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THE IMPACT OF SUBSTANCE ABUSE TRAINING AND SUPPORT
ON PSYCHOLOGISTS' FUNCTIONING AS ALCOHOL AND DRUG
COUNSELORS

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DOCTOR OF PHILOSOPHY OF URBAN EDUCATION

at the

CLEVELAND STATE UNIVERSITY

April 2014

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Dedication

I dedicate my dissertation to my amazing mother, Maria Tomaszewska, whose work ethic has always inspired me to work hard and do my best. I am forever grateful to my mom for always believing in my potential and abilities, and for her unwavering encouragement and support through my journey toward obtaining a doctoral degree. Furthermore, I dedicate my dissertation to my wonderful grandmother, Jadwiga Tomaszewska, for her warm-heartedness, love, and support and to my grandfather, Karol Tomaszewski, for instilling in me the value of education and perseverance. Moreover, I dedicate my dissertation to my late father, Janusz Pabian, whose intelligence, confidence, good will, and hard work have always served as an inspiration to me. Finally, I dedicate my dissertation to all the persons who have been touched by Substance Use Disorder. It is my hope that this study will make a contribution toward improving substance abuse treatment.

Acknowledgment

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ABSTRACT

Alcohol and other drug (AoD) problems occur at epidemic levels in society, yet many individuals do not receive adequate treatment. Research suggests that psychologists are disinterested in AoD counseling, and have AoD training, attitude, and skill deficits. The current study examined the role of AoD training and professional support on psychologists' functioning as AoD counselors. The ultimate purpose of the study was to determine what interventions may be useful for improving psychologists' ability to provide AoD counseling. One hundred and seventy eight members of four divisions of the American Psychological Association were surveyed using a measure developed by the author based on prior research. Regression analyses confirmed the hypothesis that AoD training would be predictive of psychologists' functioning as AoD counselors; and that professional support would make a unique contribution to the prediction model.

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CHAPTER 1

INTRODUCTION

Chapter One sets the context for the study on the predictors of psychologists' functioning as AoD counselors. First, the alcohol and other drug (AoD) abuse epidemic will be discussed. Second, the stigma surrounding AoD treatment and its effect on AoD treatment services will be considered. Third, the chapter will examine the shortage of AoD treatment providers including psychologists. Fourth, the AoD counseling workforce development crisis will be discussed, with a special focus on psychologists' place in the crisis. The chapter will close with a statement on the importance of the problem, the research problem, purpose of the study, research questions, and significance of the study.

Introduction

This dissertation focused on improving AoD treatment, an area of great importance given the prevalence and burden of substance abuse to individuals and society as a whole (e.g., Carey, Bradizza, Stasiewicz, & Maisto, 1999; Haack & Adger, 2002; The National Institute on Drug Abuse, 2010; SAMHSA, 2004; Washton & Zweben,

2006). The literature suggests that psychologists have significant deficits in AoD education, knowledge, and skills; lack confidence and don't have a sense of professional legitimacy to practice AoD counseling; are seldom involved in AoD counseling practice, and hold negative attitudes toward persons with Substance Use Disorders (SUDs) (Corrigan et al., 2002; Corrigan, Kuwabara, & O'Shaughnessy, 2009; Gilchrist et al., 2011; Hardy & Johnson, 1992; Kloss & Lisman, 2003; Linden, 2011; Najavits, 1995; NeATTC, 2011; Room, Rehm, Trotter, Paglia, & Üstün, 2001; SAMHSA, 2008; Servais & Saunders, 2007; Schomerus, 2011; Schwartz, 1997; Shoptaw et al., 2000).

The current study aimed to extend previous research by exploring the predictive power of AoD training and professional support on psychologists' functioning as AoD counselors. It was hoped that the study would provide new insights into effective strategies in improving psychologists' treatment of substance-using clients.

The Addiction Epidemic

Substance abuse is a major public health problem in the United States. Directly and indirectly, substance abuse and addiction involving tobacco, alcohol, and illegal and prescription drugs is the leading cause of death, disability and disease in the United States (Haack & Adger, 2002). Every year, abuse of illicit drugs and alcohol contributes to the death of more than 100,000 Americans, while tobacco is linked to 440,000 deaths a year.

Substance Use Disorder is recognized as one of the most prevalent mental health disorder in the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-V, 2013) among the general population (APA, 2000; Carey et al., 1999; Surgeon General, 1999). In 2003, an estimated 21.6 million (9%) people ages 12 and older in the United States met criteria for SUDs (SAMHSA, 2004). Of these, 14.8 million met criteria for alcohol

abuse/dependence; 3.9 million met criteria for illicit drug abuse/dependence; and 3.1 million met criteria for both alcohol and drug abuse/dependence (Haack & Adger, 2002).

According to The National Institute on Drug Abuse (NIDA) (2010), almost every American has been impacted by AoD use problems through personal or family experience. People of all ages suffer harmful consequences of drug abuse and addiction.

Substance abuse and addiction are implicated in many of America's social problems, including spousal and child abuse, crime, spread of sexually transmitted diseases, teen pregnancy, reduced productivity at work, traffic accidents and fires, suicides, premature death from cancer, heart disease, stroke, and emphysema (NIDA, 2010; Washton & Zweben, 2006).

The economic cost to society of alcohol, nicotine, and other drug abuse is over half a trillion dollars a year (NIDA, 2010; Washton & Zweben 2006). Without effective prevention and treatment, people with SUDs are most likely to continue the physical deterioration, crime, child abuse and neglect, and domestic violence that are symptomatic of addictive disease (Haack & Adger, 2002). Identification of SUDs, implementation of an evidence-based treatment, and/or referral to specialist care is essential.

Societal Stigma Against SUDs

According to the American Society of Addiction Medicine (ASAM, 2012), addictive disease creates distortions in thinking, feeling, and perceptions, which drive people to behave in destructive ways that are not understandable to others around them. ASAM explains that the behaviors of people with SUDs are outward manifestations of an underlying disease that are understandable in the context of the alterations in brain

function. Unfortunately, negative stereotypes, stigma, and rampant discrimination against people with SUDs reduce their chances of receiving treatment.

In 2011, Schomerus et al. conducted a cross-cultural population-based study review, finding that alcoholism is a severely stigmatized mental disorder. Compared with people suffering from substance-unrelated mental disorders, alcohol-dependent persons were less frequently regarded as mentally ill, held much more responsible for their condition, provoked more social rejection and more negative emotions, and were at high risk for structural discrimination (Schomerus, 2011). Similarly, a cross-cultural study conducted by the World Health Organization (WHO) in 14 countries found that drug addiction was ranked as the most stigmatized condition and alcohol addiction was ranked fourth (Room, Rehm, Trotter, Paglia, & Üstün, 2001).

In a population-based survey, Corrigan, Kuwabara, and O'Shaughnessy, (2009) examined differences in attribution and dangerousness beliefs toward vignettes depicting a person with a mental illness, a SUD, and a physical handicap. Attributions refer to the process by which people make inferences about the causes of behaviors. The person in the SUD vignette was seen as more blameworthy for the onset and prognosis of his condition and more dangerous compared to the mentally ill client vignette.

According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2008), stigma against individuals with SUDs negatively affects their access to education, housing, employment, financial assistance, and health care. Individuals with SUDs experience fear and isolation that separates them from their communities. For instance, insurance policies deny or restrict coverage for addiction treatment.

The Drug Free Student Aid provision of the United States Higher Education Act denies financial aid to students with a drug conviction. Instead of mandating treatment, the 1996 welfare reform provision imposes a lifetime ban on welfare benefits for people convicted of possessing or selling drugs (SAMHSA, 2008). Furthermore, Schwartz (1997) notes that a far larger amount of government funds is spent on prosecuting and jailing offenders rather than on treating their addiction. What is more, the majority (80%) of prisoners are in jail for drug-related crimes.

AoD Treatment Workforce Crisis

In 2006, the Center for Substance Abuse Treatment (CSAT) issued a document entitled *Strengthening Professional Identity: Challenges of the Addictions Treatment Workforce*, which asserted that the AoD treatment field is facing a workforce crisis. Among the key issues facing the AoD treatment workforce were difficulty attracting and recruiting professionals into the field, insufficient education and professional development, stigma of working in the field, low funding and lack of resources, inadequate compensation, lack of defined career paths, job discontent, and high turnover.

The AoD treatment workforce refers to both AoD specialist workers who exclusively focus on the treatment of SUDs, as well as mainstream workers. Mainstream workers refer to health care and human service providers who work in settings such as hospitals, mental health centers, family service agencies, schools, and child welfare organizations where substance-abusing clients may be encountered as part of the general client population. Depending upon their roles, these mainstream practitioners might focus on their clients' medical, psychiatric, marital, family, or occupational problems (Amodeo, 2000).

AoD Treatment Workforce

A study of 175 substance abuse treatment programs conducted by McLellan, Carise, and Kleber (2003) suggests that the organizational and administrative infrastructures of many specialty addiction programs are inadequate and unstable, with high staff turnover rates, few professionals with advanced degrees, and agency closings. These findings call into question the ability of the national addiction infrastructure to meet the complex needs of substance-using clients and adopt evidence-based treatment methods, which involve clinical personnel with advanced degrees (McLellan et al., 2003). These findings are concerning in light of CSAT's (2010) report that there aren't sufficient numbers of workers to meet the huge demand for addiction services.

In 2005, approximately 23.48 million individuals ages 12 and older needed specialty treatment for SUDs, but only 2.33 million received treatment at a specialty facility. In 2008, only about 10% of those affected by SUDs received treatment (SAMHSA, 2008). Between 13 and 16 million people need treatment for SUDs each year, but only three million receive care (CSAT, 2010).

An estimated 67,000 licensed and unlicensed counselors in the United States provide AoD treatment and related services (Harwood, 2002). The Health Resources and Services Administration (2011) reported that, as of December 14, 2011, there were 3, 630 Mental Health Professional Shortage Areas, with 88.9 million people living in them. It would take 5, 818 practitioners to meet the treatment needs of this population.

Mainstream professionals have significantly lagged behind the demand for AoD services. In 1997, The Institute of Medicine (IOM) compared the number of practitioners by professional discipline to the subset of those same practitioners who had received

specialized addictions certification. The data indicated that only a small number of professionals within the total healthcare are certified to provide AoD counseling. Of the 69, 800 clinical psychologists in the workforce, only 950 held the American Psychological Association Certificate of Proficiency in the Treatment of Alcohol and Other Psychoactive Substance Use Disorders (APA- CPP) (See Table I).

Table I. Number of Practitioners and Certified AoD Specialists by Health Care Discipline (IOM, 1997).

Discipline	Workforce Size	Number of Certified Addiction Specialists	Percentage of Certified Addiction Specialists
Primary Care	700,000	2,790 ASAM Certified	0.4%
Psychiatry	30,000	1,067 addiction psychiatrists	3.6%
Clinical Psychology	69,800	950 APA substance abuse certified	0.01%
Social Work	300,000	29,400*	10.00%
Nursing	2,200,000	4,100*	0.2%
Physician Assistant	27, 500	185*	0.7%
Marriage/Family Therapy	50,000	2,500	5.0%

*Self-described addictions specialists

AoD Training

For the last 30 years, studies have consistently shown that AoD education has been seldom incorporated into the routine clinical training of mainstream professionals, including psychologists (Chiert et al., 1994; Lubin, Brady, Woodward, & Thomas, 1986; Margolis & Zweben, 2011; Selin & Svanum, 1981). According to Miller (2000), progress has been slow in integrating the TAP 21 AoD Counseling Competencies Model (which will be discussed in chapter two) into psychologists' graduate training.

Alarming, it is currently possible to become and continue to be a licensed psychologist without having any or only very limited knowledge of SUDs (APA Practice Directorate, 2003; Burrow-Sanchez et al., 2009; Hardwood, Kowalski, & Ameen, 2004;

SAMHSA, 2008). Quinn (2010) asserted that the lack of significant AoD training reflects such astounding deficits that it can only be described as institutional bias, denial, and minimization.

AoD training is an important variable for further research investigation as it has been found to predict practitioners' functioning as AoD counselors. (Amodeo, 2000; Bartlett-Voigt, 1995; Carroll, 2000; Straussner & Varo, 2007). Overall, research suggests that the impact of AoD training is a function of duration, intensity, and comprehensiveness of educational programming (e.g., Mazmanian & Davis, 2002; Straussner & Vairo, 2007). The current study seeks to expand upon past research by specifically surveying psychologists on their perceptions of the usefulness of their AoD training and its impact on their functioning as AoD counselors.

AoD Knowledge and Skills

Research suggests that existing AoD education for the human service and health care disciplines do not adequately equip mainstream professionals to competently work with AoD issues (APA Practice Directorate, 2001, 2003; Cellucci & Vic, 2001; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; Evans, 2006; Freeman et al, 2004; Freimuth, 2008; Johansson, Akerlind, & Bendsten, 2005; Matthews, Schnid, Conclaves, & Bursley, 1998; McCormick et al, 2000; Spirito et al, 2009; Spurr, 1997; Weisner & Matzzer).

According to CSAT (2006), little is typically done in mainstream settings for clients with SUDs. Many therapists rarely conduct AoD screenings. They do not have the diagnostic skills to recognize that clients have AoD problems or are at risk for them, and don't know how to get this information across, especially to non-disclosing clients. Mainstream practitioners are also more likely to respond to a client's existing AoD

problem than to prevent potential future harm. As a result, many clients with SUDs go unidentified or are recognized late when it is more difficult and costly to treat them (Freimuth et al., 2004).

Without proper screening, it is difficult to recognize when a person with a mental disorder also has a SUD, resulting in the SUD being unrecognized and untreated. Practitioners often fail to recognize co-occurring SUDs and mental health disorders, resulting in clients not receiving integrated care or being referred solely to AoD counseling (APA Practice Organization, 2011).

Furthermore, psychologists may not understand the pharmacological state of mind of addicted individuals, may not be familiar with medications that reduces craving or blocks the pleasurable effects of drugs, or know how to find a psychopharmacologist to plan a client's treatment with (Evans, 2006; Page & Bailey, 1995).

Studies also suggest that mainstream professionals often mistake the physical and psychological effects of excess substance use (e.g., stomach problems, anxiety, sleep disturbances, low self-esteem or mood) for emotional disorders, especially anxiety and depression (Freimuth, 2008). In addition, interviews with physicians reveal that they treat problems related to substance abuse (e.g., career, family, mental health) without addressing substance abuse as a potential contributing factor (Haack & Adger, 2002).

Furthermore, research shows that mental health professionals including psychologists lack knowledge of empirically proven psychosocial and pharmacotherapeutic interventions for SUDs. Psychologists have also been found to take a limited role in the treatment of SUDs by relying on referrals to AoD specialty treatment or self-help recovery groups (APA Practice Directorate, 2003, 2004; Cellucci & Vic,

2001; de Silva Cardoso, Pruett, Chan, & Tansey, 2006; Freeman et al., 2004). These findings are quite alarming in light of the frequency with which mainstream workers encounter SUDs and the serious consequences of not treating these disorders.

Role Adequacy

Research consistently suggests that mental health professionals including psychologists perceive their ability to treat AoD problems as inadequate. In the literature, the term role adequacy refers to perceived ability to respond to AoD issues. Scholars assert that professionals' anxiety about their AoD counseling competencies is underpinned by the limited graduate and continuing AoD training they receive (Anavai, Tauge, Ja, & Duran, 1999; Burrow-Sanchez, Call, Adolphson, & Hawken, 2009; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; Madson, Bethea, Daniel, & Necaise, 2008).

Perceptions of role adequacy have been found influential on mainstream professionals' functioning as AoD counselors. (Addy et al., 2004b). Madson et al. (2008) observed that graduate students and psychologists who don't feel prepared to treat SUDs may appear timid while addressing clients' AoD problems, or may avoid treating them altogether.

Moreover, psychologists may solely focus on diagnosing emotional disorders, which they feel confident in treating, resulting in missed SUD diagnoses and negligent care. Scholars also suggest that practitioners' confidence levels may affect their effort to learn more challenging counseling skills, as well as their job retention and satisfaction (Madson et al., 2008; Miller & Brown, 1997). The current study seeks to expand upon past research by specifically surveying psychologists' perceptions of their role adequacy and the impact of AoD training and professional support on their role adequacy.

Role Legitimacy

In the literature, role legitimacy refers to practitioners' perceptions of the appropriateness and their professional right to intervene with clients presenting with SUDs. In other words, role legitimacy concerns a "should I respond?" judgment. Practitioners with low role legitimacy believe that the treatment of SUDs is another profession's responsibility. They also lack the authority and/or support of clients to provide AoD counseling (Cartwright, 1980; Gorman & Cartwright, 1991).

Some research has found that mainstream practitioners have high perceptions of role legitimacy. Scholars explain that this may be due to the AoD treatment field's wider acceptance of mainstream professionals working with substance-using clients (Roche & Pidd, 2010). As discussed in chapter Two, mainstream professionals have gained greater recognition to practice AoD counseling due to the pressing need for a wider response to the SUD epidemic and the need to provide competent treatment for substance-using client's complex needs (Roche et al., 2004).

In contrast to the above findings, Miller and Brown (1997) suggest that psychologists may have low perceptions of role legitimacy. Scholars explain that the AoD treatment infrastructure historically relied heavily on recovering addicts as AoD counselors, treating AoD counseling as a specialty outside of mental health professionals' competence.

The role of mental health professionals has also been questioned since the professionalization of AoD counseling and the implementation of AoD counseling certification. Miller and Brown (1997) asserted that psychologists who do not have an

AoD counseling specification in their generic license may as a result feel that they do not hold a legitimate role in providing AoD treatment services.

Consequently, the APA-CPP was developed to help licensed psychologists overcome the certification barrier to practicing AoD counseling (APA, 2011; The AoD Newsletter, 1996; APA Division 50 Forum Archives, June 2011). However, in 2011, the certificate was withdrawn by the APA due to psychologists' low interest in the credential.

West, Mustaine, and Wyrick (1999) asserted that mainstream practitioners' perceptions of low role legitimacy may serve as a barrier to their involvement in AoD-counseling practice. Acker et al. (2004) found that social workers experiencing higher levels of role conflict (i.e., conflicting job demands or work tasks) and role ambiguity (i.e., uncertainty around one's job functions and responsibilities) have reduced feelings of job satisfaction and higher levels of intention to leave their jobs. In contrast, low role ambiguity, clear performance standards, goals, and expectations have been shown to increase mainstream workers' motivation to practice AoD counseling (Skinner, 2005a).

Perceptions of role legitimacy may also affect mainstream workers' practice behaviors with substance using clients. Johansson, Bendtsen, and Akerlind (2002) found that generalist practitioners who perceived a professional right and responsibility to respond to AoD issues were more likely to intervene with patients with SUDs. In contrast, doctors and nurses with low role legitimacy were only willing to intervene when the patient's health was unequivocally influenced by their drug use rather than intervene opportunistically. Furthermore, perceived role stress (i.e., role ambiguity and role conflict) exerted a negative impact on the practitioners' job satisfaction.

Scholars asserted that psychologists have much more to contribute to the AoD treatment field than they think. Miller (DeAngelis, 2001a) stated that,

Psychologists have vastly underestimated what we can do in this area... We have this funny notion that we should send people off to specialized treatment centers, even though research shows psychological treatments to be highly effective with this population (p.1)

Miller and Brown (1997) recommended that psychologists start viewing AoD treatment as part of traditional mental health services, such that SUDs are integrated with treatment for other emotional difficulties rather than diverted to a separate specialty setting. They also reminded psychologists that they can significantly enrich the AoD treatment field. Psychologists can offer expertise in evaluating treatment programs by virtue of their integrated scientist–practitioner training, develop testing instruments, and conduct AoD assessments. They can also assume administrative and supervisory positions where they can offer programs strong empirical focus (Miller & Brown, 1997).

The current study sought to expand upon past research by exploring psychologists' current perceptions of their role legitimacy, which to this author's knowledge has not been investigated by prior research. Furthermore, this was the first study to test the predictive power of AoD counseling certification on psychologists' perceptions of role legitimacy to provide AoD counseling.

Professional Support

Professional support is broadly defined as all aspects of work practices other than the single individual that are designed to facilitate practitioners' effectiveness and wellbeing. Support can be provided by the profession, professors, coworkers, supervisors, and employers (Roche & Skinner, 2005). The types of role support that was examined in

the current study included career motivation, APA Division 28 and 50 membership, informal support, and organizational role legitimacy.

Studies consistently reveal that professional support to practice AoD counseling facilitates positive work outcomes (Addy et al., 2004; Albery, 2003; Amodeo, 2000; Broadus et al., 2010; Cartwright & Gorman, 1993; CSAT, 2006; Davis & Taylor-Vaisey, 1997; Hunot & Rosenbach, 1998; Knudsen, Johnson, & Roman, 2003; Lubin et al., 1986; Moos and Moos, 1998; Rhoades & Eisenberger, 2002; Skinner, 2005). For example, support from supervisors, coworkers, and employers has been identified as an important factor contributing to AoD counselors' wellbeing and effectiveness (Skinner, 2005).

Research has also found that professional support mediates the effect of AoD education on practitioners' functioning as AoD counselors. These findings suggest that the positive effects of training can be thwarted by a non-supportive work environment (Cartwright & Gorman, 1993). In fact, Cartwright and Gorman found that professional support rather than experience or education was the strongest predictor of mainstream practitioners' role legitimacy and role adequacy to practice AoD counseling.

Addy et al. (2005) replicated Cartwright and Gorman's (1993) study using an Australian sample of nurses and mental health professionals, which confirmed the original study. Skinner et al. (2005) concluded that interventions at the agency or system level might be more beneficial than targeting individual educational needs. Similarly, the Northeast Addiction Technology Transfer Center (NeATTC, 2006) concluded that managers striving to increase the effectiveness of their AoD treatment workforce must attend to not only workers' competencies, but also to the quality of supervision, peer support, and the characteristics of the organization's culture (Skinner, et al., 2005).

The current study sought to expand upon past research by surveying psychologists' perceptions of professional support to provide AoD counseling, which, to the author's knowledge, has not been studied before. The study also examined the relative predictive power of professional support and AoD training on participants' functioning as AoD counselors. It was hoped that the findings would shed light on the types of interventions that are most effective in improving psychologists' clinical work with substance-using clients.

Statement of the Problem

Studies show that a significant number of mainstream human service workers including psychologists lack competencies in providing AoD counseling, are not trained in AoD counseling, have poor attitudes toward substance-using clients, lack knowledge about SUDs, and lack confidence in providing AoD counseling (Addy et al., 2004; Cartwright, 1980; Miller, 1997; Washton & Zweben, 2011).

Najavits (2001), a psychologist and active researcher in AoD treatment and past president of APA Division 50 discussed her own initial reaction to addiction treatment that has been found typical of many mainstream practitioners. In her Society for Psychotherapy Research early career award paper entitled "Helping 'difficult' clients", Najavits wrote,

On the NIDA (National Institute on Drug) abuse study, I became fascinated with psychotherapy for substance abuse clients. This was rather a surprise because I had not studied substance abuse in graduate school, had never treated a substance abuse client in psychotherapy until then and had no particular connection to it. If I had any prior impression, it was likely negative (an impression I have since realized is fairly typical in the mental health field): "They can't get better", "I don't understand that area of work", "Alcoholics Anonymous is the main treatment for that" (p. 138).

The AoD treatment field has called on mental health professionals who come into significant contact with AoD users and have the potential to intervene positively to become more involved in the treatment of SUDs (APA Practice Directorate, 2003; 2004; Cellucci & Vik, 2001; da Silva Cardoso, Hardwood, Kowalski, & Ameen, 2004; Madson et al., 2008; Miller and Brown, 1997; Pruett, Chan, & Tansey, 2006).

However, the field has been slow to respond to this problem of epidemic proportions. This has resulted in a failure to meet the needs of individuals with AoD problems. Primary care workers including psychologists have an ethical responsibility to routinely screen and assess clients for AoD problems (Miller & Brown, 1997). Without an appropriate foundation in AoD counseling theory and technique, psychologist may fail to recognize, assess, and effectively treat SUDs and, in so doing, may violate Principle A, (Beneficence and Nonmaleficence) and Standard 2.01 (Boundaries of Competence) of the *APA Ethical Principles and Code of Conduct's* (2002).

Principle A stated that, "Psychologists strive to benefit those with whom they work and take care to do no harm" (p.3). Standard 2.02 requires psychologists to develop and maintain competence in their areas of professional practice. It stated,

- a. Psychologists provide services, teach, and conduct research with populations and in areas only within the boundaries of their competence, based on their education, training, supervised experience, consultation, study, or professional experience...
- b. Psychologists planning to provide services, teach, or conduct research involving populations, areas, techniques, or technologies new to them undertake relevant education, training, supervised experience, consultation, or study (p.4-5).

In order to meet the challenge of the AoD epidemic, psychologists must be prepared to incorporate treatment - both in early detection and in secondary intervention - for addictions (APA Practice Directorate, 2003; 2004; Cellucci & Vik, 2001; da Silva Cardoso, Hardwood, Kowalski, & Ameen, 2004; Pruett, Chan, & Tansey, 2006). Unless

workforce development is tackled effectively, the AoD treatment field will fail to flourish and its ability to provide optimal services to clients with SUDs will be thwarted.

Miller and Brown (1997) concluded that psychologists' historical indifference toward AoD counseling practice cannot continue. Miller (2002) asserted the following vision for the future:

All psychologists will be routinely trained to recognize, assess, diagnose, treat, and prevent SUD. Psychologists will regard the treatment of SUD as a natural part of their practice, and a larger number of psychologists will choose to specialize in research, prevention, and treatment of SUD. Psychologists will use state-of-the art, evidence-based methods in their practice to assess, treat, and prevent SUD (p. 298).

Purpose of the Study

The purpose of the current study was threefold. The first goal was to survey the extent of psychologists' AoD training, professional support, and level of functioning as AoD counselors. Secondly, the study sought to measure the predictive power of AoD training and professional support on psychologists' functioning as AoD counselors. Lastly, the study aimed to gather descriptive data on participant's attitudes toward current educational standards for AoD training, as well as their views on the most appropriate way to respond to the withdrawal of the APA-CPP. The following were the hypotheses of the study:

1. **Professional support** (i.e., career motivation, APA Division 28 and 50 membership, informal support, and organizational legitimacy) will significantly account for the proportion of variance in **psychologists' functioning as AoD counselors** (i.e., role adequacy, role legitimacy, motivation and reward, and the percentage of ones current caseload with AoD issues) over and above the proportion of variance accounted for by **AoD training** (i.e., perceived relevance

of AoD training, number of AoD clients treated over the course of one's career, AoD counseling certification, and continuing AoD education).

