuse rates and changing issues, prevention professionals have been challenged to modify services and programs continually. The evolution of substance abuse prevention programs reflects social, cultural, economic, technological, educational, legal, moral, and political changes.

For the purpose of this study, the chronology of prevention models in Table I has been expanded to include the substance abuse prevention professional. The new heading, “assumed characteristics of substance abuse prevention professionals”, illustrates changes substance abuse prevention professionals have been required to make throughout the evolution of substance abuse prevention. This expanded model illustrates the adaptability, flexibility, tolerance, and diverse skill level required for the effective substance abuse prevention professional (SAPP); see Table 2.

<table>
<thead>
<tr>
<th>Prevention Models</th>
<th>Assumed Characteristics of Substance Abuse Prevention Professionals (SAPP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In U.S. History</td>
<td>Beliefs of the SAPP were based on observation not science thus they encouraged the use of certain kinds of alcohol over others.</td>
</tr>
</tbody>
</table>
The SAPP were seen as activists and moralizers who collaborated with political and religious leaders using reactionary tactics.

The SAPP collaborated with health care providers to profile the community for disease candidates and to treat symptoms.

The SAPP was a consumer of research and science based programs with an emphasis on drug specific information. The professional collaborated with educators.

The SAPP helped to place alcohol in a social context, taught low-risk use, and attempted to de-stigmatize use by collaborating with policy makers.

The SAPP collaborated with psychologists and facilitated generic mental health programs without mention of substance abuse.

The SAPP collaborated with psychologists, parents, community groups, and educators to facilitate affective growth with substance abuse used as example for decision making.

The SAPP collaborated with sellers of alcohol, educators, and

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health care providers with an emphasis on primary prevention.

Peer Resistance The SAPP were seen as builders of a positive peer culture and role models of a positive life style. Recipients of prevention programming are seen in a social context.

Lifestyle Risk The SAPP is an educator, consumer of science-based research, and Reduction uses the persuasion process. Has a holistic view of the individual b can target individuals or groups.

Depending on the institution, substance abuse prevention professionals serve in the Health Center, Counseling Center, Dean of Students Office, Crime Prevention Office, Residence Life Office, Office of Student Activities, or a contracted substance abuse research institution. Each institution may identify this substance abuse prevention professional in any number of ways. Examples include the disciplinarian, the health educator, the alcohol education coordinator, the campus climate evaluator, the alternative education specialist, the patient educator, the in-house human resources trainer, the substance abuse policy maker, or the substance abuse officer (Wechsler, 2001). Colleges may also enlist faculty, mental health counselors, health care providers, task forces members, law enforcement staff, and student activities staff to expand the efforts of the substance abuse prevention professional. Colleges appoint professionals to serve either part-time or full time as substance abuse prevention professionals. For example, the Virginia Department of Alcoholic
Beverage Control identified 75 alcohol education coordinators in the 2000 College Contact Directory who served in 36 institutions of higher education. Of those 75 alcohol education coordinators, approximately 20 serve as full-time substance abuse prevention professionals and 55 serve as providers of specific prevention programs such as freshman orientation, tobacco awareness, fake identification card education, alcohol awareness campaigns, social marketing programs, or campus assessment.

**Research on a Similar Professional**

Research on the substance abuse prevention professional is limited. The profession that is most similar to the substance abuse prevention professional in terms of educational training, professional credentialing, knowledge of substance abuse issues, supervision, and role modeling is the mental health counselor. Crippen (1983) acknowledged the overlap between these two professions and others. He suggested an interdisciplinary approach to dealing with substance abuse issues since they are such complex issues. Crippen’s interdisciplinary approach stems from the many factors involved in promoting health and preventing substance abuse which requires knowledge and skills in counseling, pharmacology, sociology, and other disciplines. Thus, to align substance abuse prevention professionals and their training with the training of the mental health counselor would address the criticism that “we have spent too much time teaching ‘about drugs’ and not enough time teaching ‘about people’” (Crippen, 1983, p. 81). Examples of quintessential counseling skills that could be helpful for the substance abuse prevention professional include good communication, genuineness, empathy, warmth, unconditional positive regard and
non-threatening demeanor (Rogers, 1983). The profession of mental health counseling has been researched broadly with particular emphasis on conceptual and moral development (Chase, 1998; Diambra, 1997; and Halverson, 1999). Thus, the theoretical models used in this particular study will be drawn from those based on the counselor and applied to the substance abuse prevention professional.

Of initial interest is the work of Stoltenberg (1981). He drew a parallel between the mental health counselor’s development and his/her optimal professional environment. This matching of individual and environment reflects conceptual systems development theory that will be described in greater detail later in this chapter. Table 3 outlines counselor developmental levels (with one representing the novice student and four the master counselor), counselor characteristics, and the optimal professional environment.

Table 3 Matching Counselor Level, Characteristics and Environment

<table>
<thead>
<tr>
<th>Counselor Level</th>
<th>Counselor Characteristics</th>
<th>Optimal Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dependent on supervisor (imitative, categorical thinking w/ knowledge but minimal experience; concerned with the rules of counseling).</td>
<td>Encourage autonomy within normative structure; supervisor uses instruction and support.</td>
</tr>
<tr>
<td>2</td>
<td>Dependency-autonomy conflict (increasing self-awareness, fluctuating motivation, striving for independence, and less imitative).</td>
<td>Autonomy within structure; supervisor uses ambivalence, clarification and less instruction.</td>
</tr>
</tbody>
</table>
3 Conditional dependency (counselors' identity is developing with increased insight, more consistent motivation, increased empathy, and more differentiated interpersonal orientation). Autonomy with low normative structure; counselor treated as a peer with mutual exemplification and confrontation.

4 Master counselor (adequate self and other awareness, insightful of own strengths and weaknesses, willfully interdependent with others, and has integrated standards of the profession with personal identity). Counselor can function adequately in most environments; supervision now becomes collegial if continued.

(Stoltenberg, 1981, p.61)

**Moral Development Theory by Kohlberg**

Lawrence Kohlberg pioneered research in cognitive development and moral reasoning in the 1950's. He built upon the work of Piaget but departed from the behaviorists who assumed that society determined what was morally right and wrong. Kohlberg believed that the individual determines right and wrong in a deliberate, cognitive manner via organized stages. The basic principles of moral development include universality, freedom from values or doctrines, constitutionality, need for good role models and stimulation toward the next highest stage, fairness, and linkages between moral reasoning and moral behavior (Kohlberg and Turiel, 1971).
Table 4 lists the six stages of moral development that are clustered into three levels according to Kohlberg. These levels include the Pre-Conventional, the Conventional, and the Post-Conventional.

<table>
<thead>
<tr>
<th>Level</th>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Pre-Conventional</td>
<td>1</td>
<td>Obedience, deference to superior power/prestige and punishment.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Naively egoistic orientation.</td>
</tr>
<tr>
<td>II Conventional</td>
<td>3</td>
<td>Orientation to approval, pleasing others, living up to expectations, keeping mutual relationships, and to being good with good motives.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Maintain authority, contribute to social order, do one's duty, and uphold laws except in extreme cases.</td>
</tr>
<tr>
<td>III Post-Conventional Level</td>
<td>5</td>
<td>Contractual legalistic orientation, recognition of an arbitrary starting point relative to the group and upholds non-relative values like liberty and life; maintains social contracts.</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Conscience/self-chosen orientation, principles of choice, universal ethical principles, and follow principles over laws.</td>
</tr>
</tbody>
</table>

Moral development theory posited that the goal in life was progression through the stages. Kohlberg and Turiel (1971) believed the goal of education was to encourage children to develop upward and to reach the highest stage, number six, if
possible. They also believed moral development could be stimulated by exposing individuals to the stage just beyond their current functioning with deliberate problem solving exercises. Kohlberg acknowledged the need for role models who are a stage ahead as essential for growth. The following two references cite the practice of role modeling for students as a critical skill for the preventionist. Jenkins and Olsen (1994) and Powell, Zehm and Kottler (1995) cite personal lifestyle choices and public behaviors as critical issues for credibility and student receptivity. Age was an additional consideration in moral development, since it is believed that stages five and six can only be reached in adulthood because different kinds of experience are required for attainment of principled moral judgement.

Kohlberg applied moral development to social issues and to the counseling process. He considered moral development to be a restructuring of self-concept, relationships, and interdependence (Kohlberg, 1969). Kohlberg (1976) saw an interaction between the individual and the social environment; both the individual and the social environment should be committed to reaching higher levels. Tennyson and Strom (1986) believed counseling to be a "moral enterprise" due to the power differential between counselor and client, the moral directedness of counseling goals, professional standards, the moral development of counselors, and the moral education of clients (p. 298). Hayes (1994) added that Kohlberg's theory could be translated into a progressive approach for working with clients and students to help them make meaning of events. For example, Hayes asserted that counselors and educators could collaborate to structure interventions for clients or students that were
one stage above their current stage to encourage development and problem solving abilities.

Moral development theory can be applied in a higher education setting. Nucci (1997) applied moral development theory to contemporary academia. She suggests an infusion of academic practices with student development needs to encourage moral development. Some of her suggestions include: integrating moral discussions within the total school experience with a focus on the welfare of others, the development of moral sensitivity and moral character, using moral exemplars, providing opportunities for self-reflection, role-taking and social problem solving around real life issues, preparing educators to deal with controversy and pluralism, and fostering fairness and respect. These suggestions reflect Kohlberg’s sense of universality, building a just community, and the use of deliberate psychological education. The link between higher moral development and education may also exist because education exposes the learner to a broader world view rather than a defined ideology while encouraging self-discovery (Rest, 1986).

**Moral Development Theory and Substance Abuse Prevention Professionals**

This study attempted to apply Kohlberg’s theory of moral development to substance abuse prevention professionals in higher education. Although Kohlberg theorized that everyone advances through the developmental stages, only certain individuals reach the higher levels. If Kohlberg’s theories can be applied to substance abuse prevention professionals as they have for mental health counselors we would expect to see only a few substance abuse prevention professionals at higher stages.
We would also expect to see those at higher stages of moral development to be offering the most advanced, comprehensive programs.

Substance abuse prevention professionals are likely candidates for developing higher stages of moral judgement. A ten year longitudinal study with 102 subjects found people who develop in moral judgement to be reflective, responsible risk-takers who like challenges, stimulating environment and placing themselves in a larger social context (Rest, 1993). Rest’s research found that social environment, intellectual stimulation and supportive social milieu are more crucial for moral development than a particular college course(s) or specific professional work experience. These conditions for nurturing stage advancement exist in a higher education setting. These conditions of an encouraging social environment, intellectual stimulation, and social support may also apply to the professional environment of substance abuse preventionist in higher education.

Substance abuse prevention professionals in a higher education setting can be described according to Kohlberg’s stages. The first of Kohlberg’s stages, termed Pre-Conventional, with its two stages applies to young children and adolescents. The second level, termed the Conventional Level, also has two stages and is the most common level for adults, particularly adults with college experience. It is this level at which the substance abuse prevention professionals can begin to serve as positive role models if they are a stage ahead of their target audience. The following three references cite the practice of role modeling for students as a critical skill for the preventionist. Heavner (1994), Jenkins and Olsen (1994) and Powell, Zehm, and Kottler (1995) cite personal lifestyle choices and public behaviors as critical issues
for credibility and student receptivity. The third level, the Post-Conventional, contains the two highest stages. This research assumes that substance abuse prevention professionals in higher education will be in either level two or three due to age and education. Substance abuse prevention professionals will be defined according to these Kohlbergian stages beginning with the second level in Table 5.

Table 5 **Kohlberg’s Stages and Substance Abuse Prevention Professionals (SAPP)**

<table>
<thead>
<tr>
<th>Kohlberg’s Level and Stages</th>
<th>SAPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Level, Stage 3:</td>
<td>Stage 3: SAPP offer programs exactly as expected without campus adaptation or innovation, have an objective orientation, offers programs because other campuses offer them, and maintain their job description without adding new services.</td>
</tr>
<tr>
<td>orientation to approval, pleasing others, living up to expectations, keeping mutual relationships, and being good with good motives.</td>
<td></td>
</tr>
<tr>
<td>Conventional Level, Stage 4:</td>
<td>Stage 4: SAPP infuse prevention into a broader social context, collaborate with colleagues and others, and expand the prevention position.</td>
</tr>
<tr>
<td>maintains authority, contributes to social order, does one's duty, and upholds laws except in extreme cases.</td>
<td></td>
</tr>
</tbody>
</table>
Post-Conventional Level, Stage 5: contractual legalistic orientation, recognition of an arbitrary starting point relative to the group, and upholds non-relative values such as liberty and life, social contract.

Post-Conventional Level, Stage 6: conscious/self-chosen orientation, principles of choice, universal ethical principles, and follows principles over laws.

Stage 5: SAPP introduce complex decision making paradigms, have a subjective orientation, utilize new research that may be controversial, and advocate for services.

Stage 6: SAPP present differing viewpoints, displays creativity in programming, have higher order thinking, are personally committed to universal truths, and advocate with compassion.

(Kuhmerker, 1981)

**Conceptual Level Matching Model by Hunt**

Hunt's Conceptual Level Matching Model overlaps with Kohlberg's Moral Developmental Model. Both can be applied to any ethnic, gender, occupation, culture or religious population. These models assume that human behavior is a function of experience and level of cognitive complexity and that this cognitive development occurs within specific domains, such as moral, emotional, intelligence, rather than across the entire realm of domains. These models also assume that people are intrinsically motivated toward a mastery of lower stages and that growth or movement to higher stages is dependent upon the interaction between the person and the environment. Another overlap between these models is the belief that cognitive
development, which includes both physiological and psychological transformations, occurs in stages or structures with each stage or structure representing the individual's current style of constructing meaning of experiences. The Conceptual Level Matching Model and the Moral Developmental Model overlap in their belief that people operate in the stage they most frequently use; however no one is completely in one stage at any particular time. Movement from one stage to another represents qualitative change in the individual's meaning-making system rather than quantitative change. This movement occurs in an irreversible, hierarchical and sequential fashion from the least complex stage to the most complex stage (McAdams, 1988).

Hunt viewed development on a continuum of conceptual complexity or interpersonal maturity. Like other developmentalists, Hunt saw development as a continuous process that is described in stages with higher stages indicating higher development and with education playing a key role in development. Hunt's stages of conceptual development include:

1) Stage 0 is described as self-centered and unorganized. This stage is represented by a score of 0 on the PCM.

2) Stage 1 is defined by learning the ground rules, by following cultural standards, and by polarized thinking. A Stage 1 individual has low conceptual level, immaturity, is unsocialized, seeks high social approval, and experiences the world in terms of good or bad, right or wrong. At Stage 1, the person adapts to change by turning to the rulebook, since the rules for the game are the game. Inter-personal relations for this person occur in a network of role
prescriptions without any empathic understanding of what others think or feel.
A Stage 1 person is sensitized to the status and authority of others, is self-centered and seeks extrinsic reward (Hunt, 1966). This individual would benefit from an accepting, firm, highly structured environment; this individual would be encouraged to move to the next stage by a structured, teacher centered, deductive learning environment. This stage is represented by a score of 1 on the PCM.

3) Stage 2 is described as learning about self from generalized standards, increased tolerance, and striving for independence. An individual at Stage 2 is dependent, conforming, a moral realist, and an absolutist thinker. For some, Stage 2 represents "negative independence, a breaking away with the realization of increased choices and alternatives" (Hunt, 1966, p. 294). Stage 2 can also mean the start of self-delineation and alternative expressions (Hunt, 1971). An individual in Stage 2 would benefit from an environment with structure and clear, consistent rules that encourage inductive learning. Given this environment and encouragement for self-delineation, intrinsic acceptance, student-centeredness and self-expression, the individual at Stage 2 would be encouraged to move to the next stage (Hunt and Sullivan, 1974). This stage is represented by a score of 2 on the PCM.

4) Stage 3 is self-anchored, empathetic, and integrated. Stage 3 represents high conceptual level, independence, and self-reliance. At Stage 3 the individual can break away from the standard, take differential action, and seek self-definition. The individual has a high level of motivation to seek intrinsic
or self-defined rewards. An individual at this stage would also benefit from environments that are highly autonomous and unstructured (Hunt and Sullivan, 1974). This stage is associated with creativity, tolerance toward stress and change, flexibility, abstraction, ability to cope, and greater concern with process than outcome. Hunt believed the goal of education was to help students become inquisitive, analytical and unique broad thinkers who challenge convention (Hunt, 1966). A meta-analysis by Miller (1981) found individuals high in conceptual level to be associated with lower prejudice and greater empathy, internal locus of control, flexibility, interdependence and information processing skills. When behavior was at a more complex and flexible level it demonstrated high conceptual level that was more advanced than low conceptual level. Stage 3 is represented by a score of 3 on the PCM. Hunt and Sullivan (1974) equated development to a motion-picture sequence that could be represented by selecting still shots from the sequence. Development includes conceptual complexity and interpersonal maturity. Earlier writings by Hunt (1966) referred to this as “conceptual systems” (p. 277), which can progress to either flexibility or arrestation. These conceptual systems are the basis by which the person relates to the environment. Like a computer program, these conceptual systems serve to filter, code or read events. Thus, these conceptual systems guide how individuals think and relate to others rather than guide just what they think (Hunt, 1966). Hunt’s model helps to understand individuals at their respective levels without judgment. Hunt cautioned against labeling environments as good or bad and against arranging environments rich to poor. He also cautioned against the tendency to label terms such
as autonomy and control as either good or bad since the value of those terms depends on the individual (Hunt, 1966).

Hunt (1971) believed that psychological viewpoints and models should be used to produce change in individuals. This could be initiated by matching the individual with an environment or structure conducive to progression along the stages. For example, if educational programs could be offered at a slightly higher level than the students’ current level, then developmental change is inspired although not predicted and immediate needs are separated from developmental needs (Hunt and Sullivan, 1974).

**Conceptual Level and Substance Abuse Prevention Professionals**

Hunt’s theory of conceptual complexity and conceptual level can be applied to substance abuse prevention professionals. Kelly (1992) believed master’s level students in training for substance abuse prevention work needed an “ability to think broadly, deal with ambiguity or competing issues, and to balance positivistic inquiry with professional constructivism demands high levels of conceptual development” (p. 256). These examples relate to Hunt’s high conceptual level of flexibility, adaptation, and ability to work with vague or shifting parameters.

The literature indicates a relationship between the education of counselors and the education of substance abuse prevention professionals. Thus, the research on the education of counselors by Stoltenberg (1981) might apply to substance abuse prevention professionals. Stoltenberg’s research shows the development of professional skills to be due in part to the professionals’ environment. His research
has been adapted to fit substance abuse prevention professionals; see Table 6. For example, if a substance abuse prevention professional initially scored low on conceptual level, then we might expect an eventual developmental advancement in conceptual level given an optimal learning environment. Stoltenberg cited increased empathy and listening skills as characteristics of counselors with higher conceptual level. With an optimal environment and higher conceptual level, we might expect substance abuse prevention professionals to acquire enhanced professional skills such as complex decision-making, autonomy, ability to offer multiple or comprehensive services, adaptability, and professional integrity. Table 6 shows how Stoltenberg’s (1981) research fits substance abuse prevention professionals (SAPP) in a higher education setting at each of Hunt’s conceptual levels (CL).

Table 6  Conceptual Level, Substance Abuse Prevention Professionals

<table>
<thead>
<tr>
<th>CL</th>
<th>SAPP Characteristics</th>
<th>Optimal Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Novice SAPP are dependent on supervision and others,</td>
<td>The supervisor uses instruction,</td>
</tr>
<tr>
<td></td>
<td>imitates other preventionists and are concerned with the</td>
<td>support, helps SAPP learn about their self, and a</td>
</tr>
<tr>
<td></td>
<td>procedures of prevention programming.</td>
<td>structured environment while encouraging autonomy.</td>
</tr>
<tr>
<td>1</td>
<td>SAPP have a dependency-autonomy conflict</td>
<td>The supervisor uses ambivalence,</td>
</tr>
</tbody>
</table>
(increasing self-awareness, fluctuating motivation, striving for independence, becoming more self-assertive and less imitative) and are becoming more Autonomous with less need for structure.

2 Identities as SAPP are developing with increased insight, more consistent motivation, autonomy, and with inner structure.

The supervision is sparse and weak, The supervisor and SAPP interact as peers with appropriate personal and professional confrontation as needed.

3 Master SAPP know their own strengths and weaknesses, are willfully interdependent, integrates professional with personal identity, and function adequately in any environment.

The supervision is sparse and collegial as SAPP become a supervisor for others, like SAPP at Level 1.

**Applying Moral Development and Conceptual Level to A Similar Professional**

Hunt’s stages of conceptual level correspond to Kohlberg’s stages of moral development. Although the terms conceptual level and moral development are not synonymous, both terms suggest that individual development becomes more comprehensive, broad-based, complex, and abstract as it progresses through stages of growth (Sprinthall and Bernier, 1979). Hunt’s Stages 0-1 correspond to Kohlberg’s Pre-Conventional Stages 1 and 2. Hunt’s Stage 2 corresponds to Kohlberg’s
Conventional Stage 3 and 4. Hunt's Stage 3 corresponds to Kohlberg's Post-Conventional Stages 5 and 6. Thus, development in conceptual level supports development in moral decision-making. Rest found this correlation in a series of replication studies published in 1983 that related moral decision making and cognitive capacity to the understanding of more complicated ideas. He believed that if people did not understand moral reasoning then they could not use it in decision making, but if people do understand higher stage ideas they tend to use them in decision making (Rest, 1993).

Further support for Hunt's model of matching the environment to fit the counselors' conceptual level is found in a meta-analysis by Holloway and Wampold (1986). They found that high conceptual level counselors functioned better than low conceptual level counselors in low structured environments. These low structured environments are typical for counselors in private practice, doing independent consulting work, working in school systems where there is limited supervision, and working alone. The performance of low conceptual level counselors can be improved with increased structure.

The writings by Skovholt and Ronnestad (1992) suggest a professional milieu that fosters counselor development. They suggest physical and social structures that allow processes, innovation, and change to occur with care given to "tolerate complexities" (p. 132). This study suggests an interplay between environment and the development of cognitive complexity. This also suggests that advances in counselor development are related to conceptual level.
The meta-analysis by Holloway and Wampold (1986) draws a parallel between education and advancing levels of development. The authors examined 29 articles with the topics of cognition, counseling, and psychotherapy that were published in professional journals between 1967 and 1983. This meta-analysis found that counselors high in conceptual level showed more innate counseling skill, but counselors low in conceptual level could reach similarly high levels of counseling skills with the necessary structured environment. This research reinforces the need to ascertain each student's conceptual level, then to design the appropriate learning environment to promote growth. It also reinforces the notion that good counseling skills are not necessarily innate, but are developed over time given the right environment. An example of a counseling skill is the formation and testing of a clinical hypothesis. Exploratory research by Holloway and Wolleat (1980) found a relationship between conceptual level and the formation and testing of a clinical hypothesis. Specifically, they concluded, "conceptual level, but not professional experience, is related to the quality and clarity of expression evident in counselors' clinical judgements and the number of divergent questions posed about client behavior" (Holloway and Wolleat, 1980, p. 543).

Summary

In this chapter, a selected literature review on substance abuse prevention and substance abuse prevention professionals in higher education was presented. Due to the limited research on substance abuse prevention professionals, counseling professionals were cited for their similarities to substance abuse prevention
professionals. Considerable research was found on substance abuse prevention but limited research has been conducted on substance abuse prevention professionals in higher education. Thus, a need was found to research substance abuse prevention professionals. This research will include the conceptual and moral development of substance abuse prevention professionals and the comprehensiveness of prevention programs they offer.

Chapter 3 will describe the research methods used to study substance abuse prevention professionals. The three instruments selected for this research include the Paragraph Completion Method, the Defining Issues Test 2, and the Task Force Planner Survey. These instruments and the Demographic Survey will be described in the next chapter along with methods for gathering data and ethical considerations. Chapter 3 will include information on the pilot study and the Human Subjects Applications.
Chapter Three

Research Methods

Overview

In Chapters 1 and 2 the need for research on substance abuse prevention professionals in higher education was introduced. This chapter will introduce the research methods used for investigating the relationship between conceptual level and moral development of substance abuse prevention professionals and the comprehensiveness of their substance abuse prevention programming in higher education settings.

Population and Sample

The target population for this study was substance abuse prevention professionals in higher education settings in the United States. The sample for the study was obtained by randomly selecting member institutions registered with the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse that was established by the Higher Education Center for Alcohol and Other Drug Prevention (www.edc.org/hec.network). There are currently 1,460
registered institutions from 48 states (neither Alaska nor Hawaii are included), the District of Columbia, Canada, and Puerto Rico with one professional listed per institution. Membership in the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse is voluntary.

Institutions registered with the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse are an accessible population of professionals who are concerned about the issue of substance abuse on their respective campus. These professionals held positions that ranged from Dean of Students, Counselor, Health Center Director, Health Educator, and Faculty Member to the substance abuse prevention professional. A web based randomization service entitled Research Randomizer (www.randomizer.org) was used to select the institutions for the sample. Although institutions from Puerto Rico and Canada are registered with the Network, they were not included in this sample. After an institution from the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse was randomly selected, an exploratory email was sent to ascertain the employment of a substance abuse prevention professional at that particular institution. The exploratory email may not have reached the correct office or professional, it may have been confusing as some institutions may not use the term substance abuse prevention professional, and substance abuse prevention professionals may perform many different functions in addition to prevention programming. The packet of instruments with the Demographic Survey was sent if a full or part time substance abuse prevention professional was located at that institution. If a substance abuse prevention professional was not found at that
institution then another institution was randomly selected. To achieve population validity, the sample size was set at 300. Some contacts at the randomly chosen institutions quickly returned the incomplete packet either without an explanation, with a note stating there was no substance abuse prevention professional, or with a note stating they didn’t have the time to participate in this study. Confusion over these returned packets resulted in a total of 305 randomly selected institutions being sent the packet of instruments and survey. The sample included: 174 universities, 86 colleges, 33 community colleges and 12 military or technical institutions from 45 states plus the District of Columbia; see Appendix G for a complete listing of respondents.

Data Gathering

The 305 substance abuse prevention professionals in the sample were mailed a packet of three instruments, the Demographic Survey, a return envelope, a consent form (Appendix I) and a personalized cover letter (Appendix H) from this researcher. The three instruments included the Defining Issues Test 2 (DIT), the Paragraph Completion Method (PCM), and the Task Force Planner Survey (TFPS). Participants were asked to complete the instruments and the Demographic Survey, sign the consent form (Appendix I) then return everything in the addressed, stamped envelope. The consent form was numbered with the assigned Network number and upon receipt by the researcher, the institutions’ number was added to the top of each instrument and survey. Respondents were informed that only aggregate data would be used and that the signed consent form would be separated from the returned instruments and
survey upon receipt by the researcher to ensure confidentiality. A separate list of respondents was maintained by the researcher.

A rigorous attempt was made to collect data from all substance abuse prevention professionals in the sample. If the packet was not returned a month after it was sent, a reminder post card was mailed to the substance abuse prevention professional. In total, 255 postcards were mailed. A reminder email was sent two weeks after the postcards to those 245 substance abuse prevention professionals who still had not responded.

**Instrumentation**

Quantitative information was gathered from the sample via written, self-report instruments and a survey. The two standardized instruments included the DIT, which measures moral development, and the PCM, which measures conceptual level or complexity. The TFPS was developed to measure the comprehensiveness and frequency of substance abuse prevention programming offered by the substance abuse prevention professional. The Demographic Survey was developed to collect information on the substance abuse prevention professional’s pre-service education, post-service training, professional certifications and memberships, substance abuse prevention experience, and other variables used as control measures.

**Defining Issues Test**

The Defining Issues Test was developed by James Rest in 1979 to measure moral development. Rest’s Defining Issues Test is a paper-and-pencil, multiple
choice survey that quantifies moral development as opposed to Kohlberg's longer, Moral Judgement Interview. Since the Defining Issues Test is a recognition-type instrument, it measures principled reasoning more accurately than Kohlberg's Moral Judgement Inventory (Evans, 1985). It is "the most extensively used test of moral judgement with college and adult populations" (Rest, 1993, p. 202).

Rest developed a long and short version of the Defining Issues Test. The Long Version, updated after 25 years, is the Defining Issues Test 2 (DIT) that consists of six moral dilemmas and the Short Version consists of three moral dilemmas, with each dilemma followed by 12 items that are considered when deciding an issue. Both versions have the same properties (Rest and Narvaez, 1998). The DIT takes a maximum of one hour to complete (Rest and Narvaez, 1998). This study used the updated DIT due to changes in the wording and relevance of moral dilemmas, scoring with a new N index that is more powerful than the old P score, validity, and reliability (Rest, Narvaez, Thoma and Bebeau, 1999).

The returned, completed DIT instruments were scored by the Center for the Study of Ethical Development at the University of Minnesota. Each item is rated on a Likert scale ranging from "no" to "great" importance; then the top 4 items are identified as most important. These items are rated and ranked by the respondent in terms of their importance in making a decision about the particular dilemma. These ratings and rankings of the items are used to derive a score with two indexes, the N and P. The P score was the most frequently used index for scoring the DIT. The P score represents the weighted sum of ranks for Post-Conventional items, which corresponds to Kohlberg's stages 5 and 6 (Rest, et al., 1999) and represents use of
principled reasoning in decision making and higher stages of development. The newest index is the N. Although the N score is considered a more valid score than the P index, it has fewer references in the literature. The N index has been adjusted and is on the same scale as the P index; thus it is highly correlated with the P index (Rest and Narvaez, 1998). The N score adds greater validity to the scoring and improves generalizability (Rest, Narvaez, Thoma and Bebeau, 1999). This study used the N score.

There are advantages and disadvantages of the DIT. Advantages include its quantitative reliability, computerized analysis, elimination of scorer bias, convenience, economy of time, and use of remarks by subjects in Kohlbergian interviews. The DIT is not dependent on individual verbal expressiveness as Kohlberg's instrument was and it measures an implied understanding of moral thinking. The DIT also gives information on three main headings that include personal interest that corresponds to Stages 2 and 3, maintaining norms that correspond to Stage 4 and Post-Conventional thinking that corresponds to Stages 5 and 6. There are many disadvantages of the ranking and rating the moral dilemmas on the DIT. These disadvantages include ambiguous test items, a careless rating by respondents, unintended answers by participants, and an overestimation of the respondents' development (Rest, et al., 1999). Since the test items on the DIT are short and cryptic, there is limited differentiation between Kohlberg's developmental stages.

In general, the DIT can be interpreted in four areas: educational level, cognitive development, public policy attitudes, and interventions. Since more data
has been collected using the mean P score for the Defining Issues Test 1, a comparison on educational levels is available for the following subgroups: junior high school students = 20.0; senior high school students = 31.0; college students = 43.5; graduate students = 44.9; moral philosophers = 65.1 (Center for the Study of Ethical Development). DIT scores can be used to measure cognitive development since they correlate with moral comprehension, recall and reconstruction of high stage arguments. To a lesser extent the DIT scores are correlated to general intelligence, achievement, and grade point average. Some studies have shown a prediction between DIT scores and controversial public policy attitudes. DIT scores also show gains as a result of interventions such as moral educational programs (Rest and Narvaez, 1998).

Validity for the DIT has been assessed in over 400 articles. The Center for the Study of Ethical Development lists eight criteria that were assessed: differentiation of various age/education groups, longitudinal gains, relationship to cognitive capacity and general intelligence, sensitivity to moral education interventions, link to prosocial behaviors and desired decisions, connection to political attitudes and choices, gender, and reliability. An unpublished article by Brendel, Kolbert, and Foster (1999) found evidence for validity and reliability of the DIT. This article also reported internal validity ranges between .70 and .80 and test-retest reliability ranges are between .70 and .80 (Rest, 1986). See Appendix B for a copy of the DIT.
Paragraph Completion Method

The PCM is a semi-projective instrument that assesses conceptual level, learning style and how a person thinks. Conceptual level is defined “in terms of increasing conceptual complexity as indicated by discrimination, differentiation, and integration and by increasing interpersonal maturity as indicated by self-definition and self-other relations” (Hunt, Butler, Noy, and Rosser, 1978, p. 3). Conceptual level is distinct from intellectual or achievement measures. When controlling for achievement factors, researchers found people with low ability and achievement to be low in conceptual level and people with high ability and achievement to vary in conceptual level (Hunt, et al., 1978). The PCM consists of six topics, each on a separate page, and respondents are asked to give their ideas and opinions about each of these topics. These topics are introduced as stem sentences and respondents are asked to write at least three sentences about each topic in approximately two minutes per topic. The PCM would take a minimum of twelve minutes to complete. The topics include:

1. What I think about rules...
2. When I am criticized...
3. What I think about parents...
4. When someone does not agree with me...
5. When I am not sure...
6. When I am told what to do...

Individual researchers can learn to score the PCM by assessing the thought structure behind each response rather than just the content of the response. Expert consults are also available. The PCM is non-objective, averages the three highest responses to reduce any false high scores, and has an interrater reliability coefficient
of .86. (Hunt, et al., 1978). This study used a trained, experienced PCM consultant to score the PCM. See Appendix C for a copy of the PCM.

**Task Force Planner Survey**

The Promising Practices: Campus Alcohol Strategies Task Force Planner, developed by Anderson and Milgram (1998), is a grid of recommended substance abuse prevention components in higher education with recommended sponsors. These eight recommended substance abuse prevention components reflect best practices by including examples of programming which could be offered via ten of the listed, recommended sponsors or campus groups. These components and sponsors would collectively deliver campus and community wide, comprehensive substance abuse prevention programming. There are few published lists of substance abuse prevention programming for higher education with as many suggested components for as many sponsors or campus groups as the Promising Practices: Campus Alcohol Strategies Task Force Planner. It suggests depth and breadth of substance abuse prevention programming and it suggests comprehensive, best practices for substance abuse prevention professionals.

The Promising Practices: Campus Alcohol Strategies Task Force Planner was adapted into the TFPS for this study. The 38 statements in the Task Force Planner for the Coordinator were converted into questions that asked respondents to indicate the frequency with which he/she performed the prevention task in the statement. A Likert scale was used to indicate frequency with $0=never$, $1=rarely$, $2=sometimes$, $3=regularly$, $4=often$, and $5=very often$. A total of these scores determined frequency and comprehensiveness of substance abuse prevention programming. A pilot study
was conducted to determine the variability and reliability of this instrument.

Participants in this pilot study took approximately 20 minutes to answer these 38 questions. See Appendix D for a copy of the TFPS.

**Demographic Survey**

The Demographic Survey was developed for this study. It collected the following information about the respondents: age, gender, pre-service education, post-service training, current and past job responsibilities and services, number of years in the field of substance abuse prevention, certifications, and memberships in professional organizations. It also collected the following information about the institution: number of undergraduate students, number of substance abuse prevention professionals, and number of professionals in the prevention network. The Demographic Survey provided descriptive, professional information about the respondents. A pilot study was conducted to determine the accuracy of the survey. It took a maximum of ten minutes to complete these twenty questions. See Appendix E for a copy of the Demographic Survey.

**Null Hypotheses**

Hypothesis 1: There will be no significant relationship between conceptual level and moral development of substance abuse prevention professionals in a higher education setting and comprehensiveness of substance abuse prevention programming.

Hypothesis 2: There will be no significant relationship between conceptual level and moral development of substance abuse prevention professionals in a higher education
setting and education, which included substance abuse prevention classes, conferences and workshops, certifications, and memberships in professional organizations.