2. **Membership in APA Division 29 and 42** will negatively predict psychologists' **functioning as AoD counselors.**

The following were the study's exploratory research questions:

1. How do psychologists perceive the usefulness of their AoD training?
2. How much professional support to engage in AoD counseling practice do psychologists report having?
3. What are psychologists' perceptions of role adequacy and role legitimacy to practice AoD counseling, and their level of motivation and reward from providing AoD counseling?
4. What views do psychologists have on mandating graduate AoD training?
5. What views do psychologists have on mandating AoD content on the Examination for Professional Practice for Psychologists (EPPP)?
6. What views do psychologists have on mandating continuing AoD education?
7. What do psychologists believe is the most appropriate way to respond to the withdrawal of the APA Certificate of Proficiency in the Treatment of Alcohol and Other Psychoactive Substance Use Disorders (APA-CPP)?

Significance of the Study

Studying factors that may lead to the improvement in psychologists' functioning as AoD counselors is an especially timely issue, as the AoD field grapples with the

challenges of responding to dually diagnosed clients, incorporating empirically supported treatments, and implementing results-oriented management (SAMHSA, 1998).

Compared to other professions, relatively little research has been conducted specifically on psychologists' functioning as AoD counselors and its predictors, which the current study sought to address (APA Practice Directorate, 2003, 2004). It is crucial that psychologists' functioning as AoD counselors is assessed in order to inform workforce and policy development and to ensure that clients with SUDs receive the highest quality of care.

It is also important for the field of psychology to examine its own efforts in training students and clinicians, and supporting AoD counseling practice (Addy et al, 2004; Roche, 2009; Roche & Pidd, 2010; Washton & Zweben, 2011) in order to identify interventions that would improve psychologists' functioning as AoD counselors. Equipped with such knowledge, the profession can go a long way toward breaking down the barriers to providing quality services to substance-using clients.

The current study hoped to provide valuable information on the factors that may increase psychologists' motivation and reward from providing AoD counseling, and their feelings of confidence and legitimacy to practice AoD counseling (Addy et al, 2004; Roche, 2009; Roche & Pidd, 2010; Washton & Zweben, 2011).

A major limitation of prior studies on practitioners' functioning as AoD counselors is that they have largely focused on the role of AoD training and attitudes towards substance-using clients, without exploring the role of social support. The current study represented a significant step towards developing a more comprehensive

understanding of key workplace factors involved in shaping psychologists to be dedicated, motivated, and competent AoD counseling providers.

Furthermore, few studies have simultaneously attempted to examine the predictive power of individual versus contextual factors on mainstream practitioners' functioning as AoD counselors (Lightfoot & Orford, 1986). Thus, the relative importance of provider versus contextual factors in influencing clinicians' functioning as AoD counselors remains unclear. This limits the understanding of how to best intervene in order to improve mainstream practitioners' functioning as AoD counselors. As such, the current study sought to explore the predictive power of AoD training versus professional support on psychologists' functioning as AoD counselors.

Due to the failure of many psychologists to comply with professional AoD-counseling practice standards, psychologists may find themselves excluded by the government and managed care systems who fund AoD treatment services from the right to provide AoD treatment services.

This potential problem may be exacerbated by fact that the field of psychology has failed to provide its own path for psychologists to become certified in AoD counseling. Thus, currently, the field is at a crossroads where it must decide its level of involvement in AoD counseling practice and, relatedly, what action to take in relation to the withdrawal of the APA-CPP.

To examine psychologists' opinions about this important topic, the current study sought to survey this population regarding their views on the withdrawal of the APA-CPP, and their beliefs about whether or not the profession should mandate AoD education in graduate schools, on licensing exams, and for license renewal. It was hoped

that the results of the study would shed light on solutions psychologists see as the most feasible and appropriate for meeting their AoD training and certification needs. The study also hoped to stimulate participants' critical thinking about their own functioning as AoD counselors, as well as that of the profession as a whole.

Chapter Summary

In summary, Chapter One discussed the AoD epidemic, stigma against the substance-using population, the shortage of AoD treatment providers, and its negative effects on the quality of AoD treatment services available to substance-using clients. The chapter also examined the AoD-treatment workforce crisis and challenges that psychologists face that negatively affect their ability to practice AoD counseling. Finally, the chapter summarized the statement of the problem, the purpose of the study, the research questions, and the significance of the study. Chapter Two will follow with a review of relevant literature that the current study built upon.

CHAPTER 2

LITERATURE REVIEW

Chapter Two will present a critical review of the literature in order to identify key gaps in knowledge and to inform the methodological approach of the current study. First, the early history of the AoD treatment system will be discussed, followed by an examination of the role that mainstream workers hold in the AoD treatment field. Second, AoD counseling training standards will be discussed, followed by the creation of the APA-CPP, and the establishment of the APA addictions Divisions. Third, the theories of AoD-counselor functioning will be presented. Fourth, the chapter will present research on practitioners' AoD knowledge, skills, and training; clinicians' motivation to work in the AoD field; and their perceptions of adequacy, legitimacy, and professional support to practice AoD counseling. Fifth, research on the predictors of clinician's functioning as AoD counselors will be presented. The chapter will conclude with a summary of the literature, research gaps, review of the purpose of the study, and chapter summary.

Early History of the AoD Treatment System

In the United States, mental health counseling and addiction counseling developed through completely independent systems, with separate routes of service delivery and reimbursement. The mental health and AoD treatment fields diverged in 1935, when Dr. Robert Smith and Bill Wilson (a physician and lawyer, respectively, who struggled with alcoholism) formed Alcoholics Anonymous (AA), a peer support self-help program for people struggling with Alcohol Use Disorder.

Wilson and Dr. Smith felt that the psychiatric and psychoanalytic community failed to help treat their alcohol addiction. Many of these professionals held moralistic attitudes about the etiology of SUDs, viewing excessive substance use as sinful and weak (Margolis & Zweben, 2011). Helping professionals also found clients with SUDs difficult to treat, notoriously disliking, and avoiding AoD counseling practice (Imhoff, 1991).

Imhoff states that, historically, psychologists and other mental health providers, untrained in fully understanding the biology of substance abuse and its effects on personality and therapeutics, reacted with feelings of inadequacy and frustration toward substance-using clients. Psychosocial treatment for SUDs was widely perceived by professionals as ineffective and few people with AoD problems came to psychologists for treatment (Margolis & Zweben, 2011).

AA became very popular where people struggling with addiction found supportive, understanding help, and learned skills of recovery. Former users began to play a leading role in designing and implementing specialty intensive AoD treatment programs for those with severe Substance Use Disorder. Human service professionals in

the mainstream workforce were largely absent from AoD treatment provision, usually referring clients with SUDs to specialty AoD programs (Deitch & Carleton 1997).

Current Role of Mainstream Professionals in AoD Treatment

Over the past 30 years, a major shift in thinking has occurred about AoD treatment, with an increasingly important role played by mainstream professionals in AoD screenings and brief interventions for SUDs. These professionals (e.g., psychologists, social workers, medical doctors, police) have extensive contact with the wider community, routinely encountering individuals with SUDs in their work settings. In fact, individuals with AoD problems most often come into contact with primary care workers in the health care and social service systems seeking care for other presenting problems. Most of them never seek professional help from an AoD specialist treatment program (Freimuth, 2009).

Studies have shown that the majority of clients on a psychologist's caseloads have SUDs, suggesting that the provision of AoD counseling is integral to the vast majority of psychologists' clinical practices (APA Practice Directorate, 2001, 2003, 2004; Cellucci & Vik, 2001; CSAT, 2006; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; Harwood, 2002; von Steen, Vaac, & Strickland, 2002). As part of CSAT's (2006) multidisciplinary research initiative to study AoD-counseling practices, APA conducted a series of studies from 2001 to 2003 that took snapshots of psychologists' practice behaviors by looking at their most recent episodes of care within a 72-hour window.

The surveys help illuminate how clients with AoD problems present and how they are treated in general psychology practice settings. Participants reported that the treatment of AoD problems in specialty settings was rare, suggesting that psychologists

play a significant role in addressing the substance-using population's treatment needs (APA Practice Directorate, 2003, 2004).

The majority of AoD-related interactions occurred in private practice settings where most clients were seeking treatment for affect-related issues (i.e., mood, anxiety, or adjustment disorders). Specifically, of the 200 psychologists surveyed in 2001, the majority (76%) treated SUDs as a secondary disorder, whereas a minority (35%) treated SUDs as a primary disorder. The majority of those clients had trouble with drinking, followed by smoking, marijuana, cocaine, and prescription sedative tranquilizers (APA Practice Directorate, 2003; 2004).

In the 2003 APA Practice Directorate survey, psychologists reported that 25% of their clients had subclinical AoD problems, or past or current AoD problems, with half of them in recovery from SUDs. These findings suggest that there is significant comorbidity of emotional disorders with SUDs in psychologists' practice settings. They also reveal that AoD issues intersect with a wide range of presenting concerns in the psychologists' office (Holloway, 2003; Smith, 2001).

Likewise, in a survey of 144 Idaho psychologists, Cellucci and Vik (2001) found that, on average, one fourth (24%) of the clients on psychologist' caseloads had SUDs. Clients typically did not seek treatment for AoD issues, and psychologists reported a high rate of comorbid psychiatric conditions (over 50%) (Cellucci & Vik, 2001). Of the participants, rural psychologists reported seeing the highest percentage of clients with SUDs. Cellucci and Vik noted that the need to provide training on SUDs might be even greater in rural states such as Idaho where psychologists must function without many organized AoD treatment services.

da Silva Cardoso et al. (2006) conducted a survey of 76 rehabilitation psychologists from APA Division 22 to examine preparedness to treat people with disabilities who have primary or secondary substance-related problems. Typical conditions participants treated were traumatic brain injuries, spinal cord injuries, chronic pain, and depression. Participants commonly worked with clients who used a variety of illicit drugs. Consistent with APA (APA Practice Directorate, 2001; 2003, 2004) and Cellucci and Vic's (2002) studies, 5% of clients had a primary diagnosis of AoD abuse problems and 25% had concomitant AoD abuse problems. Of those clients, 44% met DSM-IV criteria for Substance Abuse and 30% for Substance Dependence.

Although it was once thought sufficient for a recovering counselor to handle all AoD problems, it has become clear over the past 30 years that other significant problems are part of a constellation of sociopsychological difficulties in persons with SUDs that they are not prepared to treat. For example, patients in the Veteran Administration health care systems exhibit high rates of SUDs and dual disorders. Health care systems often encounter patients with SUDs, complicating the treatment of medical problems. Correctional facilities house an estimated 80% of offenders who have committed crimes related to or under the influence of SUDs. School systems have high rates of underage drinking and drug use. Universities have a high rate of binge drinking that contributes to injuries, conduct problems, and academic failure (Freimuth, 2009).

Scholars also noted that rapid changes in health care contribute to the increasing demand for mainstream workers in the AoD treatment field. These changes demand competent program evaluation to demonstrate the outcomes of services, which can only be undertaken by professionals with advanced degrees (Margolis & Zweben, 2011).

Psychologists have become highly involved in developing evidence-based treatments for SUDs, such as cognitive-behavioral modalities, relapse prevention, and motivational enhancement treatment. Treatment centers have begun to incorporate these new strategies into their treatment protocols (Margolis & Zweben, 2011).

AoD treatment has also broadened to include the prevention of AoD-related problems and the minimization of acute harm resulting from risky patterns of drinking or drug use (Johansson, Akerlind, & Bendtsen, 2005). Over the past three decades, there has been a wide recognition that a large segment of the population would benefit from earlier detection of AoD problems before the problem merits a formal diagnosis and specialist treatment (Roche & Pidd, 2010).

Mainstream practitioners have been recognized as being well-placed to implement prevention and early interventions that include screenings for AoD problems, brief intervention for non-dependent users, and referral and follow-up to the specialist treatment system for dependent users (Freimuth, 2011; Margolis & Zweben, 2011).

Moreover, risky drinking among young people that does not reach diagnostic levels has become an area of growing concern. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) initiative on harmful drinking stresses the importance of addressing alcohol use before it merits a formal diagnosis (Freimuth, 2011).

Harmful drinking is by far the most common form of problematic alcohol use and accounts for more harm to self and others than severe Substance Use Disorder (Freimuth, 2011; Madson et al., 2008). The NIAAA encouraged routine screening to identify “at risk” populations and brief interventions to curb harmful substance misuse and halt its progression into the disease of addiction.

Recent Changes in AoD Training

With the recent changes in the AoD treatment field, mainstream professionals including psychologists must be equipped to handle SUDs (APA Practice Directorate, 2003, 2004). In the 1960s, a widely held perception emerged that training in the AoD treatment field as a whole was not keeping pace with the changes discussed above (APA Practice Directorate, 2001, 2003; Cellucci & Vic, 2001; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; Evans, 2006; Freeman et al, 2004). In response to this concern, the education of addiction counselors became increasingly professionalized based on competencies, credentialing, and best practices research (Fisher 1997; SAMHSA, 1998).

Credentialing has become the primary method of determining minimum competencies for AoD counselors. Currently, certification of addiction counselors is required in every state, usually requiring a high school diploma and a specified number of years of experience in the field (SAMHSA, 1998).

Many human service professionals have graduate degrees in mental health disciplines, including AoD counseling, along with appropriate licenses and certifications (Goodwin & Sias, 2007). Unfortunately, scholars assert that the AoD treatment field is in a chaotic stage of transition as evidenced by a lack of uniformly adopted credentialing standards for those who provide AoD counseling (CASA, 2006; Hoge et al., 2005).

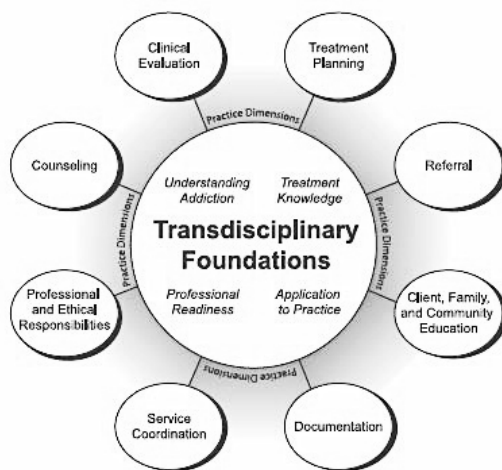
In 1993, SAMHSA created the Addiction Technology Transfer Center (ATTC) network to improve frontline and mainstream professionals' AoD counseling competencies (ATTC, 1995). ATTC established a set of core competencies for addiction counseling in a document entitled "*Technical Assistance Publication (TAP) Series 21: Addiction Counseling Competencies: The Knowledge, Skills and Attitudes of Professional*

Practice“ (SAMHSA, 1998). TAP 21 is considered the basis for education and training of AoD treatment providers. Notably, SAMHSA asserted that TAP 21 should also be studied and emulated by the mental health field (ATTC, 1995; SAMHSA, 1998).

TAP 21 conceptualized AoD counseling competencies using Bloom’s (1956) Knowledge, Skills, Attitudes (KSA) Learning Domains model. According to the model, an addiction counselor should possess the knowledge, skills, and attitudes associated with each competency discussed in TAP 21 (SAMHSA, 1998)

“Knowledge” refers to what clinicians need to know in order to develop proficiency in AoD counseling. “Skills” refer to the behaviors needed for effective performance. “Attitude” refers to beliefs and a state of mind that is consistent with AoD-counseling practice. Using this framework, the TAP 21 AoD Competencies organized the work of the AoD counselor into four “Foundations” and eight “Practice Dimensions” (SAMHSA, 1998) (See Figure 1).

Figure 1. Components of the TAP 21 Competencies Model (SAMHSA, 1998).



“Practice Dimensions” contain eight necessary competencies specific to addiction counselors. They include 1) Clinical Evaluation (screening and assessment), 2) Treatment Planning, 3) Referral (facilitating the client’s use of needed support systems and

community resources), 4) Service Coordination (encompasses case management, client advocacy, and implementing the treatment plan), 5) Counseling (individual, group, couples, and family counseling), 6) Client, Family and Community Education, and 7) Documentation, and Professional and Ethical Responsibilities (SAMHSA, 1998).

“Transdisciplinary Foundations” contain a list of AoD counseling competencies that all disciplines that deal directly with SUDs (e.g., psychology, medicine, social work) need to possess. TAP 21’s inclusion of transdisciplinary foundations reflects the AoD treatment field’s agreement that there are specific AoD counseling competencies that all mainstream clinicians must have (Miller & Brown, 1997).

The Transdisciplinary Foundations include:

1. Understanding Addiction (Current models and theories; the context within which addiction exists; and behavioral, psychological, physical, health, and social effects of psychoactive substances)
2. Treatment Knowledge (Continuum of care; importance of social, family, and other support systems; understanding and application of research; interdisciplinary approach to treatment)
3. Application to Practice (Understanding diagnostic and placement criteria; understanding a variety of helping strategies)
4. Professional Readiness (Understanding diverse cultures and people with disabilities; importance of self-awareness; professional ethics and standards of behavior; the need for clinical supervision and ongoing education) (SAMHSA, 1998).

Notably, in contrast to the AoD treatment field's TAP 21 competency standards, a widely recognized set of core competencies for mental health professionals including the field of psychology does not exist (von Steen et al., 2002). The National Association for Alcoholism and Drug Abuse Counselors (NAADAC) is currently working to standardize the certification process for AoD counselors nationwide, so that all AoD counselors have the same educational and experiential background. NAADAC has already developed standards for the associate's degree, is completing standards for the bachelor's degree level, and hopes to develop standards through the doctoral level (Geri et al., 2010).

AoD Counseling Certification for Psychologists

Multiple professions aim to be the providers of AoD counseling, resulting in much competition (Page & Bailey, 1995). In some instances, legislation prevents psychologists who have not met the specific AoD counseling certification standards of states' AoD counseling boards to be able to practice AoD counseling (West et al., 1999).

Nathan (1997) exclaimed that,

The push to develop certification barriers across the nation, primarily to enfranchise selected alcoholism counselors at the expense of other clinicians, including many psychologists and other professionals, is extremely unfortunate. It is designed to maintain an unuseful clinical exclusivity that never had much reason to exist (p. 15).

The College of Professional Psychology (hosted by the APA Practice Organization) historically provided a way for psychologists to have a credential speaking to their proficiency in the area of AoD treatment. Beginning in 1996, psychologists could acquire the Certificate of Proficiency in the Treatment of Alcohol and Other Psychoactive Substance Use Disorders (APA-CPP) to demonstrate proficiency in AoD counseling.

Rather than advanced or specialist-level expertise, the APA-CPP standards reflect the level of proficiency necessary for acceptable, entry level professional functioning in

the AoD treatment field. Requirements for the APA-CPP include: 1. Current state or provincial psychology license in good standing, 2. Treatment of SUDs for at least one of the last three years, 3. Provision of health services in psychology, and 4. Passage of the APA-PCC examination. To stay certified, recipients must then take 18 hours of continuing education during each three-year certification period (Clay, 2000).

The core knowledge areas included in the proficiency examination are organized into 12 knowledge categories: 1) Clinical pharmacology and clinical epidemiology of psychoactive substances, 2) Etiology of SUDs, 3) Initiation, progression, and maintenance of SUDs, 4) Course/natural history of SUDs, 5) Prevention, early intervention, and harm reduction; 6) Screening and assessment of substance use, 7) Diagnosis and comorbidity, 8) Models and approaches to treatment, 9) Planning, implementing, and managing treatment and the course of recovery, 10) Issues in specific populations, 11) Research knowledge; and 12) Legal and ethical Issues (Clay, 2000; Miller, 2002; National Technology Transfer, 2007).

Establishment of APA Division 28 and 50

In the 1960s, a movement led by the Society of Psychologists in Addictive Behaviors (SPAB) and APA Division 42's (Psychologists in Independent Practice) Committee on AoD emerged to advocate for SBAP having APA Division status (Chiert et al., 1994). APA Division of Psychopharmacology and Substance Abuse (Division 28) was successfully formed in 1967 for psychologists interested in the behavioral effects of psychoactive or central nervous system medicine, drugs, and chemicals. The Division promotes teaching, research, and dissemination of information on the effects of drugs on behavior.

In 1993, APA admitted the Society of Addiction Psychology as its 50th official special interest Division focusing on AoD-counseling practice issues that extended beyond Division 28's research focus. The Division's mission is to:

promote advances in research, professional training, and clinical practice within the broad range of addictive behaviors including problematic use of alcohol, nicotine, and other drugs and disorders involving gambling, eating, sexual behavior, or spending (APA Division 50, 2012).

To become a member of Division 50, one must be eligible for membership of the APA and have an interest in the field of SUDs or other addictive behaviors. Scholars asserted that the creation of APA Divisions 28 and 50 suggests that, over time, psychologists have become increasingly aware of the importance of the field's involvement in the study and treatment of SUDs (APA Division 50, 2012).

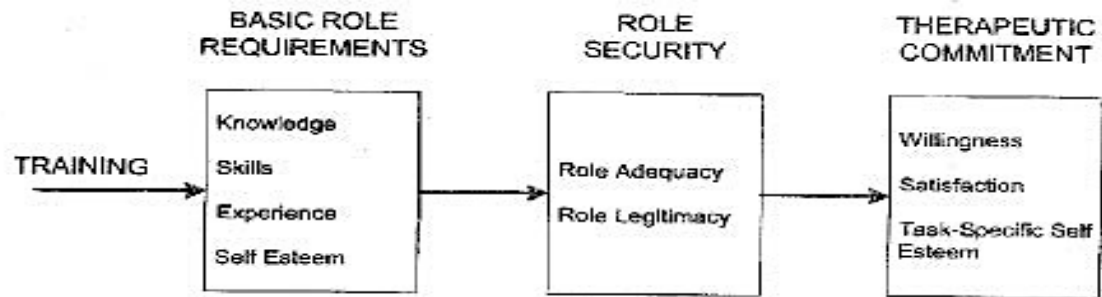
Theories of Functioning as an AoD Counselor

The following section discusses the leading theories of mainstream practitioners' functioning as AoD counselors, which serve as frameworks for the current study. The models that will be presented include the Model of Therapeutic Commitment, the Model of Situational Constraints, and the Workforce Development Model.

Model of Therapeutic Commitment

Shaw, Cartwright, Spratley, and Harwin (1978) pioneered the study of mainstream practitioners' reluctance to assume AoD-counseling roles. They developed the Model of Therapeutic Commitment to predict mainstream practitioners' therapeutic commitment, which refers to clinicians' willingness to practice AoD counseling and their satisfaction from being an AoD counselor (See Figure 2).

Figure 2. The Model of Therapeutic Commitment (Gorman & Cartwright, 1991).



Shaw et al. (1978) used Role Theory to inform their Model of Therapeutic Commitment. A role is a set of rights, expectations, and norms that are considered appropriate by others based on the position that a person occupies in society. Role Theory postulates that people modify their behavior to match their role identity standards. Satisfactory role enactment is associated with positive affect, whereas distress can result if behavior is perceived to be incongruent with one's identity. When discrepancies occur, individuals alter their behavior, the situation, or justify their behavior to reduce dissonance. Shaw et al. utilized Role Theory to help understand the process that mainstream practitioners go through when adopting AoD-counseling roles.

Shaw et al.'s (1978) Model of Therapeutic Commitment theorizes that practitioners need to meet "basic role requirements" in order to practice AoD-counseling effectively. Specifically, they need to obtain AoD-related knowledge and skills, experience working with clients who have AoD issues, and sufficient self-esteem to seek support from others who are experienced, knowledgeable, and skilled in AoD counseling.

Shaw et al.'s (1978) model holds that mainstream practitioners who meet basic role requirements develop positive perceptions of confidence and legitimacy to conduct AoD counseling (i.e., role security), which in turn will lead to feelings of motivation and

satisfaction from engaging in AoD counseling (i.e., therapeutic commitment) and the ability to respond competently to clients' AoD issues.

Cartwright (1980) developed the *Alcohol and Alcohol Problems Perception Questionnaire (AAPPQ)* to test the Model of Therapeutic Commitment. The instrument has five subscales: 1) motivation and willingness to work with drinkers, 2) expectation of work satisfaction working with drinkers, 3) feelings of adequacy of knowledge and skills in working with drinkers, 4) extent of feeling the right to work with drinkers, and 5) specific self-esteem tied to working with drinkers (Shaw et al., 1978). Responses contained a seven point Likert scale ranging from *strongly agree* to *strongly disagree* for each individual item.

Various subsections of Shaw et al.'s (1978) model have been tested and supported. Studies have consistently shown that education, experience, and AoD support are related to stronger role perceptions, higher motivation and satisfaction from responding to AoD issues, and higher number of patients with alcohol problems being treated by mainstream practitioners (Anderson et al., 2003; Cartwright, 1980; Gorman & Cartwright, 1999; Lightfoot & Orford, 1986; Skinner, 2005).

Reflecting on Shaw et al.'s (1978) work, Anderson (2006, p. 750) concluded that the Model of Therapeutic Commitment "remains a guide today as to what still has to be done, everywhere, as it did 30 years ago." Similarly, Amodeo (2000) asserted that,

The Cartwright model is an important reference point because it captures crucial changes in self-perception on the part of helping professionals as they move from being relatively uninformed to being skillful in responding to AoD problems (p. 1510).

The Situational Constraints Model

Lightfoot and Orford (1986) critiqued Shaw et al.'s (1978) model, pointing out that it does not take into account the influence of helping professionals' environment on their therapeutic commitment to engaging in AoD counseling practice. Lightfoot and Orford built on Shaw et al.'s model by introducing the variable of "situational determinants." Situational determinants include factors such as time resources, case priorities, departmental policy, modeling from colleagues, collaboration with specialists, and opportunities for involvement with clients' AoD issues within one's organizational policy and attitudinal context.

Lightfoot and Orford (1986) proposed that,

Rather than role support, experience, education, and self-esteem per se being seen as the main variables effecting AoD-counseling therapeutic attitude, it is argued that the effects of these factors are best viewed as contingent upon situational influences operating within agents' occupational contexts (p.749).

In other words, Lightfoot and Orford (1986) suggested that the influence of basic role requirements on therapeutic commitment is dependent upon overcoming situational constraints within the mainstream professional's work environment. They developed an 18-item *Alcohol Problems Occupationally Perceived Questionnaire (APOPQ)* to measure situational constraints. Items on the APOPQ were rated on a 7-point Likert scale, ranging from 1=*strongly agree* to 7=*strongly disagree*.

Lightfoot and Orford (1986) confirmed their model, finding that an increase in occupational constraints among a sample of social workers was related to little effect of basic role requirements on role security and decreased therapeutic commitment. These practitioners reported significant barriers to involvement in AoD counseling including their departments having policies that limited their ability to provide AoD counseling;

receiving the message within their department that they didn't have the right to interfere in SUD cases; receiving little or no encouragement from their seniors to get involved in the provision of AoD counseling; having few colleagues who had had success in dealing with SUDs; lacking local backup or example in treating AoD issues; and having limited time and agency resources to put any knowledge of SUDs to use. Lightfoot and Orford concluded that examining mainstream practitioners' work constraints contributes to a greater understanding of their disinterest in providing AoD counseling.

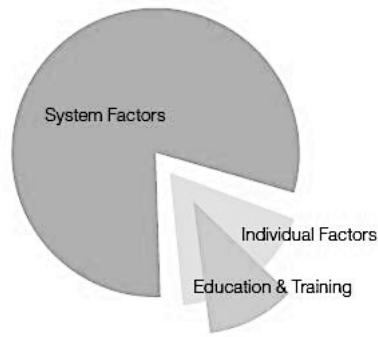
More recently, Albery et al. (2003) found support for the Situational Constraints Model in a sample of mainstream professionals. The levels of therapeutic commitment were explained by the direct effect of situational constraints. Moreover, experience with working with drug users and education on drug-related issues had predominantly indirect effects on therapeutic commitment via situational constraints.

The SOTI-BES Workforce Development Model

Addy, Skinner, Shoobridge, Freeman, Roche, Pidd, and Watts (2004) developed the SOTI-BES Workforce Development (WFD) Model for Australia's National Research Centre for Education and Training on Addiction (NCETA), which uses a systemic approach to understanding barriers to clinicians' willingness to provide AoD counseling.

The basic premise of the SOTI-BES WFD Model is that while education and training are important, more attention needs to be given to the systemic and organizational context in which workers operate and the wider systems, which ultimately determine whether specific AoD counseling practices can be put in place (Roche et al., 2009; Roche & Pidd, 2010) (See Figure 3).

Figure 3. Theorized Influence of Individual Factors Relative to Systems Factors (Roche & Pidd, 2010).



Addy et al. (2004) argued that, in reality, a substantial proportion of mainstream professionals operate in organizations with particular policies, procedures, and established work practices that are not supportive of them being AoD counselors.

Similar to the systemic issues facing the United States' AoD treatment workforce, Australia faces issues such as poor salary, low funding and resources, lack of career development opportunities, high workload and stress, stigma of AoD counseling, and limited supervision (Pidd et al., 2004)

Students also operate in school environments that facilitate, are indifferent to, or hinder their ability to provide AoD counseling. Addy et al. (2004) asserted that mainstream professionals need the system to support and sustain them as they transfer their AoD education into clinical practice.

Furthermore, Addy et al., (2004) endorsed a top down approach combined with a bottom up approach that embeds professionals' individual issues such as the lack of training within the context of larger AoD treatment workforce, organizational, and systemic forces (See Figure 4). Table II shows SOTI-BES WFD's view of training as merely one aspect of a much broader array of essential elements to mainstream practitioners' involvement in the provision of AoD counseling.

Figure 4. Bottom Up Approach to AoD-Counseling Workforce Development (Roche & Pidd, 2010).



Table II. Examples of Individual versus Organizational and Structural Factors (Roche, 2009).

Individual Factors	Organizational and Structural Factors
Knowledge Skills Attitudes	Policy Funding Recruitment and retention Accreditation Resources Support mechanisms Incentives

The SOTI-BES WFD Model identifies four levels at which workforce development operates (See Table II) and three central aims or overriding principles. The four levels at which WFD operates are: **S**ystems, **O**rganizations, **T**eams, and **I**ndividuals (SOTI). The Systems domain addresses factors that impact on the functioning of the AoD treatment organization as a whole, such as funding and legislation (Addy et al., 2004).

The Organizations domain addresses factors in the working environment such as workplace policies, resources, availability of feedback, supervision, workload and other pressures, and the availability of support and general working conditions (e.g., job security, remuneration) (Addy et al., 2004).

The Team domain addresses factors that relate to a team environment within the work situation such as team culture, team capacity, team communication, formal and informal support, and team morale. Lastly, the Individual domain relates to the personal characteristics, beliefs, and views of individual workers (Addy et al., 2004).

At each of the four levels, Roche and Skinner (2005) identified a range of workforce development strategies that can be implemented to ensure high quality AoD treatment service delivery. They asserted that the key to effective workforce development lies in the capacity of the field to engage in endeavors that represent a coordinated and collaborative approach across multiple levels. The application of only a single workforce development strategy is likely to be of limited effectiveness.

The three central aims of the SOTI-BES WFD Model are: **Best Practice**, **Effectiveness**, and **Sustainability**. **Best Practice** refers to the commitment by workers, organizations, policy makers, and funders to provide high quality evidence-based AoD treatment. **Effectiveness** refers to the availability of high quality services of established efficacy. **Sustainability** refers to the establishment of enduring mechanisms to secure the human and financial resources required for delivery of high quality and effective AoD treatment services (Roche & Skinner, 2005).

Research on training transfer supports the WFD approach's systemic approach, finding that a range of factors (e.g. encouragement from colleagues and peers, organizational policies and procedures that support mainstream professionals' involvement in AoD counseling) impact an individuals' willingness and capacity to transfer knowledge and skills to work practice (Addy et al., 2004).

Addy et al. (2004) asserted that a positive and enthusiastic attitude toward mainstream practitioners' involvement in the provision of AoD counseling is likely difficult in a workplace that does not value, support, or recognize this type of work (e.g. no formal policies or procedures, little recognition, reward, or encouragement). In contrast, a supportive supervisory and work setting allows individuals to gain experience

in a non-threatening environment, develop realistic expectations, and further develop their AoD skills and knowledge from more experienced colleagues.

In 2004, NCETA commissioned Addy et al. (2004) to undertake the development and evaluation of an instrument called the *Work Practice Questionnaire (WPQ)* to measure a wide range of factors (i.e., individual, team, workplace, and organizational) hypothesized to effect clinicians' involvement in AoD counseling practice. In a validation study of the *WPQ*, Addy et al. confirmed the Workforce Development Model, finding that all four practice factors were positively correlated with the frequency with which Australian nurses and mental health professionals conducted AoD screenings, assessments, and brief interventions, and made referrals.

The WFD approach makes a significant contribution to the literature by moving beyond AoD education and training to examining the role of organizational and team culture (i.e. supportive supervisors, managers and colleagues) on mainstream professionals' work with substance-using clients (Addy et al., 2004). The current study utilized the *WPQ* in order to study the impact of professional support variables on psychologists' functioning as AoD counselors. This survey was chosen because it allowed the researcher to bridge the research gap through the study of these systemic variables, which have long been neglected in prior research.

Research on Mainstream Professionals' Functioning as an AoD Counselor

Research on health professionals' attitudes towards providing AoD counseling has been conducted since the 1970s. Studies can be classified into two main groups:

1) descriptive studies related to clinicians' AoD counseling practice, and 2) cross-sectional studies examining the impact of a number of factors on practitioners'

functioning as AoD counselors. The studies are characterized by diverse samples (e.g. social workers, psychologists, nurses, police, teachers, psychiatrists, and students) and measurement instruments (e.g. single-item vs. validated scales) (Skinner et al., 2009). The following section provides an overview of the insights gained from the literature, starting with psychologists' interest in, and motivation, and reward from engaging in AoD counseling practice; followed by mainstream professionals' AoD training, AoD knowledge, perceptions of professional support, and attitudes toward AoD counseling.

Interest in AoD Counseling

Miller (2000) asserted that despite the fact that academic and research psychologists pioneered the way to new evidence-based treatments for SUDs, only a small minority of psychologists has a significant clinical practice impact within the addiction field (APA, 2001; APA Practice Central, 2011; Cellucci & Vik, 2001; da Silva Cardoso, Pruett, Chan, & Tansey, 2006).

Research suggests that despite the great demand for AoD treatment services, psychologists lack interest in pursuing a doctoral-level AoD counseling credential. Studies consistently reveal that few psychologists have the APA-CPP (APA, 2001; Cellucci & Vik, 2001; CSAT, 2006; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; IOM, 1997; Personal communication, College of Professional Psychology, July 26, 2011; Smith, 2001). For example, in 2001, APA found that only 7% of 200 randomly surveyed psychologists held the APA-CPP. Another 3.5% held state AoD-counseling certification, and 1.5% were certified AoD counselors (Smith, 2001). Roughly 1,000 psychologists held the APA-CPP in 2002.

In a sample of psychologists from rural Idaho, Cellucci and Vik (2001) found that only 51% of participants were aware of the APA-CPP and only one held the certificate. Only one third (36%) of the respondents expressed interest in the APA-CPP, stating that they desired greater knowledge and training in AoD issues due to their high prevalence.

The majority of psychologists were not interested in the APA-CPP and equated AoD treatment to a specialty area. Others stated that having the APA-CPP certification was not necessary (Cellucci & Vik, 2001). In 2006, da Silva Cardoso et al. found little change, with only 53% of surveyed rehabilitation psychologists showing awareness of the existence of the APA-CPP. Only 2.6% of the participants held the certificate and 23% expressed an interest in obtaining it.

In January 2011, the APA College of Professional Psychology stopped certifying psychologists who want to become AoD specialists. The APA's Practice Central (2011) website posted the following announcement:

As of January 1, 2011, we are no longer accepting new applications for the [APA-CPP]. We continue to support the credential for previously certified psychologists who maintain their certification by engaging in appropriate continuing education.

The APA (2012) explained that the certificate was withdrawn because licensed psychologists were not signing up in sufficient numbers to support the effort needed to sustain the certificate financially. In a personal communication in 2011, the College of Professional Psychology (CPP) informed that there were merely around 800 United States and Canadian psychologists who held the APA-CPP (Personal communication, College of Professional Psychology, July 26, 2011). Psychologists' low interest in the APA-CPP suggests that the profession does not consider the provision of AoD counseling as a central activity for psychologists.

The Society of Addiction Psychology (SoAP) asserted that the withdrawal of the APA-CPP was a major setback to acknowledging the unique contributions that psychologists make to the AoD field (APA, 2011; The AoD Newsletter, 1996; APA Division 50 Forum Archives, June 2011). Two years after the withdrawal of the certificate, APA Division 50 issued the following formal statement regarding the status of the APA-CPP:

The Society of Addiction Psychology (SoAP) plays an active role, along with 28 [Division of Psychopharmacology and Substance Abuse] in helping to maintain the definition of this proficiency....SoAP is exploring avenues to re-instate it for individuals who would like to acquire it, while also examining other avenues for credentials in addiction treatment (APA, 2012).

SoAP stated that in order to remain an ethical, legitimate, and viable force in the managed care area, psychologists needed to reevaluate the withdrawal of the APA-CPP. Furthermore, psychologists were encouraged to take steps to create an identification that indicates a unique body of knowledge and expertise to address SUDs (APA, 2011; The AoD Newsletter, 1996; APA Division 50 Forum Archives, June 2011).

On March 28, 2013, Division 50 made an announcement on the Division's listserv, asking students and psychologists to sign a petition urging the Board of Directors of the APA to reinstate the APA-CPP. The Board argued that the APA-CPP needed to be reinstated so that psychologists would be prepared to treat the expected influx of clients with SUDs caused by mental health and addiction parity reform (Kelly, 2014).

Most recently, on April 22, 2014, John Kelly, Ph.D., the President of Division 50, announced on APA Division 50's listserv that the APA has agreed to reinstate the APA-CPP, which will occur within the next few months (Kelly, 2014).

Although APA Division 28 and Division 50 have made progress in promoting psychologists' involvement in AoD counseling practice and research, only a small number of psychologists have shown interest in these Divisions. According to APA's (2011) annual demographic report, of APA's 96, 100 members, merely 473 were members of Division 28 and 918 were member of Division 50. Notably, this is a very small membership compared to other APA Divisions and given the immensity of the epidemic proportions of SUDs in the United States. It also suggests that the majority of psychologists lack interest in AoD counseling practice.

Motivation and Reward

In the AoD-counseling literature, "motivation and reward" refers to the extent to which mainstream practitioners are willing to respond to AoD issues and are satisfied with assuming AoD-counselor roles. Professionals with low perceptions of motivation and reward find AoD counseling frustrating, unimportant, and refer clients with SUDs out (Addy et al., 2004).

AoD motivation and reward is an important variable to investigate as it is has been found to be associated with professionals' AoD counseling practices. For example, in a sample of nurses and mental health professionals, Addy et al. (2004) found that interest in pursuing a career in the AoD field and high motivation and satisfaction from providing AoD counseling were associated with the frequency with which practitioners conducted AoD screenings, assessments, and brief interventions, and making referrals.

Amodeo (2000) examined the influence of AoD training on social workers in mainstream treatment settings. Amodeo found that interest and commitment to AoD counseling practice was related to participants 1) working with substance-using clients in

their primary work setting, 2) accepting roles or titles that identified them as specialists, 3) seeking out jobs that made this possible, and 4) using the acquired assessment and intervention skills they had gained through training.

Some research suggests that graduate students in psychology are not very interested in AoD counseling practice (Lubin, Brady, Woodward, & Thomas 1986; Mendez, 2006). In Mendez's study, when graduate student participants were asked how likely they were to seek a job in the AoD treatment field, as many as 37% chose "*not at all*" as their response. Another 43.4% chose either "*a little or somewhat*" as their response. Only 18.5% stated that they were "*much or very much likely*" to seek a job in the AoD treatment field. Hence, only about one-fifth of the graduating students were likely to seek a job in AoD treatment practice upon graduating.

Mendez (2006) reflected that the above findings are incongruent with the "satisfaction question" in which 29% of the students reported that they found working with substance abusing clients satisfying. Mendez concluded that satisfaction with working with this population is not the only reason why a student would pursue a job in the AoD treatment field.

Mendez (2006) hypothesized that perhaps the lack of experience, knowledge, and skills are mediating factors in students not intending to pursue a career in AoD counseling practice. Nevertheless, the fact that 70% of participants did not find satisfaction in providing AoD counseling is concerning in light of its negative effect on involvement in AoD-counseling practice. Mendez concluded that working with substance abusing clients continues to be an undesirable population among students graduating in the mental health fields.

In contrast, other research suggests (Allnut, 2004; Skinner et al., 2005) that students and mental health professionals are motivated to pursue AoD counseling practice. For example, Allnut found that, despite having low familiarity with SUDs, graduate psychology students were interested and willing to treat dually diagnosed clients.

Similarly, in a sample Australian mental health professionals and nurses, Skinner et al. (2005) found that they had high levels of motivation to respond to AoD issues. The current study sought to address the discrepant findings and limited generalizability of prior research to practicing psychologists by surveying the extent to which they feel motivated and rewarded by providing AoD counseling.

AoD Training

Studies overwhelmingly show that psychologists have significant deficits in AoD training (Chiert et al., 1994; Lubin, Brady, Woodward, & Thomas, 1986; Margolis & Zweben, 2011; Selin & Svanum, 1981). The following section will summarize studies on graduate AoD coursework and internship training, the extent of mainstream professionals' AoD counseling experience, and continuing AoD education.

Graduate AoD Education

A 1981 survey of 74 APA-approved clinical psychology graduate programs demonstrated a modest level of research activity, coursework, and clinical AoD training. Most students received didactic information that was a small part of a larger psychopathology or clinical methods course. Only 7% received direct clinical experience in AoD treatment centers. Of the participants, 70% indicated that their AoD training was poor. The majority of participants perceived their ability to treat SUDs (i.e., assessing,

conceptualizing, treatment planning, using evidence-based practices) as inadequate (Selin & Svanum, 1981).

Eight years later, Chiert, Gold, and Taylor (1994) conducted a survey of 95 APA-accredited doctoral clinical psychology programs to ascertain changes in doctoral AoD training. Although 38% of the programs offered at least one course on SUDs, 95% were electives. Moreover, only a minority of programs allocated more than 10-12% of a required course on SUDs.

Although there was evidence that faculty interest in and research projects related to AoD increased over time, this did not translate into expanded course offerings, practicum placements, workshops, colloquia, or AoD seminars (Chiert et al., 1994). Chiert et al. concluded that, in spite of APA and APA-accredited training programs' growing recognition for the need for additional AoD training, no definitive action had been taken to improve training.

Ten years later, Allnutt (2004) surveyed 93 graduate psychology students to examine the extent of training that they received in co-occurring SUDs and mental health disorders. Of the participants, 76% reported counseling clients with co-occurring disorders, but only 43% had taken any AoD coursework, and 57% received 10 or fewer supervision hours in SUDs. They also displayed low familiarity with SUDs, averaging 61% correct on a test of terms and concepts related to SUDs.

In 2008, Madson, Bethea, Daniel, and Necaie surveyed 136 masters and doctoral counseling and counseling psychology students, seeking to reassess the adequacy of AoD training in psychology programs. Although 54% of participants often worked with AoD problems, only 34% completed a course on AoD treatments. Only 29% of participants

reported that their program expected competency in addressing coexisting psychiatric conditions. The majority (70%) of students reported a strong demand for integrated AoD training, and endorsed the opinion that the study of SUDs should be a core component of graduate school.

Anavai et al. (1999) surveyed 739 licensed clinical and counseling psychologists regarding their education and training in AoD issues. Although the majority (91%) of psychologists encountered SUDs in their daily work, as many as 75% had received no formal coursework on the subject, and 54% had received no training in SUDs even during their internship.

In a survey of 144 Idaho psychologists, Cellucci and Vik (2001) found that although the majority (89%) had contact with SUDs, fewer than one fourth to one third received such training. The majority (66%) of participants rated their graduate training as inadequate preparation for their practice and 63% indicated that AoD coursework should be required in graduate school.

da Silva et al. (2006) conducted a survey of 76 rehabilitation psychologists from APA Division 22 to examine their preparedness to treat people with disabilities with primary or secondary AoD-related problems. Despite wide involvement in treating AoD-related problems, 59% of participants reported poor or very poor preparation in AoD counseling practice in their graduate program coursework, practica, and internships.

The majority (73%) of participants believed that AoD training should be mandatory in the professional psychology training curriculum. An encouraging finding was that more recent graduates reported having had more AoD training, whether through graduate courses or through practica (da Silva Cardoso et al., 2006).

In 2008, Craig sampled 131 Massachusetts and New Hampshire psychologists who reported having limited AoD education and training in their doctoral programs. Of the participants, 39.7% had no graduate training in which AoD issues were a topic and 87% received fewer hours than the equivalent of one semester of graduate coursework. Similar to Chiert et al. (1994), Craig concluded that although graduate-level AoD training in counseling and counseling psychology programs has made progress with inclusion of AoD content in curricula, such training seems to be largely inadequate.

Most recently, Corbin, Gottdiener, Sirikantraporn, Armstrong, and Probbler (2012) examined the prevalence of training in SUD psychopathology, assessment, and treatment in all APA-accredited clinical and counseling psychology programs by surveying their curriculum webpages and staff research interests. Corbin et al. found that only 30.8% of all surveyed programs offered courses on SUDs. No program stated that SUD training was incorporated broadly through the curriculum. This data supported past research findings that SUD training is scant among clinical and counseling psychology programs.

Furthermore, training varied according to the type of program a student was in, with combined Psy.D./Ph.D. programs offering the most formal AoD training, followed by Psy.D. programs. Ph.D. programs offered the least formal AoD training. On the positive side, at least half of the available AoD courses were required in the surveyed programs. Psy.D. programs were significantly more likely to require these courses than Ph.D. programs. Psy.D. programs were also more likely to have faculty members who had SUDs as their clinical and/or research interest (Corbin et al., 2012).

Corbin et al. (2012) concluded that Psy.D. programs, which view their role as providing primarily clinical training as opposed to research, see a greater need to educate

their students about SUD psychopathology and its treatment. Notably, however, the fact that clinical and counseling psychology programs are overwhelmingly Ph.D. programs poses a problem in that their poor AoD training leads to the majority of psychologists being unprepared to work with clients with SUDs.

Pre-Doctoral Internship Experience in AoD Counseling

Bacorn and Connors (1989) studied the components of alcohol treatment training in 137 APA-approved internship programs that offered a rotation in SUDs. Of the internships, 73% offered a major rotation in AoD counseling. Group psychotherapy and relapse prevention were rated as most relevant to training interns in alcohol treatment. Six other domains including aftercare, Alcoholics Anonymous, marital/family therapy, stress management/relaxation procedures, social skills training, and cognitive therapy were rated as quite relevant. However, the extent to which interns were exposed to these content areas was variable.

In 2006, Glidden-Tracey et al. reported on a Division 50 survey of 153 training directors of APA-accredited internships that sought to assess interns' AoD. While 77% of training directors reported that all interns had contact with SUDs and dual diagnosed clients, only 42% reported that they received formal training to treat SUDs.

Of the sites, 64% offered some rotations in AoD counseling, but only 23% mandated it. Nearly 63% of internship directors reported that they did not conduct evaluations of interns' competence to work with SUDs (Glidden-Tracey et al., 2006). This finding was consistent with a study conducted 22 years earlier by Schlesinger (1984) who found that over half of sampled pre-doctoral internships did not evaluate interns' competencies in AoD counseling and less than 10% required AoD training.

Glidden-Tracey et al. (2006) reported that although many of the sampled internship training directors viewed AoD treatment skills as important in training interns, they admitted that only some relevant training was offered at their sites. The 10 content areas that training directors considered the most important in preparing interns to work with substance-using clients included: relapse prevention, dual diagnosis, differential diagnosis, psychopathology among substance users, cognitive therapy, stress management, treatment outcome research, motivational enhancement, group therapy, and harm reduction. Unfortunately, many training directors reported that only interns on an AoD counseling rotation were exposed to these content areas.

Continuing AoD Education

Geri et al. (2010) observed that the AoD treatment field is young and at an awkward stage of professionalization. Training comes largely from clinical experience and sporadic didactic sessions including self-study, single-session workshops, training institutes, and professional conferences for continuing AoD education development (APA Practice Directorate, 2003; Freeman et al, 2004; Goodwin & Sias, 2007; Hardwood, Kowalski, & Ameen, 2004; Mendez, 2006; SAMHSA, 2008).

In a sample of students from graduate schools of social work, mental health counseling, and marriage and family therapy, Mendez (2006) found that the majority (83%) received limited or no substance abuse content in their academic programs. Instead, the majority (55%) of participants received their AoD education from professional development activities, having taken one to 9 hours or more of continuing AoD education in the past two years.

Consistent with Geri et al.'s (2010) observation, Mendez's (2006) findings suggest that the majority of the student participants received some AoD treatment training through their work setting rather than through their academic program. Nevertheless, in Mendez's (2006) study, 34.8% of participants had not received or attended any continuing education sessions on substance abuse. Alarming, Mendez's findings suggest that many practitioners do not pursue or have access to continuing AoD education.

Anavai et al. (1999) found that, once in practice, psychologists quickly recognized their deficits in AoD counseling, with 86% seeking informal training through workshops and supervision. However, in a publication entitled Workforce FACTS, the NeATCC (2011) reported that as many as 23% percent of AoD counselors stated that training opportunities are only sometimes or rarely provided. Anavi et al. expressed concern that when professional AoD development opportunities are available, they are of poor quality and inadequately prepare professionals for evidence-based AoD counseling practice.

Several studies showed that a significant number of mainstream practitioners do not take continuing AoD education (APA, 2002; NeATTC, 2006; Hardwood, Kowalski, & Ameen, 2004). In 2004, Hardwood et al. were commissioned by CSAT to examine the extent to which six major mental health professional groups (psychiatrists, psychologists, professional counselors, social workers, marriage and family therapists, and AoD counselors) were involved in AoD counseling practice. The study showed that while over two-thirds of practitioners had previously received AoD training, only 50% engaged in AoD-specific professional development in the past year. This finding suggests that the

AoD training that participants received might have been a one-time or occasional occurrence rather than a regular happening.

Similarly, an APA (2002) study found that only 40% of the sampled psychologists received continuing AoD education. On average, participants took eight hours of continuing AoD education in the past year (APA Practice Directorate, 2003). Overall, the literature seems to suggest that, whereas some mainstream practitioners obtain continuing AoD education, many do not pursue professional AoD development activities and lack opportunities to obtain such training.

AoD Knowledge and Skills

Research suggests that a significant number of mainstream practitioners lack the knowledge and skills to provide AoD counseling (APA Practice Directorate, 2001, 2003; Cellucci & Vic, 2001; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; Evans, 2006; Freeman et al, 2004; Freimuth, 2008; Johansson, Akerlind, & Bendsten, 2005; Matthews, Schnid, Conclaves, & Bursley, 1998; McCormick et al, 2000; Salyers et al., 2006; Spirito et al, 2009; Spurr, 1997; Weisner & Matzzer, 2003).

AoD Screening and Assessment Practices

Spirito and Brown University Center for Alcohol and AoD Studies Postdoctoral Fellows (2009) administered the Alcohol Education Inventory- Revised (AEI-R) to 90 mental health trainees to assess their basic knowledge of etiology, diagnosis, and treatment for alcohol use disorders. The measure assessed basic knowledge of alcohol that all mental health professionals treating alcohol problems should have. Pre-doctoral and postdoctoral clinical psychology fellows scored a mere 60% correct which was

relatively similar to scores obtained 10 years prior when the AEI was first developed (Spirito et al., 2009).