Hypothesis 3: There will be no significant relationship between education of substance abuse prevention professionals in a higher education setting, which included substance abuse prevention classes, conferences and workshops, certifications, and memberships in professional organizations and comprehensiveness of prevention programming.

**Data Analysis**

A data analysis was performed on each hypothesis in the following ways.

Hypothesis 1: There will be no significant relationship between conceptual level and moral development of substance abuse prevention professionals in a higher education setting and comprehensiveness of substance abuse prevention programming.

Hypothesis 1 was analyzed by multiple regression with conceptual level and moral development as independent variables and the comprehensiveness of prevention programming as the dependent variable. The number of students at the institution served as the control variable for determining number of prevention professionals employed, the number of professionals in the prevention network, and the subsequent division of prevention tasks. For example, a small institution might employ only one substance abuse prevention professional who would then be expected to deliver many prevention programs and thus demonstrate a high degree of comprehensiveness. Conversely, a large institution might employ several substance
abuse prevention professionals. Those substance abuse prevention professionals would then be expected to divide prevention tasks between themselves, thereby reducing the probability of any one substance abuse prevention professional demonstrating a high degree of comprehensiveness while allowing for a high degree of frequency for certain tasks. Another control variable was the age of the substance abuse prevention professional, since moral development often increases with age.

Hypothesis 2: There will be no significant relationship between conceptual level and moral development of substance abuse prevention professionals in a higher education setting and education, which included substance abuse prevention classes, conferences and workshops, certifications and memberships in professional organizations.

Hypothesis 2 was analyzed by two multiple regressions with conceptual level and moral development as the dependent variables and the substance abuse prevention professionals' education, which included substance abuse prevention classes, conferences and workshops, certifications, and memberships in professional organizations as the independent variables.

Hypothesis 3: There will be no significant relationship between education of substance abuse prevention professionals in a higher education setting, which included substance abuse prevention classes, conferences and workshops, certifications, and memberships in professional organizations and comprehensiveness of prevention programming.

Hypothesis 3 was tested by one multiple regression using comprehensiveness of prevention programming as the dependent variable and the substance abuse
prevention professionals’ education, training, certifications and professional memberships as the independent variable. The number of students at the substance abuse prevention professionals’ institution was the control variable.

**Pilot Study**

A small pilot study was conducted on substance abuse prevention professionals at the College Conference of the Alcoholic Beverage Control Board in Richmond, Virginia in September, 2000. Approximately twenty substance abuse prevention professionals were randomly asked to participate in the pilot study during the conference registration and breaks. They were asked to complete the Demographic Survey and the TFPS. They were also asked to give written or verbal feedback on the Demographic Survey and the TFPS to the researcher. This pilot study tested the reliability and variability of the TFPS and the Demographic Survey.

**Ethical Considerations**

Every effort was taken to ensure ethical integrity. Prior to the pilot study, a Precis, the Demographic Survey and the TFPS, were submitted to the Human Subjects Research Committee of the College of William and Mary. Prior to the national mailing and data collection a proposal with the three instruments and the one survey was submitted to the Human Subjects Research Committee of the College of William and Mary.

The national sample was informed of ethical safeguards in the cover letter and the consent form. The cover letter and consent form stated the purpose of this study,
the voluntary nature of participation, the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse number assigned to their institution, and safeguards for confidentiality and anonymity. The consent form was immediately separated from the returned instruments and survey upon receipt by the researcher. To ensure confidentiality, the names of the respondents will not be revealed. Instead, only aggregate data were used. Respondents were also given the opportunity to receive the results of this research through e-mail. A copy of the cover letter is in Appendix H and a copy of the consent form is in Appendix I.

**Summary**

There were three null hypotheses tested in this study. They related to conceptual level, moral development, and comprehensiveness of prevention programming by substance abuse prevention professionals in higher education. Three instruments and one survey measured both the dependent and independent variables. The dependent variable of comprehensiveness of prevention programming was measured by the TFPS. The independent variables of conceptual level, moral development and education, which included substance abuse prevention classes, conferences and workshops, certifications, and memberships were measured respectively by the DIT, the PCM and the Demographic Survey. Education related questions on the Demographic Survey asked about the number of substance abuse prevention classes attended while in a degree program, number of substance abuse prevention conferences and workshops attended, the number of substance abuse prevention or related certifications held and the number of professional memberships.
held. Data were analyzed using multiple regression. According to Gall, Borg and Gall (1996), multiple regression suggests statistical significance of the relationships between several variables and the magnitude of those relationships. Multiple regression is the most widely used statistical analysis for quantitative, educational research. Multiple regression can also be used with nominal data like gender and ratio data like the PCM, the DIT, and the TFPS. The control variables were age of respondents and the number of undergraduates at the institutions where respondents work.

Chapter 4 will present the results of this study. It will begin with details of the data collection process. It will also include the statistical analysis from each instrument and survey for each hypothesis.
Chapter Four

Results

Overview

This chapter reports the results of this study. The first section of this chapter describes the data collection process followed by the descriptive statistics of the three hypotheses presented in Chapter 3. These hypotheses relate to comprehensiveness, education, conceptual level, and moral development of substance abuse prevention professionals in higher education.

Data Collection

To represent the population of substance abuse prevention professionals in higher education, a random sample was drawn from institutions registered with the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse. As of November 1, 2000 there were 1460 institutions registered with the Network. A web-based, random number generator was used to select a sample of 305 institutions employing at least one substance abuse prevention professional.

A packet of three instruments and the Demographic Survey was sent to 305 substance abuse prevention professionals in the sample. This sample represented the following institutions: 174 in universities, 86 in colleges, 33 in community colleges
and 12 in either military or technical institutes. The number of undergraduates at institutions in the sample ranged from 600 to 42,465 with a mean of 7,901.

Several techniques were employed to encourage participation. Initially, the cover letter stated the purpose and the confidential nature of the study. The letter also outlined a raffle for a $25 gift certificate to a national bookstore of choice as an incentive. A stamped, addressed envelope was also enclosed in the packet. A month later, a reminder postcard was sent. Two subsequent emails were sent to substance abuse prevention professionals in the initial sample who had not replied after two months.

Of the 305 substance abuse prevention professionals in the sample, a total of 97 respondents completed and returned the instruments. The completion rate of 97 represents a 31% response rate. The 97 responding substance abuse prevention professionals served in the following institutions: 57 in universities, 29 in colleges, eight in community colleges, and three in either military or technical institute. See Appendix G for the list of institutions.

Because some of the returned instruments and questions from the Demographic Survey were incomplete, attempts were made to retrieve missing data. These attempts included calling or emailing respondents, sending second copies of either an instrument or survey to respondents, and looking for data, such as number of undergraduate or graduate students, on the institutions' website. Despite these efforts there were missing data for the dependent and independent measures. Missing data from the dependent measures included two of the Paragraph Completion Methods (PCM), six of the Defining Issues Tests 2 (DIT) and 10 of the Task Force Planner.
Surveys (TFPS). All of the Demographic Surveys, which included independent variables, were returned. There were, however, missing data from the Demographic Surveys that included age of the substance abuse prevention professional, number of undergraduate students at the institution, and the degree program which the substance abuse prevention professional is currently enrolled in. Other missing data from the Demographic Surveys included the substance abuse prevention professionals on and off campus network, number of substance abuse prevention classes, conferences and workshops, and the number of substance abuse classes, conferences and workshops. When a respondent wrote a range for an answer it was entered as the highest number of that range.

**Descriptive Statistics**

The respondents proved to be diverse. They included 23 men and 74 women whose ages ranged from 23 to 60 with a mean age of 41 years and a standard deviation of 10.31. The Demographic Survey did not ask respondents to describe their work status as either full or part time. The respondents listed a range of 0 to 21 for years of experience in the field of substance abuse prevention in a higher education setting with a mean of 6.39 years and a standard deviation of 5.59. The years of experience in the field of substance abuse prevention in another setting ranged from 0 to 42 years with a mean of 3.09 years and a standard deviation of 6.42.

The educational background of substance abuse prevention professionals who responded was also diverse. In terms of formal education, 10% have undergraduate
degrees only, 61% have graduate degrees, 16% have post graduate degrees, and 13% have doctorates. In addition, 23.5% are enrolled in an educational program.

To access informal education, the respondents were asked about the number of substance abuse prevention conferences and workshops they had attended as well as the number of substance abuse conferences and workshops they had attended. The mean for the number of substance abuse prevention conferences attended was 7.82 with a standard deviation of 13.37 and a range of 0 to 115 conferences. The mean for the number of substance abuse prevention workshops attended was 14.63 with a standard deviation of 17.94 and a range of 0 to 100 workshops; two outliers were removed. Regarding substance abuse conferences, the mean was 7.61 with a standard deviation of 10.98 and a range of 0 to 50 conferences. The mean for the number of substance abuse workshops attended was 17.74 with a standard deviation of 31.51 and a range of 0 to 200. Table 7 describes the substance abuse (SA) and substance abuse prevention (SAP) conferences and workshops of the respondents using descriptive statistics.

<table>
<thead>
<tr>
<th>Type</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP conferences</td>
<td>7.82</td>
<td>13.37</td>
<td>0-115</td>
</tr>
<tr>
<td>SAP workshops</td>
<td>14.63</td>
<td>17.94</td>
<td>0-100</td>
</tr>
<tr>
<td>SA conferences</td>
<td>7.61</td>
<td>10.98</td>
<td>0-50</td>
</tr>
<tr>
<td>SA workshops</td>
<td>17.74</td>
<td>31.51</td>
<td>0-200</td>
</tr>
</tbody>
</table>

The respondents varied on the types and number of Trainer Qualifications they listed. Question 11 on the Demographic Survey asked respondents to list the
types/names of trainer qualifications they held. This fill-in-the-blank, open-ended question attempted to ascertain breadth of trainer qualifications for substance abuse prevention professionals and gave the examples of Training Intervention Procedures for Servers of Alcohol, Boosting Alcohol Consciousness Concerning the Health of University Students, or On Campus Talking About Alcohol, etc. The five most frequently listed trainer qualifications by the respondents were Boosting Alcohol Consciousness Concerning the Health of University Students, On Campus Talking About Alcohol, Training Intervention Procedures for Servers of Alcohol, counseling certification and prevention certification.

The first three responses on the list of Trainer Qualifications represent national, train-the-trainers curricula for higher education, whereas the last two are professional certifications. Boosting Alcohol Consciousness Concerning the Health of University Students serves as a clearinghouse for educational materials and education for student leaders and peer counselors entitled the Certified Peer Educator. On Campus Talking About Alcohol is a research-based curriculum from the Prevention Research Institute that uses the life span, risk reduction model. Training Intervention Procedures for Servers of Alcohol is a curriculum from Health Communications, Inc., targeting alcohol servers. These five Trainer Qualifications were used to measure breadth of comprehensiveness. Table 8 lists the most frequently cited trainer qualifications as reported on the Demographic Survey. See the entire list of trainer qualifications in Appendix J.
Table 8 Trainer Qualifications

<table>
<thead>
<tr>
<th>Trainer Qualifications</th>
<th>Frequencies</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boosting Alcohol Concerning the Health of University Students</td>
<td>39</td>
<td>33.7</td>
</tr>
<tr>
<td>Training Intervention Procedures for Servers of Alcohol</td>
<td>23</td>
<td>23.5</td>
</tr>
<tr>
<td>On Campus Talking About Alcohol</td>
<td>23</td>
<td>23.5</td>
</tr>
<tr>
<td>LCDL, CACD III, CCDC, LPC &amp; ICADC (International Certification for Alcohol and Drug Counselors)</td>
<td>12</td>
<td>12.2</td>
</tr>
<tr>
<td>Certified Prevention Specialist</td>
<td>3</td>
<td>6.1</td>
</tr>
</tbody>
</table>

A question on the Demographic Survey asked respondents to list their current job responsibilities. This was a fill-in-the-blank, open-ended question that was used to ascertain breadth of tasks for substance abuse prevention professionals. Using a qualitative technique to explain by similarities, the respondents' cumulative list was sorted into traditional, higher education teaching and student life areas with corresponding frequencies. Tables 9-14 list some of the reported job responsibilities. See Appendix K for the entire list of job responsibilities.

Table 9 Job Responsibilities in Student Life Services

<table>
<thead>
<tr>
<th>Student Life Services</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>grant writing</td>
<td>5</td>
</tr>
<tr>
<td>supervise interns</td>
<td>3</td>
</tr>
<tr>
<td>all campus programming</td>
<td>2</td>
</tr>
<tr>
<td>advising</td>
<td>2</td>
</tr>
<tr>
<td>Policy</td>
<td>2</td>
</tr>
<tr>
<td>peer mentors</td>
<td>2</td>
</tr>
<tr>
<td>Career and placement services</td>
<td>2</td>
</tr>
</tbody>
</table>

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Table 10  Job Responsibilities in Prevention Services

<table>
<thead>
<tr>
<th>Prevention Services</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>social marketing campaign</td>
<td>61</td>
</tr>
<tr>
<td>alcohol and other</td>
<td>45</td>
</tr>
<tr>
<td>training and supervision of student leaders (like Resident Assistants &amp; peers)</td>
<td>22</td>
</tr>
<tr>
<td>sanctioned education</td>
<td>19</td>
</tr>
<tr>
<td>educator for dorm programs</td>
<td>18</td>
</tr>
<tr>
<td>awareness events</td>
<td>13</td>
</tr>
<tr>
<td>advisor for Boosting Alcohol</td>
<td>11</td>
</tr>
<tr>
<td>Consciousness Concerning the Health of University Students</td>
<td></td>
</tr>
<tr>
<td>data/survey collection, referral</td>
<td>6</td>
</tr>
<tr>
<td>community outreach model</td>
<td>5</td>
</tr>
<tr>
<td>orientation programs, smoking cessation</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 11  Job Responsibilities in Wellness Services

<table>
<thead>
<tr>
<th>Wellness Services</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health education</td>
<td>10</td>
</tr>
<tr>
<td>Wellness coordinator/education</td>
<td>9</td>
</tr>
<tr>
<td>Peer health educators, director of health center</td>
<td>4</td>
</tr>
<tr>
<td>Health educator/wellness coordinator</td>
<td>3</td>
</tr>
<tr>
<td>Advise wellness council</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 12  Job Responsibilities in Counseling Services

<table>
<thead>
<tr>
<th>Counseling Services</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling</td>
<td>13</td>
</tr>
<tr>
<td>Director and assistant director of counseling</td>
<td>4</td>
</tr>
<tr>
<td>Clinical director for counseling/life development</td>
<td>3</td>
</tr>
<tr>
<td>Student assistance program, clinical</td>
<td>2</td>
</tr>
<tr>
<td>Psychologist/psychotherapy</td>
<td>2</td>
</tr>
<tr>
<td>Crisis intervention</td>
<td>2</td>
</tr>
<tr>
<td>Individual evaluation and treatment</td>
<td>1</td>
</tr>
<tr>
<td>Employee assistance program coordinator</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 13  Job Responsibilities in Teaching

<table>
<thead>
<tr>
<th>Teaching</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum infusion</td>
<td>6</td>
</tr>
<tr>
<td>Faculty</td>
<td>5</td>
</tr>
<tr>
<td>Visiting lecturer</td>
<td>1</td>
</tr>
<tr>
<td>University 112 (course) instructor</td>
<td>1</td>
</tr>
<tr>
<td>Counselor education</td>
<td>1</td>
</tr>
<tr>
<td>Wellness (course) instructor</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 14  Job Responsibilities in Committee Facilitation

<table>
<thead>
<tr>
<th>Committee Facilitation</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair of alcohol task force</td>
<td>5</td>
</tr>
<tr>
<td>Community-university prevention coalition</td>
<td>2</td>
</tr>
<tr>
<td>School-university task force</td>
<td>2</td>
</tr>
<tr>
<td>Community presentations</td>
<td>1</td>
</tr>
<tr>
<td>Drug awareness committee</td>
<td>1</td>
</tr>
</tbody>
</table>

The five most frequently listed job responsibilities in the Prevention Services area from Table 10 were: alcohol and other drug prevention and education, training and supervising of student leaders, social norms marketing campaigns, sanctioned education, and dorm programs. These five most frequently listed job responsibilities were also used to measure comprehensiveness by totaling the number listed by each respondent. These top five job responsibilities appeared to be normally distributed; for example, 10% of the respondents did not list any of these top five job responsibilities, 30% listed only one of these responsibilities, 31% listed two of these responsibilities, 18% listed three responsibilities, 10% listed four of these responsibilities and only 1% of the respondents cited each of the top five job responsibilities.
responsibilities. Table 15 lists frequencies and percentages of these top five responsibilities.

Table 15  Top Five Job Responsibilities in Prevention Services

<table>
<thead>
<tr>
<th>Job Responsibility</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>alcohol and other drug prevention and education</td>
<td>58</td>
<td>59.2</td>
</tr>
<tr>
<td>training and supervision of student leaders</td>
<td>41</td>
<td>41.8</td>
</tr>
<tr>
<td>social norms marketing campaigns</td>
<td>32</td>
<td>32.7</td>
</tr>
<tr>
<td>sanctioned education</td>
<td>30</td>
<td>30.6</td>
</tr>
<tr>
<td>dorm programs</td>
<td>24</td>
<td>24.5</td>
</tr>
</tbody>
</table>

Three questions on the Demographic Survey asked about the number of professionals who either worked with or networked with the substance abuse prevention professional. One question referred to the substance abuse prevention professional’s on-campus professional network. Two respondents listed 1000 faculty and 500 professionals respectfully as being in their on-campus network and were deleted as outliers. Of the acceptable responses, the range was from 1 to 300, the mean was 26.12, the standard deviation was 42.99 and the two modes were 5 and 10.

Another question referred to the substance abuse prevention professionals’ off-campus professional network. One respondent, who was deleted as an outlier, listed 300 professionals in his/her off-campus network. Of the acceptable responses, the mean was 15.66, the standard deviation was 19.06, the range was 0 to 100 and the mode was 10. The question that asked about the number of on campus co-workers for the substance abuse prevention professional had a range from 0 to 20 with a mean of 1.59, a standard deviation of 3.26, and a mode of 0.
The last two questions on the Demographic Survey asked about substance abuse prevention or related professional certifications and memberships. Only 34% of the sample had one or more substance abuse prevention certifications. A total of 70% of the sample had one or more substance abuse prevention or related memberships. There was a strong relationship between number of certificates and number of memberships with a correlation significance of .000. See Table 16 for frequency and percentages of reported involvement with certifications and memberships.

Table 16 Substance Abuse Prevention Certifications and Memberships

<table>
<thead>
<tr>
<th>N</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>certifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>65</td>
<td>66.3</td>
</tr>
<tr>
<td>1</td>
<td>19</td>
<td>19.4</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>8.2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>4.1</td>
</tr>
<tr>
<td>memberships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>29</td>
<td>29.6</td>
</tr>
<tr>
<td>1</td>
<td>35</td>
<td>35.7</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>17.3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3.1</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>9.2</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

A measure of comprehensiveness of prevention programming is the TFPS. A likert scale was used to indicate how often substance abuse prevention professionals performed each of the 38 tasks listed on the TFPS. The scale gave the following options: 0 = never, 1 = rarely, 2 = sometimes, 3 = regularly, 4 = often, and 5 = very often. The responses were tallied to give each respondent a total score. The range of possible total scores for the TFPS was 0 to 190. The mean for the samples' total
score was 109.13 and the standard deviation was 30.86. The mean and standard deviation for each question on the TFPS are listed in Appendix L.

Results

The hypotheses examined the relationships between conceptual level, moral development, education of substance abuse prevention professionals, and comprehensiveness of substance abuse prevention programming. Appendix M presents a correlation matrix for all variables. Table 17 provides descriptive statistics for the three instruments.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFPS</td>
<td>109.13</td>
<td>30.86</td>
<td>87</td>
</tr>
<tr>
<td>DIT N</td>
<td>44.91</td>
<td>47.55</td>
<td>91</td>
</tr>
<tr>
<td>PCM</td>
<td>1.96</td>
<td>.28</td>
<td>95</td>
</tr>
</tbody>
</table>

Hypothesis 1:

There will be no significant relationship between conceptual level and moral development of substance abuse prevention professionals in a higher education setting and comprehensiveness of substance abuse prevention programming.

This null hypothesis was tested by multiple regression using conceptual level, as measured by the PCM, and moral development, as measured by the DIT, as independent variables and the comprehensiveness of prevention programming, as measured by the total TFPS score as the dependent variable. The age of the substance
abuse prevention professional and the number of undergraduate students at the substance abuse prevention professional’s institution were used as controls in a stepwise regression. A PCM score of 1.0 was found to be an outlier and was subsequently deleted. The null hypothesis was accepted; there was no significant relationship between conceptual level and moral development of substance abuse prevention professionals in a higher education setting and comprehensiveness of substance abuse prevention programming. Table 18 illustrates the statistical analysis for this hypothesis.

Table 18  Relationship between DIT, PCM, and Comprehensiveness of Substance Abuse Prevention Professionals

<table>
<thead>
<tr>
<th>Regression Model</th>
<th>Df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>2</td>
<td>.289</td>
<td>.750</td>
</tr>
<tr>
<td>Residual</td>
<td>77</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), undergraduates, age
b Dependent Variable: TFPS Total Score

Secondary statistical analyses were run using chi square and t-tests to ascertain relationships between TFPS total score and other variables; the alpha level was set at .05. There was no relationship found between total TFPS scores and the following: gender of respondents, total number of the five most frequently listed job responsibilities, number of additional substance abuse prevention professionals with whom the respondent worked, number of certifications, number of memberships, or highest degree attained.
Hypothesis 2:

There will be no significant relationship between conceptual level and moral development of substance abuse prevention professionals in a higher education setting and education which included substance abuse prevention classes, conferences and workshops, certifications, and memberships in professional organizations.

Hypothesis 2 was tested by two multiple regressions. One multiple regression used conceptual level, as measured by the PCM, for the dependent variable. The second multiple regression used moral development, as measured by the DIT, for the dependent variable. Both multiple regressions used the substance abuse prevention professionals’ education, as measured by the total number of substance abuse prevention classes, conferences and workshops plus certifications and memberships in professional organizations as the independent variables. There were no control variables. The results of this null hypothesis did not indicate a significant relationship between the substance abuse prevention professionals’ conceptual level, moral development, or education which included substance abuse prevention classes, conferences and workshops, certifications, and memberships in professional organizations. No correlations were found between the PCM and DIT scores and the education variables. No variables met the minimal requirements at the .05 level. Both multiple regressions for Hypothesis 2 are consistent with the correlation matrix; see Appendix M. The null Hypothesis 2 was accepted; there was no significant relationship between conceptual level and moral development of substance abuse prevention professionals in a higher education setting and education which included
substance abuse prevention classes, conferences and workshops, certifications, and memberships in professional organizations.

Hypothesis 3:

There will be no significant relationship between education of substance abuse prevention professionals in a higher education setting, which included substance abuse prevention classes, conferences and workshops, certifications, and memberships in professional organizations, and comprehensiveness of prevention programming.

Hypothesis 3 was tested by one multiple regression. It used comprehensiveness of prevention programming, as measured by the TFPS, for the dependent variable and the substance abuse prevention professionals' total number of substance abuse prevention classes, conferences, and workshops plus certifications and memberships in professional organizations as the independent variables. The number of undergraduate students at the respondent's institution was the control. A significant relationship was found between number of substance abuse prevention conferences, number of substance abuse prevention workshops, certifications, and comprehensiveness of prevention programming. The null hypothesis was rejected. Table 19 illustrates the statistical analysis for Hypothesis 3. Table 20 illustrates the ANOVA analysis for Hypothesis 3. Table 21 illustrates the Coefficients for Hypothesis 3.
Table 19  Regression Model Summary for the Relationship Between Education of the Substance Abuse Prevention Professional in Higher Education and Comprehensiveness of Programming

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>number of undergraduates</td>
<td>.103</td>
<td>.011</td>
</tr>
<tr>
<td>2</td>
<td>number of undergraduates number of conferences attended</td>
<td>.359</td>
<td>.129</td>
</tr>
<tr>
<td>3</td>
<td>number of undergraduates number of conferences attended certifications</td>
<td>.451</td>
<td>.203</td>
</tr>
</tbody>
</table>

Table 20  ANOVA for the Relationship Between Education of the Substance Abuse Prevention Professional in Higher Education and Comprehensiveness of Programming

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>age</td>
<td>875.819</td>
<td>1</td>
<td>875.819</td>
<td>.919</td>
<td>.340</td>
</tr>
<tr>
<td>age and conferences</td>
<td>10553.57</td>
<td>2</td>
<td>5276.78</td>
<td>6.21</td>
<td>.003</td>
</tr>
<tr>
<td>age and conferences and certifications</td>
<td>16629.796</td>
<td>3</td>
<td>5543.27</td>
<td>7.05</td>
<td>.000</td>
</tr>
</tbody>
</table>

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Table 21 **Coefficients for the Relationship Between Education of the Substance Abuse Prevention Professional in Higher Education and Comprehensiveness of Programming**

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>B</th>
<th>Beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant</td>
<td>96.481</td>
<td>21.107</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>number of undergraduates</td>
<td>.00036</td>
<td>.100</td>
<td>1.014</td>
<td>313</td>
</tr>
<tr>
<td>number of conferences attended</td>
<td>.591</td>
<td>.226</td>
<td>2.611</td>
<td>.011</td>
</tr>
<tr>
<td>certifications</td>
<td>10.491</td>
<td>.283</td>
<td>2.780</td>
<td>.007</td>
</tr>
</tbody>
</table>

**Findings**

Data were collected from a national sample of substance abuse prevention professionals via the PCM, the DIT, the TFPS and the Demographic Survey. The first two instruments, the PCM and the DIT, were developed by researchers and have normed, comparison scores. A trained consultant scored the PCM. The DIT was scored by the Center for the Study of Ethical Development at the University of Minnesota. The Demographic Survey and the TFPS were developed for this research and provided only a cumulative description without a normed, comparison score.

The PCM mean for this study was 1.96. According to the scoring manual for the PCM (Hunt, et al., 1978), the suggested range for low conceptual level is 0-1.0, for moderate conceptual level is 1.1-1.9 and for high conceptual level is 2.0 and above. Graduate counseling education majors in an ethics class had a pre-intervention PCM mean score of 1.86 and a post-intervention PCM mean score of
1.98 (Chase, 1998). The school counselors in Halverson’s (1999) study had a PCM mean score of 1.92.

Of the 97 respondents in the sample, two of the respondents did not return the DIT and five of the completed DIT’s were purged. The Center for the Study of Ethical Development listed the following reasons for purged responses in the return letter: inconsistencies between ratings and rankings, abundance of meaningless items, omitted data, and weak discrimination between items.

For respondents the DIT mean was 44.91 with a standard deviation of 14.78. The DIT scores from this study can be compared to those of school counselors. Halverson (1999) found the counselor DIT mean to be 42.45 with a standard deviation of 14.37.

Table 22 compares DIT and PCM scores of the substance abuse prevention professionals with those of school counselors as per the Halverson study.

Table 22 Comparing DIT and PCM scores

<table>
<thead>
<tr>
<th></th>
<th>DIT M</th>
<th>DIT SD</th>
<th>PCM M</th>
</tr>
</thead>
<tbody>
<tr>
<td>substance abuse prevention professionals</td>
<td>44.9</td>
<td>14.8</td>
<td>1.96</td>
</tr>
<tr>
<td>school counselors</td>
<td>42.5</td>
<td>14.4</td>
<td>1.92</td>
</tr>
</tbody>
</table>

Conclusion

This chapter summarized the statistical and demographic information collected by the four instruments. Null Hypothesis 1 was not rejected. There was no
significant relationship between conceptual level and moral development of substance abuse prevention professionals in a higher education setting and comprehensiveness of substance abuse prevention programming. Null Hypothesis 2 was not rejected. There was no significant relationship between conceptual level, moral development and education of the substance abuse prevention professional. A significant relationship was found in Hypothesis 3 between the number of substance abuse prevention conferences, number of substance abuse prevention workshops, certifications, and comprehensiveness of prevention programming. Null Hypothesis 3 was rejected. The comprehensiveness of substance abuse prevention programming, as measured by the TFPS, related to the number of workshops and conferences attended, and the number of professional certifications held by the substance abuse prevention professional.

Other research questions were also analyzed. The control variables of age of the respondents and number of undergraduate students at the respondents' institution were not significant. The level of pre-service education for substance abuse prevention professionals, as measured by bachelor, master, post-master or doctorate degrees on the Demographic Survey, did not relate significantly to the DIT. A significant relationship did exist between master's degree and PCM.

Chapter 5 will summarize and conclude this study. It will discuss the results from each hypothesis and the limitations of this study. Chapter 5 will suggest implications for substance abuse prevention professionals and for future research on this topic.
Chapter Five
Discussion and Conclusion

Overview

The purpose of this study was to examine the relationship between conceptual level, moral development and comprehensiveness of programming offered by substance abuse prevention professionals in higher education. The literature has cited the need for substance abuse prevention professionals in higher education (Gianini and Nicholson, 1994), the history of substance abuse prevention efforts on college campuses (Gonzalez, 1994), and the elements of a comprehensive substance abuse prevention program (Anderson and Milgram, 1996). There is a dearth of research, however, on the substance abuse prevention professional in higher education. The research emphasis thus far has been on the substance abuse prevention message or strategy and not on the substance abuse preventionist or messenger. This discovery was surprising since it has been acknowledged that the “effectiveness in any drug education program must have its beginning with those who are responsible to teach drug education and the specialized training they will have hopefully received” (Crippen, 1983, p. 78). There is also little research on the impact that substance abuse prevention professionals have on comprehensive program delivery. A need was established for research that links the conceptual level and moral development of
substance abuse prevention professionals with his or her subsequent delivery of comprehensive substance abuse prevention programming in higher education.

**Research Design**

A national sample of college and university substance abuse prevention professionals was randomly selected for this study. They were sent a packet of three instruments that included the Paragraph Completion Method (PCM), the Defining Issues Test 2 (DIT), the Task Force Planner Survey (TFPS), and a Demographic Survey. The DIT and the PCM are “normed-referenced measurements” (Gall, Borg & Gall, 1996, p. 260). The Demographic Survey and the TFPS have not been normed and were developed for this study. The three instruments measured different variables; the PCM measured conceptual level, the DIT measured moral development, and the TFPS measured comprehensiveness of substance abuse prevention programming. The Demographic Survey collected data on the number of substance abuse prevention classes attended; the number of professional conferences and workshops attended; the number of professional certifications and memberships; the age of the substance abuse prevention professional; the number of undergraduates at the substance abuse prevention professional’s institution; the number of substance abuse prevention professionals per institution; and other variables. Of the 305 substance abuse prevention professionals in the sample, a total of 97 completed and returned the instruments, which represented a 31% response rate. The 97 responding substance abuse prevention professionals served in the following institutions: 57 in universities, 29
in colleges, eight in community colleges, and three in either military or technical
institutes. The non-responding 69% of the sample were not surveyed and may
have differed from the responding 31% of the sample. Differences between the
non-respondents and the respondents may have included: motivation, available
time to complete the instruments and the survey, perceived benefit for this study,
incentive, interest in research, time in the semester when the packet arrived, or
institutional constraints.

Summary of Result

This study posited three null hypotheses. Hypothesis 1 stated that there will
be no relationship between conceptual level and moral development of substance
abuse prevention professionals in higher education and comprehensiveness of
substance abuse prevention programming by the substance abuse prevention
professional. Hypothesis 2 stated that there will be no relationship between
conceptual level and moral development of substance abuse prevention
professionals in higher education settings and education, which included substance
abuse prevention classes, conferences, and workshops, certifications, and
memberships in professional organizations. Hypothesis 3 stated that there will be
no significant relationship between education of substance abuse prevention
professionals in higher education settings, which included substance abuse
prevention classes, conferences, and workshops, certifications and memberships in
professional organizations and comprehensiveness of prevention programming.

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Null Hypothesis 1 was not rejected. There was no relationship between the substance abuse prevention professionals' level of moral development, conceptual level, comprehensiveness and independent variables. Null Hypothesis 2 was not rejected. There was no relationship between moral development, conceptual level and substance abuse prevention education, which included classes, conferences, workshops, certifications and memberships. Null Hypothesis 3 was rejected. A significant relationship was found between comprehensiveness of prevention programming, the number of substance abuse prevention conferences and workshops attended and the number of professional certifications earned. The substance abuse prevention professionals' programming comprehensiveness related to the number of conferences and workshops attended and the number of professional certifications they held. This finding supports the notion that substance abuse prevention professionals who attend more substance abuse prevention workshops and conferences and receive more certifications have the knowledge, skills, or resources to implement more comprehensive prevention programming. This relationship was a surprising result since there are few national or state professional prevention certifications and few curriculum specific certifications.

**Discussion**

Null Hypothesis 1 was accepted. This hypothesis was based on prevention literature that acknowledges the complexity and challenge of prevention programming as well as the perception that substance abuse prevention professionals who have higher conceptual levels and moral development can better meet those
challenges. This hypothesis was also based on the perceived similarities between substance abuse prevention professionals and school counselors, as well as the research by Chase (1998) and Halverson (1999).

It has not been demonstrated in the literature or in this study that substance abuse prevention professionals need high levels of conceptual development or moral development to deliver comprehensive programming. In fact, comprehensive programming may more accurately reflect institutional needs and resources than individual, professional development.

Substance abuse prevention professionals in this study were found to have higher DIT and PCM scores than the school counselors in Halverson's research. These findings could be explained by the percentage of the substance abuse prevention professionals in this study with post masters or doctorate degrees since education is linked to moral development (Rest, 1994) or to the effect of a college experience in promoting development (McNeel, 1994). This phenomenon could also reflect the individual's motivation, need for intellectual growth and stimulation or comfort with self-reflection (Rest, 1986). Although the literature suggests that counseling courses encourage conceptual and moral development, this study did not ask respondents for the type of degree they have achieved or are pursuing nor did this study ask respondents for the number of counseling courses they had taken. Speculation about substance abuse prevention professionals' degrees and their subsequent PCM and DIT score is limited.

Although comprehensiveness of programming is not related to conceptual level or moral development, it may be linked to other variables. Comprehensiveness
of programming may be linked to variables such as the substance abuse prevention professionals’ motivation or career aspirations, personality, intellect, type of degree, age, tenure, or job satisfaction (Whorley, 1989). Comprehensiveness of programming may be linked to institutional variables such as funding, perception of need, assets of the off-campus community, campus climate and receptivity toward prevention programming, professional network, or cooperation with on-campus resources like the recreation center or counseling center. Substance abuse prevention professionals may offer different programs than those listed on the TFPS or they may offer few programs but at higher frequencies. Future research may even find an inverse relationship between conceptual level and moral development with comprehensiveness such that high PCM and DIT scores relate to low TFPS scores. In this scenario, substance abuse prevention professionals with high PCM and DIT scores may favor fewer, in depth programs and less comprehensiveness.

Hypothesis 1 employed three instruments, the PCM, the DIT and the TFPS. Two instruments, the PCM and the DIT, are well researched and have high reliability. The TFPS was developed for this study and was pilot tested with a small, in-state sample, which raises concerns about its validity. The TFPS was adapted from the Promising Practices: Campus Alcohol Strategies Task Force Planner.