Evans (2006) compared the attitudes, beliefs, and knowledge of six different licensed professionals (professional counselors, professional clinical counselors, licensed social workers, licensed independent social workers, psychologists working outside methadone clinics, and certified chemical dependency counselors primarily working in drug-free treatment). Ninety-three percent of the participants reported having deficits in AoD knowledge including methadone treatment. Evans concluded that there is a serious need for providing AoD education to human service providers.

Between 2001 and 2003, the APA Practice Directorate conducted a series of surveys of psychologists' in-the moment practice behaviors in the past 12 months. Participants reported that a substantial number of their clients had subclinical AoD problems. Of the 200 psychologists surveyed in 2001, the majority (76%) treated SUDs as a secondary disorder (i.e., as a consequence of an emotional disorder), whereas 35% treated them as a primary disorder (i.e., as arising independently and not associated with an emotional disorder) (APA Practice Directorate, 2003, 2004; Smith, 2001).

Alan Leshner (2001), the former director of the National Institute on Drug Abuse, asserted that there is strong evidence that SUD is fundamentally a brain disease, which makes it a primary disorder. Leshner stated that the fact that SUDs is a primary disorder has profound implications for its treatment in that psychologists must understand its genetic and biological underpinnings to competently treat the disorder. APA's (2001) findings discussed above suggest that psychologists lack knowledge and misconceive the nature of SUDs, which may lead to inadequate treatment of these disorders.

Moreover, in the APA Practice Directorate studies (APA Practice Directorate, 2003, 2004; Holloway, 2003; Smith, 2001), most of the respondents did not focus primarily on substance abuse in their most recent clinical encounter with this client. However, the majority (80%) discussed substance abuse at some point during treatment with the particular client who was randomly selected from their practice. The APA Practice Directorate concluded that the finding that psychologists are talking to their clients about AoD regardless of whether or not they are a presenting issue is an encouraging one (APA Practice Directorate, 2003; 2004; Holloway, 2003; Smith, 2001).

Nonetheless, in the past 12 months, only 62% of the surveyed psychologists screened for SUDs and less than half (46%) diagnosed or conducted a formal assessment of substance abuse. These findings suggest that psychologists may fail to engage in routine screening and assessment of SUDs despite significant contact with AoD-related issues. Participants also indicated that approximately 50% of clients that they assessed as having a substance use problem were actually assigned a primary or secondary substance use diagnosis, with mood disorder diagnoses being more commonly assigned (APA Practice Directorate, 2003, 2004; Holloway, 2003; Smith, 2001).

In interpreting the above findings, the APA Practice Directorate (2003; 2004) explained that clients with substance use problems might often not be assigned a diagnosis by psychologists for reasons such as not meeting diagnostic criteria, stigma or privacy concerns, and incomplete assessment of diagnostic criteria. Unfortunately, the study did not explore the factors that might influence psychologists' diagnostic judgments about SUDs (APA Practice Directorate, 2003, 2004; Holloway, 2003; Smith, 2001).

Matthews, Schmid, Conclaves, and Bursley (1998) examined the extent to which college counselors incorporated data routinely requested on client intake forms regarding the quantity and frequency of problematic alcohol use into their assessments of clients' presenting problems. Among drinkers, 20% of college men and 13% of women reported drinking regularly, and 9% met the definition of a "potential problem drinker."

Tellingly, 50% of the intake reports failed to mention alcohol problems even though a student's self-reported level of use merited concern. Given that the intake report is the primary way in which the intake counselor conveys a client's clinical picture to the treating therapist, failure to mention the influence of problematic alcohol use is a major omission. These findings suggest that college counselors may fail to consider the effect of substance use on their clients' presenting problems (Matthews et al., 1998).

In a study of medical and mental health professionals, Weisner and Matzger (2003) found that opportunities to address drinking behavior at mental health and medical visits were often missed. Only 40% of patients who either had a medical or mental health visit had their drinking addressed. Clients with a history of SUDs were significantly more likely to be screened for their drinking than those without such history (61% versus 22%, respectively). This finding suggests that medical and mental health professionals may limit the type of client they choose to screen for AoD issues.

Although women and older adults had more frequent medical and mental health visits, they were significantly less likely to have their drinking addressed in a mental health visit. This suggests that medical and mental health professionals may hold misconceptions and stereotypes about a "typical" substance-misusing client's clinical

presentation. As a result, they may be selective in whom they screen for AoD issues, thus missing AoD problems in a significant number of clients (Weisner & Matzger, 2003).

Freimuth (2008) surveyed 117 mental health professionals' AoD screening practices and skills in recognizing signs and symptoms of a SUD in two case vignettes. The majority of participants held master's degrees (67%) and 17% held doctorates. Primary work settings included outpatient clinics (54%), private practice (28%), and inpatient settings (19%). Although the majority (92.7%) of respondents reported routinely asking clients about alcohol use in their practice, only 38.5% asked a substance use question when presented with vignettes, and 23.9% never did.

Remarkably, not one participant mentioned using CAGE or AUDIT (The Alcohol Use Disorder Identification Test), the screening tools recommended by clinics and insurance companies to screen for SUDs. The most frequent reason for hesitating to screen was the belief that clients do not tell the truth about substance use (31.5% of participants), which Freimuth (2008) reports is a common misconception.

Furthermore, participants were more likely to ask about substance use and to diagnose a SUD when the vignette contained explicit reference to the client's substance use compared to a vignette where the signs of alcohol use were more subtle. Freimuth (2008) reflected that professional AoD training, with its emphasis on salient adverse effects and diagnostic criteria, supports the misconception that SUDs are readily apparent. Findings also revealed that participants often mistake the physical and psychological effects of excess substance use (e.g., stomach problems, anxiety, sleep disturbances, low self-esteem or mood) for emotional disorders, especially anxiety and depression.

Spurr (1997) investigated the ability of 114 practicing psychologists and counselors licensed in Michigan to diagnose Eating Disorders and SUDs, and as well as their co-presentation in six case vignettes. Whereas 43.9% of respondents accurately diagnosed vignettes of an Eating Disorder, remarkably, only 14% recognized vignettes of Substance Dependence. Of the participants, only 57% accurately diagnosed case vignettes of Substance Dependence and Eating Disorder co-morbidity. The findings suggest that practicing psychologists have significant deficits in diagnosing SUDs and co-morbid disorders. However, Spurr warned that results must be interpreted with caution in light of the poor reliability of the vignettes.

AoD Treatment Practices

In a study comparing psychologists and AoD counselors' clinical views about alcohol and drugs, Humphreys et al. (1996) found that the majority of psychologists endorsed the psychosocial learning model of addiction and eclectic beliefs about SUDs. Few participants endorsed the disease model of addiction. These views are inconsistent with what experts in the field emphasize about addiction being a multifaceted, biopsychosocial phenomenon (Polcin, 1997) that goes beyond social learning. Twelve years later, Craig (2008) reported similar findings in a survey of 131 Massachusetts and New Hampshire psychologists, suggesting that psychologists continue to not fully understand the disease/biological components of SUDs.

Research shows that while many therapists refer clients to the disease model-based 12-step AA treatment program, few have a good understanding of how meetings are helpful or how to integrate AA concepts into therapy (Polcin, 1997). It is concerning

that, even though best practices view 12-step programs as an important aspect of treatment, psychologists know little about this evidence-based treatment.

The APA Practice Directorate (2003; 2004) found that the majority of participants (80%) referred clients presenting with AoD issues to AoD specialty treatment (Holloway, 2003; Smith, 2001). Similarly, in a survey of Idaho psychologists' AoD training and clinical practices, Cellucci and Vic (2001) found that the majority (57%) limited their treatment approach to self-help referrals. Participants also commonly used cognitive-behavioral coping skills training (67%) and family therapy (59%) for SUD-related issues.

Similarly, six years later, de Silva Cardoso et al. (2006) found that rehabilitation psychologists' most common intervention for SUDs was referral to recovery support groups (46%), followed by cognitive-behavioral (CB) coping skills training (39%). de Silva Cardoso et al. concluded that psychologists need to change their thinking about the treatment of SUDs and treat clients in the so-called "normal" context rather than view Substance Dependence as a separate issue that requires referral to a specialty setting. Cellucci and Vic (2001) added that there is a continuing need both to convince psychologists that they have much to offer substance-using clients and to enhance training and exposure to the range of empirically supported treatments for SUDs.

The APA Practice Directorate (2002; 2003) also found that psychologists in generalist practice treated clients with AoD-related problems by utilizing strategies consistent with the latest scientific and clinical knowledge in the AoD treatment arena. The three most commonly used strategies were motivational interviewing, cognitive-behavior therapy, and relapse prevention counseling techniques. Participants also endorsed using harm reduction strategies, such as clean needle exchanges and designated

driver programs. According to the APA Practice Directorate (2003; 2004), although harm reduction treatment has not been equally well researched, there is good evidence that it reduces AoD-related health problems without increasing AoD misusing behaviors.

Other therapeutic interventions participants reported using for problematic AoD use included limit setting, assessing the pervasiveness of the substance use, psychoeducation, 12-step facilitation therapy, contingency management, and, notably psychodynamic therapy for which there is no empirical support in treating SUDs (APA Practice Directorate, 2003; 2004). In fact, insight-oriented treatment was the next most frequently used treatment for SUDs after the three established evidence-based practices.

These findings align with Polcin's (1997) report that some practitioners still treat severe SUDs with unmodified insight-oriented therapy, despite existing research showing that treating emotional issues does not alleviate the condition and can even make it worse. Polcin urged psychologists to implement specific diagnostic and intervention strategies that are based on the existing AoD literature rather than psychodynamic or behavioral theoretical bias.

However, it was encouraging that most of the psychodynamic strategies that participants in the APA Practice Directorate (2003; 2004) study endorsed implementing with substance-using clients were used in conjunction with one or more of the empirically supported treatments. This suggests that psychologists are making attempts at integrating proven treatments for SUDs into their work with substance-using clients.

Role Adequacy

According to the Substance Abuse and Mental Health Administration (SAMHSA, 1998), a mainstream practitioner needs to have confidence in his/her clinical skills and

instill that confidence in clients that their work together will be productive. Otherwise, the practitioner's clinical interventions will be ineffective. Alarming, research consistently suggests that mental health professionals including psychologists lack confidence in treating AoD issues (Addy et al., 2004b; Anavai, Tauge, Ja, & Duran, 1999; Burrow-Sanchez, Call, Adolphson, & Hawken, 2009; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; Madson, Bethea, Daniel, & Necaie, 2008; Wheeler & Turner, 1997). For example, Wheeler and Turner (1997) studied 94 British generic counselors' clinical experience with alcohol problems and their understanding of AA. Participants did not feel competent working with AoD issues and some declined to work with them.

In a sample of high school psychologists, Burrow-Sanchez et al. (2009) found that the majority perceived their ability to treat SUDs as inadequate, including assessing, conceptualizing, treatment planning, and using evidence-based practices. Participants felt least competent in individual and group interventions and identified AoD screenings and assessment as the most important areas for future training. It is alarming that even though national statistics show that a significant proportion of high school students engage in AoD use, school psychologists do not feel prepared to treat them.

In 2006, Mendez conducted a study investigating confidence in providing AoD counseling among a sample of graduate students from various human services fields. Mendez utilized Murdock, Wendler, and Nilsson's (2005) *Addiction Counseling Self-Efficacy Scale (ACSES)*, which included the following factors: 1) specific AoD counseling skills, 2) assessment/treatment planning, and referral skills, 3) co-occurring disorders skills, 4) group counseling skills; and 5) basic counseling skills. Mendez used two measures from the ACSES, which included 1) The Addiction Counseling Specific

Skills and Assessment, Treatment Planning, and 2) Referral Skills subscales. The *ACSES* used a Likert scale that ranged from 1 = *no confidence* to 6 = *absolute confidence*).

Mendez (2006) found that participants had the lowest self-efficacy to assess the readiness of clients to change their substance abuse. The highest self-efficacy score represented the skill of gathering employment history of the substance-using client. Mendez pointed out that the higher AoD self-efficacy scores tended to be related to more “generic” practice skills associated with graduate-level social work, counseling and marriage and family therapy education. The lower scores were associated with more “substance-abuse treatment” specific characteristics, suggesting that graduate students lack the AoD training that would allow them to feel adequately prepared to counsel clients with SUDs.

In 2009, Chandler conducted a survey of a national sample of licensed mental health counselors to measure their confidence in providing AoD counseling. Chandler used Kranz’s (2006) *Substance Abuse Treatment Self-Efficacy Scale*, a 43-item scale containing the following factors: 1) Assessment/Treatment Planning, 2) Individual Counseling, 3) Case Management, and 4) Ethics, and 5) Group Counseling. The scale used the rating scale of *very low confidence* to *very high confidence*.

Contrary to previous research, participants reported high levels of AoD counseling self-efficacy, even though they reported deficits in AoD education (Chandler, 2009). Chandler reflected on the discrepancy by stating that perhaps participants lacked awareness of their AoD knowledge gaps, consequently feeling overconfident of their abilities to treat SUDs. Garb (1998) warned that one of the dangers of overconfidence is that clinicians may believe that they do not require assistance and training, thus

perpetuating incompetent and potentially harmful clinical practices (Croskerry & Norman, 2008; Garb, 1998).

Alternatively, Chandler's (2009) findings may suggest that mental health counselors may have high perceptions of role adequacy because of their increasingly active role in providing screenings, assessment, prevention, and treatment of SUDs. One of the purposes of the current study was to address the inconsistencies in the literature by examining psychologists' perceptions of their adequacy to provide AoD counseling.

In the current study, the *Role Adequacy Scale* of the *WPQ* was used to assess psychologists' self-efficacy beliefs to provide AoD counseling. The measures mentioned above break down self-efficacy into specific sub-constructs, whereas the purpose of this study was to assess psychologists' overall role adequacy beliefs. These surveys are also much lengthier than the *Role Adequacy Scale*.

Rift Between the Professions

Margolis and Zweben (2011) described a long-standing rift between psychologists and the AoD treatment field characterized by distance, competition, and lack of collaboration. The division between the two fields stems from competing views of AoD illness, treatment, and recovery. AoD treatment is based on the disease model, which holds that SUDs are not curable because the individual has a biochemical condition that, without abstinence, will progress. In contrast, the prevailing view within the psychological community is of a behavioral learning model in which AoD use is considered a learned behavior that can be controlled through positive and negative rewards (Hoge, 2002; Johansson, Akerlind, & Bendtsen, 2005; Margolis & Zweben, 2011; Nathan, 1997).

Margolis (1993) reported that, historically, the AoD treatment community had mistrust toward psychologists for using behavioral or psychodynamic approaches to treat SUDs. Psychodynamic psychologists who focused on “underlying” emotional contributors to a SUD typically failed to directly treat the disorder, while supporting the client’s minimization of the problem (Margolis & Zweben, 1998). Many behavior-oriented psychologists argued that clients with addiction can be taught to control their use (Margolis, 1993). However, Margolis warned that moderation management is inappropriate for clients with Substance Dependence, who, by definition, often make unsuccessful attempts at controlled use before seeking treatment.

Margolis and Zweben (2011) report that research now conclusively shows that a SUD is a “biobehavioral disorder” involving genetic susceptibility and physical changes to the brain structure. In addition, the disease is complicated by learning or conditioning factors, social factors, family dynamics, and developmental factors, as well as the presence of co-occurring disorders (ASAM, 2012; Margolis & Zweben, 2011).

Thus, to follow evidence base, psychologists were urged to become educated about the genetic and biological underpinnings of addiction and the nature of addiction as a biopsychosocial disorder. Psychologists were also urged to form collaborative relationships with the AA recovery community and to recognize its contributions to understanding and treating addiction (Margolis and Zweben, 2011). Margolis and Zweben argued for informed integration of the contributions from the disease and learning models, which would move the field toward a more comprehensive and individualized model of AoD treatment.

Margolis and Zweben (2011) stated that,

From a strategic point of view...psychology as a profession should adopt the position that psychologists are eminently qualified to assess, treat, and manage the behavioral aspects of addictive disease, rather than continue to fight a battle, which was essentially settled within the AoD field years ago...If psychologists continue to argue about biochemical and genetic susceptibility to AoD, we risk being perceived as having our heads in the sand, unwilling to accept evidence that conflicts with the established viewpoint (p.191).

Another aspect of the rift between psychologists and the AoD treatment field is the distant relationship between research and practice. In the past decade, psychologists have been at the forefront of psychosocial AoD treatment development and AoD evaluation research. Psychologists generate the majority of funded research proposals and publications on the nature, treatment, and prevention of SUDs (Miller & Brown 1997; Margolis and Zweben, 2011). They are prominently represented in two major federal funding agencies for scientific research on SUDs - the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and NIDA (Margolis & Zweben, 2011).

Margolis and Zweben (2011) asserted that psychologists have felt frustrated by the AoD treatment community's "antiscientific bias" and slowness in adopting promising evidence-based approaches such as cognitive-behavioral modalities and motivational interviewing. Miller and Brown (1997) urged psychologists to leave their "ivory towers", engage the AoD treatment community in challenging narrow viewpoints, and facilitate implementation of proven treatments for SUDs.

CSAT (2006) also argued that the boundaries that have traditionally separated specialist AoD counselors and mainstream practitioners including psychologists need to be broken down in order to permit the development of a strong workforce that is a truly responsive AoD care system.

In 2011, Margolis and Zweben concluded that the rift between psychologists and AoD counselors is decreasing, although there is much progress to be made. The AoD treatment community is gradually recognizing the necessity for proven and cost-effective treatments and the adoption of learning and behavioral techniques for changing behavior. On the one hand, psychologists are gradually coming to understand the biochemical and genetic basis for addictive disease and the value of clients' involvement in AA.

Role Legitimacy

Some research suggests that, in the past 30 years, the move toward the inclusion of mainstream workers in AoD treatment has made their role in the AoD treatment field more legitimate. For example, Roche and Pidd (2010) found high perceptions of role legitimacy among a sample of AoD specialists, medical staff, and mental health professionals.

Despite reported higher levels of perceived legitimacy to practice AoD counseling among mainstream mental health professionals, Miller and Brown (1997) asserted that psychologists need to address their lingering feelings of role illegitimacy stemming from the common misconception that addiction treatment is a “mysterious art” that is outside of their competencies. Margolis and Zweben (2011) add that the rift between psychologists and specialist AoD counselors that was discussed above may negatively affect psychologists' role legitimacy. Cellucci and Vic (2001) concluded that unless psychologists shift their thinking to viewing AoD treatment as part of their professional roles, they will remain reluctant to apply their expertise in behavior change to treat SUDs.

Professional Support

This section will discuss descriptive studies on the level of professional support that mainstream professionals receive to engage in AoD counseling practice (Addy et al., 2004; Skinner et al., 2005). Table III summarizes the different types of support that Skinner et al. proposed practitioners may receive.

Table III. Types of Support Provided by Organizations, Supervisors, and Coworkers (Skinner et al., 2005).

	Social / emotional support	Instrumental support
Organisation	<ul style="list-style-type: none"> • Ensuring fairness of treatment • Providing valued rewards • Ensuring supportive supervision 	<ul style="list-style-type: none"> • Ensuring good job conditions (physical safety, job security, promotion paths, autonomy)
Managers / supervisors	<ul style="list-style-type: none"> • Channeling / facilitating organisational support • Providing positive social interaction (praise, encouragement, caring, respect) • Recognising and rewarding good work • Involving workers in decision-making 	<ul style="list-style-type: none"> • Addressing work overload • Addressing role ambiguity or conflict • Providing access to high quality resources and equipment
Coworkers	<ul style="list-style-type: none"> • Providing positive social interaction (praise, encouragement, care, respect) 	<ul style="list-style-type: none"> • Providing help and advice • Filling in when others are absent • Assisting with heavy workloads • Providing constructive feedback • Appreciation and recognition • Sharing duties and responsibilities

Career Motivation

Graduate Students

In the AoD counseling literature, “career motivation” refers to motivation to pursue a career in AoD counseling and the perceived rewards and advantages of doing so provided by the profession. Students and clinicians who have high perceptions of career motivation believe that there are professional advantages in engaging in AoD counseling practice and that it is highly regarded by the profession (Addy et al. 2004; Skinner, 2005).

According to Lubin et al. (1986), anecdotal observation suggests that the field of psychology offers graduate students and psychologists low career motivation to practice AoD counseling. Lubin et al. stated that the extent of AoD education provided in graduate school can depend on the enthusiasm of individual academicians. One can

deduce from graduate students' deficits in AoD training that the profession does not find this to be an important focus of practice. The withdrawal of the APA-CPP also seems to communicate that the profession does not see much value or importance in AoD counseling practice.

Broadus et al. (2010) suggest that negative reactions toward AoD issues may occur because students receive mixed messages about the ability and willingness of the profession to train them to work with substance-using clients. Students and trainees can have training programs, professors, and supervisors who vary in the opportunities, support, and encouragement that they offer for developing AoD counseling skills.

Educators may even be unwilling to provide support for obtaining AoD education by ignoring new AoD-counseling skills students may have obtained elsewhere or actively attacking the use of those skills and "extinguishing" them (Amodeo, 2000). Moreover, Broadus et al. (2010) stated that, " 'educator bias' may influence the information transmitted from educator to student, inadvertently transferring attitudes to students that reduce an unbiased consideration of alternative viewpoints." (p. 291).

Lubin et al. (1986) added that universities are not taking responsibility for encouraging students to look at their own attitudes and value systems regarding working with substance-using clients. Without adequate faculty role models, students seem reluctant to treat SUDs (APA, 2012). CSAT (2006) asserted that not only must graduate psychology training programs be reviewed and examined for their potential to instill bias, but also training and continuing education programs must be designed to combat bias.

Practicing Professionals

The NeATTC (2006) asserted that the AoD-counseling practice environment is typically unappealing compared to other career options, which leads to job dissatisfaction and detracts professionals from the field. AoD counselors report being stressed out, stigmatized for working in the AoD treatment field, and having few career advancement opportunities.

In 2011, the NeATTC reported that, once in practice, 58% of professionals perceived AoD counseling as having a lower status than other helping professions. The NeATTC reported that over 40% of AoD treatment providers experienced few incentives, believing that their talent and achievement were not rewarded in their workplaces.

The vast majority of specialty addictions treatment is provided through community-based, not-for-profit agencies with public funds such as State Block grants, the Department of Veterans Affairs, and Medicaid. Thus, there is very limited government financing for AoD-counseling jobs. The NeATTC asserted that the overburdened public funding stream serves as a barrier for attracting and recruiting educated workers including psychologists to the AoD treatment field (NeATTC, 2006).

Salaries of AoD counselors are unattractive to highly trained practitioners, as they are extremely low in comparison to salaries in other healthcare and human service fields such as teaching or nursing. The average annual salary of an AoD counselor is around \$34,000. McLellan et al. (2003) concluded that strategies need to be developed to make careers in AoD counseling economically viable for physicians, nurses, social workers, psychologists, and mental health counselors.

To the author's knowledge, only Addy et al. (2004) studied the effect of career motivation to engage in AoD counseling practice on mainstream practitioners' functioning as AoD counselors. Addy et al. found that higher levels of career motivation were associated with more engagement in AoD-counseling practice.

To add to the scarcity of research on career motivation to engage in AoD counseling practice, the current study sought to examine its effect on psychologists' functioning as AoD counselors. Such an inquiry was hoped to provide useful information on whether career motivation needs to be addressed in interventions geared toward improving psychologists' functioning as AoD counselors.

Informal Support

In the workforce development literature, the term "team" refers to the collection of individuals who interact regularly, exhibit task interdependence, possess one or more shared goals, and are embedded in a larger organizational setting (Addy et. al, 2004; Skinner, 2005). Addy et al. stated that team factors such as informal co-worker support likely exert a significant influence on individual work practice, since workgroups and teams are becoming increasingly common in the human service sectors.

"Informal support" refers to the emotional support and advice/information about AoD issues that mainstream practitioners receive from coworkers and peers that they work closely with. Whereas formal support is provided within the context of established hierarchies of seniority and supervision within an organization, informal support is given in a spontaneous and unstructured manner between colleagues (Addy et al., 2004).

Examples of informal support include encouragement to intervene with cases involving substance-using clients, good communication on AoD issues, guidance, and

availability for consultation regarding AoD issues. High perceptions of informal role support reflect a good informal supervisory relationship (i.e., encouragement, peer support, guidance, mentoring on AoD issues), where the mainstream clinician does not have any difficulty finding support with AoD-counseling practice issues when needed (Addy et. al, 2004; Skinner, 2005).

Todd (2005) asserted that the need for ongoing professional support and guidance is particularly relevant to practitioners working with AoD issues, because the cases are complex, the work often demanding, and issues related to stress, burnout and turnover are common. For example, the NeATTTC (2011) found that 81% of AoD treatment providers strongly or somewhat strongly agreed that it is easy to burn out in the work they do, and 70% always had too much work to do. Moreover, because a chronic condition like SUD is challenging to treat, practitioners may benefit from support from their colleagues to help them cope and manage feelings of inadequacy, discouragement, frustration, and disengagement (CSAT, 2006).

To the author's knowledge, there is a scarcity of research on mainstream workers' perceptions of informal support (Cartwright, 1980; Addy et al., 2004; Lightfoot & Orford, 1986; 2002). In Cartwright's study, mainstream practitioners reported not having many colleagues to turn to for support and consultation. Neither Lightfoot and Orford or Addy et al. reported the actual level of informal support that their sample of mainstream providers endorsed having.

Moreover, to the author's knowledge, there is no research on psychologists' perceptions of informal support to engage in AoD-counseling practice in their workplaces. To bridge this gap, the current study sought to examine psychologists'

perceptions of informal support. Since psychologists are licensed to practice independently, they likely rely on informal support at their place of employment rather than formal supervisory support. Thus, it was important to assess psychologists' current perceptions of informal support to engage in AoD counseling practice, which would provide valuable exploratory data on interventions that may improve psychologists' functioning as AoD counselors.

Organizational Legitimacy

In the WDM (Addy et al., 2004), the organizational domain addresses factors that impact the functioning of the organization as a whole, and hence may also impact on workers' capacity to perform effectively. The term "organizational legitimacy" refers to the extent to which an organization's culture, policies, priorities, incentives, philosophies, and expectations support, guide, and encourage clinicians to respond to AoD issues.

Organizational legitimacy communicates to workers the extent to which the provision of AoD treatment and their AoD knowledge and skills are appropriate, valued, and worthwhile (Roche, 2009; Skinner et al., 2009). Organizational support also entails administrative and managerial supervision, which is directed toward helping the worker meet organizational performance requirements and behavioral consistency with organizational goals, expectations, and standards (Duraisingam, 2005).

Perceptions of organizational legitimacy indicate that the worker perceives his/her place of employment as having clearly states objectives about its involvement with AoD issues; that the organization has clearly laid out staff roles and responsibilities for responding to AoD issues; and is recognized by the community as a provider of AoD treatment services (Duraisingam, 2005).

To the author's knowledge, Addy et al.'s (2004) *WPQ* validation study was the only one that measured clinicians' organizational legitimacy to engage in AoD counseling practice. Unfortunately, Addy et al. did not report their participants' actual perceptions of organizational legitimacy to provide AoD counseling. The current study sought to make a contribution by being the first to explore the extent to which psychologists feel supported by their organization to work with substance-using clients.

Other studies have measured constructs similar to but different from organizational legitimacy. These studies showed mixed findings in regard to participants' perceptions of organizational support to engage in AoD counseling practice (Amodeo & Fassler, 2001; Durand, Lelliott, Crome, & Coyle, 2009; Lightfoot and Orford, 1986). In a study conducted by Lightfoot and Orford, social workers reported working under more situational constraints than nurses. They also had significantly more negative therapeutic attitudes towards working with substance-using clients.

The participants in Lightfoot and Orford's (1986) study reported that the policy of their departments governed the type of clinical problems they could respond to. They also reported that they received little or no encouragement from their seniors to become involved in the provision of AoD counseling within their department; generally felt that they didn't have the right to interfere in people's drinking choices; felt that AoD issues had to affect others than the drinker to justify their involvement; had few opportunities and little time to get involved in AoD-counseling practice in their department; and did not have the time to put any knowledge of AoD counseling to use.

Amodeo and Fassler (2001) interviewed 115 social workers with AoD training who worked in general social service agencies in order to determine if they viewed their

settings as facilitating or hindering their work with substance-using clients. In contrast to Lightfoot and Orford's (1978) study, the majority of participants viewed their agencies as facilitating AoD-counseling practice through support from knowledgeable supervisors and administrators, availability of AoD training and supervision, agency contracts that provided financial coverage for the provision of AoD counseling, workers' freedom to choose clients, and opportunities to supervise others on AoD issues. Supervisor data corroborated these findings. The constraining factors to participants' engagement in clinical work with substance-using clients included too many non-AoD-counseling related responsibilities and the presence of experts to which AoD clients were referred.

In 2009, Durand, Lelliott, Crome, and Coyle conducted a study surveying the attitudes and activities of specialist consultant addiction psychiatrists in England. About one half agreed that addiction psychiatrists were an "endangered species." The study also suggested that addiction psychiatrists do not feel supported by the organizations that employ them. Participants felt that they lacked local and national influence on AoD services policy making; had concerns about funding; felt that the performance management culture interfered with their provision of AoD treatment services; that their employers did not make substance-using clients a priority, and that there were unrealistic performance standards that caused stress on AoD treatment providers.

Studies on the Predictors of Functioning as an AoD Counselor

The following section will review studies on the predictors of attitudes toward AoD counseling practice, skills and knowledge about SUDs, and clinical practices with substance-using clients. The review will include an overview of studies examining the impact of AoD education, continuing AoD education, AoD-counseling work experience,

AoD-counseling certification, APA Division 28 and 50 membership, informal support, and organizational legitimacy to engage in AoD counseling practice on mainstream practitioners' functioning as AoD counselors.

Impact of Graduate AoD Education

Washton and Zweben (2006) stressed that the lack of AoD education "...fosters professional disinterest, a sense of clinical impotence, and negative stereotyping of clients with alcohol and drug problems" (p. 4). Similarly, Miller (2002) argued that negative attitudes toward people with AoD issues are fundamentally exacerbated and fueled by a lack of mental health professionals' AoD knowledge and training. Miller explained that without adequate training, practitioners cannot correct their flawed judgment, misconceptions, and emotional reasoning about SUDs.

Studies on the impact of graduate AoD training support the above assertion, linking graduate AoD training to students having more positive attitudes toward substance-using clients and greater competencies in providing AoD counseling (Amodeo & Litchfield 1999; Bina, 2008; Carroll, 2004; Gassman, Semante, & Albilal, 2000).

In a 1995 survey of graduate counseling students, Bartlett-Voigt found that AoD training was significantly correlated with the positivity (i.e., unconditional positive regard) with which the students responded to an alcohol-abusing client vignette.

Amodeo and Litchfield (1999) examined the extent to which graduate social work instructors with and without specialized AoD training integrated AoD content into basic and advanced courses. Results showed that faculty with specialized AoD training were more likely than faculty without such training to integrate AoD content into their courses.

Furthermore, courses taught by trained faculty received higher ratings from students on the quality of their content.

Carroll (2000) examined the influence of AoD education in four counseling programs on graduate counseling students' initial interventions with a hypothetical client. Students responded to a vignette of a client meeting diagnostic criteria for Major Depressive Disorder, Recurrent; Cocaine, Alcohol, and Benzodiazepine Dependence; and Axis II criteria for Borderline Personality Disorder.

Participants were asked to indicate which of the following actions they would be most likely to take as treating counselors: a) address Substance Dependence as the principal problem, b) address a problem other than Substance Dependence as the principal concern, c) refer the client for AoD counseling, or d) refer the client to another counselor for a problem other than Substance Dependence (Carroll, 2000).

Carroll (2000) found that students who received at least three semester hours of instruction in AoD counseling were more likely to treat or refer the hypothetical client for AoD counseling. In contrast, students with little or no instruction in AoD counseling were more likely to ignore the client's Substance Dependence and focus on managing the comorbid emotional disorders. The findings suggest that mental health counseling students' deficits in AoD education put them at risk for making serious diagnostic and treatment errors.

Gassman et al. (2001) studied the effect of three master's level social work training models on students' judgment of their AoD assessment skills. A general social work curriculum was compared to an integrated AoD curriculum, and a social work curriculum with an AoD minor.

Participants who completed an AoD minor were the most capable of assessing SUDs in their practica and most likely to do so, followed by those enrolled in integrated coursework. Self-reported assessment practices were poorest among students taught in a general curriculum (Gassman et al., 2001). Gassman et al. concluded that integrating AoD content into core clinical courses is effective and may be the more cost and time-effective compromise compared to an integrated curriculum for training programs seeking to improve AoD counseling competencies.

Most recently, Mendez (2006) examined the predictors of graduating social work, mental health counseling, and marriage and family therapy students' readiness to provide AoD treatment services. Nonacademic in-service training and workshops were predictive of AoD-counseling knowledge.

Interestingly, Bina et al.'s (2008) survey of recent MSW graduates' perceived preparedness to provide AoD counseling found the opposite; i.e., formal training (i.e., AoD curricula and field work) was a stronger predictor of preparedness than informal training (i.e., mentoring, supervision, peer consultation, and in-service training).

Impact of Post-Graduate AoD Education

A number of studies on the impact of post-graduate AoD training found an association between post-graduate AoD training and practitioners' functioning as AoD counselors (Albery et al., 2003; Amodeo, 2000; Amodeo, Fassler, and Griffin, 2002; Bartlett-Voigt, 1995; Cartwright & Gorman, 1993; de Silva Cardoso et al., 2006; Hayes, 2004; Lightfoot & Orford, 1986; Loughran, Hohman, & Finnegan, 2010; Skinner, 2005; Straussner & Vairo, 2007).

In a sample of psychiatric nurses and social workers, Lightfoot and Orford (1986) found that education and experiential training increased role security and decreased situational constraints to practice AoD counseling. Cartwright and Gorman (1993) surveyed multidisciplinary mental health teams (i.e., general practitioners, nurses, social workers, and occupational therapists) to study the differences in perceptions about AoD counseling practice between those who received AoD-board accredited training, non-accredited training, or no training at all. AoD-board accredited education, followed by non-accredited AoD education were associated with higher role adequacy and role legitimacy and greater motivation and satisfaction from providing AoD counseling. Moreover, the perceived usefulness of education was also associated with stronger role adequacy and role legitimacy.

Similarly, in a sample of Australian nurses and mental health professionals, Skinner et al. (2005) found that participant's perceptions of the usefulness of their AoD education was predictive of role legitimacy and role adequacy. Skinner concluded that the influence of the perceived usefulness of education on perceptions of AoD counseling practice highlights the importance of providing high-quality and work-relevant AoD training.

AoD training has also been correlated with counselors making correct dual diagnosis and alcohol abuse diagnoses, being optimistic about the prognosis and treatment of SUDs, and having self-efficacy to conduct alcohol assessments (Bartlett-Voigt, 1995).

Furthermore, in a study of non-specialist workers (e.g., volunteer counselors, probation officers, general nurses, social workers, and youth/community workers),

Albery et al. (2003) found that higher levels of AoD education and experiential training increased role security and decreased perceptions of situational constraints, which in turn increased mainstream practitioners' therapeutic commitment to AoD counseling practice.

Amodeo (2000) examined the influence of AoD training on master's-level social workers in generalist treatment settings who completed a nine-month postgraduate AoD training program. Competencies in AoD treatment were assessed using participants' self-reports of their ability to assess and intervene with three different categories of clients. These included: 1) clients with both an AoD and a mental health diagnosis, 2) clients with only an AoD diagnosis, and 3) clients with only a mental health diagnosis.

After the AoD training, participants were more involved in AoD-counseling practice, had a caseload of clients with SUDs, AoD-counseling job roles/titles, and AoD-counseling job opportunities. They were also more likely to intervene with substance-using clients, and to report optimism, confidence, and competence in assessing and intervening with substance-using and dually diagnosed clients. Moreover, AoD training predicted future engagement in AoD training, and professional contributions to the AoD treatment field (Amodeo, 2000).

In 2002, Amodeo et al. conducted a study examining the effect of training on social workers' behavioral outcomes in their agency, community, and personal life. Participants who completed a clinical postgraduate AoD training program were significantly more likely than the comparison group to provide agency AoD training, receive AoD training and supervision outside of their agency, engage in community service related to SUDs, and present AoD-related papers at conferences.

In 2007, Straussner and Vairo investigated the impact of post-master's AoD training on the attitudes and values, knowledge and skills, and behaviors of its graduates. The program consisted of six classes taken over a one-year span that satisfied requirements for state AoD-counselor certification requirements. Participants endorsed an increased desire to add substance-using clients to their caseloads and a belief in a good recovery prognosis. Similar to Amodeo's (2000) study, the findings suggest that completion of a comprehensive, long-term AoD training program increases clinicians' knowledge about AoD issues and positively impacts their attitudes toward substance-using clients.

In 2004, Hayes et al. found that teaching a workshop course on Acceptance and Commitment Training (ACT) (i.e., acceptance, mindfulness, and cognitive diffusion of negative AoD-related thoughts and feelings) reduced stigmatizing attitudes and work burnout. In 2006, de Silva Cardoso et al. found that rehabilitation psychologists' perceived adequacy of AoD training was significantly related to overall ratings of their competency to provide AoD treatment services.

In 2007, Munro et al. found that training in AoD etiology and patterns of use improved mental health clinicians' attitudes towards comorbid clients. Most recently, in a study of the predictors of social work students and professionals' perceptions of AoD counseling practice, Loughran et al. (2010) found that AoD education and training in clinical skills were predictive of both role adequacy and role legitimacy.

Several studies found little evidence that AoD training changes professional practice (Chandler, 2009; Davis et al., 1999; Mazmanian & Davis, 2002; Stein, 2003). Chandler found that AoD education (i.e., graduate courses, internship, and continuing

education) did not predict professional counselors' self-efficacy scores. Stein found that a brief four-hour educational program did not modify the attitudes of master's level social work students toward AoD counseling practice. Similarly, in 2002, Mazmanian and Davis found that didactic, single-session, noninteractive teaching approaches increased AoD knowledge, but were ineffective in building AoD counseling skills among trainees.

It is concerning that there was no increase in skills from single-session AoD training in light of the fact that this training approach predominates in post-graduate professional development. Overall, the above studies suggest that the impact of AoD training is a function of the duration, intensity, and comprehensiveness of the training that practitioners receive.

Furthermore, the studies that did not find an association between AoD education and mental health professionals' functioning as AoD counselors suggest that there may be other variables that mediate the relationship. For example, professional support to practice AoD counseling has been found to mediate the effect of AoD education on role security and therapeutic commitment (Cartwright & Gorman, 1993; Skinner, 2005a), suggesting that the positive effects of training can be thwarted by a non-supportive work environment. The present study sought to build upon prior research by studying the relative effect of AoD education and professional support to practice AoD counseling on psychologists' functioning as AoD counselors.

Impact of Continuing AoD Education

Some studies found that continuing AoD education has a positive effect on mainstream professionals' functioning as AoD counselors. For example, in the APA Practice Directorate (2003) study, continuing AoD education was related to an increase in

the frequency with which psychologists conducted AoD evaluation and treatment. In addition, Acker et al. (2004) found that greater opportunities for professional AoD development were associated with higher levels of job satisfaction and lower levels of intention to leave their jobs (Pollard, 2005). However, other studies have found that continuing AoD education (i.e., single session workshops) is ineffective in changing workforce practice patterns (Aanavi et al., 1999; Goodwin & Sias, 2007; Haack & Adger, 2002).

Similar to research on post-graduate education, studies suggest that the effect of continuing AoD education depends on its intensity and duration, with single session workshops showing little effect on improving practice behaviors and substance-using clients' outcomes (Amodeo, 2000; Stein, 1999; 2003; Mazmanian & Davis, 2002; Moyers, Martin, Manuel, Hendrickson, & Miller; 2005; Rosengren, Baer, Hartzler, Dunn, & Wells, 2005; Rubel, Sobell, & Miller, 2000). Cellucci and Vik (2001) noted that although single-session workshops provide the most pragmatic approach for practicing psychologists to enhance competencies in providing AoD counseling, this only provides a short-term solution.

The current study sought to expand on the above research by examining the predictive power of psychologists' perceptions of the usefulness of their AoD education on their functioning as AoD counselors. The study sought to add to the generalizability of past findings by surveying psychologists who have rarely been studied.

Impact of AoD Counseling Experience

The majority of studies show that experience in providing AoD counseling has a positive impact on mainstream practitioners' attitudes toward substance-using clients and

AoD counseling practices (Cartwright, 1980; Loughran et al. 2010; Mendez, 2006; O'Neil, 1997). In a sample of students attending AoD training, Cartwright found that experience determined the level of task-specific self-esteem, which, in turn, predicted therapeutic attitude toward substance-using clients. Thirty years later, Loughran et al. found that AoD-counseling experience was a good predictor of social worker and social work students' perceptions of role adequacy and role legitimacy to practice AoD counseling.

Mendez (2006) found that the likelihood that students from different human service fields sought a job in the AoD treatment field was best predicted by a prior internship in substance abuse and experience in providing AoD counseling. Moreover, experience in the AoD treatment field and familiarity with AoD treatment strategies predicted confidence in participants' ability to assess, plan treatment, and refer substance-using clients for specialty AoD treatment.

In 1997, O'Neil studied attitudes toward dually diagnosed clients among a sample of social workers, psychologists, and psychiatrists within an urban hospital. Participants who had less experience treating dually diagnosed clients expressed more treatment pessimism and less satisfaction from working with this population. They also favored a separate over an integrated treatment model for dual diagnosis, which is known to reduce the ability of practitioners to accurately diagnose clients with co-occurring disorders.

The above findings suggest that AoD counseling experience is crucial for the formation of positive attitudes toward AoD counseling practice among mainstream practitioners. Miller and Brown (1997) concluded that AoD education should be

explicitly incorporated into the practicum and internship training of psychologists in order to offer them the needed experience in providing AoD counseling.

To the author's knowledge, two studies did not find AoD counseling experience to have an effect on mainstream practitioners' functioning as AoD counselors (Chandler, 2009; Skinner et al., 2005). Skinner et al. found no evidence that AoD counseling experience was an influential factor on practitioners' functioning as AoD counselors. Similarly, Chandler's study found that the percentage of clients that licensed counselors treated with SUDs as a primary diagnosis did not predict their self-efficacy scores. These findings seem to be counterintuitive.

It is possible that the participants in Skinner et al. (2005) and Chandler's (2009) studies had AoD-counseling work experiences that were of poor quality and were not impactful on their clinical work. Alternatively, perhaps there were other variables not examined in the two studies (e.g., situational constraints) described above that mediated the effect of AoD-counseling experience on mental health clinicians' functioning as AoD counselors. The current study sought to clarify the effect of AoD-counseling experience on psychologists' functioning as AoD counselors among a diverse sample of psychologists, which, to date, has rarely been studied.

Impact of AoD Counseling Certification

Studies have consistently found that AoD-counseling certification predicts positive attitudes toward AoD-counseling practice (Cartwright, 1980; Hsieh & Srebalus, 1997; Kloss & Lisman, 2003; Loughran, Hohman, & Finnegan, 2010; Mendez, 2006). Cartwright found that, compared to alcohol specialists, primary care workers had significantly more role insecurity and lower therapeutic commitment. Mainstream

practitioners also lacked clinical knowledge, had very little experience working with alcohol issues, and reported not having many colleagues to turn to for support.

Hsieh and Srebalus (1997) surveyed 119 psychologists and 110 AoD counselors in an effort to compare their philosophies and treatment approaches to alcoholism. The sample of psychologists was selected from APA Division 28 and Division 29 (Psychotherapy). Notably, only two psychologists were certified as AoD counselors.

Both groups endorsed the disease model of SUDs and held positive views of the 12-step model of recovery. However, unlike AoD counseling specialists, psychologists were more willing to accept controlled drinking as an alternative goal to abstinence. Psychologists also paid more attention to personal issues compared to AoD counselors who focused on treating the addictive behavior (Hsieh & Srebalus, 1997).

These findings support the importance of the AoD-counseling certification system in fostering knowledge of models of the etiology of substance abuse and evidence-based treatments for SUDs. Unfortunately, separate analyses of psychologists' treatment beliefs by APA Division membership were not conducted (Hsieh & Srebalus, 1997). The current study sought to bridge this gap by examining the effect of APA Division membership on psychologists' functioning as AoD counselors.

In 2003, Kloss and Lisman surveyed AoD and master's level mental health counselors regarding their attributions in response to vignettes depicting either individuals with schizophrenia, alcoholism, or dual diagnosis. Although blame attributions for the cause of the clients' problems were generally low and consistent with the Disease Model of Addiction, mental health clinicians showed a tendency to attribute more personal blame to dually diagnosed clients. In contrast, identification as a certified

AoD counselor was associated with more situational attributions of the cause of the substance-using client's addiction.

Similarly, Najavits et al. (1995) found that compared to 12-step drug counselors, psychotherapists in general, and psychodynamic therapists in particular consistently endorsed more negative feelings toward their cocaine-dependent clients. Likewise, Murdock et al. (2005) found that, compared to non-certified clinicians, certified addiction professionals had higher self-efficacy to practice AoD counseling. Moreover, in a sample of social workers, Amodeo and Fassler (2001) found that being an AoD counseling specialist facilitated practice with substance-using clients.

In 2010, Loughran et al. found that, when social worker students and clinicians had professional support to practice AoD counseling and treated clients with AoD issues, holding an AoD-counseling license enhanced their role legitimacy to practice AoD counseling. Similar to Kloss and Lisman's (2003) findings, Loughran et al.'s study suggests that AoD-counseling certification is a recognized and valued mark of excellence that engenders a sense of role legitimacy. The study also supports the importance of the AoD counseling licensure system in building positive feelings of role legitimacy to practice AoD counseling.

Loughran et al.'s (2010) findings also revealed that holding an MSW was neither correlated with perceptions of participants' adequacy or legitimacy to practice AoD counseling. Loughran et al. interpreted these findings as showing the AoD treatment field's reluctance to recognize the legitimacy of the MSW to provide AoD counseling. Loughran et al. added that in the absence of an AoD-counseling certification,

psychologists, like social workers, may also be at risk of having to legitimize their involvement in AoD counseling based only on individual merit.

Cartwright (1980) stated that AoD-counseling certification is associated with more positive attitudes toward substance-using clients and greater competencies to practice AoD counseling because the specialized settings in which they work likely provide them with the necessary AoD education, experience, and support to function effectively as AoD counselors.

To the author's knowledge, Mendez (2006) conducted the only study that did not find a connection between AoD-counseling certification and functioning as an AoD counselor. Mendez found that graduating counseling students who were certified AoD counselors were no more ready to provide AoD counseling services than uncertified graduating counseling students. Mendez explained that AoD-counseling certification did not emerge as an influential variable because only 3.3% of the student sample was certified in AoD counseling.

Balducci (1999) conducted a study on differences between psychologists with a primary specialty interest in either alcoholism and alcohol abuse or drug abuse and psychologists with a primary specialty interest in non-addictions areas. The APA Research Office generated a list of participants by specialty area for the researcher. The purpose of this study was to analyze the factors that affected psychologists' decisions to treat or not to treat persons with SUDs and to assess the current state of psychologists' attitudes toward substance-using clients.

Balducci (1999) did not examine differences by AoD-counseling certification, but rather used psychologists' interest area to represent their clinical specialty area. Although

this was a major weakness in the study, it nonetheless provides useful information that supports the notion that fostering an AoD interest area/specialty among psychologists improves their functioning as AoD counselors.

Balducci (1999) found that psychologists with a specialty interest in SUDs were significantly more educated and experienced in treating these disorders. They were also significantly more familiar with published manuals that described treatments for SUDs and were more likely to use structured assessments for SUDs.

In addition, psychologists with a specialty interest in SUDs had significantly higher self-reports of competence and comfort with treating SUDs, a higher number of current clients with SUDs, a higher total number of clients treated for SUDs, and more current clients who met the criteria for a SUD (Balducci, 1999).

Moreover, participants viewed the client as significantly more appropriate a candidate for psychotherapy than non-addiction psychologists, significantly more open to treatment recommendations, and more motivated for treatment. Psychologists with a specialty interest in SUDs were also significantly less likely to use hard confrontational strategies with substance-using clients (Balducci, 1999). The current study sought to expand upon the previous research by exploring the predictive power of AoD counseling certification on psychologists' functioning as AoD counselors.

Impact of APA Division 28 and 50 Membership

Pidd, Freeman, Skinner, Addy, Shoobridge, and Roche (2004) asserted that membership in a professional AoD association is a useful professional development strategy for improving attitudes toward substance-using clients and competencies in AoD counseling. Pidd et al. explain that professional associations can provide support,

educational opportunities, and access to information regarding best AoD counseling practice.

To this author's knowledge, only one study examined the influence of APA Division 50 membership on the extent to which psychologist are involved in AoD counseling practice (APA Practice Directorate, 2003). The APA Practice Directorate found that psychologists who belonged to APA Division 50 were more likely to have clients with SUDs, suggesting that expertise (defined by Division 50 membership) translates into involvement in AoD-counseling practice.

The current study sought to test the generalizability of the above findings by examining the predictive power of APA Division 28 and 50 membership on psychologists' functioning as AoD counselors. Conversely, the study sought to explore whether a lack of focused support on AoD-counseling practice (as would be seen in a non-addiction focused APA Division) would negatively impact psychologists' functioning as AoD counselors.

Impact of Informal Support

According to Social Identity Theory, individuals develop a social identity or definition of "who one is" through their relationships with others (Shaw et al., 1978). The profession to which a clinician belongs can be considered an important social identity, providing a context for expectations associated with one's social role. Accordingly, mainstream practitioners' colleagues likely exert a significant effect on their functioning as AoD counselors. Addy et al. (2004) stated that a mainstream worker will likely identify with the role of an AoD counselor if his/her colleagues support him/her in holding this role.

Skinner (2005a) argued that informal mentoring offers a workforce development strategy that can help address some pertinent issues within the AoD treatment field. Mentoring can facilitate workers' attainment of new roles and responsibilities associated with AoD counseling, increase confidence in their ability to practice AoD counseling, and reduce role ambiguity, stress, and burnout.

Acker et al. (2004) found that social workers experiencing higher levels of social support at their job had higher levels of job satisfaction and lower levels of intentions to leave their job. Likewise, Addy et al. (2004) found that informal support was positively correlated with the frequency with which Australian nurses and mental health professionals conducted AoD screenings, assessments, and brief interventions, and make referrals. Furthermore, Skinner (2005a) argued that negative or unsupportive coworkers can inhibit training transfer.

The current study sought to examine the predictive power of informal support on psychologists' functioning as AoD counselors. It was hoped that expanding upon the scarcity of research in this area would provide valuable information on the extent to which collegial support affects psychologists' functioning as AoD counselors.

Impact of Organizational Legitimacy and Support

Shaw et al. (1978) placed particular emphasis on the provision of organizational support, arguing that a supportive work setting allows mainstream practitioners to gain experience in a non-threatening environment, develop realistic expectations, and further develop their AoD counseling skills and knowledge from more experienced colleagues.

Similarly, Roche (2009) explained that psychologists who work in an environment that has greater organizational legitimacy to practice AoD counseling will

display more positive attitudes toward substance-using clients and greater competencies in AoD counseling practice because of their access to an environment that fosters and supports the prerequisite training experiences.

Because it is difficult for psychologists outside of such an environment to gain access to conditions that are supportive of AoD counseling practice, they may not have the same outcomes (Skinner et al., 2005). Skinner et al. explained that maintaining a positive and enthusiastic attitude toward AoD-counseling practice is likely difficult in a workplace that does not value, support or recognize this type of work.

Research has consistently shown that organizational support has a significant positive effect on mainstream professionals' clinical practices with substance-using clients (Addy et al., 2004b; Albery et al., 2002; Amodeo, 2000; Amodeo, 2001; Broadus et al., 2010; Cartwright, 1980; Cartwright & Gorman (1993); CSAT, 2006; Davis & Taylor-Vaisey, 1997; Lightfoot & Orford, 1986; Loughran et al., 2010; Lubin et al., 1986; Moos & Moos, 1998; Shaw et al., 1978; Skinner, Roche, Freeman, & Addy, 2005).