The Promising Practices: Campus Alcohol Strategies Task Force Planner is a convenient list of comprehensive programming efforts that could be offered by different higher education stakeholders or sponsors including the substance abuse prevention professional. It has not been field tested or assessed. Reliability of the Promising Practices: Campus Alcohol Strategies Task Force Planner is questionable.
It was developed to illustrate possible programming efforts and was not developed as a research instrument. It emphasizes programs and best practices rather than research and evaluation. The Promising Practices: Campus Alcohol Strategies Task Force Planner may not apply to all institutions of higher education. For example, it may be short sighted to expect substance abuse prevention programming appropriate for a community college to also be appropriate for a large state, residential university. Despite its limitations, the Promising Practices: Campus Alcohol Strategies Task Force Planner was the only available, recognizable, comprehensive and workable list of substance abuse prevention programs. This study assumed that the 38 programs listed in the Promising Practices: Campus Alcohol Strategies Task Force Planner would be suitable for all colleges and universities in the sample and would be an accurate measure of comprehensiveness.

The sample reflects membership in the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse (www.edc.org/hec/network). The sample was heterogeneous. This study did not control for institutional characteristics such as residential or commuter, academic emphasis, type of institution, number of students, rates of substance abuse, number of substance abuse prevention professionals, or number of professionals in the substance abuse prevention professional’s network. The TFPS may not have been the best instrument for assessing comprehensiveness from such a heterogeneous sample as the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse. This study also did not control for characteristics of substance abuse
prevention professionals such as gender, race, tenure as a substance abuse prevention professional in higher education, or physical abilities.

Null Hypothesis 2 was accepted. There was no significant relationship between conceptual level, moral development and education, which included substance abuse prevention classes workshops and conferences, memberships, and certifications. The lack of a significant relationship between these variables may be due to either the sample or the instruments and survey used. Hypothesis 2 employed the PCM, the DIT and the Demographic Survey. Although the PCM and the DIT have high reliability and strong validity, the qualities of the Demographic Survey are unknown since it was developed for this study.

The Demographic Survey may not have included important questions. It was pilot tested on a small, in-state sample. The survey could have been improved if it contained more specific, detailed questions. For example, it could have asked for more specific information regarding level of pre-service education, which included the bachelors, masters, post-masters or doctorate degrees. The Demographic Survey did not ask the type of degree, discipline or research interest. The type of degree could have been related to conceptual level, moral development or programming comprehensiveness. It would also have been valuable to note the number of substance abuse prevention professionals with counseling degrees or backgrounds since substance abuse prevention professionals were compared to school counselors.

As Chase (1998) noted, counseling programs may expose students to more deliberate psychological education that can move students to higher moral levels. In addition, counseling programs may also challenge conceptual development that moves students
to higher conceptual levels. Other educational programs and degrees, however, may also increase conceptual levels.

Another area in which the Demographic Survey could have been more specific was in the differentiation between substance abuse and substance abuse prevention. There are many mutual topics and linkages between the two topics of substance abuse and substance abuse prevention. The Demographic Survey could have given examples of substance abuse and substance abuse prevention to aid in differentiating the two and to ensure accurate data collection. Although the Demographic Survey was time consuming, it may have yielded more relevant information by asking respondents' about their substance abuse prevention work history, career development, research interests and career opportunities.

Null Hypothesis 3 was not accepted. There was a significant relationship between number of substance abuse prevention conferences, number of substance abuse prevention workshops, certifications, and comprehensiveness of programming.

Comprehensiveness was measured by the TFPS. A question on the Demographic Survey provided more information about comprehensiveness by asking respondents to list their job responsibilities. Respondents listed a total of 85 different job responsibilities; (see Appendix K for the entire list). This number of job responsibilities may be due to the demands placed on substance abuse prevention professionals by their institutions or because substance abuse prevention professionals have solo positions and have varied responsibilities.

This study demonstrated a relationship between professional certification, substance abuse prevention conferences, substance abuse prevention workshops and
comprehensive programming. Thus, the substance abuse prevention program in higher education may benefit from the substance abuse prevention professionals’ involvement in post service training and a certification process. This result supports the International Certification and Reciprocity Consortiums’ Domain 5 (Appendix F) and their justification for setting standards, certification and expectations for substance abuse prevention professionals. The relationship between professional certification, substance abuse prevention conferences, substance abuse prevention workshops and comprehensive programming could also be due to increased funding for substance abuse prevention professionals to attain professional certifications, an emphasis on the prevention programming by the institution or an institutional need for certified trainings. The research relationship between professional certifications and subsequent comprehensiveness of prevention programming appears to be mutually exclusive from the conceptual level and moral development of substance abuse prevention professionals.

There are many new, specialized, curricula and programming strategies offering certification that could be introduced at post service workshops and conferences. Since certification seems to relate to comprehensiveness, the prevention field may even consider two levels of certification such as an introductory certification and an advanced certification after implementing a program or curriculum. It may also be necessary to continue to separate substance abuse prevention from substance abuse classes, conferences and workshops. In this way, prevention can continue as an area of specialization and focus for substance abuse
prevention professionals as opposed to pharmacology and treatment issues that are
typically covered in substance abuse classes, conferences and workshops.

**Implications for the Field**

Substance abuse prevention professionals in higher education can benefit from
the results of this study. Of initial interest is the fact that this may be the first study of
substance abuse prevention professionals in higher education. Any application of
these results, however, outside the Network of Colleges and Universities Committed
to the Elimination of Drug and Alcohol Abuse may be limited. The small response
rate also limits generalizability.

The results of the Demographic Survey can be used as a national profile of
current substance abuse prevention professionals in higher education. The
Demographic Survey contains demographic and educational information, a listing of
campus prevention programming and services, the length of employment for
substance abuse prevention professionals, and the ratio of substance abuse prevention
professionals to number of undergraduates. Gender was also asked on the
Demographic Survey and over two-thirds of the substance abuse prevention
professionals who responded are women. Speculation about the gender difference in
substance abuse prevention professionals includes the possibility that more women
than men serve in the helping and teaching professions, more women than men serve
in non-administrative positions in Student Affairs, or that more women than men
were motivated to participate in this study.
This study assumed similarities between school counselors and substance abuse prevention professionals. The literature supported a sharing of skills and preservice education for these two professions. The results of this study reveal one overlap between counselors and substance abuse prevention professionals. A question on the Demographic Survey asked respondents to list trainer qualifications. Of the five most frequently listed trainer qualifications, counseling certification was ranked fourth after Boosting Alcohol Consciousness Concerning the Health of University Students, On Campus Talking About Alcohol, and Training Intervention for Servers of Alcohol, but before prevention certification. Respondents were not asked to provide details of any possible relationship between any of their counseling education, qualifications or certifications and their substance abuse prevention education, qualifications, certifications or prevention programming.

Along with this limited information about substance abuse prevention professionals is the missing information about this profession. In acquiring the sample of 305 substance abuse prevention professionals for this study, approximately 500 institutions were contacted via a randomized search. Thus, approximately 200 of the institutions contacted were found to be without designated, full or part time substance abuse prevention professionals. The possible reasons for this percentage of missing substance abuse prevention professionals are limited funding, the allocation of prevention programming to other staff, underreporting of substance abuse issues, or the existence of other more pressing student life issues. Wechsler (2000) found yet another reason: “a strong positive association existed between perceived severity of student alcohol abuse and the institutional investment in prevention” (p. 224-225). It
is important for institutions to examine student and community substance abuse prevalence rates and design prevention programs to react to these rates and to proactively address future issues.

Substance abuse prevention classes, conferences, workshops, and certifications were significant variables in this study. These variables are rarely discussed in the prevention literature. It was surprising to find such a large number of substance abuse prevention professionals in this study to have advanced degrees, although an equally large number did not attend pre-service substance abuse prevention classes. Not only do these findings suggest more inquiry but they also suggest the need for more pre-service education for future substance abuse prevention professionals. Since professional certifications seem to relate to comprehensiveness, the prevention field needs more specifics about these certifications. The field may want to consider increasing the promotion of existing certifications or the establishment of new state specific or program specific certifications. Since professional certifications and master’s level education seem to relate to conceptual level, the field needs to explore this relationship further to assess potential benefits. If needed, the substance abuse prevention field could then either promote national or statewide substance abuse prevention certifications or intentional development of conceptual level in pre-service education.

**Implications for Future Research**

The substance abuse prevention literature continues to describe prevention theory (Kellam and Van Horn, 1997) and trends in alcohol, tobacco or other drug
usage (Johnston, O'Malley, and Bachman, 1999) while challenging prevention
efficacy (Morin and Collins, 2000). The research continues to focus on the need for,
cost of, benefits from and recipients of substance abuse prevention services. There
are few references in the literature, however, on the delivery of prevention services
via substance abuse prevention professionals. There are many new variables
regarding substance abuse prevention professionals that could be studied. Future
studies might compare substance abuse prevention professionals with professionals
other than school counselors who deliver prevention services or compare the age of
substance abuse prevention professionals with the audience. Other areas of study
include assessing how prevention professionals continue to develop through post-
service classes, workshops and conferences (Peace & Sprinthall, 1998), assessing
how prevention professionals expand expertise through post graduate degree
programs, and the availability of professional role models or mentors for substance
abuse prevention professionals. Future research may continue to explore the delivery
of substance abuse prevention programming to include the use of counseling skills,
presentation skills, humor, personal disclosure and terminology. Future research may
also want to explore the characteristics of institutions that support substance abuse
prevention professionals.

Another possible direction for future research is to match effective prevention
programming with pre-service education, post-service training, certification trainings
and professional memberships. This research could discern the most effective
components of a comprehensive substance abuse prevention program using factorial
designs (West and Aiken, 1997). Comprehensive prevention programming could
then be assessed by geographic region, type of institution, state, state specific memberships and certifications, or trainings, all of which may influence substance abuse prevention professionals. If effective programming is assessed then substance abuse prevention professionals could be assessed for effectiveness.

Additional research could be conducted on the educational background of substance abuse prevention professionals. It would be helpful to ascertain which academic courses, degrees, substance abuse prevention workshops or conferences were most beneficial in advancing comprehensive programming. Future research could assess causal-comparative relationships between conceptual level, pre and post service education, and professional certifications of substance abuse prevention professionals. This may help set priorities, educational sequences, institutional agendas and national or state professional initiatives.

More research could also be done on a detailed assessment of the substance abuse prevention professionals' leadership abilities. Komines' (1988) research suggested that substance abuse prevention professionals need to be effective leaders. Leadership skills may be necessary to coordinate on and off campus resources, as per the Promising Practices: Campus Alcohol Strategies Task Force Planner, in offering the most comprehensive array of programming.

It would seem that a balance should exist between prevention content and process, between prevention theory and application or programming, and between general curricula and population-specific curricula. Research in this area may reveal a similarity of pre and post service education and training between the substance abuse prevention professional and the health educator. Future research may choose to
compare these two professions in higher education for comprehensiveness of programming.

Future research may also examine the educational and developmental needs of the professional network that works with substance abuse prevention professionals. The Promising Practices: Campus Alcohol Strategies Task Force Planner illustrates how substance abuse prevention professionals work in collaboration with other resources or sponsors. This study examined one of the resources of the Promising Practices: Campus Alcohol Strategies Task Force Planner, the Coordinator, also termed the substance abuse prevention professional. In order for comprehensive programming to be effective, however, all resources delivering substance abuse prevention programming, not just the substance abuse prevention professional, must be skilled and knowledgeable. Thus, future research may explore the development and substance abuse prevention education of others in higher education such as teaching faculty, professional faculty in the Division of Student Affairs, law enforcement and policy makers.

The Coordinator section of the Promising Practices: Campus Alcohol Strategies Task Force Planner was used extensively in this study. Future research could examine how the Coordinator or the substance abuse prevention professional networks with others to offer the grid of suggested prevention programming. Thus the substance abuse prevention professional needs to collaborate, train, role model, supervise, and advise as other sponsors or resources deliver substance abuse prevention programs or services. Future competency trainings and certifications could be built around this need for collaboration and training skills.
Future research may want to explore the characteristics of institutions in the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse. Since the sample was drawn solely from this Network, it would be helpful to know the differences and similarities between institutions within and outside of this group. It would therefore be helpful to know why the institution or substance abuse prevention professionals chose to enroll in the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse. These differences may have accounted for differences in substance abuse prevention professionals. Future research may need to obtain other national lists of substance abuse prevention professionals in higher education.

**Limitations**

This study has limited generalizability. Since there was no national listing of substance abuse prevention professionals, a national sample was obtained by randomly selecting member institutions in the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse, which is a voluntary, online listing of institutions with no standards for membership, fees or responsibilities after the application process. The Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse list includes professionals involved with various aspects of the substance abuse issue. Examples of these professionals include Vice President for Student Affairs, Health Educator, Director of Health Centers, Judicial Affairs Officer, Counselor, Faculty, and the substance abuse prevention professional. In this study, after a member institution was randomly
selected an attempt was made to locate the substance abuse prevention professional. If that institution did not have a substance abuse prevention professional then another institution was randomly chosen. This method of selecting the sample of substance abuse prevention professionals may have resulted in some substance abuse prevention professionals being missed if their institutions did not join the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse for any reason.

An unexpected issue in selecting the sample was the lack of uniformity regarding the titles of substance abuse prevention professionals and the office or department in which they were located. There was no standard professional title used by substance abuse prevention professionals or their institutions.

This study had a 31% response rate. There are several possible reasons for this low response rate. The first possible reason is the length of time to complete the three instruments and the Demographic Survey. Since the pilot study used only the TFPS and the Demographic Survey, an inaccurate amount of time to answer all the questions may have been stated in the cover letter. Participants could have felt deceived or even overwhelmed at the visual length of the instruments and survey. Another possible reason for the low response rate was a misunderstanding about the relevance of the instruments. Since research about the preventionist is rare, substance abuse prevention professionals may have been more experienced or comfortable answering questions about their programs or student substance abuse rates. A potential bias is that some substance abuse prevention professionals know the researcher whereas others did not. Yet another potential reason for a low response rate...
rate was the timing of the study. The packets were initially sent in November with a request to return them prior to the end of the year. Perhaps some substance abuse prevention professionals were too busy or too fatigued at this time of year to respond. The respondents may have been more motivated, considered substance abuse prevention as their primary focus, or were more interested in research about substance abuse prevention professionals. The reminder postcard and emails extended the deadline and increased the response rate.

The low response rate may have compromised generalizability to the population of substance abuse prevention professionals in higher education. It is impossible to know how the nonresponding group may have differed from the responding group or how their answers may have changed the results. An attempt could have been made to sample some of the non-respondents last winter, after the low response rate was detected to ascertain possible bias or differences (Gall, Brog and Gall, 1996).

Another limitation was the missing data on the returned instruments. Some respondents did not complete all of the instruments and other respondents omitted answers. A common omission occurred on the Demographic Survey for the two questions that were open ended and asked about tasks and qualifications for substance abuse prevention professionals.

**Conclusion**

This study attempted to find relationships between the conceptual level and moral development of substance abuse prevention professionals in higher education.
pre-service and post service education, certifications, memberships and their comprehensiveness of programming. There is little research on substance abuse prevention professionals and this study may be one of the first to investigate substance abuse prevention professionals in higher education.

Substance abuse prevention professionals in higher education remain an enigma. There is little reference to substance abuse prevention professionals in the literature. Substance abuse prevention professionals remain a hidden asset in higher education. It was difficult to collect a sample for this study since colleges and universities locate the substance abuse prevention professional in different offices and under different titles. It was also difficult to attain an adequate response rate. The data that were collected were incomplete, had questionable validity, and limited generalizability.

Secondary analyses of the DIT scores were surprising. This study found that substance abuse prevention professionals in higher education have higher DIT scores than school counselors in a similar study. These scores, however, were not tested for statistical significance. This may indicate either higher moral development for substance abuse prevention professionals than was expected or that substance abuse prevention professionals can not be compared to school counselors. The slightly higher DIT scores for substance abuse prevention professionals in this study may be due to their number of advanced degrees and their exposure to a higher education experience.

The third null hypothesis was rejected. The results from Hypothesis 3 are interesting. A significant relationship was found between comprehensive
programming, the number of substance abuse prevention conferences and workshops and attainment of professional certifications. The relationship between programming comprehensiveness and certifications may indicate an application of theory to practice such that the training and skill acquired through the certification process is in turn related to prevention practice. The certification process may be a cost and time effective means of expanding substance abuse prevention programming. This finding validates existing state and national professional certification processes as well as curriculum specific certifications. Prevention professionals in higher education may want to continue to advocate for funding and release time to attend trainings that offer professional certifications.

A new wave of substance abuse prevention research may be launched by this study. This new research should focus on the delivery of comprehensive programming, leadership skills of the substance abuse prevention professional and education of substance abuse prevention professionals. New research on substance abuse prevention professionals may be the missing link for understanding prevention efficacy and comprehensiveness. Although continued research is needed regarding the substance abuse prevention message, further efforts are indicated to understand the substance abuse prevention messenger.
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Appendix A

Promising Practices: Campus Alcohol Strategies Task Force Planner
Table 1 Promising Practices: Campus Alcohol Strategies Task Force Planner

COORDINATOR:

A Policies and Implementation
1. Create a task force composed of a broad range of campus and community leaders.
2. Schedule regular task force meetings to review policy.
3. Revise policies to comply with emerging legislation, legal liability issues, and government initiatives.

B Curriculum
1. Teach a class for peer educators.
2. Provide an educational program for alcohol policy violators.
3. Distribute information to faculty for incorporation into their courses.
4. Encourage inclusion of practical and applied courses and workshops.
5. Develop faculty networks for support and exchange of prevention information.

C Awareness and Information
1. Provide up-to-date information, relevant resources, and quality programs.
2. Support events that encourage awareness, healthy choices, and alcohol-free activities.
3. Ensure distribution of materials and resources to targeted audiences.
4. Initiate media campaigns to promote timely messages and to counteract misinformation.
5. Coordinate special events and campaigns with national, state, and local efforts as well as with campus groups.
6. Work with others to distribute information regarding policy and campus services.