In 2004, Addy et al. found that the frequency with which Australian nurses and mental health professionals conducted AoD screenings, assessments, brief interventions, and made referrals increased with stronger perceptions of their workplaces' organizational legitimacy to practice AoD counseling. Skinner (2005) also reported that Addy et al.'s study found that clear performance standards, goals, and expectations were associated with an increase in participants' motivation to practice AoD counseling.

In Lightfoot and Orford's (1986) study, social workers' low perceptions of support to practice AoD counseling were associated with a minimal therapeutic role with substance-using clients. Lightfoot explained the results, stating that,

In a nutshell, in the situationally constrained agent, constrained by time, by departmental policy and by absence of local backup or example - the response is, understandably, the adoption of negative attitudes to maintain self-esteem” (p.754).

In a study of doctors and midwives in 20 antenatal clinics in New South Wales, Cooke et al. (1998) explored factors that facilitate or obstruct the use of brief interventions for smoking cessation. In hospitals with written procedures, doctors and midwives were more likely to be offered training in smoking cessation interventions, to perceive that the hospital had a policy for smoking cessation intervention, and to report smoking cessation intervention use (Cooke et al., 1998). Similar to Lightfoot and Orford’s research (1986), Cooke et al.’s study suggests that organizational variables play an important role in improving mainstream clinicians’ functioning as AoD counselors.

Moos (1998) found that AoD treatment programs with a supportive and goal-oriented workplace (i.e., possessing task orientation, clarity, and structure) and a clear and explicit AoD-related mission had a higher rate of staff motivation to engage in AoD counseling practice, a stronger belief system and orientation toward AoD treatment, and more goal-oriented AoD treatment.

Furthermore, substance-using clients who were treated in a supportive and goal-oriented treatment environment participated in more AoD-related educational, social, and family treatment services, were more involved in self-help groups, were more satisfied with treatment, improved more during treatment, and were more likely to participate in outpatient mental health care after discharge (Moos, 1998).

Moos and Moos (1998) concluded that the findings suggest that organizational structure plays an important role in reducing role ambiguity and conflict among different professionals working together, developing trust and rapport with supervisors to manage

difficult client situations, and promoting intrinsic commitment to AoD counseling practice highlighting intrinsic rewards.

Hunot and Rosenbach (1998) examined the influence of role recognition, role support, and AoD training on 141 volunteer counselors' attitudes toward substance-using clients and their future commitment to their agency. Hunot and Rosenbach found that role recognition, role support, opportunities for skills development, and the provision of different modalities of supervision all helped to enhance volunteers' attitudes towards AoD-counseling practice and retain their commitment to the work of the agency. Hunot and Rosenbach concluded that agencies' willingness to recognize and value their counselors' engagement in AoD-counseling practice is an important factor in improving their attitudes toward substance-using clients and increasing their future commitment to the mission of their place of employment.

Albery et al. (2003) sampled 189 non-specialist drug workers to examine the predictive power of situational constraints to AoD counseling practice on clinicians' commitment to practicing AoD counseling. The participants included volunteer counselors, probation officers, general nurses, social workers, and youth/community workers. Consistent with Lightfoot and Orford's (1986) seminal study conducted 17 years earlier, therapeutic commitment to being an AoD counselor decreased as situational constraints to AoD counseling practice increased.

Rhoades and Eisenberger (2002) reviewed more than 70 studies on perceived organizational support (i.e., employees' general belief that their work organization values their contribution and cares about their wellbeing). Fairness, supervisor support, organizational rewards, and favorable job conditions were associated with perceived

organizational support, which in turn was related to outcomes favorable to employees (job satisfaction, positive mood) and the organization (affective commitment, performance, and lessened withdrawal behavior).

Similar to Rhodes and Eisenberg's (2002) study, Knudsen, Ducharme, and Roman (2008) found that the availability of good clinical supervision was strongly associated with higher perceptions of job autonomy and justice, which in turn was associated with lower perceptions of emotional exhaustion and turnover intention.

In a study of counselors employed in a national sample of therapeutic communities, Knudsen, Johnson, and Roman (2003) found that organizational culture predicted burnout and turnover intent. Centralized decision-making (i.e., a strong emphasis on rigid hierarchical control within the treatment process) predicted high levels of burnout and turnover intent. Knudsen et al. concluded that organizational culture plays a substantial role in counselors' well-being and their decision to leave their jobs.

The NeATTC (2006) highlighted extensive research evidence suggesting that trained AoD counselors will fail to use newly acquired skills if they return to a work environment where the new skills are not actively supported or where they are hindered. For example, Davis and Taylor-Vaisey's (1997) study on continuing medical education found that newly learned skills were not implemented in an environment where participants' behavior was not rewarded or sanctioned, or ran counter to prevailing practices within the workplace.

The above studies reinforce the importance of implementing workforce development interventions at an organizational level rather than exclusively focusing on improving the AoD-counseling knowledge, skills, and experiences of individual

clinicians. To the author's knowledge, Addy et al. (2004) are the only researchers who studied the impact of organizational legitimacy on psychologists' functioning as AoD counselors. The current study sought to build upon this research by examining the predictive power of organizational legitimacy to practice AoD counseling on psychologists' functioning as AoD counselors.

Overview of Research Gaps

Given the epidemic proportion of untreated SUDs in the United States, it is important to discover what factors may enhance psychologists' functioning as AoD counselors. The current study sought to make a unique contribution by shedding light on factors that enhance psychologists' functioning as AoD counselors. Amodeo (2000) stressed that future research needs to continue to explore the key factors that compromise clinicians' role adequacy, role legitimacy, and motivation and reward from engaging in AoD counseling practice in order to build successful interventions that would alleviate the AoD treatment workforce crisis.

Only a handful of studies have specifically researched psychologists' functioning as AoD counselors (Aanavi, Tange, Ja, & Duran, 1999; APA Practice Directorate, 2003; 2004; Burrow Sanchez, Call, Adolphson, & Hawken, 2009; Cellucci & Vik, 2001; Craig, 2008; Pruett, Chan, & Tansey, 2006; Spirito et al., 2009). Rather, most research has focused on social workers, mental health counselors, and medical professionals. Thus, there is a need to specifically assess psychologists' functioning as AoD counselors, as well as the generalizability of prior findings, which the current study sought to undertake.

Amodeo (2000) pointed out that existing research has not systematically explored the contribution of factors such as the level of support available to mainstream

practitioners and the agency constraints under which they work. To date, most emphasis has been and continues to be directed to individual factors. A multifaceted approach is required for a more representative examination of the range of factors that impact professionals' functioning as AoD counselors, which this study sought to undertake.

To this author's knowledge, the current study is the first multifaceted examination of the predictive power of AoD training and support on psychologists' functioning as AoD counselors. It was hoped that conducting a more comprehensive analysis would provide important insights into the relative effect that AoD training versus professional support has on psychologists' functioning as AoD counselors.

Chapter Summary

This chapter provided a context for the current study by discussing the early history of AoD treatment and the current role of mainstream clinicians in the AoD treatment field. Furthermore, the chapter consisted of a discussion of AoD counseling competencies, and the initiative to certify psychologists in AoD counseling and develop APA addiction Divisions. The chapter then presented a literature review describing psychologists' AoD education and knowledge, their functioning as AoD counselors, and their professional support to practice AoD counseling. Furthermore, the chapter examined the predictive power of AoD education, experience in AoD counseling, and professional support to practice AoD counseling on psychologists' functioning as AoD counselors. Finally, the chapter provided an overview of existing research gaps, and an overview of the study. The following chapter will discuss the methodology of the current study.

CHAPTER 3

METHOD

This chapter will present the methodology of the study. First, the participant pool and sampling procedures will be described. Second, the descriptive, predictor, and outcome variables will be discussed. The next section will present exploratory questions followed by the research hypotheses. Finally, the measures will be reviewed, followed by the procedure, and approach to data analysis.

Participants

A total of 220 subjects participated in the study. The sample size was reduced to 178 participants after removing participants who indicated that they were either students or held master's degrees in a mental health field. Psychologists who were members of either APA Division 28, 29, 42, or 50 and were on the Divisions' listservs made up the participant pool. The current sample was intended to be representative of the diversity of psychologists involved in AoD counseling practice.

Division 28 and Division 50 are APA’s addictions divisions, which are described in Chapter Two. Division 29 (Psychotherapy) aims to advance the science, teaching, and practice of psychotherapy. It is a community of practitioners, scholars, researchers, teachers, health care specialists, and students who are devoted to the advancement of the art and science of psychotherapy.

The mission of Division 42 (Psychologists in Independent Practice) is to support and encourage the evolution and development of the independent practice of psychology. The Division offers tools and learning opportunities to increase professional skill building and practice development across the career span (APA, 2012).

The APA Listserv website (APA, 2014) reports that Division 28 has 532 listserv subscribers, whereas Division 29 has 270 subscribers. Division 42 has 1306 subscribers and Division 50 has 1926 subscribers. Of the Division listserv subscribers, 220 participated in the study. In total, the response rate was 7%.

Participants’ APA Division Membership

Table IV shows the percentage of participants who are members of the Society of Addiction Psychology (Division 50), the Division of Psychologists in Independent Practice (Division 42), Psychotherapy (Division 28), and/or Psychopharmacology and Substance Abuse (Division 29). Nearly half of the participants reported that they were members of Division 50. Nearly one third of participants belonged to Division 42. Of the participants, 139 also indicated that they belonged to “other” divisions.

Table IV. Participants’ APA Division Membership.

APA Division Membership	Percentage of Participants
Society of Addiction Psychology	45.5%
Psychologists in Independent Practice	32.6%
The Division of Psychotherapy	18.0%
Pharmacology and Substance Abuse	16.3%

*Multiple answers allowed

Participant Demographics

Of the participants, 46.6% were male and 53.4% were female ($N=176$).

Table V shows the frequencies of the ages of the participants.

Table V. Frequency of the Ages of Participants ($N=178$).

Age	Percentage of Participants
20-29 years old	3.4%
30-39 years old	23.6%
40-49 years old	18.0%
50-59 years old	20.2%
59 years and older	34.8%

The majority (89.3%) of participants were Caucasian ($N=177$). Table X shows the breakdown of participants by ethnicity (See Table VI).

Table VI. Race/Ethnicity of Participants ($N=177$).

Race/Ethnicity	Percentage of Participants
Caucasian	89.3%
African-American	4.0%
Asian/Pacific Islander	1.1%
Hispanic/Latino	2.3%
Indian	0.6%
Middle Eastern	0.6%
Bi/Multiracial	2.3%

Participants' Education

Table VII shows the type of doctoral degree held by the participants. Nearly two thirds of the participants held a Ph.D. in Clinical Psychology.

Table VII. Type of Doctoral Degree Held by Participants ($N=147$).

Doctoral Degree Held	Percentage of Participants
Ph.D. in Clinical Psychology	63.3%
Ph.D. in Counseling Psychology	19.0%
Psy.D. in Clinical Psychology	14.3%
Psy.D. in Counseling Psychology	3.4%

Participants' Clinical Practice Background

Of the participants, 42.6% indicated that they have been practicing for more than 15 years. As many as 17.6% of the participants reported that they were not involved in clinical practice (See Table VIII).

Table VIII. Number of Years in Clinical Practice Since Licensure (*N*=176)

Years in Clinical Practice	Percentage of Participants
I do not practice	17.6%
5 years or less	18.8%
6-10 years	12.5%
11-15 years	8.5%
More than 15 years	42.6%

Of the participants, half (50.5%) reported being in solo private practice; 30.5% worked in an outpatient mental healthy agency or clinic; and 104 endorsed “other” for their primary place of employment (See Table IX).

Table IX. Participants’ Primary Place of Employment (*N*=105)

Primary Place of Employment	Percentage of Participants
Group private practice	9.5%
Outpatient mental health agency or clinic	30.5%
Solo private practice	50.5%
Inpatient setting	9.5%

Table X shows the degree to which participants were engaged in various professional activities that involved at least 33% of their time. As this table indicates, professional practice activities (therapy, assessment and consultation) were the most frequently endorsed categories. Other professional activities included supervision, administrative oversight, program development, professional boards, grant writing, coaching, group therapy, brief counseling and resource linkage, and vocational rehabilitation counseling.

Table X. All the Professional Activities That Involve at Least 33% of Participant’s Time.

Professional Activities That Involve at Least 33% of Participants’ Time	Percent of Participants
Psychotherapy with adults	50.5%
Research and teaching	38.6%
Assessment/testing	27.3%
Consultation	27.3%
Psychotherapy with adolescents	14.5%
Psychotherapy with children	11.4%
Combination of the above	7.3%

*Multiple answers allowed

Involvement in AoD Counseling Practice and Training

The range of clients with AoD issues seen by participants was wide. Nearly 20% did not have a current caseload that has AoD problems or is diagnosed with a SUD. However, over 20% of participants had 81-100% of their caseload consist of clients with AoD issues or a SUD diagnosis. Over one third of participants had 1-20% of their current caseload consist of clients with AoD issues or SUDs (See Table XI).

Table XI. Percentage of Participants' Current Caseload That Has AoD Issues (*N*=170)

Percentage of Current Caseload with AoD Issues	Percent of Participants
None	19.4%
1-20%	33.5%
21-40%	11.2%
41-60%	9.4%
61-80%	5.9%
81-100%	20.6%

Table XII shows the percentage of participants' current caseload that has AoD issues. Nearly half of participant saw 100 or more clients with AoD issues over the course of their careers. One fourth of the participants saw 10-50 clients with AoD issues over the course of their careers.

Table XII. Number of Participants' Clients with AoD Issues Treated Over the Course of One's Career (*N*=184).

Number of AoD Clients Seen Over the Course of One's Career	Percentage of Participants
Less than 10 clients with AoD issues	14.4%
10-50 clients with AoD issues	25.3%
50-100 clients with AoD issues	12.6%
100 or more clients with AoD issues	47.7%

Table XIII below shows the AoD counseling certification status of participants. The majority (78.5%) of participants indicated that they have never been certified in AoD counseling, and only 13.6% were currently certified as AoD counselors.

Table XIII. Participants' AoD Counseling Certification Status ($N=177$).

AoD Certification Status	Percentage of Participants
Never certified	78.5%
Currently certified	13.6%
Previously certified	7.3%
Certification pending	0.6%

Table XIV shows the extent to which participants have engaged in continuing AoD education in the past two years. On average, participants took 2.4 hours of continuing AoD education in the past two years, but the range was wide. One third of the participants engaged in no continuing AoD education activities in the past two years.

Table XIV. Hours of Continuing AoD Education Completed in the Last 2 Years ($N=174$).

Hours of Continuing AoD Education Completed in the Last 2 years	Percentage of Participants
0 hours	35.1%
1-9 hours	27.6%
10-29 hours	20.1%
30-49 hours	6.3%
More than 50 hours	10.9%

Predictor Variables

AoD training was operationalized by the following variables: 1) the relevance of AoD training on one's current clinical practice, 2) the number of substance-using clients seen over the course of one's career, 3) AoD counseling certification, and 4) continuing AoD education. AoD role support was represented by the following variables: 1) AoD career motivation, 2) APA Division membership, 3) informal support, and 4) organizational legitimacy (See Table 4).

Outcome Variables

For the purpose of this study, "functioning as an AoD counselor" was operationalized by the following variables: 1) AoD adequacy, 2) AoD legitimacy, 3) motivation and reward, and 4) the percentage of one's current caseload that has AoD issues (See Table XV).

Table XV. Predictor and Outcome Variables.

PREDICTOR VARIABLES	OUTCOME VARIABLES
<p>Training: Relevance of AoD Training No. of AoD Clients Seen During One’s Career AoD Counseling Certification Continuing AoD Education</p> <p>Professional Support: Career Motivation Division 28, 29, 42, and 50 Membership Informal Support Organizational Legitimacy</p>	<p>Functioning as an AoD Counselor: Role Adequacy Role Legitimacy Motivation and Reward % of Current Caseload That Has AoD Issues</p>

Hypotheses

The first hypothesis presented below groups the predictor variables into unique sets of variables (steps/blocks entered in a regression model). These sets of variables were included in four separate multiple regression analyses for each outcome of interest.

The study sought to test (confirm) the following hypotheses:

1. **Professional support** (i.e., career motivation, APA Division 28 and 50 membership, informal support, and organizational legitimacy) will significantly account for the proportion of variance in **psychologists’ functioning as AoD counselors** (i.e., role adequacy, role legitimacy, motivation and reward, and the percentage of one’s current caseload that has AoD issues) over and above the proportion of variance accounted for by **AoD training** (i.e., the perceived relevance of AoD training to one’s current practice, the number of substance-using clients treated over the course of one’s career, AoD counseling certification, and continuing AoD education).
2. **Membership in APA Division 29 and 42** will negatively predict psychologists’ **functioning as AoD counselors**.

Hypothesis 1 was based on research suggesting that AoD education and professional support are predictive of functioning as an AoD counselor (e.g., Addy et al., 2005; Amodeo, 2000; Cartwright et al., 1980; Lightfoot & Orford, 1986, Skinner, 2005). Existing research has mainly focused on the effect of AoD education on mental health professionals' functioning as AoD counselors to the exclusion of the effect of AoD-counselor support (Amodeo, 2000), which a few existing studies have found predict functioning as an AoD counselor above and beyond AoD education.

Hypothesis 2 was indirectly based on past research finding that Division 50 offers support that contributes to psychologists' effective functioning as AoD counselors (APA Practice Directorate, 2002). It was deduced that the opposite would be true, where a lack of focused support related to AoD counseling practice (as would be seen in generalist Division 29 and 42) would negatively effect psychologists' functioning as AoD counselors.

Exploratory Questions

The study sought to investigate the following exploratory questions:

1. How do psychologists perceive the usefulness of their AoD training?
2. How much professional support to engage in AoD counseling practice do psychologists report having?
3. What are psychologists' perceptions of role adequacy and role legitimacy to practice AoD counseling, and their level of motivation and reward from providing AoD counseling?
4. What views do psychologists have on mandating graduate AoD training?

5. What views do psychologists have on mandating AoD content on the Examination for Professional Practice for Psychologists (EPPP)?
6. What views do psychologists have on mandating continuing AoD education?
7. What do psychologists believe is the most appropriate way to respond to the withdrawal of the APA Certificate of Proficiency in the Treatment of Alcohol and Other Psychoactive Substance Use Disorders (APA-CPP)?

Measures

Participants filled out the “*Psychologists’ Clinical Work with Substance Using Clients*” questionnaire containing items adapted from the literature and developed by the author (See Appendix X), as well as scales from the *Work Practice Questionnaire (WPQ)* (Addy et al., 2004b) (See Appendix B).

Survey Questions Developed by the Author

Participants were asked demographic questions including age, gender, race/ethnicity, and type and years of clinical practice. Participants were also asked to check all the professional activities that include at least 33% of their time, and what percentage of their current caseload has AoD problems or is diagnosed with a Substance Use Disorder.

Participants were also asked to check all the APA Divisions in which they hold membership and for information about their degrees, AoD training, AoD certification status, continuing AoD education, the percentage of their current caseload that has AoD issues, and the number of clients they have treated over the course of their careers.

Furthermore, participants were asked about their views on AoD training, including whether it should be implemented in graduate school, and whether a proportion of the licensure examination should contain AoD-related content. Participants also indicated

whether or not they believe continuing AoD education should be required for psychology license renewal. In addition, the measure solicited participants' views on solutions to the withdrawal of the APA-CPP. APA Practice Central's (2011) official announcement regarding the withdrawal of the APA-CPP was also quoted.

The Work Practice Questionnaire

The *WPQ* was designed to measure individual, team, workplace, and organizational factors that likely influence clinicians' AoD counseling practice (Addy et al., 2004). Addy et al. stated that individual scales from the *WPQ* may be used to solely measure particular constructs of interest.

Addy et al.'s (2004) *Handbook for the WPQ* gives the reader permission to utilize the questionnaire. In response to the question, "Who Can Use the Work Practice Questionnaire?", Addy et al. inform that,

The *WPQ* is designed for educators and trainers to use pre- and post-training. It can also be used by organizations to identify facilitators and barriers to practice change in regard to AoD-related work practices (p. 3).

Furthermore, on page ii, Addy et al. (2004) inform that,

copies of all these documents, and other materials related to workforce development, are available from the National Centre for Education and Training on Addiction (NCETA) website at www.nceta.flinders.edu.au.

This researcher also obtained direct permission to use the *WPQ* from Dr. Allan Trifonoff who is involved in *WPQ* research and works on behalf of NCETA. The *WPQ* scales demonstrated good psychometric properties in three studies of construct validity ($N=250$), criterion-related validity ($N=215$), and test-retest reliability ($N=182$) (Addy et al., 2004b). Addy et al.'s validation study of the *WPQ* surveyed Australian health and human services professionals drawn from a wide range of organizations including AoD

specialist services, community health centers, youth agencies, and mental health organizations. The *WPQ* scales demonstrated good internal consistency (0.70 to 0.93) and test–retest reliability (0.81 to 0.95).

Moreover, in support of construct validity, Addy et al. (2004b) found that the *WPQ* scales were positively associated with similar measures not specific to AoD-counseling practice (e.g. general job satisfaction). In addition, the scales also demonstrated positive correlations with four key AoD counseling practices: screening (0.26 to 0.32, referral (0.33 to 0.46), assessment (0.36 to 0.45), and brief intervention (0.22 to 0.45). Addy et al concluded that, given the complex range of factors that impact AoD counseling practices, the criterion-related validity of the *WPQ* is satisfactory.

WPQ Scale Measuring AoD Training

Participants were given the *Perceived Relevance of Training Scale*, a 6-item measure that addresses the extent to which a training program is appropriate, relevant, and consistent with trainees’ work-related roles, demands, and performance expectations (e.g. “*The education and training provided me with the necessary knowledge and skills to respond to people with alcohol and other drug related issues*”). Answer choices were scored on a 5-point Likert scale (*1=Disagree* and *5=Agree*). *The Perceived Relevance of Training Scale* had an internal consistency of .85 and a test-retest reliability of .72 when retested after a 2-3 week interval. Mean scaled scores were created by combining the items in a scale and dividing them by the total number of items, yielding scores ranging from 1 to 5 (Addy et al., 2004).

WPQ Scales Measuring Professional Support

The remaining scales used in this study were modified from their original 4-point Likert scale to a 5-point Likert scale in order to include an “unsure” category.

Psychologists’ perceptions of professional support to engage in AoD counseling practice was measured using the *Career Motivation Scale*, the *Informal Support Scale*, and the *Organizational Role Legitimacy Scale*. Answer choices were scored on a 5-point Likert scale (1=Disagree and 5=Agree) (Addy et al., 2004b).

The *Career Motivation Scale* is a 3-item scale that measures workers’ motivation to pursue a career in AoD counseling and the perceived rewards and advantages of doing so (e.g., “*I prefer not to respond to AoD related problems as I find it too frustrating.*”). A higher score indicates greater motivation to pursue a career in the AoD treatment field. The *Career Motivation Scale* had an internal consistency of .73 and a test-retest reliability of .69 when it was retested after a 2-3 week interval (Addy et al., 2004b).

The *Informal Support Scale* of the *WPQ* is a 5-item scale measuring workers’ access to AoD-counseling-related support and advice from colleagues within an organization (e.g., “*If I needed to, it would be easy to find someone to give me advice on responses to alcohol and other drug-related issues relevant to my workplace*”). A higher score on the *Informal Support Scale* reflects stronger perceptions of informal support to practice AoD counseling. The scale had an internal consistency of .90 and a test-retest reliability of .86 when it was retested after a 2-3 week interval (Addy et al., 2004b).

Lastly, the *Organizational Role Legitimacy Scale* of the *WPQ* is a 7-item scale that assesses workers’ perceptions of the role that the organization plays in responding to AoD issues. The scale addresses the extent to which an organization’s culture, policies,

practices, and behavioral expectations support, guide and encourage workers to respond to AoD issues (e.g., “*There is a philosophy that guides this organization’s responses to alcohol and other drug related issues.*”) (Addy et al., 2004b).

Addy et al. (2004b) state that the *Organizational Role Legitimacy Scale* is appropriate for use in an organization where AoD treatment or response is not the primary service (e.g., Emergency Department). Higher scores on the *Organizational Role Legitimacy Scale* indicate a higher level of perceived organizational legitimacy to engage in AoD counseling practice. The scale had an internal consistency of .91 and a test retest reliability of .81 when it was retested after a 2-3 week interval.

WPQ Scales Measuring Functioning as an AoD Counselor

Psychologists’ functioning as AoD counselors was measured using the *Role Adequacy Scale*, *Role Legitimacy Scale*, and *Individual Motivation & Reward Scale* of the *WPQ*. The *Role Adequacy Scale* is a 6-item scale that assesses “Can I respond effectively to AoD issues?” judgments (e.g. “*I am confident in my ability to respond to alcohol and other drug-related issues*”). Higher scores on the *Role Adequacy Scale* indicate confidence in having the necessary knowledge and skills to respond to AoD issues. The scale had an internal consistency of .91 and a test-retest reliability of .86 when it was retested after a 2-3 week interval (Addy et al., 2004b).

The *Role Legitimacy Scale* of the *WPQ* is a 7-item scale that assesses “Should I respond to AoD issues?” judgments (e.g. “*I have a legitimate role to play in responding to alcohol and other drug-related issues*”). Low scores on the *Role Legitimacy Scale* indicate perceptions that one lacks authority to treat AoD issues and the belief that it is another profession’s responsibility. The *Role Legitimacy Scale* had an internal

consistency of .82 and a test-retest reliability of .81 when it was retested after a 2-3 week interval (Addy et al., 2004b).

Lastly, the *Individual Motivation and Reward Scale* is a 7-item scale that measures the extent to which workers are driven to respond to AoD issues and receive satisfaction from it. Sample items from the scale include “*I believe that responding to alcohol and other drug-related issues is important*”, and “*My experience of responding to alcohol and other drug-related issues has been rewarding.*” Higher score on the *Individual Motivation and Reward Scale* indicates stronger motivation to respond to AoD issues, and greater satisfaction from providing AoD counseling. *The Individual Motivation and Reward Scale* had an internal consistency of .89 and a test-retest reliability of .83 when it was retested after a 2-3 week interval (Addy et al., 2004b). Table XVI displays a summary of the measures for each variable.

Table XVI. Measures of Variables.

Variables	Measures
Perceived relevance of AoD training	<i>Perceived Relevance of Training Scale</i>
Number of AoD clients treated in one’s career	Over the course of my career, I have treated...
AoD counseling certification	What is your certification status in the substance abuse treatment field?
AoD continuing education	How many hours of continuing education have you completed in AoD issues in the last 2 years?
AoD career motivation	<i>AoD Career Motivation Scale</i>
Professional AoD association membership	Check all the APA divisions in which you hold membership...
Informal AoD role support	<i>Informal AoD Role Support Scale</i>
Organizational AoD role legitimacy	<i>Organizational AoD Role Legitimacy</i>
AoD role adequacy	<i>AoD Role Adequacy Scale</i>
AoD role legitimacy	<i>AoD Role Legitimacy Scale</i>
Individual motivation and reward	<i>Individual Motivation and Reward Scale</i>
Percentage of current caseload that has problems with drugs and alcohol or is diagnosed with a Substance Use Disorder	What percentage of your current caseload has problems with drugs and alcohol or is diagnosed with a Substance Use Disorder?

Procedure

Upon IRB approval, APA Division 28, 29, 42, and 50 Listserv administrators were contacted with a request to post a recruitment letter on the listservs explaining the nature of the study and inviting members to complete an online survey. The recruitment letter included a link to the survey created in Survey Monkey (<http://www.surveymonkey.com>). Informed consent was obtained by participants voluntarily choosing to complete the online survey. The response rate was 7%.

Data Analysis

For exploratory analysis, descriptive statistics were run, including the mean, standard deviation, skewness, and frequency counts for the variables. In addition, data screening and regression diagnostics were conducted.

For the main analysis, four separate hierarchical multiple regression analyses were performed to test Hypothesis 1 and 2. To complement the main results, a series of backwards elimination regression models were performed as one method to address issues of multicollinearity, while seeking a more parsimonious model to test in future studies.

Chapter Summary

In summary, this chapter presented the methodology of the study consisting of a description of the demographic variables, and the predictor, and outcome variables. The chapter also presented the study's exploratory questions, the hypotheses, procedure, and method for data analysis. Chapter Four will describe the results of the study.

CHAPTER 4

RESULTS

The main purpose of this study was to examine the relative predictive power of AoD training and professional support on psychologists' functioning as AoD counselors. The study also sought to assess psychologists' alcohol and other drug (AoD) training, professional support, and their functioning as AoD counselors. Finally, the study aimed to gather data on participant's attitudes toward current AoD education standards, as well as their views on the most appropriate way to respond to the withdrawal of the APA-CPP.

In this chapter, first, descriptive statistics will be presented. Second, correlations between variables will be discussed, followed by the presentation of data screening and regression diagnostics. Finally, tests of the hypotheses will be discussed, followed by the exploratory questions of the study, and summary of the chapter.

Descriptive Statistics

Table XVII shows the mean, standard deviation, and skewness of each variable.

Table XVII. Mean, Standard Deviation, and Skewness of Predictor and Outcome Variables.

Variable	Mean	Standard Deviation	Skewness
Number of AoD Clients Treated in One's Career	2.9	1.1	-0.5
Usefulness of Education	11.5	3.2	-0.9
Certification	0.2	0.4	1.4
Continuing Education	2.3	1.3	0.8
Role Adequacy	24.5	6.6	-1.2
Role Legitimacy	24.9	5.2	-0.9
Motivation and Reward	30.7	5.4	-1.3
Percentage of Current Caseload with AoD Issues	3.1	1.8	0.5
Informal Support	19.2	5.3	-0.9
Career motivation	11.95	2.8	-0.8
Division 28 Membership	0.2	0.4	1.8
Division 50 Membership	0.5	0.5	0.2
Division 29 Membership	0.2	0.4	1.7
Division 42 Membership	0.3	0.5	0.8

Preliminary Analysis: Correlations

Correlations were computed between variables measuring 1) AoD training and professional support, 2) AoD training and participants' functioning as AoD counselors and 3) professional support and functioning as an AoD counselor.

Results revealed that the majority of variables measuring functioning as an AoD counselor were strongly positively correlated with each other. Moreover, the variables measuring AoD training were positively correlated with each other to varying degrees. The role support variables were also strongly positively correlated with each other.

The variables measuring AoD education were positively correlated with the variables measuring functioning as an AoD counselor to varying degrees. Similarly, the variables measuring role support were strongly positively correlated with the variables measuring functioning as an AoD counselor (See Table XVIII).

Table XVIII. Bivariate Correlations Among Variables.

	1	2	3	4	5	6	7	8	9	10	11
1. AoD Clients Seen During Career											
2. Usefulness of Education	.365**										
3. Certification	.355**	-.044									
4. Continuing Education	.552**	.261**	.301*								
5. Role Adequacy	.658**	.405**	.271*	.460*							
6. Role Legitimacy	.666**	.398**	.294*	.439*	.882*						
7. Motivation and Reward	.584**	.407**	.252*	.420*	.845*	.850*					
8. % of Current AoD Caseload	.583**	.241**	.280*	.520*	.469*	.555*	.520**				
9. Career Motivation	.447**	.378**	.188*	.382*	.589*	.516*	.565**	.463*			
10. Informal Support	.379**	.261**	.088	.313*	.498*	.513*	.523**	.428*	.579*		
11. Organizational Legitimacy	.400**	.269**	.161	.413*	.533*	.576*	.623**	.504*	.578*	.694**	

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

* Correlation is significant at the 05 level (2-tailed). Dichotomous variables not included.

Data Screening and Regression Diagnostics

Estimates of skewness and kurtosis for the continuous predictor variables fell between -1 and 1. Diagnostic tests were conducted to determine how well the regression models fitted the data. The residuals of the outcomes variables and the regression slopes were examined to detect specification errors and influential observations. Analyses of studentized residuals were run to detect outliers that fell 3 *SDs* outside the mean. To determine if these cases were influencing the slope, Cook's D values were computed. After removing one outlier from the solution predicting role legitimacy (Hypothesis 1 and 2) and one from the solution predicting role adequacy (Hypothesis 2), and then re-running the analyses, the results remained nearly identical.

Hierarchical Multiple Regression Analyses

A series of four separate regression analyses were conducted to test Hypothesis 1 and another series of four separate regressions analyses were conducted to test

Hypothesis 2. In each final solution, the second block of predictor variables (Step 2) was deliberately entered after the first block of predictors. The variables within each block, however, were entered using forced-entry method.

Hypothesis 1. Regression analyses were conducted to test whether **professional support** (i.e., career motivation, APA Division 28 and 50 membership, informal support, and organizational legitimacy) would significantly account for the proportion of variance in psychologists' **functioning as AoD counselors** (i.e., role adequacy, role legitimacy, motivation and reward, and the percentage of one's current caseload with AoD issues) over and above the proportion of variance accounted for by **AoD training** (i.e., the perceived relevance of AoD training to one's current practice, the number of AoD clients treated over the course of one's career, certification, and continuing AoD education).

Model 1: Role Adequacy

Analyses from Step 1 revealed that AoD training variables accounted for 49% of the variation in role adequacy, which was significant, $F(4, 127) = 32.32, p = .000$. When role support variables were added in Step 2, the variables all together accounted for 57% of the variation in the final solution predicting role adequacy, which was significant, $F(9, 122) = 20.53, p = .000$ (See Table XIX).

Table XIX. Stepwise Multiple Regression for Role Adequacy ($N = 132$).

<i>Step/Variable</i>	<i>R</i>	<i>Adj. R²</i>	ΔR^2	ΔF	β
Role Adequacy as criterion					
Step 1: Usefulness of education	.71	.49	.50	32.32	.18**
No. of AoD clients treated in one's career					.57**
Certification					.00
Continuing Education					.12
Role Adequacy as criterion					

Step 2: Usefulness of AoD education	.78	.57	.10	6.0	.08
No. of AoD clients treated in one's career					.49**
Certification					-.04
Continuing Education					.02
Career Motivation					.14
Division 28 membership					.02
Division 50 membership					.13*
Informal Role Support					.06
Organizational Legitimacy					.14

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

* Correlation is significant at the 05 level (2-tailed).

In the first step, the number of substance-using clients seen over the course of one's career and the perceived usefulness of AoD education significantly positively predicted role adequacy ($t=7.02, p=.000$ and $t=2.71, p=.008$, respectively). The number of substance-using clients seen over the course of one's career was a stronger predictor of role adequacy than the perceived usefulness of AoD education ($\beta=.57$ versus $\beta=.20$).

When professional support variables were added to the equation, the number of substance-using clients seen over the course of one's career continued to be a significant predictor ($t= 6.39, p=.000$). APA Division 50 membership also emerged as a significant positive predictor of role adequacy ($t=2.00, p=.047$). When examining the individualized standardized beta coefficients, the number of substance-using clients treated over the course of one's career was a stronger predictor of role adequacy than APA Division 50 membership ($\beta=.49$ versus $\beta=.13$, respectively).

Model 2: Role Legitimacy

Analyses from Step 1 revealed that AoD training variables accounted for 49% of the variation in role legitimacy, which was significant, $F(4,127)=32.70, p=.000$). When

professional support variables were added in Step 2, the variables all together accounted for 58% of the variation in the final solution predicting role legitimacy, which was significant, $F(9,122) = 20.71, p = .000$ (See Table XX).

Table XX. Stepwise Multiple Regression for Role Legitimacy ($N=132$).

Step/Variable	R	Adj. R^2	ΔR^2	ΔF	β
Role Legitimacy as criterion					
Step 1: Usefulness of AoD education	.71	.49	.51	32.7	.19**
No. of AoD clients treated in one's career					.57**
Certification					.02
Continuing Education					.09
Role Legitimacy as criterion					
Step 2: Usefulness of AoD education	.78	.58	.10	5.99	.11
No. of AoD clients treated in one's career					.49**
Certification					-.02
Continuing Education					.00
Career Motivation					.04
Division 28 membership					.01
Division 50 membership					.14*
Informal role support					.05
Organizational Legitimacy					.23**

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

* Correlation is significant at the 05 level (2-tailed).

In the first step, role legitimacy was significantly positively predicted by the perceived usefulness of AoD education ($t=2.9, p=.005$) and the number of substance-using clients treated over the course of one's career ($t=7.1, p=.000$). Examination of the standardized beta coefficients indicated that the number of substance-using clients seen over the course of one's career was a more powerful predictor than the perceived usefulness of AoD education ($\beta=.57$ vs. $\beta=.20$, respectively).

When professional support variables were added to the prediction equation, the number of substance-using clients seen over the course of one's career continued to be a significant predictor of role legitimacy ($t=6.43, p=.000$). In addition, organizational legitimacy and APA Division 50 membership were significantly positively predictive of role legitimacy ($t=2.14, p=.035$ and $t=2.63, p=.010$, respectively).

The final solution indicated that the number of substance-using clients seen over the course of one's career was the strongest predictor of role legitimacy ($\beta=.49$), followed by organizational legitimacy ($\beta=.23$), and APA Division 50 membership ($\beta=.14$).

Model 3: Motivation and Reward

Analyses from Step 1 revealed that AoD training accounted for 39% of the variance in motivation and reward, which was significant, $F(4,124)=21.17, p=.000$.

When professional support variables were added in Step 2, the variables all together accounted for 57% of the variance in the final solution predicting motivation and reward which was significant, $F(9,119)=19.57, p=.000$ (See Table XXI).

Table XXI. Stepwise Multiple Regression for Motivation and Reward ($N=132$).

Step/Variable	R	Adj. R^2	ΔR^2	ΔF	β
Motivation and Reward as criterion					
Step 1: Usefulness of Education	.64	.39	.41	21.17	.24**
No. of AoD clients treated in one's career					.47**
Certification					.03
Continuing Education					.08
Motivation and Reward criterion					
Step 2: Usefulness of AoD education	.77	.57	.19	11.28	.13*
No. of AoD clients treated in one's career					.34**
Certification					-.01

Continuing Education					-.05
Career Motivation					.15
Division 28 membership					.03
Division 50 membership					.18**
Informal Role Support					.05
Organizational Legitimacy					.27**

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

* Correlation is significant at the 05 level (2-tailed).

In the first step, the perceived usefulness of AoD education and the number of substance-using clients seen over the course of one's career significantly positively predicted motivation and reward from practicing AoD counseling ($t=3.28, p=.001$ and $t=5.16, p=.000$, respectively). Examination of standardized beta coefficients indicated that the number of substance-using clients seen over the course of one's career was a stronger predictor of motivation and reward than the perceived usefulness of AoD education ($\beta=.47$ and $\beta=.24$, respectively).

When professional support variables were added to the equation, motivation and reward was significantly positively predicted by the perceived usefulness of AoD education ($t=1.98, p=.05$), the number of substance-using clients seen over the course of one's career ($t=4.32, p=.000$), APA Division 50 membership ($t=2.61, p=.01$), and organizational legitimacy to practice AoD counseling ($t=3.03, p=.003$).

Examination of beta coefficients indicated that the number of substance-using clients seen over the course of one's career was the strongest predictor of motivation and reward ($\beta=.34$), followed by organizational legitimacy ($\beta=.27$), APA Division 50 membership ($\beta=.18$), and the perceived usefulness of AoD education ($\beta=.13$).

Model 4: Percentage of One's Current Caseload That Has AoD Issues

Analyses from Step 1 indicated that the model accounted for 37.1% of variance in the percentage of one's current caseload with AoD issues, which was significant, $F(4,127)=20.35, p=.000$. When professional support variables were added in Step 2, the variables all significantly accounted for 42.3% of the variance in the final solution predicting the percentage of participants' current caseload that has AoD issues, $F(9,122)=11.68, p=.000$ (See Table XXII).

Table XXII. Stepwise Multiple Regressions for the Percentage of One's Current Caseload with AoD Issues ($N=132$).

Step/Variable	R	Adj. R^2	ΔR^2	ΔF	β
Current Caseload with AoD Issues as criterion					
Step 1: Usefulness of AoD education	.63	.37	.39	20.35	.02
No. of AoD clients treated in one's career					.48**
Certification					-.06
Continuing Education					.24**
Current Caseload with AoD Issues as criterion					
Step 2: Usefulness of AoD education	.68	.42	.07	3.29	-.06
No. of AoD clients treated in one's career					.38**
Certification					-.08
Continuing Education					.17*
Career Motivation					.18*
Division 28 membership					-.04
Division 50 membership					.00
Informal Role Support					.03
Organizational Role Legitimacy					.17

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

* Correlation is significant at the 05 level (2-tailed).

In the first step, the percentage of participants' current AoD caseload was significantly positively predicted by the number of continuing AoD hours taken in the last two years and the number of substance-using clients seen over the course of one's career ($t=2.93, p=.004$ and $t=5.25, p=.000$, respectively). The number of substance-using clients seen over the course of one's career ($\beta=.48$) was a stronger predictor of the percentage of participants' current caseload that has AoD issues than the number of continuing AoD education hours taken in the past two years ($\beta=.24$).

When professional support variables were added to the equation, the percentage of participants' current caseload that has AoD issues continued to be significantly positively predicted by the number of substance-using clients seen over the course of one's career ($t=4.16, p=.000$) and the number of continuing AoD education taken in the past two years ($t=2.13, p=.036$). In addition, career motivation was significantly positively predictive of the percentage of participants' current AoD caseload ($t=1.98, p=.050$).

The beta coefficients indicated that the percentage of participants' current caseload with AoD issues was best predicted by the number of substance-using clients seen over the course of one's career ($\beta=.38$), followed by career motivation ($\beta=.18$), and the number of continuing AoD education hours taken ($\beta=.17$). Table XXIII shows a summary of the significant predictors of the AoD-counselor-functioning variables.

Table XXIII. Stepwise Multiple Regression: Predictors of Participants' Functioning as AoD counselors in Descending Order of Significance.

Role Adequacy	Role Legitimacy	Motivation and Reward	Percentage of Current AoD Caseload
<i>Model 1</i> (49% of variance)	<i>Model 1</i> (49% of variance)	<i>Model 1</i> (39% of variance)	<i>Model 1</i> (37.1% of variance)
1.No. of AoD clients seen over the course of one's career	1. No. of AoD clients seen over the course of one's career	1. No. of AoD clients seen over the course of one's career	1. No. of AoD clients treated over the course of one's career
2.Usefulness of AoD education	2. Usefulness of AoD education	2. Usefulness of AoD education	2. No. of continuing AoD education hours in 2 years

<i>Model 2</i> (57% of variance)	<i>Model 2</i> (58% of variance)	<i>Model 2</i> (57% of variance)	<i>Model 2</i> (42.3% of variance)
1. No. of AoD clients seen over the course of one's career	1. No. of AoD clients seen over the course of one's career	1. No. of AoD clients seen over the course of one's career	1. No. of AoD clients seen over the course of one's career
2. APA Division 50 membership	2. Organizational role legitimacy	2. Organizational role legitimacy	2. Career motivation
	3. Division 50 membership	3. Division 50 membership	3. No. of continuing AoD education hours in 2 years
		4. Usefulness of AoD education	

Hypothesis 2. Hypothesis 2 stated that **membership in APA Division 29 and 42** would negatively predict psychologists' **functioning as AoD counselors** (i.e., role adequacy, role legitimacy, motivation and reward, and the percentage of one's current caseload that has AoD issues). Similar to the procedures for the first hypothesis, a series of four separate regression models were conducted. In this phase of analysis, however, only two predictors were of interest. These predictors were entered into the equation using forced-entry method. Table XXIV shows a summary of the regression calculations.

Table XXIV. Stepwise Multiple Regression for APA Division 29 and 42 Membership ($N=132$).

Step/Variable	<i>R</i>	<i>Adj. R</i> ²	ΔR^2	ΔF	β
Role Adequacy as criterion					
Division 29	.28	.07	.08	6.78	-.89
Division 42					-3.52**
Role Legitimacy as criterion					
Division 29	.28	.07	.08	6.58	-.08
Division 42					-.27**
Motivation and Reward as criterion					
Division 29	.39	.13	.14	12.3	-.10
Division 42					-.36**
Percentage of Current Caseload with AoD Issues					
Division 29	.29	.07	.08	7.6	-.17
Division 42					-.23**

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

* Correlation is significant at the 05 level (2-tailed).

APA Division 29 and 42 membership accounted for 7% of the variation in role adequacy, which was significant, $F(2,156)=6.8, p=.002$. Only membership in Division 42 significantly negatively predicted role adequacy ($t=-3.52, p=.001$).

APA Division 29 and 42 membership significantly predicted role legitimacy, $F(2,154)=6.58, p=.002$, accounting for 7% of the variance. Once again, only membership in Division 42 significantly predicted lower levels of role legitimacy ($t=-3.42, p=.001$).

APA Division 29 and 42 membership accounted for 13.1% of the variance in motivation and reward from conducting AoD counseling, which was significant, $F(2,148)=12.3, p=.000$. Only APA Division 42 membership significantly negatively predicted motivation and reward ($t=-4.76, p=.000$).

APA Division 29 and 42 membership accounted for 7% of the variance in the percentage of one's current caseload with AoD issues, which was significant, $F(2,167)=7.6, p=.001$. This time, both APA Division 29 and 42 membership significantly negatively predicted the percentage of participants' current caseload that has AoD issues ($t=-2.29, p=.023$ and $t=-3.08, p=.002$, respectively). When examining the standardized beta coefficients, APA Division 42 membership was a stronger predictor of the percentage of one's current caseload with AoD issues than APA Division 29 membership ($\beta=-.23$ versus $\beta=-.17$). Table XXV shows a summary of the predictive models of division membership on participants' functioning as AoD counselors.

Table XXV shows which non-addiction APA Division is a significant predictor of psychologists' functioning as AoD counselors.

Table XXV. Division 29 and 42 as Significant Predictors of the Variables Representing Participants' Functioning as AoD Counselors in Descending Order.

Role Adequacy	Role Legitimacy	Motivation and Reward	Percentage of Current Caseload with AoD Issues
1. APA Division 42 (7% of variance)	1. APA Division 42 (7% of variance)	1. APA Division 42 (13.1% of variance)	1. APA Division 42 2. APA Division 29 (7% total variance)

Secondary Results for Backwards Elimination Regression Analyses

To complement the main results, backwards elimination regression analyses were performed to address issues of multicollinearity, while seeking a more parsimonious model. In this method of variable selection, predictors are deleted from the full model one at a time based on the significance of the loss of R^2 due to the deletion of the variable. The two sets of variables (blocks/steps), however, were still entered in the same order according to the rationale of the study.

Model 1: Role Adequacy

Table XXVI presents the backwards elimination multiple regression model for role adequacy. The final model accounted for 58% of the variance in role adequacy, which was significant, $F(4, 127) = 46.1, p = .000$. Role adequacy was significantly positively predicted by the number of substance-using clients treated over the course of one's career ($t = 7.65, p = .000$), organizational legitimacy ($t = 2.52, p = .013$), career motivation ($t = 2.35, p = .020$), and APA division 50 membership ($t = 2.18, p = .031$).

Examination of standardized beta coefficients indicate that the number of substance-using clients treated over the course of one's career was the strongest predictor of role adequacy ($\beta = .50$), followed by organizational legitimacy ($\beta = .18$), career motivation ($\beta = .18$), and APA Division 50 membership ($\beta = .14$).

Table XXVI. Backwards Elimination Multiple Regressions for Role Adequacy.

Model/Variable	R	Adj. R^2	ΔR^2	ΔF
Role Adequacy as criterion				
1	.78a	.57	.000	.014
2	.78b	.57	-.001	.251
3	.78c	.57	-.001	.269
4	.77d	.57	-.002	.603
5	.77e	.57	.604	16.664
6	.77f	.58	.000	.068
7	.77g	.58	-.001	.327
8	.77h	.58	.007	2.221

- a. Predictors (Constant): Usefulness of education, continuing education, number of AoD clients treated during one's career, certification, organizational adequacy, career motivation, informal support, APA Division 28, 29, 42, and 50 membership
- b. Predictors (Constant): Usefulness of education, number of AoD clients treated in one's career, certification, organizational legitimacy, career motivation, informal support, APA Division 28, 29, 42, and 50
- c. Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, informal support, APA Division 28, 29, 42, and 50 membership
- d. Predictors (Constant): Number of AoD clients treated during one's career, organizational legitimacy, career motivation, informal support, APA Division 28, 29, 42, and 50 membership
- e. Predictors (Constant): Number of AoD clients treated during one's career, organizational legitimacy, career motivation, informal support, APA Division 28, 29, and 50 membership
- f. Predictors (Constant): Number of AoD clients treated during one's career, organizational legitimacy, career motivation, informal support, APA Division 29 and 50 membership
- g. Predictors (Constant): Percent of AoD clients treated during career, organizational legitimacy, career motivation, informal support, division 50 membership
- h. Predictors (Constant): Percent of AoD clients treated during one's career, organizational legitimacy, career motivation, APA Division 50 membership

Model 2: Role Legitimacy

Table XXVII shows the backwards elimination multiple regression model for role legitimacy. The final model accounted for 60% of the variance in role legitimacy, which was significant, $F(4, 127) = 48.04$, $p = .000$. Role legitimacy was significantly positively predicted by the number of substance-using clients treated over the course of one's career ($t = 7.95$, $p = .000$), organizational legitimacy ($t = 4.18$, $p = .000$), APA Division 50 membership ($t = 2.40$, $p = .018$), and the usefulness of AoD education ($t = 2.07$, $p = .041$).

Standardized beta coefficients indicate that the number of substance-using clients treated over the course of one's career was the strongest predictor of role legitimacy ($\beta = .50$), followed by organizational legitimacy ($\beta = .27$), APA Division 50 membership ($\beta = .15$), and the perceived usefulness of AoD education ($\beta = .12$).

Table XXVII. Backwards Elimination Multiple Regressions for Role Legitimacy.

Model/Variable	R	Adj. R^2	ΔR^2	ΔF
Role Legitimacy as criterion				
1	.78a	.57	.605	16.72
2	.78b	.57	.000	.02
3	.78c	.58	.000	.06
4	.78d	.58	.000	.00
5	.78e	.58	.000	.01
6	.78f	.59	-.001	.16
7	.78g	.59	-.001	.27
8	.78h	.60	-.001	.47

- a. Predictors (Constant): Usefulness of education, continuing education, number of AoD clients treated during one's career, certification, organizational role adequacy, career motivation, informal support, Division 28, 29, 42, and 50 membership
- b. Predictors (Constant): Usefulness of education, number of AoD clients treated in one's career, certification, organizational role legitimacy, career motivation, informal support, APA Division 28, 29, 42, and 50
- c. Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, informal support, APA Division 28, 29, 42, and 50 membership
- d. Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, informal support, APA Division 28, 42, and 50 membership
- e. Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, informal support, APA Division 42 and 50 membership
- f. Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, informal support, APA Division 42 and 50 membership
- g. Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, informal support, APA Division 50 membership
- h. Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, APA Division 50 membership

Model 3: Motivation and Reward

Table XXVIII shows the model summary of the backwards elimination multiple regressions for motivation and reward. The final model accounted for 58% of the variance in motivation and reward, which was significant, $F(5,123)=35.75, p=.000$. Motivation and reward from providing AoD counseling was significantly positively predicted by the number of substance-using clients treated over the course of one's career ($t=4.84, p=.000$), organizational legitimacy ($t=4.03, p=.000$), APA Division 50 membership ($t=2.72, p=.007$), the usefulness of AoD education ($t=2.13, p=.035$), and career motivation ($t=1.93, p=.057$). Career motivation to be an AoD counselor can be considered a marginally significant predictor of motivation and reward.

Standardized beta coefficients indicate that the number of substance-using clients treated over the course of one's career was the strongest predictor of motivation and

reward ($\beta=.32$), followed by organizational legitimacy ($\beta=.30$), APA Division 50 membership ($\beta=.18$), career motivation ($\beta=.15$), and the usefulness of education ($\beta=.13$).

Table XXVIII. Backwards Elimination Multiple Regressions for Motivation and Reward.