D Support and Intervention
1. Assure the existence of diverse self-help/support.
2. Develop assessment, screening and referral guidelines, and services.
3. Link with the local court, community services, treatment, and aftercare resources.
4. Provide assistance to intermediaries such as roommates and supports such as faculty, staff, peers, parents, and coaches.

E Enforcement
1. Coordinate with campus and local police on problems related to high-risk groups and enforcement strategies.
2. Work with campus groups to organize a consistent process for alcohol policy violations.
3. Establish programs for campus- and court-referred alcohol policy violators.
4. Work with campus offices, especially judicial affairs, to provide assessment and education for referred individuals.

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5. Conduct educational programs for segments (e.g., athletes) of the general student body.

F Assessment and Evaluation
1. Develop a system for assessing the campus environment.
2. Monitor policy and program implementation and effectiveness.
3. Coordinate student assessment, evaluation, data collection, and biennial review.
4. Collaborate with colleagues on- and off-campus.
5. Maintain records on alcohol-related problems on campus.
6. Present data summaries/findings to university leadership in a timely manner.

G Training
1. Coordinate training and in-service education for students, faculty, and staff.
2. Identify and utilize professional development and training opportunities on the local, state, and national levels.
3. Develop training modules in relevant areas (e.g., intervention, sexual assault) for target populations.
4. Provide training opportunities for community leaders.

H Staffing and Resources
1. Create practicum, internship, employment, and related opportunities for students and volunteers.
2. Mentor and advise student organizations.
3. Prepare resource information on intervention and referral for faculty and staff.
4. Organize a cooperative effort linking students, faculty, administrators, alumni, community agencies, and other allies.
5. Establish a centralized resource library.

CAMPUS LEADERSHIP:

A Policies and Implementation
1. Engage groups on and off campus in policy development.
2. Develop a policy inclusive of prevention, problem identification, enforcement, referral, support, and services.
3. Ensure that all policies support the institution's mission statement and are consistent with state and local laws.
4. Promote understanding of campus policies.
5. Review policies regularly to ensure they address current needs and are consistent with generally accepted practices.

B Curriculum
1. Provide academic courses and programs of study on alcohol and related issues.
2. Encourage integration of alcohol topics into existing academic courses.
3. Offer peer training courses for academic credit.
4. Assure that course time schedules have not been determined by campus party traditions.

C Awareness and Information
1. Understand that the campus is a community and deal with the alcohol issues presented by each segment.
2. Ensure a theoretically grounded, well-defined, and clearly articulated approach within the context of a healthy campus.
3. Work with multiple audiences on campus and in the surrounding community.
4. Communicate campus priority about alcohol issues to faculty, staff, students, and parents.
5. Promote accurate perceptions of campus norms.

D Support and Intervention
1. Identify students, faculty, and staff who are at risk of alcohol problems.
2. Establish supportive protocol for problem identification, intervention, and follow-through.
3. Ensure access to necessary services on and off campus.
4. Provide funding for support and intervention services.

E Enforcement
1. Promote awareness of enforcement practices and consequences.
2. Coordinate enforcement efforts with local community and state personnel.
3. Monitor extent and consistency of enforcement efforts.
4. Review enforcement efforts for unanticipated consequences.

F Assessment and Evaluation
1. Encourage ongoing monitoring of programs for consistency and effectiveness.
2. Encourage use of diverse evaluation methodologies.
3. Establish mechanisms that evaluate program implementation and effectiveness.
4. Ensure resource allocation.
5. Involve academic expertise.
6. Monitor the needs of groups at increased risk of alcohol problems (e.g., first year students).

G Training
1. Identify external resources and training opportunities.
2. Sponsor training for campus groups.
3. Participate in community group sessions.
4. Ensure faculty and staff receive ongoing training through professional development.

H Staffing and Resources
1. Provide leadership and support for comprehensive, campus-wide efforts.
2. Allocate resources and high visibility space.
3. Ensure that qualified personnel are designated to implement campus efforts.
4. Identify external resources to support campus efforts.
5. Establish a task force with a clear mandate.

**HEALTH and COUNSELING:**

A Policies and Implementation
1. Participate in campus-wide oversight and review committee for policies and programs.
2. Provide education and counseling groups for at-risk students and those undergoing disciplinary proceedings.
3. Sponsor public meetings to discuss alcohol problems, policies, and enforcement issues.

B Curriculum
1. Develop and teach courses on alcohol, alcoholism, and related issues.
2. Disseminate information to faculty on ways they can integrate alcohol prevention issues into their courses.
3. Serve as a guest speaker in courses.
4. Participate in curriculum review.
5. Provide internships and practical experiential opportunities.
6. Promote academic opportunities that help students adopt healthy lifestyles.
7. Support a field of study or academic concentration in substance abuse.

C Awareness and Information
1. Prepare and disseminate accurate and up-to-date informational materials on alcohol and related issues.
2. Develop messages on decision-making and health issues for campus media and special interest groups.
3. Reinforce public awareness campaigns, messages, and activities conducted by other groups on campus.
4. Offer presentations and workshops for students organizations, targeted populations, faculty, and staff.

D Support and Intervention
1. Provide consultation services to students, faculty, and staff.
2. Coordinate with campus and community groups to ensure availability of services.
3. Offer personal counseling and support groups for individuals concerned about their or other's drinking.
4. Link incoming students who are recovering to support networks and individuals.
5. Maintain a 24-hour information and referral hotline.
6. Include screening questions in all student contacts with health care providers.
E Enforcement
1. Provide information sessions on low-risk behaviors, health, and safety to various segments of the campus community.
2. Convene group sessions with policy violators and high-risk groups.

F Assessment and Evaluation
1. Maintain records on alcohol involvement in campus problems.
2. Collect quantitative and qualitative information.
4. Identify and use appropriate assessment methods and approaches.
5. Review records and data to identify and assist high-risk students or groups.
6. Promote and participate in interdepartmental data collection activities.

G Training
1. Ensure that staff receives ongoing education and training.
2. Train specific campus and community groups and organizations in identified areas of need.
3. Collaborate with other campus units, student groups, faculty, and police to offer training.
4. Provide training and educational programming for student staff and volunteers.

H Staffing and Resources
1. Hire staff with pertinent knowledge, skills, and experience.
2. Assure available services at relevant times and in accessible locations.
3. Participate in campus committees.
4. Involve students from academic courses, service education, and judicial referrals in program delivery.
5. Provide internship opportunities.

STUDENT LIFE:

A Policies and Implementation
1. Provide leadership for campus policy on prevention and intervention efforts.
2. Collaborate in the ongoing policy review process.
3. Establish and implement policy-based standards for organizations hosting social events.

B Curriculum
1. Offer peer education and leadership development courses.
2. Serve as a guest speaker in classes.

C Awareness and Information
1. Disseminate information on policies and programs using creative approaches.
2. Provide demonstrations activities and interactive events.
3. Prepare media-based educational resources.
4. Engage a variety of campus offices in educational efforts.
5. Offer a range of student-oriented activities on and off campus.
6. Target groups at increased risk such as incoming students.
7. Distribute educational information to support persons such as parents.

D Support and Intervention
1. Promote caring/helping atmosphere on campus.
2. Disseminate information on screening and referral procedures.
3. Assure relevant emergency services.

E Enforcement
1. Ensure consistent enforcement of policies.
2. Involve various campus offices (e.g., health center) in the disciplinary sanction process.
3. Oversee student judicial process involving alcohol-related incidents.
4. Develop multi-level educational sanctions.

F Assessment and Evaluation
1. Establish monitoring, record-keeping, and tracking protocols.
2. Use quantitative and qualitative measurements.
3. Conduct individual and environmental assessments in a variety of locations (e.g., residence halls and classrooms).
4. Collect data on related issues, such as student attitudes and perceptions of the campus environment.
5. Collaborate with other campus departments.

G Training
1. Promote staff awareness of alcohol-related issues, images, and perceptions.
2. Provide staff development and educational opportunities.
3. Train staff in risk management/liability procedures.

H Staffing and Resources
1. Identify partnership roles or student life and other campus departments.
2. Coordinate activities with other departments.
3. Assist organization advisors in prevention activities.
4. Assure staffing and resource allocation.

POLICE and SECURITY:

A Policies and Implementation
1. Participate in campus-wide policy development and review process.
2. Assist with policy implementation.
3. Provide leadership to identify solutions when problems surface on campus.
B Curriculum
1. Enroll in educational programs to expand knowledge base and enhance skills.
2. Support courses and programs of study on alcohol and related issues.
3. Serve as guest speakers for classes.

C Awareness and Information
1. Provide prevention/education demonstrations and programs.
2. Use current statistics and resources in educational efforts.
3. Share information on policy violations with appropriate committees and departments.

D Support and Intervention
1. Identify available support and services on campus and in the community.
2. Establish protocols for responding to alcohol policy violators.
3. Refer students to health and counseling centers.
4. Assist in educational programs conducted for alcohol policy violators.

E Enforcement
1. Enforce campus-wide policies consistently.
2. Coordinate enforcement efforts with local police and community leaders.
3. Implement sanctions for alcohol policy violators.
4. Refer policy violators to appropriate department or community agency.

F Assessment and Evaluation
1. Maintain current and accurate records of policy violations involving alcohol.
2. Synthesize campus data to identify trends and emerging problems.
3. Report and disseminate current data and trends to appropriate offices.

G Training
1. Enroll in local, state, and national training activities and courses.
2. Obtain training in emergency services (e.g., screening and referral).
3. Learn applications for use of new devices (e.g., vision goggles that demonstrate intoxication).
4. Provide training for students, faculty, and staff on problem identification, referral, enforcement, and related topics.

H Staffing and Resources
1. Participate in campus and community task forces.
2. Provide in-kind support for staffing and services.
3. Make internship opportunities available to students.
4. Identify and involve state and local enforcement personnel in education/prevention efforts.
FACULTY:

A Policies and Implementation
1. Be informed about campus policies and procedures.
2. Establish and communicate standards relating alcohol use and misuse to classroom responsibilities.

B Curriculum
1. Integrate information on alcohol and its effects in courses.
2. Involve practitioners and other guest speakers in the classroom.
3. Develop special courses for the curriculum.
4. Share technical knowledge with other campus and community groups.
5. Promote practical applications and community service.

C Awareness and Information
1. Incorporate information about the campus alcohol policy and philosophy into classroom discussion.
2. Promote low-risk behaviors and responsible choices.
3. Discuss campus activities and current events during class time.
4. Participate in campus-wide educational efforts.

D Support and Intervention
1. Obtain skills in problem identification and referral for family, colleagues, and students.
2. Recognize and respond to problem behaviors.
3. Be available to guide students with alcohol-related problems.
4. Know campus and community referral options.

E Enforcement
1. Be aware of campus and community enforcement procedures.
2. Assist with programs for policy violators.
3. Offer expertise to assist campus enforcement efforts.

F Assessment and Evaluation
1. Assist with development, analysis, and interpretation of needs assessments and evaluations.
2. Provide opportunities for student involvement in implement of evaluation activities.
3. Support use of class time for campus data collection.
4. Share informal observations with campus coordinator.

G Training
1. Participate in training on problem identification, referral strategies, and resources.
2. Support training activities for all relevant campus groups.
3. Serve as trainer for other faculty and staff.

H Staffing and Resources
1. Share willingly of time and talents.
2. Participate in campus committees on alcohol issues (e.g., policy, curriculum, programs).
3. Offer internship opportunities.
4. Serve as a mentor to a student organization.
5. Provide information materials to campus and community libraries.
6. Identify resources via Internet for students.

RESIDENCE LIFE:

A Policies and Implementation
1. Promote a positive living and learning environment consistent with campus policy.
2. Participate in the development and revision of campus and housing policies.
3. Serve on committees involved with the campus climate and quality of life issues.
4. Support substance-free and recovery housing.
5. Assist in the implementation of the alcohol policy.

B Curriculum
1. Schedule educational discussions and class sessions in residence halls on a regular basis.
2. Invite members of campus groups to present their programs in the residence halls.

C Awareness and Information
1. Sponsor and create educational programs.
2. Disseminate educational information using creative approaches.
3. Develop special event campaigns, poster contests, and other activities to discourage high-risk drinking.
4. Post alcohol emergency information and contact numbers for referral services in visible locations.
5. Publicize policy information and consequences.

D Support and Intervention
1. Publicize information on available services and referral resources.
2. Recognize, identify, and refer problematic behavior.
3. Facilitate individual and group interventions.
4. Provide informal counseling and mentor programs.
5. Encourage redirection of individual and group behavior.

E Enforcement
1. Invite police and judicial representatives to explain the policy and
consequences of violations.
2. Enforce housing policy infractions.
3. Assist in review of policy enforcement to ensure consistency.

F Assessment and Evaluation
1. Conduct student surveys in cooperation with other units (e.g., task force).
2. Evaluate programs and make changes accordingly.
3. Provide input about the quality of the living environment.
4. Track and report information on student concerns and perceptions of student life.

G Training
1. Participate in training and educational activities.
2. Motivate students to attend training events.
3. Provide training and support to student staff to manage alcohol-related issues and problems.

H Staffing and Resources
1. Discuss program options with the students.
2. Encourage students to create and implement low-risk events.
3. Develop a resource room/area that provides support and materials for programming efforts.

STUDENT GOVERNMENT:

A Policies and Implementation
1. Participate in campus-wide task force on alcohol policy.
2. Encourage implementation of strategies consistent with the institutional mission.
3. Create policy guidelines for social events.
4. Sponsor campus public meetings to discuss the alcohol policy and its enforcement.

B Curriculum
1. Collaborate with faculty who espouse prevention/education messages.
2. Support efforts that promote integrating alcohol-related content into the curriculum.

C Awareness and Information
1. Provide leadership for campus alcohol issues.
2. Support, promote, and participate in campus-wide activities.
3. Create and provide prevention/education programming.
4. Organize and support alcohol-free social activities.
D Support and Intervention
1. Offer insights about student needs and service gaps.
2. Publicize the availability of existing student support services.

E Enforcement
1. Publicize the campus policies and the consequences of violations.
2. Assist in review of policy enforcement to ensure consistency.
3. Encourage enforcement of policy by student organizations at social events.

F Assessment and Evaluation
1. Provide observations and data about student issues and problems.
2. Support campus-wide data collection efforts.

G Training
1. Support training for student organization leaders.
2. Participate as a resource in programs for faculty and staff.

H Staffing and Resources
2. Provide leadership for a peer-based coalition.
3. Use student government resources to print and/or purchase information materials.
4. Stress the need for support personnel.

STUDENT GROUPS:

A Policies and Implementation
1. Participate in development and review of campus policy.
2. Understand and promote accurate interpretation of policies and related issues among the group membership.
3. Collaborate with campus and community on concerns and policy issues.

B Curriculum
1. Promote the inclusion of alcohol-related issues in courses and programs of study.
2. Provide peer-led presentations in academic courses.
3. Encourage integration of practical experience into academic curriculum.

C Awareness and Information
1. Discuss with membership personal and group responsibility, role modeling, social event hosting, and refusal skills.
2. Participate in awareness campaigns and plan alcohol education events.
3. Sponsor peer-led activities that emphasize healthy lifestyles and low-risk behaviors.
4. Distribute peer-developed information materials.

D Support and Intervention
1. Intervene and refer students as appropriate.
2. Provide support to students experiencing problems.
3. Volunteer in campus and community service activities.

E Enforcement
1. Publicize consequences of policy infractions.
2. Support consistent enforcement of policies.
3. Participate in student judicial processes.

F Assessment and Evaluation
1. Monitor the campus environment for current student needs.
2. Support and participate in campus-wide efforts to gather data.
3. Participate in focus groups activities.
4. Conduct periodic review of programs, procedures, attitudes, and behaviors of membership.

G Training
1. Enhance skills of group members on problem identification, referral, and related topics.
2. Train select members of groups to serve as group resources.
3. Encourage peer-facilitated training for other students.
4. Provide training for students to act as outreach workers to local schools and community groups.

H Staffing and Resources
1. Develop educational programs for campus and community groups.
2. Assist campus organizations in event planning and implementation.
3. Support peer educators/helpers by promoting training and participating in programs.
4. Encourage allocation of sufficient professional personnel.
5. Participate in task force activities such as distributing educational materials.

COMMUNITY:

A Policies and Implementation
1. Participate in campus-wide task forces.
2. Ensure consistency between campus policies and town ordinances.
3. Support responsible advertising, sale, hosting, and service of alcohol.
4. Recognize community leaders and businesses that exemplify positive prevention practices.
5. Clarify with campus personnel the professionals responsible for enforcing local
laws.

B Curriculum
1. Serve as guest lectures or panelists in academic classes.
2. Participate in campus educational programs.
3. Recognize faculty involvement in prevention as outstanding citizens of the community.

C Awareness and Information
1. Market community activities that emphasize healthy lifestyles and low-risk behaviors.
2. Provide relevant prevention programming.
3. Notify campus officials about major community events.
4. Include prevention, intervention, and referral information on written and electronic listings.

D Support and Intervention
1. Confer with key campus personnel to identify unmet campus service needs.
2. Provide needs-based services for students and employees.
3. Promote acceptance of campus population into community support services.
4. Participate in provision of prevention, intervention, and treatment activities.

E Enforcement
1. Form ongoing liaison with campus enforcement personnel.
2. Hold students and other members of the campus community accountable to local standards and laws.
3. Enforce existing laws, norms, and standards in the community.

F Assessment and Evaluation
1. Discuss areas of concern and develop consensus on possible solutions with campus representatives.
2. Inform campus/community task force on student behaviors in the community.
3. Assist in data collection efforts.

G Training
1. Ensure that staff is trained in responsible hosting, problem identification, and emergency services.
2. Provide training on current campus issues and student needs to relevant groups in the community.

H Staffing and Resources
1. Participate in a campus/community task force.
2. Provide support, resources, and sponsorship for prevention and education activities.
3. Offer internships a short-term work-study opportunities for students.
Appendix B

Defining Issues Test 2
**DIT 2: Defining Issues Test 2**

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Center for Research in Ethical Development  
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**Instructions**

This questionnaire is concerned with how you define the issues in a social problem. Several stories about social problems will be described. After each story, there will be a list of questions. The questions that follow each story represent different issues that might be raised by the problem. In other words, the questions represent different ways of judging what is most important in making a decision about the social problem in the story. You will be asked to rate and rank the questions in terms of how important each one seems to you. That is, you will be asked to pick which questions raise the most important issues of the story.

This questionnaire is in two parts: one part contains the INSTRUCTIONS (this part) and the stories presenting the social problems; the other part contains the questions (issues) and the ANSWER SHEET on which to write your responses.

Here is an example of the task:

**Presidential Election**

Imagine that you are about to vote for a candidate for the Presidency of the United States. Imagine that before you vote, you are given several questions, and asked which issue is the most important to you in making up your mind about which candidate to vote for. In this example, 5 items are given. On a scale of 1 to 5 (1=Great, 2=Much, 3=Some, 4=Little, 5=No) please rate the importance of the item (issue) by putting a rating number in the bracketed box before each item.

Assume that you thought that item #1 (below) was of great importance, item #2 had some importance, item #3 had no importance, item #4 had much importance, and item #5 had much importance. Then you would fill in the boxes as indicated.

[Rate importance: 1--Great, 2=Much, 3=Some, 4=Little, 5=No]

**Item #**

1. [I] Financially are you personally better off now than you were four years ago?  
2. [3] Does one candidate have a superior personal moral character?  
3. [5] Which candidate stands the tallest?  
5. [2] Which candidate has the best ideas for our country's internal problems, like
Further, the questionnaire will ask you to rank the questions in terms of importance in the space below, the numbers at the top, 1 through 5, represent the item number. From top to bottom, you are asked to fill in the item number that represents the item in first importance (of those given you to chose from), then second most important, third most important, and fourth most important. Please indicate your tip choices. You might fill out this part as follows:

[Write in the number of the item in the bracketed boxes.]
Which of these 5 issues is the 1st most important? [ 1] Item #1 is most.
Which of these 5 issues is the 2nd most important? [ 5]
Which of these 5 issues is the 3rd most important? [ 4]
Which of these 5 issues is the 4th most important? [ 2]

Note that some of the items may seem irrelevant to you (as in item#3) or not make sense to you—in that case, rate the item as “no” importance and do not rank the item. Note that in the stories that follow, there will be 12 items for each story, not five. Please make sure to consider all 12 items (questions) that are printed after each story. In addition you will be asked to state your preference for what action to take in the story. After the story, you will asked to indicate the action you favor on a seven-point scale (1=strongly favor some action, 7=strongly oppose that action).

In short, read the story from this booklet, then fill out your answers on the answer sheet. Please use a pencil so that if you change your mind about a response, you can erase the pencil mark cleanly and enter your new response.

Famine – (Story #1)
The small village in northern India has experienced shortages of food before, but this year’s famine is worse than ever. Some families are even trying to feed themselves by making soup from tree bark. Mustaq Singh’s family is near starvation. He has heard that a risk man in his village has supplies of food stored away and is hoarding food while its price goes higher so that he can sell the food later at a huge profit. Mustaq is desperate and thinks about stealing some food from the risk man’s warehouse. The small amount of food that he needs for his family probably wouldn’t even be missed.

[If at any time you would like to reread a story, feel free to do so. Now turn to the Answer Sheet, go to the 12 issues and rate and rank them in terms of how important each issue seems to you.]

What should Mustaq Singh do? Do you favor the action of taking the food? (Mark one)

Take food I Strongly Favor 2 Favor 3 Slightly Favor 4 Neutral 5 Slightly Disfavor 6
Disfavor
7 Strongly Disfavor

**Great/Much/Some/Little/No**
Rate the following 12 issues in terms of importance (1-5)

1 2 3 4 5- 1. Is Mustaq Singh Courageous enough to risk getting caught for stealing?
1 2 3 4 5- 2. Isn't it only natural for a loving father to care so much for his family that he would steal?
1 2 3 4 5- 3. Shouldn't the community's laws be upheld?
1 2 3 4 5- 4. Does Mustaq Singh know a good recipe for preparing soup from tree bark?
1 2 3 4 5- 5. Does the rich man have any legal right to store food when other people are staring?
1 2 3 4 5- 6. Is the motive of Mustaq Singh to steal for himself or to steal for his family?
1 2 3 4 5- 7. What values are going to be the basis for social cooperation?
1 2 3 4 5- 8. Is the epitome of eating reconcilable with the culpability of stealing?
1 2 3 4 5- 9. Does the rich man deserve to be robbed for being so greedy?
1 2 3 4 5- 10. Isn't private property an institution to enable the rich to exploit the poor?
1 2 3 4 5- 11. Would stealing bring about more total good for everybody concerned or wouldn't it?
1 2 3 4 5- 12. Are laws getting in the way of the most basic claim of any member of a society?

**Rank which issue is the most important (item number).**

Most important item 1 2 3 4 5 6 7 8 9 10 11 12 Third most important 1 2 3 4 5 6 7 8 9 10 11 12
Second most important 1 2 3 4 5 6 7 8 9 10 11 12 Fourth most important 1 2 3 4 5 6 7 8 9 10 11 12

Now please return to the Instructions booklet for the next story.

**Reporter - (Story #2)**

Molly Dayton has been a news reporter for the Gazette newspaper for over a decade. Almost by accident, she learned that one of the candidates for Lieutenant Governor for her state, Grover Thompson, has been arrested for shoplifting 20 years earlier. Reporter Dayton found out that early in his life, Candidate Thompson had undergone a confused period and done things he later regretted, actions which would be very out-of-character now. His shoplifting had been a minor offense and charges had been dropped by the department store. Thompson has not only straightened himself out since then, but build a distinguished record in helping many people and in leading constructive community projects. Now, Reporter Dayton regards Thompson as the best candidate in the field and likely to go on to important leadership positions in the state. Reporter Dayton wonders whether or not she should write the story about Thompson's earlier troubles because in the upcoming close and heated election, she
fears that such a new story would wreck Thompson's chance to win.

[Now turn to the Answer Sheet, go to the 12 issues for this story; rate and rank them in terms of how important each issue seems to you.]

**Reporter - (Story #2)**

**Do you favor the action of reporting the story? (Mark one.)**

Report the story 1 Strongly Favor 2 Favor 3 Slightly Favor 4 Neutral 5 Slightly Disfavor 6 Disfavor 7 Strongly Disfavor

**Great/Much/Some/Little/No**

*Rate the following 12 issues in terms of importance (1-5)*

1 2 3 4 5- 1. Doesn't the public have a right to know all the facts about all the candidates for office?

1 2 3 4 5- 2. Would publishing the story help Reporter Dayton's reputation for investigative reporting?

1 2 3 4 5- 3. If Dayton doesn't publish the story wouldn't another reporter get the story anyway and get the credit for investigative reporting?

1 2 3 4 5- 4. Since voting is such a joke anyway, does it make any difference what reporter Dayton does?

1 2 3 4 5- 5. Hasn't Thompson shown in the past 20 years that he is a better person than his earlier days as a shoplifter?

1 2 3 4 5- 6. What would best serve society?

1 2 3 4 5- 7. If the story is true, how can it be wrong to report it?

1 2 3 4 5- 8. How could reporter Dayton be so cruel and heartless as to report the damaging story about candidate Thompson?

1 2 3 4 5- 9. Does the right of "habeas corpus" apply in this case?

1 2 3 4 5- 10. Would the election process be more fair with or without reporting the story?

1 2 3 4 5- 11. Should reporter Dayton treat all candidates for office in the same way by reporting everything she hears about them, good or bad?

1 2 3 4 5- 12. Isn't it a reporter's duty to report all the news regardless of the circumstances?

**Rank which issue is the most important (item number).**

Most important item 1 2 3 4 5 6 7 8 9 10 11 12 Third most important 1 2 3 4 5 6 7 8 9 10 11 12

Second most important 1 2 3 4 5 6 7 8 9 10 11 12 Fourth most important 1 2 3 4 5 6 7 8 9 10 11 12

**Now please return to the Instructions booklet for the next story.**

**School Board – (Story #3)**

Mr. Grant has been elected to the School Board District 190 and was chosen to be Chairman. The district is bitterly divided over the closing of one of the high schools. One of the high schools has to be closed for financial reasons, but there is
not agreement over which school to close. During his election to the School Board, Mr. Grant had proposed a series of “open Meetings” in which members of the community could voice their opinions. He hoped that dialogue would make the community realize the necessity of closing one high school. Also he hoped that through open discussion, the difficulty of the decision would be appreciated, and that the community would ultimately support the school board decision. The first Open Meeting was a disaster. Passionate speeches dominate the microphones and threatened violence. The meeting barely closed without fist-fights. Later in the week, school board members received threatening phone calls. Mr. Grant wonders if he ought to call off the next Open Meeting.

[Now turn to the Answer Sheet, go to the 12 issues and rate and rank them in terms of how important each issue seems to you.]

School Board- (Story #3)

Do you favor calling off the next Open Meeting? (Mark one.)

Call off meeting 1 Strongly Favor 2 Favor 3 Slightly Favor 4 Neutral 5 Slightly Disfavor 6 Disfavor 7 Strongly Disfavor

Great/Much/Some/Little/No Rate the following 12 issues in terms of importance (1-5)

1 2 3 4 5- 1. Is Mr. Grant required by law to have Open Meetings on major school board decisions?

1 2 3 4 5- 2. Would Mr. Grant be breaking his election campaign promises to the community by discontinuing the Open Meetings?

1 2 3 4 5- 3. Would the community be even angrier with Mr. Grant if he stopped the Open Meetings?

1 2 3 4 5- 4. Would the change in plans prevent scientific assessment?

1 2 3 4 5- 5. If the school board is threatened, does the chairman have the legal authority to protect the Board by making decisions in closed meetings?

1 2 3 4 5- 6. Would the community regard Mr. Grant as a coward if he stopped the open meetings?

1 2 3 4 5- 7. Does Mr. Grant have another procedure in mind for ensuring that divergent views are heard?

1 2 3 4 5- 8. Does Mr. Grant have the authority to expel troublemakers from the meetings or prevent them from making long speeches?

1 2 3 4 5- 9. Are some people deliberately undermining the school board process by playing some sort of power game?

1 2 3 4 5- 10. What effect would stopping the discussion have on the community’s ability to handle controversial issues in the future?

1 2 3 4 5- 11. Is the trouble coming from only a few hotheads, and is the community in general really fair minded and democratic?

1 2 3 4 5- 12. What is the likelihood that a good decision could be made without open discussion from the community?
Rank which issue is the most important (item number).
Most important item 1 2 3 4 5 6 7 8 9 10 11 12
Third most important 1 2 3 4 5 6 7 8 9 10 11 12
Second most important 1 2 3 4 5 6 7 8 9 10 11 12
Fourth most important 1 2 3 4 5 6 7 8 9 10 11 12
Appendix C

Paragraph Completion Method
PARAGRAPH COMPLETION METHOD

Instructions:

On the following pages, you will be asked to give your ideas about several topics.

Please write at least three sentences on each topic. There are no right or wrong answers, so give your own ideas and opinions about each topic. Indicate the way you really feel about each topic, not the way others feel or the way you think you should feel.

In general, spend about three minutes for each topic. Should you need more space to write your response, please use the back side of the page for that particular topic.

The topics, each on a separate page, are:

1. What I think about rules…
2. When I am criticized…
3. What I think about parents…
4. When someone does not agree with me…
5. When I am not sure…
6. When I am told what to do…

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Appendix D

Task Force Planner Survey
**SURVEY FOR THE SUBSTANCE ABUSE PREVENTION PROFESSIONAL**

This survey is adapted from the Task Force Planner (Anderson and Milgram, 1998). Please indicate how often you have performed the tasks (in the left column) during your current position as a Substance Abuse Prevention Professional by circling the appropriate number (in the right column) using the following key:

0 = never, 1 = rarely, 2 = sometimes, 3 = regularly, 4 = often, 5 = very often.

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How often have you created a task force composed of a broad range of campus and community leaders?</td>
<td>012345</td>
</tr>
<tr>
<td>2. How often have you scheduled regular task force meetings to review policy?</td>
<td>012345</td>
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<tr>
<td>3. How often have you revised policies to comply with emerging legislation, legal liability issues, and government initiatives?</td>
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<td>4. How often have you taught a class for peer educators?</td>
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<tr>
<td>5. How often have you provided an educational program for alcohol policy violators?</td>
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<td>6. How often have you distributed information to faculty for incorporation into their courses?</td>
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<tr>
<td>7. How often have you encouraged inclusion of practical and applied courses and workshops?</td>
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<td>8. How often have you developed faculty networks for support and exchange of prevention information?</td>
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<td>9. How often have you provided up-to-date information, relevant resources, and quality awareness programs?</td>
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<td>10. How often have you supported events that encourage awareness, healthy choices, and alcohol-free activities?</td>
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<tr>
<td>11. How often have you ensured distribution of materials and resources to targeted audiences?</td>
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<tr>
<td>12. How often have you initiated media campaigns to promote timely messages and to counteract misinformation?</td>
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<td>13. How often have you coordinated special events and campaigns with national, state, and local efforts as well as with campus groups?</td>
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<td>14. How often have you worked with others to distribute information regarding policy and services?</td>
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<td>15. How often have you assured the existence of diverse self-help/support groups?</td>
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<td>16. How often have you developed assessment, screening and referral guidelines, and services?</td>
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<td>17. How often have you linked with the local court, community services, treatment, and aftercare resources?</td>
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<td>18. How often have you provided assistance to intermediaries such as roommates and supports such as faculty, staff, peers, parents, and coaches?</td>
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<tr>
<td>19. How often have you coordinated with campus and local police on problems related to high-risk groups and enforcement strategies?</td>
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<tr>
<td>20. How often have you worked with campus groups to organize a consistent process for alcohol policy violations?</td>
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<tr>
<td>21. How often have you established programs for campus- and court-referred alcohol policy violators?</td>
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<tr>
<td>22. How often have you worked with campus officers, especially judicial affairs, to provide assessment and education for referred individuals?</td>
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<tr>
<td>23. How often have you conducted educational programs for segments (e.g., athletes) of the general student body?</td>
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<td>24. How often have you developed a system for assessing the campus environment?</td>
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<tr>
<td>25. How often have you monitored policy and program implementation and effectiveness?</td>
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<tr>
<td>26. How often have you coordinated student assessment, evaluation, data collection, and biennial review?</td>
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<tr>
<td>27. How often have you collaborated with colleagues on- and off-campus?</td>
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<tr>
<td>28. How often have you maintained records on alcohol-related problems on campus?</td>
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<td>29. How often have you presented data summaries/findings to university leadership in a timely manner?</td>
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<tr>
<td>30. How often have you coordinated training and in-service education for students, faculty, and staff?</td>
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<td>31. How often have you identified and utilized professional development and training opportunities on the local, state, and national levels?</td>
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<tr>
<td>32. How often have you developed training modules in relevant areas (e.g., intervention, sexual assault) for target populations?</td>
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<tr>
<td>33. How often have you provided training opportunities for community leaders?</td>
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<tr>
<td>34. How often have you created practicum, internship, employment, and related opportunities for students and volunteers?</td>
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<tr>
<td>35. How often have you mentored and advised student organizations?</td>
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<tr>
<td>36. How often have you prepared resource information on intervention and referral for faculty and staff?</td>
<td>012345</td>
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<tr>
<td>37. How often have you organized a cooperative effort linking students, faculty, administrators, alumni, community agencies and other allies?</td>
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<tr>
<td>38. How often have you established a centralized resource library?</td>
<td>012345</td>
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</table>
Appendix E

Demographic Survey
Demographic Survey for the Substance Abuse Prevention Professional

It would be helpful to have some background information on you, your career, and your institution. Please complete this demographic survey as completely as possible. Assume SAP refers to Substance Abuse Prevention. Thank you.

1) What is your gender? ☐ male ☐ female
2) What is your age? ____

3) What is the highest educational degree you attained?
☐ Undergraduate ☐ Graduate ☐ Post Graduate ☐ Doctorate

4) If you are currently enrolled in an educational program, what degree are you working towards?
☐ not currently enrolled ☐ Graduate ☐ Post Graduate ☐ Doctorate

5) List the number of specific SAP classes you had in each of the following programs:
   Undergraduate Program? _____ Masters Program? _____
   Post Masters Program? _____ Doctoral Program? _____

6) List the number of general Substance Abuse classes you had in each of the following programs:
   Undergraduate Program? _____ Masters Program? _____
   Post Masters Program? _____ Doctoral Program? _____

7) Approximately how many SAP specific conferences have you attended? ____

8) Approximately how many SAP specific workshops have you attended? ____

9) Approximately how many general Substance Abuse conferences have you attended? ____

10) Approximately how many general Substance Abuse workshops have you attended? ____

11) List the types/names of your Trainer Qualifications (ex. TIPS, BACCHUS or OCTAA, etc.):

12) List your current job responsibilities (ex. hall programs, social marketing campaign, etc.):

13) How many on-campus staff/faculty/professionals do you network with? ____

14) How many off-campus professionals do you network with? ____

15) How many SAP Professionals do you work with on campus? ____

16) How many students are enrolled at your institution? _____ undergraduates _____ graduates

17) How many cumulative years' experience do you have as a SAP Professional in higher education? ____

18) How many cumulative years' experience do you have as a SAP Professional in another setting? ____

19) How many SAP or related Certifications (ex. CSAP, CPP, etc.) do you have? ____

20) How many memberships in SAP or related organizations do you have? ____

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Appendix F

International Certification and Reciprocity Consortium

Domain 5
Domain 5. Professional Growth and Responsibility

![Bar chart showing evaluation and allocation of questions for Domain 5.](chart)

Evaluation and Allocation of Questions for Domain 5

<table>
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<th>Criticality</th>
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<td>4.51</td>
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</tr>
</tbody>
</table>

Total number of items from this domain on examination: 19
Task 1. Attain knowledge of current research-based prevention trends, models, strategies, and ethical, legal, and professional standards by taking advantage of appropriate educational opportunities and reviewing current literature in order to provide state-of-the-art prevention services.

Knowledges [sic]:
1. of research-based risk and resiliency factors.
2. of research-based ATOD information
3. of research-based HIV/AIDS information
4. of research-based sexuality information
5. of research-based health and fitness information
6. of research-based teen pregnancy prevention information
7. of research-based suicide risk factors and prevention information
8. of research-based Fetal Alcohol Syndrome/Fetal Alcohol Effects information
9. of research-based sexual transmitted disease information
10. of research-based violence prevention information
11. of basic pharmacology
12. of prevention theory
13. of state and federal confidentiality laws
14. of recipient rights
15. of program, state, and federal codes of conduct
16. of pertinent rules and regulations
17. of parenting strategies and programs
18. of educational resources
19. of programmatic strategies (effective or not)
20. of self-help programs
21. of prevention language and terminology
22. of disease concepts of chemical dependency
23. of research publications and where to find them (i.e. NCADI, RADAR, etc.)

Skills:
1. in literacy
2. in research

Task 2. Model collaborative behavior with colleagues and other professionals, individuals, and communities by networking in order to establish mutual empowerment.
Knowledges [sic]:
1. of personal and professional courtesy
2. of group dynamics
3. of political process (formal and informal)
4. of professional organizations and associations

Skills:
1. in social behavior
2. in listening techniques
3. in using empathy
4. in diplomacy
5. in group techniques
6. in conflict resolution
7. in cooperation

Task 3. Practice ethical behavior by understanding and adhering to legal and professional standards in order to promote the integrity of the profession and to protect the consumer.

Knowledges [sic]:
1. of state and federal confidentiality laws
2. of recipient rights
3. of state and federal program codes of conduct

Task 4. Recognize existing community norms by gaining awareness of culture, lifestyle, and other factors in order to be sensitive to the unique needs of the community.

Knowledges [sic]:
1. of cultures and subcultures
2. of political climate
3. of community history
4. of lifestyles
5. of religions
6. of grassroots networking

Skills:
1. in research
2. in observation
3. in political awareness
4. in listening
5. in self-evaluation related to cultural competency

Task 5. Practice personal wellness by continually assessing life choices and circumstances with the willingness to change behavior and seek assistance, if applicable, in order to model a healthy lifestyle.

Knowledges [sic]:
1. of nutrition
2. of stress and time management
3. of professional, personal, and community resources
4. of fitness
5. of spirituality
6. of self-defeating behaviors
7. of self (including limitations)
8. of healthy alternatives
9. of low-risk behaviors
10. of risk factors
11. of denial
12. of health and wellness

Skills:
1. in self assessment
Appendix G

Respondents from the Sample
The respondents for this sample are listed by state in alphabetical order. The number indicates their listing in the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse.

Alabama
16  University of South Alabama

California
93  West Valley College

Colorado
105  Metropolitan State College of Denver
110  University of Northern Colorado

Connecticut
113  Central Connecticut State University
118  Manchester Community Technical College
131  US Coast Guard Academy
134  University of Hartford

Delaware
146  University of Delaware

Florida
169  Ringling School of Art & Design
170  Rollins College
177  University of Florida
182  University of West Florida

Iowa
220  Cornell College

Illinois
251  Barat College
271  Eastern Illinois University
289  John Woods Community College
327  Southern Illinois University at Edwardsville
333  Triton College
337  University of Illinois at Urbana

Indiana
344  Ball State University
366  Ivy Tech State College-Whitewater
371 Purdue University-Main Campus

Kansas
384 Barton County Community College

Louisiana
435 Nicholls State University

Massachusetts
442 Anna Maria College
449 Bentley College
450 Berkshire Community College
459 Framingham State College

Maryland
494 Frostburg State University
505 University of Maryland-Baltimore County
508 Washington College

Maine
521 University of Maine at Farmington

Michigan
544 Madonna University
555 University of Michigan-Ann Arbor

Minnesota
577 Saint Olaf College

Missouri
596 Maryville University of St.Louis
601 Saint Louis Community College at Florissant Valley
609 University of Missouri at Columbia
612 Washington University
613 Webster University

Montana
633 Montana Tech of the University of Montana

North Carolina
647 Elon College
664 North Carolina State University
680 University of North Carolina at Charlotte
684 Wake Forest University
North Dakota
699  Valley City State University

Nebraska
704  Creighton University
716  University of Nebraska at Omaha

New Jersey
751  Saint Peters College
757  Rider University

New York
773  Suny College of Technology at Alfred
813  Hudson Valley Community College
831  Nazareth College of Rochester
859  Suny College of Technology at Delhi
872  the College of Saint Rose
873  The Sage College, Troy Campus

Ohio
884  Ashland University
889  Case Western Reserve University
898  Denison University
911  Mount Union College
922  Ohio State University, main campus
923  the University of Findlay
927  University of Cincinnati
930  University of Toledo
934  Wittenberg University

Oklahoma
951  Oklahoma State University, Okmulgee
958  University of Science and Arts of Oklahoma

Oregon
972  Oregon State University
973  Portland Community College

Pennsylvania
992  LaSalle University
1004  Gettysburg College
1054  Shippensburg University of Pennsylvania
1061  University of Scranton
1066  Waynesburg College
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<thead>
<tr>
<th>State</th>
<th>University Name</th>
<th>Code</th>
</tr>
</thead>
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</tr>
<tr>
<td></td>
<td>University of South Carolina at Columbia</td>
<td>1148</td>
</tr>
<tr>
<td>South Dakota</td>
<td>University of South Dakota</td>
<td>1166</td>
</tr>
<tr>
<td>Tennessee</td>
<td>Columbia State Community College</td>
<td>1176</td>
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<tr>
<td></td>
<td>Maryville College</td>
<td>1193</td>
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<td>University of Memphis</td>
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<td></td>
<td>University of the South</td>
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<tr>
<td>Texas</td>
<td>Texas A&amp;M University</td>
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<td></td>
<td>Texas A&amp;M, Galveston</td>
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<td></td>
<td>Texas Tech University</td>
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<td>Central Texas College</td>
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<tr>
<td></td>
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<tr>
<td></td>
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<td></td>
<td>Dixie State College of Utah</td>
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<tr>
<td></td>
<td>Snow College</td>
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<tr>
<td></td>
<td>University of Virginia</td>
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<td>Virginia Commonwealth University</td>
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<td>Wisconsin</td>
<td>Northeast Wisconsin Technical College</td>
<td>1421</td>
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<tr>
<td></td>
<td>University of Wisconsin Colleges</td>
<td>1426</td>
</tr>
<tr>
<td>West Virginia</td>
<td>West Virginia Wesleyan College</td>
<td>1452</td>
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</table>
Appendix H

Cover Letter
Dear Substance Abuse Prevention Professional,

The attached surveys are part of a nationwide survey of substance abuse prevention professionals in higher education. I am investigating the development of prevention professionals for partial completion of my dissertation research.

Your responses are important to me because of your prevention programming efforts in high education. You have been chosen at random to participate in this study however you may decide to not participate. Completion of these surveys is much appreciated since your responses will help me better understand the educational, training, and developmental needs of substance abuse prevention professionals.

The enclosed consent form and the surveys will take approximately 40 minutes to complete. Please return them by December 15th in the enclosed, self-addressed envelope. Upon receipt, I will separate the consent form from the surveys thus assuring your responses will be anonymous. Only aggregate data will be used in this research. The number on the consent form corresponds to your institution and will be used for record keeping purposes only. A reminder post card will be sent in two weeks if the number of your institution has not been checked off as having returned the consent form and surveys.

If you are interested, I will send you a summary of the final research results. Please indicate this wish, along with your email address, on the consent form. Thank you for taking the time to complete these surveys.

Respectfully,

Mary K. Crozier
Doctoral Candidate
The College of William & Mary
Appendix I

Consent Form
CONSENT FORM

I, (print name here)__________________________, am willing to participate in a study of substance abuse prevention professionals. I understand that this study is being conducted by Mary K. Crozier, a doctoral candidate in counseling at the College of William and Mary. This study will explore the development of substance abuse prevention professionals in a higher education setting. My involvement in this study will be approximately 40 minutes.

As a participant in this study, I am aware that I will be asked to complete four research instruments: the Defining Issues Test, the Paragraph Completion Method, the Demographic Survey and the Task Force Planner Survey. I am also aware that participation is voluntary and that I may choose to withdraw at any time during the study. I understand that a copy of the results will be emailed to me, upon my request.

By participating in this study, I understand that there are no obvious risks to my physical or mental health.

Confidentiality Statement

As a participant in this study, I am aware that all records will be kept confidential. I fully understand the above statements and do hereby consent to participate in this study.

_____________________________________

Participant's Signature & Date

_____________________________________

Email Address (if research results are requested)
Appendix J

Trainer Qualifications
Table 8  Trainer Qualifications

<table>
<thead>
<tr>
<th>Trainer Qualifications</th>
<th>Frequencies</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACCHUS (Boosting Alcohol Consciousness Concerning the Health of University Students)</td>
<td>39</td>
<td>33.7%</td>
</tr>
<tr>
<td>TIPS (Training Intervention Procedures for Servers of Alcohol)</td>
<td>23</td>
<td>23.5%</td>
</tr>
<tr>
<td>OCTAA (On Campus Talking About Alcohol)</td>
<td>23</td>
<td>23.5%</td>
</tr>
<tr>
<td>LCDL, 2ICADC (international certification for alcohol and drug counselors), CACD III, CCDC, and LPC</td>
<td>12</td>
<td>12.2%</td>
</tr>
<tr>
<td>Certified Prevention Specialist</td>
<td>3</td>
<td>6.1%</td>
</tr>
<tr>
<td>Licensed psychologist</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Center Associate, US Dept of Ed &amp; Higher Ed Center</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GAMMA (Greeks Advocating Mature Management of Alcohol)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Talking With Your Students about Substance and Alcohol</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>SCHA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>State trainer</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Alcohol 101</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Military specific training (C.D.A.R.)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Certified Health Education Specialist (C.H.E.S.)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Oregon assistance MH Division</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>TOAST</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Student Assistance Programs</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BCRPS (Gorski Relapse Prevent Special)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Freedom from Smoking</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>RAMP</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Alecha</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SASSI</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HIV</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>South Carolina School for Alcohol and Drug Studies</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Appendix K

Most Frequently Listed Job Responsibilities
Most frequently listed job responsibilities sorted into traditional, higher education teaching and student life areas with frequencies.

Table 9 Job Responsibilities in Student Life Services

<table>
<thead>
<tr>
<th>Student Life Services</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>grant writing</td>
<td>5</td>
</tr>
<tr>
<td>supervise interns</td>
<td>3</td>
</tr>
<tr>
<td>all campus programming</td>
<td>2</td>
</tr>
<tr>
<td>advising</td>
<td>2</td>
</tr>
<tr>
<td>policy</td>
<td>2</td>
</tr>
<tr>
<td>peer mentors</td>
<td>2</td>
</tr>
<tr>
<td>career &amp; placement services</td>
<td>2</td>
</tr>
<tr>
<td>non-traditional students</td>
<td>1</td>
</tr>
<tr>
<td>advisor for student</td>
<td>1</td>
</tr>
<tr>
<td>advisory council</td>
<td>1</td>
</tr>
<tr>
<td>student activities</td>
<td>1</td>
</tr>
<tr>
<td>international students</td>
<td>1</td>
</tr>
<tr>
<td>career counseling</td>
<td>1</td>
</tr>
<tr>
<td>disabled students services</td>
<td>1</td>
</tr>
<tr>
<td>community service</td>
<td>1</td>
</tr>
<tr>
<td>presentations on stress &amp; time management</td>
<td>1</td>
</tr>
<tr>
<td>testing</td>
<td>1</td>
</tr>
<tr>
<td>freshmen retention programs</td>
<td>1</td>
</tr>
<tr>
<td>sexual assault</td>
<td>1</td>
</tr>
<tr>
<td>HIV/AIDS programs</td>
<td>1</td>
</tr>
<tr>
<td>university center programs</td>
<td>1</td>
</tr>
<tr>
<td>judicial issues</td>
<td>1</td>
</tr>
<tr>
<td>supervise research assistant</td>
<td>1</td>
</tr>
<tr>
<td>academic counseling</td>
<td>1</td>
</tr>
<tr>
<td>staff training</td>
<td>1</td>
</tr>
<tr>
<td>fraternity and sorority programs</td>
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</tbody>
</table>

Table 10 Job Responsibilities in Prevention Services

<table>
<thead>
<tr>
<th>Prevention Services</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>social marketing campaign</td>
<td>61</td>
</tr>
<tr>
<td>alcohol &amp; other drugs prevention/education</td>
<td>45</td>
</tr>
<tr>
<td>training &amp; supervision of student leaders</td>
<td>22</td>
</tr>
<tr>
<td>(like Resident Assistants &amp; peers)</td>
<td></td>
</tr>
<tr>
<td>sanctioned education</td>
<td>19</td>
</tr>
<tr>
<td>educator for dorm programs</td>
<td>18</td>
</tr>
<tr>
<td>Wellness Services</td>
<td>Frequencies</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>health education</td>
<td>10</td>
</tr>
<tr>
<td>wellness coordinator/education</td>
<td>9</td>
</tr>
<tr>
<td>peer health educators, director of health center</td>
<td>4</td>
</tr>
<tr>
<td>health educator/wellness coordinator</td>
<td>3</td>
</tr>
<tr>
<td>advise wellness council</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Counseling Services</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>counseling</td>
<td>13</td>
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<tr>
<td>director &amp; asst. director of counseling</td>
<td>4</td>
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<tr>
<td>clinical director for counseling/life development</td>
<td>3</td>
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<tr>
<td>student assistance program, clinical</td>
<td>2</td>
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<tr>
<td>psychologist/psychotherapy</td>
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<tr>
<td>crisis intervention</td>
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</table>
individual evaluation & treatment 1
employee assistance program coordinator 1

Table 13  **Job Responsibilities in Teaching**

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Frequencies</th>
</tr>
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<tbody>
<tr>
<td>curriculum infusion</td>
<td>6</td>
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<tr>
<td>faculty</td>
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<tr>
<td>visiting lecturer</td>
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<tr>
<td>University 112 (course) instructor</td>
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<tr>
<td>counselor education</td>
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</tr>
<tr>
<td>Wellness (course) instructor</td>
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</table>

Table 14  **Job Responsibilities in Committee Facilitation**

<table>
<thead>
<tr>
<th>Committee Facilitation</th>
<th>Frequencies</th>
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<tbody>
<tr>
<td>chair of alcohol task force</td>
<td>5</td>
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<tr>
<td>community-university prevention coalition</td>
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</tr>
<tr>
<td>school-university task force</td>
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<tr>
<td>community presentations</td>
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<tr>
<td>drug awareness committee</td>
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Appendix L

Results of the Task Force Planner Survey
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<th>Question</th>
<th>Mean</th>
<th>Standard Deviation</th>
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<tr>
<td>2</td>
<td>2.38</td>
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</tr>
<tr>
<td>3</td>
<td>2.02</td>
<td>1.49</td>
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<td>4</td>
<td>2.95</td>
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<tr>
<td>5</td>
<td>3.42</td>
<td>1.84</td>
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<td>6</td>
<td>2.41</td>
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<td>7</td>
<td>2.57</td>
<td>1.38</td>
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<td>8</td>
<td>2.16</td>
<td>1.40</td>
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<td>9</td>
<td>3.78</td>
<td>1.23</td>
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<td>10</td>
<td>4.31</td>
<td>.96</td>
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<tr>
<td>38</td>
<td>2.52</td>
<td>1.61</td>
</tr>
</tbody>
</table>

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Appendix M

Correlation Matrix
| Table 1 Correlations for Substance Abuse Prevention (SAP) Research Variables |
|--------------------------------------------------|------------------|------------------|------------------|
| Undergraduate SAP classes | Pearson Correlation | Undergraduate SAP classes | Masters SAP Classes | Post masters SAP classes |
| SIG. (2-tailed) | N | SIG. (2-tailed) | N | SIG. (2-tailed) | N |
| Masters SAP classes | .135 | .187 | .175 | .087 | .237* |
| SIG. (2-tailed) | 97 | 97 | 97 | 97 | 97 |
| Post masters SAP Classes | .175 | .087 | .237* | .019 | .237* |
| SIG. (2-tailed) | 97 | 97 | 97 | 97 | 97 |
| Doctorate SAP Classes | .131 | .201 | .286** | .044 | .249* |
| SIG. (2-tailed) | 97 | 97 | 97 | 97 | 97 |
| SAP conferences | -.046 | .654 | .044 | .970 | .009 |
| SIG. (2-tailed) | 97 | 97 | 97 | 97 | 97 |
| SAP workshops | -.066 | .518 | .014 | .895 | -.051 |
| SIG. (2-tailed) | 97 | 97 | 97 | 97 | 97 |
| Certifications | .067 | .515 | .306** | .002 | .057 |
| SIG. (2-tailed) | 97 | 97 | 97 | 97 | 97 |
| Memberships | .062 | .548 | .192 | .060 | -.079 |
| SIG. (2-tailed) | 97 | 97 | 97 | 97 | 97 |
| PCM | -.029 | .778 | -.170 | .102 | .103 |
| SIG. (2-tailed) | 94 | 94 | 94 | 94 | 94 |
| DIT | -.059 | .581 | .031 | .767 | .070 |
| SIG. (2-tailed) | 91 | 91 | 91 | 91 | 91 |
| TFPS total score | .067 | .537 | .177 | .102 | .103 |
| SIG. (2-tailed) | 87 | 87 | 87 | 87 | 87 |

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*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).