Model/Variable	R	Adj. R^2	ΔR^2	ΔF
Motivation and Reward as criterion				
1	.78a	.57	.606	16.37
2	.78b	.57	.000	.02
3	.78c	.57	-.003	.92
4	.78d	.58	.000	.09
5	.78e	.58	.000	.15
6	.78f	.58	-.002	.48
7	.78g	.58	-.008	2.55

- Predictors (Constant): Usefulness of education, continuing education, number of AoD clients treated during one's career, certification, organizational legitimacy, career motivation, informal support, APA Division 28, 29, 42, and 50 membership
- Predictors (Constant): Usefulness of education, continuing education, number of AoD clients treated in one's career, organizational legitimacy, career motivation, informal support, APA Division 28, 29, 42, and 50
- Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, informal support, APA Division 28, 29, 42, and 50 membership
- Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, APA Division 28, 29, 42, and 50 membership
- Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, APA Division 29, 42, and 50 membership
- Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, APA Division 42 and 50 membership
- Predictors (Constant): Usefulness of education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, APA Division 50 membership

Model 4: Percentage of Current Caseload That Has AoD Issues

Table XXIX shows the model summary of the backwards elimination multiple regressions for the percentage of one's current caseload with AoD issues. The final model accounted for 44% of the variance in the percentage of one's current caseload with AoD issues, which was significant, $F(4, 127)=26.42, p=.000$. The percentage of one's current AoD caseload was significantly positively predicted by the number of substance-using clients treated over the course of one's career ($t=4.12, p=.000$), continuing AoD education ($t=2.05, p=.042$), organizational legitimacy ($t=2.06, p=.041$), and career motivation to be an AoD counselor ($t=2.09, p=.039$).

Standardized beta coefficients indicate that the strongest predictor of the percentage of one's current AoD caseload was the number of substance-using clients treated over the

course of one's career ($\beta=.34$), followed by career motivation ($\beta=.18$), organizational legitimacy ($\beta=.17$), and continuing AoD education ($\beta=.16$).

Table XXIX. Backwards Elimination Multiple Regressions for the Percentage of One's Current Caseload That Has AoD Issues.

Model/Variable	R	Adj. R^2	ΔR^2	ΔF
Percentage of One's Current AoD Caseload as criterion				
1	.68a	.42	.467	9.57
2	.68b	.42	-.003	.58
3	.68c	.42	-.004	.80
4	.68d	.43	.000	.04
5	.68e	.43	-.001	.18
6	.68f	.43	-.001	.29
7	.68g	.44	-.002	.51
8	.67h	.44	-.003	.63

- Predictors (Constant): Usefulness of education, continuing education, number of AoD clients treated during one's career, certification, organizational adequacy, career motivation, informal support, APA Division 28, 29, 42, and 50 membership
- Predictors (Constant): Continuing education, number of AoD clients treated in one's career, certification, organizational legitimacy, career motivation, informal support, APA Division 28, 29, 42, and 50
- Predictors (Constant): Continuing education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, informal support, Division 28, 29, 42, and 50 membership
- Predictors (Constant): Continuing education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, APA Division 28, 29, 42, and 50 membership
- Predictors (Constant): Continuing education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, APA Division 28, 29, and 42 membership
- Predictors (Constant): Continuing education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, APA Division 28 and 42
- Predictors (Constant): Continuing education, number of AoD clients treated during one's career, organizational legitimacy, career motivation, APA Division 42
- Predictors (Constant): Continuing education, number of AoD clients treated during one's career, organizational legitimacy, career motivation

Table XXX shows a summary of the predictors of the variables representing participants' functioning as AoD counselors in descending order of significance.

Table XXX. Backward Elimination: Predictors of Participants' Functioning as AoD Counselors in Descending Order of Significance.

Role Adequacy	Role Legitimacy	Motivation and Reward	Percentage of Current Caseload with AoD Issues
<i>Final Model</i> (58% of variance)	<i>Final Model</i> (60% of variance)	<i>Final Model</i> (58% of variance)	<i>Final Model</i> (44% of variance)
1. No. of AoD clients seen over the course of one's career	1. No. of AoD clients seen over the course of one's career	1. No. of AoD clients seen over the course of one's career	1. No. of AoD clients treated over the course of one's career
2. Organizational role legitimacy	2. Organizational role legitimacy	2. Organizational legitimacy	2. Career motivation
3. Career motivation	3. Division 50 membership	3. Division 50 membership	3. Organizational legitimacy

4. APA Division 50 membership	4. Usefulness of AoD education	4. Career motivation	4. No. of continuing AoD education hours in the past two years
		5. Usefulness of AoD education	

Exploratory Questions

1. How do psychologists perceive the usefulness of their AoD training?

The mean response rate for participants' perceived usefulness of AoD training to their clinical practice was a 3.9 on a 5-point Likert scale (*1=Disagree* and *5=Agree*) ($N=163$). This indicates that participants tended to agree that their overall AoD training is appropriate, relevant, and consistent with their work-related roles, demands, and performance expectations. Reliability analysis of the *Perceived Usefulness of AoD Training Scale* of the *WPQ* (Skinner et al., 2005) indicated that the Cronbach's Alpha was .93, indicating good reliability.

2. How much professional support to practice AoD counseling do psychologists endorse having?

The mean career motivation to practice AoD counseling ($N=165$) was a 3.98 on a 5-point Likert scale, indicating that participants believed that the profession of psychology provides them with a high degree of motivation, rewards, and advantages of pursuing a career in AoD counseling. Cronbach's alpha for the *Career Motivation Scale* of the *WPQ* (Skinner et al., 2005) was .75.

The mean score for informal support among participants ($N=156$) was a 3.89 on a 5-point Likert Scale, indicating that participants believed that they had access to AoD-counseling-related support and advice from colleagues within their place of employment. Cronbach's Alpha for the *Informal Support Scale* of the *WPQ* (Skinner et al., 2005) was .89, indicating good reliability.

The mean score for participants' ($N=156$) perceptions of organizational legitimacy was 3.97 on a 5-point Likert scale, indicating that participants believed that their place of employment's culture, policies, practices, and behavioral expectations support, guide and encourage them to respond to AoD issues. Cronbach's Alpha for the *Organizational Role Legitimacy Scale* of the *WPQ* (Skinner et al., 2005) was .92.

3. What are psychologists' perceptions of role adequacy and role legitimacy to practice AoD counseling, and their level of motivation and reward from providing AoD counseling?

The mean role adequacy score was 4.1 on a 5-point Likert scale, indicating that participants had high levels of confidence in having the necessary knowledge and skills to respond to AoD issues.. The Cronbach's alpha for the *Role Adequacy Scale* of the *WPQ* (Skinner et al., 2005) was .95.

The mean role legitimacy of participants ($N=167$) was 4.16 on a 5-point Likert scale, indicating that participants perceived themselves as having the authority and responsibility to treat AoD issues. Cronbach's alpha for the *Role Legitimacy Subscale* of the *WPQ* (Skinner et al., 2005) was .85, indicating strong reliability.

The mean motivation and reward score was 4.4 on a 5-point Likert scale, indicating that the participants ($N=160$) are driven to respond to AoD issues and receive satisfaction from it. Cronbach's alpha for the *Role Motivation and Reward Scale* of the *WPQ* (Skinner et al., 2005) was .91.

4. What views do psychologists have on mandating graduate AoD training?

Of the participants ($N=165$), over 80% indicated that an AoD-specific course (s) should be mandated. Nearly one fifth (18.8%) indicated that AoD content should only be

increased in existing courses. A very small minority of participants (1.2%) indicated that AoD education should not be implemented in graduate psychology programs.

5. What views do psychologists have on mandating AoD content on the Examination for Professional Practice for Psychologists (EPPP)??

Of the participants ($N=166$), an overwhelming majority (92.8%) indicated that a proportion of the psychology licensure examination should contain AoD-related content. Only 7.2% of participants did not believe that it should be included.

6. What views do psychologists have on mandating continuing AoD education?

Of the participants ($N=166$), over a half (56%) indicated that continuing AoD education should be included, whereas 44% indicated that it should not be.

7. What do psychologists believe is the most appropriate way to respond to the withdrawal of the APA Certificate of Proficiency in the Treatment of Alcohol and Other Psychoactive Substance Use Disorders (APA-CPP)?

Of the participants ($N=140$), over half (51.4%) indicated that an American Board of Professional Psychology (ABPP) AoD specialty area should be created. Over one third (34.3%) of participants indicated that the APA-CPP should be reinstated, and less than fifteen percent (14.3%) indicated that psychologists should rely on alternate means of obtaining AoD-counseling certification through AoD counseling boards.

Of the participants, 26 endorsed “other”, listing options such as relying on graduate school training, including AoD training in licensing requirements and continuing education, following the APA’s opinion, both reinstating the APA-CPP and creating an ABPP in AoD counseling, and looking to the American Academy of Health Care Providers in the Addictive Disorders for guidance. Others did not believe that the field of

psychology needed its own means of obtaining AoD-counseling certification. Some participants never heard of the APA-CPP and others were not familiar with the issues surrounding the APA-CPP and why it was revoked. Others had no opinion.

Summary of the Results

Overall, the findings supported the hypothesis that professional support would account for a significant proportion of variance in psychologists' functioning as AoD counselors over and above the proportion of variance accounted for by AoD training. The hypothesis that APA Division 29 and 42 would be negatively predictive of psychologists' functioning as AoD counselors was also confirmed.

All models accounted for a large proportion of variance in participants' functioning as AoD counselors (37%-60%). Adding professional support variables strengthened the predictive models of all the variables representing participants' functioning as AoD counselors. Nonetheless, by far, the most important factor in improving psychologists' functioning as AoD counselors was the number of substance-using clients they have seen over the course of their careers.

The regression models in the main results and the backwards elimination model coincided by having the number of substance-using clients seen over the course of one's career as the strongest predictor of the four variables representing participants' functioning as an AoD counselor. In addition, organizational legitimacy was frequently the second strongest predictor in both the regression model in the main results and the backwards elimination model. Furthermore, in neither model was informal support or AoD counseling certification predictive of participants' functioning as AoD counselors.

In addition, in both the regression model in the main results and the backwards elimination model, APA Division 50 membership was a predictor of three outcome variables; and continuing AoD education was only a predictor of the percentage of one's current caseload that has AoD issues. Moreover, in both models, the perceived usefulness of AoD education was a rare predictor of functioning as an AoD counselor.

In terms of differences between the regression model in the main results and the backwards elimination model, the latter had more predictors than the former. Also, in the backwards elimination models, organizational legitimacy and career motivation to provide AoD counseling were more frequent predictors of participants' functioning as AoD counselors than in the regression models in the main results.

Participants endorsed high levels of confidence in practicing AoD counseling; tended to believe that they played a legitimate role in providing AoD counseling; had motivation and reward from engaging in AoD-counseling practice; had taken AoD education that was relevant to their clinical practice; and was receiving high levels of career and informal support to provide AoD counseling. They also tended to believe that AoD education should be part of the graduate psychology curriculum, that AoD content should be included in the EBPP, and that an ABPP specialty area should be created.

Chapter Summary

In summary, this chapter presented the descriptive and inferential results of the study. First, descriptive statistics were presented. Second, tests of assumptions for regressions were reviewed. Third, regression analyses and exploratory findings were discussed, followed by a summary of the findings. Chapter Five will follow with a discussion of the results.

CHAPTER 5

DISCUSSION

In this chapter, the findings from the current study will be discussed within the context of the previous literature. Next, the study's implications for graduate education in psychology and clinical practice will be discussed, followed by limitations of the study, and directions for future research.

Alcohol and other drug (AoD) problems occur at epidemic levels in society, yet many individuals do not receive adequate treatment (CSAT, 2010). The literature suggests that psychologists have significant deficits in AoD education, knowledge, and skills; lack confidence and don't have a sense of professional legitimacy to practice AoD counseling; are seldom involved in AoD counseling practice, and hold negative attitudes toward persons with Substance Use Disorders (SUDs) (Corrigan et al., 2002; Corrigan, Kuwabara, & O'Shaughnessy, 2009; Gilchrist et al., 2011; Hardy & Johnson, 1992; Kloss & Lisman, 2003; Linden, 2011; Najavits, 1995; NeATTC, 2011; Room, Rehm, Trotter, Paglia, & Üstün, 2001; SAMHSA, 2008; Servais & Saunders).

The main purpose of the current study was to examine the predictive power of AoD training and professional support on psychologists' functioning as AoD counselors. The relative importance of provider versus contextual factors in predicting mental health professionals' functioning as AoD counselors has remained unclear, with some theories focusing on the importance of individual factors (Cartwright, 1980; Shaw et al., 1978) and others focusing on contextual factors (Addy et al., 2004; Lightfoot & Orford, 1978). The ultimate purpose of the study was to determine what interventions – individual and/or systemic - may be useful for improving psychologist' functioning as AoD counselors.

The author hypothesized that **professional support** (i.e., career motivation, APA Division 28 and 50 membership, informal support, and organizational legitimacy) would significantly account for the proportion of variance in **psychologists' functioning as AoD counselors** (i.e., role adequacy, role legitimacy, motivation and reward, and the percentage of one's current caseload that has AoD issues) over and above the proportion of variance accounted for by **AoD training** (i.e., the relevance of AoD training to one's clinical practice, the number of substance-using clients seen over the course of one's career, AoD counseling certification, and continuing AoD education). Furthermore, it was hypothesized that membership in APA Division 29 and 42 will negatively predict psychologists' functioning as AoD counselors.

Overall Findings

Of the study participants, the majority had substance-using clients on their current caseload. The findings are consistent with previous research showing that the majority of psychologists see clients with SUDs, suggesting that the provision of AoD treatment

services is integral to the vast majority of psychologists' clinical practice (APA Practice Directorate, 2001, 2003, 2004; Cellucci & Vik, 2001; CSAT, 2006; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; Harwood, 2002; von Steen, Vaac, & Strickland, 2002). Since most psychologists see substance-using clients in their practice, it is important to examine what steps can be taken to assure that they can function well as AoD counselors.

Stepwise regression was used to test whether professional support would account for a significant proportion of variance in psychologists' functioning as AoD counselors over and above that accounted for by AoD training. Backward elimination was used to address multicollinearity issues and to generate a more parsimonious model.

All findings supported the hypothesis that professional support would account for a significant proportion of variance in psychologists' functioning as AoD counselors over and above the proportion of variance accounted for by AoD training. The findings supported Lightfoot and Orford's (1986) Situational Constraints Model, which holds that occupational constraints (i.e., systemic variables) decrease role security and therapeutic commitment to AoD counseling practice.

The findings also partially support Addy et al.'s (2004) Workforce Development (WFD) Model, confirming the assertion that AoD training is merely one aspect of a much broader array of essential elements of mental health practitioners' functioning as an AoD counselor. Rather, the key to improving clinicians' functioning as an AoD counselor is to implement comprehensive interventions across both the individual and systemic levels.

The findings did not support the WFD Model's assertion that systemic and organizational factors are more influential in promoting mental health professionals' functioning as AoD counselors than individual factors such as education and experiential

training. The rationale behind this argument was that mainstream practitioners cannot learn from AoD education and experience if they work in an environment that does not support them in these endeavors (Loughran et al., 2010).

Rather, the current findings suggest that interventions at the individual level are far more important in improving mental health professionals' functioning as an AoD counselor than interventions at the organizational or systemic level. The findings support Cartwright and Gorman's (1993) Model of Therapeutic Commitment, which holds that individual factors such as knowledge, experience, skills, and self-esteem are a prerequisite to practitioners' commitment to AoD counseling practice.

Perhaps individual factors emerged as more important than professional support in fostering functioning as an AoD counselor because, if psychologists are not equipped with the necessary prerequisite knowledge, they cannot benefit from a supportive work environment that further fosters their abilities to provide AoD counseling. Alternatively, the professional support variables that were examined may have been weaker predictors of psychologists' functioning as AoD counselors than other support variables that were not explored in this study. Since the majority of the predictor and outcome variables were (to the author's knowledge) never previously studied, many of the findings could not be compared to past research.

The Percentage One's Current Caseload with AoD Issues

The current study found that the number of substance-using clients that participants have seen over the course of their career was by far the strongest predictor of role adequacy, role legitimacy, and the percentage of their current caseload that has AoD issues. Findings suggest that, since psychologists have little AoD-counseling experience

(Bacorn & Connors, 1989; Glidden-Tracey et al., 2006), it is crucial for them to obtain experiential AoD training in order to improve their functioning as AoD counselors.

Organizational Legitimacy

Findings suggest that organizational legitimacy to engage in AoD practice is predictive of role adequacy, role legitimacy, motivation and reward, and the percentage of one's current caseload that has AoD issues. Shaw et al. (1978) placed emphasis on the provision of professional support, arguing that a supportive supervisory and work environment allows mainstream practitioners to further develop their AoD counseling skills and knowledge from more experienced colleagues. Consistent with current findings, Acker et al. (2004) found that social workers experiencing higher levels of social support at their job had higher levels of job satisfaction.

APA Division 50 Membership

The current study suggests that APA Division 50 membership is a significant predictor of role adequacy, role legitimacy, and motivation and reward from practicing AoD counseling. Pidd et al. (2004) help to understand why APA Division 50 emerged as a predictor of role adequacy to practice AoD counseling. Pidd et al. asserted that membership in a professional AoD association is a useful professional development strategy to improve attitudes toward substance-using clients and AoD counseling competencies.

Career Motivation

Findings suggest that career motivation to engage in AoD counseling practice is predictive of role adequacy, motivation and reward, and the percentage psychologists' current caseload that has AoD issues. Findings suggest that the field of psychology may

wish to examine its values and attitudes toward AoD counseling practice and consider communicating to psychologists that they have regard for the AoD treatment field and perceive it to be advantageous to engage in AoD counseling practice.

Perceived Usefulness of AoD Education

The current study suggests that participants' perceived usefulness of their overall AoD education is predictive of role adequacy, role legitimacy, and motivation and reward from practicing AoD counseling *when* it is perceived to be appropriate, relevant, and consistent with psychologists' work roles, demands, and performance expectations. Nonetheless, the perceived usefulness of AoD education emerged as one of the weakest predictor of participants' functioning as AoD counselors.

Furthermore, once professional support variables were added to the prediction equation, the perceived usefulness of AoD education was no longer a significant predictor of participants' functioning as AoD counselors, except for predicting motivation and reward from practicing AoD counseling.

The current findings are consistent with previous research that links graduate AoD training with mental health practitioners' functioning as an AoD counselor (e.g., Amodeo, Fassler, & Griffin, 2002; Bina, 2008; Carroll, 2004; Hayes, 2004). The current study highlights the importance of providing continuing AoD education to psychologists that is useful and relevant to their clinical practice.

Continuing AoD Education

In the current study, continuing AoD education was only predictive of the percentage psychologists' current caseload that has AoD issues. Similar to Chandler's

(2009) study, the current study found that continuing AoD education is not predictive of role adequacy.

Researchers have concluded that the impact of continuing AoD education is a function of its duration, intensity, and comprehensiveness (Amodeo, 2000; Stein, 1999; 2003; Mazmanian & Davis, 2002; Moyers, Martin, Manuel, Hendrickson, & Miller; 2005; Rosengren, Baer, Hartzler, Dunn, & Wells, 2005; Rubel, Sobell, & Miller, 2000).

Perhaps continuing AoD education did not emerge as a predictor of the three variables representing functioning as an AoD counselor because it wasn't of high quality. Although the participants reported that their AoD education was very relevant to their clinical practice, this may not necessarily be an accurate reflection of the quality of the AoD education they received, since the data was based on self-report.

AoD Counseling Certification

Contrary to the hypothesis and the majority of past research (Cartwright, 1980; Hsieh & Srebalus, 1997; Kloss & Lisman, 2003; Loughran, Hohman, & Finnegan, 2010; Mendez, 2006), the current study found that AoD certification was not predictive of any of the variables representing participants' functioning as an AoD counselors. The current findings may not compare directly to the previous research because they studied different populations and the effect of different types of AoD counseling certification.

That is, the current study compared psychologists with and without APA-CPP certification, whereas most of the past research compared mental health workers to AoD counselors certified by AoD counseling boards. It is also possible that AoD counseling certification was not predictive of AoD-counselors' functioning because few participants

in the current study were certified. These findings may generalize to the entire population of psychologists since the majority practice AoD counseling without certification.

Informal Support

In the current study, informal support was not predictive of any of the variables representing functioning as an AoD counselor. Findings are contrary to Addy et al.'s (2004) assertion that team factors such as informal co-worker support likely exert a significant influence on individual work practice, since workgroups and teams are becoming increasingly common in human service sectors.

Perhaps informal support to practice AoD counseling did not emerge as a significant predictor of psychologists' functioning as an AoD counselor because the majority of participants were in solo private practice where they would more likely be relying on themselves rather than external supports.

The Four Models Predicting Functioning as an AoD Counselor

This section will discuss the four predictive models of functioning as an AoD counselor in order to delineate the specific predictor variables that predicted each variable representing psychologists' functioning as an AoD counselor.

Predictors of Role Adequacy

The current findings are consistent with Cartwright and Gorman (1993) and Skinner et al.'s (2005) studies, which showed a positive association between the perceived usefulness of education and role adequacy. The findings are also consistent with previous research showing the positive impact of experiential training on role adequacy (Albery et al., 2003; Cartwright et al., 1980; Lightfoot & Orford, 1986; Loughran et al., 2010).

Predictors of Role Legitimacy

The finding that organizational role legitimacy was a significant predictor of role legitimacy to practice AoD counseling was consistent with previous research (Addy et al., 2004b; Albery et al., 2002; Amodeo, 2000; Amodeo, 2001; Broadus et al., 2010; Cartwright, 1980; Cartwright & Gorman (1993); CSAT, 2006; Davis & Taylor-Vaisey, 1997; Hunot & Rosenbach, 1998; Lightfoot & Orford, 1986; Loughran et al., 2010; Lubin et al., 1986; Moos & Moos, 1998; Shaw et al., 1978; Skinner, Roche, Freeman, & Addy, 2005). The findings are also consistent with Cartwright and Gorman (1993) and Skinner et al.'s (2005) studies which both found a positive association between the perceived usefulness of education and role legitimacy to practice AoD counseling.

Predictors of Motivation and Reward

The current study suggests that the most important interventions for increasing psychologists' motivation and reward from practicing AoD counseling are to increase AoD counseling experience and to provide a work environment that is supportive of practitioners engaging in AoD counseling practice.

The finding that organizational legitimacy was predictive of motivation and reward from practicing AoD counseling was consistent with previous research examining the effect of organizational variables on motivation and reward (Addy et al., 2004; Acker et al., 2004; Hunot & Rosenbach, 1998; Moos, 1998).

In the current study, continuing AoD education and informal support were not predictive of motivation and reward. These findings were inconsistent with Acker et al.'s study (2004) which found a positive association between opportunities for professional

development, informal support, and job satisfaction. Perhaps the findings were discrepant because the variables were operationalized differently.

Predictors of Participants' Current Caseload that Has AoD Issues

The findings are consistent with previous research showing that AoD counseling experience, AoD education, and professional support are related to the percentage of mainstream professionals' current caseload that had AoD issues (Amodeo, 2000, Lightfoot and Orford, 1986). The current study did not find AoD counseling certification, continuing AoD education, APA Division 50 membership, or informal support to engage in AoD counseling practice to be predictive of the percentage of psychologists' current caseload that has AoD issues.

The finding that APA Division 50 membership was not predictive of the percentage of psychologists' current caseload that has AoD issues is inconsistent with the APA Practice Directorate's (2003) study, which found that psychologists who belonged to APA Division 50 were more likely to have clients with SUDs. Perhaps the findings were inconsistent because different samples of psychologists participated in the studies.

Division 29 and 42 Membership as Predictors of AoD Counselor Functioning

The current study suggests that a lack of professional support focused on AoD counseling practice (as would be seen in generalist Division 29 and 42) decreases psychologists' functioning as AoD counselors. Nonetheless, non-addiction APA Division membership contributed little variance to participants' functioning as AoD counselors, which is consistent with the relatively low predictive power of APA Division 50 membership on psychologists' functioning as AoD counselors that was found in this study. Likely, Division 29 membership did not emerge as a significant predictor of the

three variables representing functioning as an AoD counselor because the number of participants that belonged to this Division was small.

Findings support the notion that psychologists should be encouraged to join the APA addiction Divisions, as a lack of professional support focused on AoD counseling practice is detrimental to their functioning as AoD counselors.

Exploratory Findings

Since (to the author's knowledge) research has not been conducted on psychologists' beliefs about the role of AoD education in graduate psychology programs, the EBPP, continuing education, and licensure renewal; and the most appropriate way to respond to the withdrawal of the APA-CPP, the study hoped to provide some provisional data on these topics. The following section will discuss the study's exploratory findings.

Perceived Usefulness of AoD Training

Research suggests that students and practitioners find the quality of their graduate AoD training inadequate (Cellucci and Vik, 2001; da Silva et al., 2006; Selin & Svamm, 1981). Contrary to similar past research (Cellucci and Vik, 2001; da Silva et al., 2006; Selin & Svamm, 1981), in the current study, participants reported that their overall AoD training was useful to their clinical practice. Inconsistencies in findings may be due to the different type of AoD education that participants were asked about. That is, in the current study, participants rated the usefulness of their overall education, whereas previous studies asked participants about perceptions of their graduate AoD education.

The current study suggests that once graduate psychology students complete their doctorates, as practitioners, they find that their AoD education has improved. The

findings may reflect a genuine improvement in post-graduate AoD training over the past several years. Alternatively, since over half of the sample belonged to the two APA addiction Divisions, these participants may have received better quality AoD education than non-addiction members who were underrepresented in this study. It is also possible that participants over-reported the usefulness of their AoD education, not being aware of their AoD knowledge gaps.

Views on Mandating AoD Training

The majority of participants in the current study believed that an AoD-specific course (s) should be mandated in graduate psychology programs. Thus, it appears that psychologists recognize the deficit that exists in graduate AoD education, which is consistent with previous research (Madson et al., 2008).

The current findings are consistent with prior research, which suggests that psychologist believe that AoD training should be mandated in the professional psychology training curriculum (Cellucci and Vik, 2001; da Silva Cardoso et al., 2006). The findings are encouraging in the sense that many psychologists believe that the AoD training deficit needs to be corrected and support mandating AoD training as a core component of graduate psychology education.

Of the participants, nearly one fifth indicated that AoD education content should only be increased in existing courses. This perspective is consistent with Miller and Brown's (1977) argument that the problem of a lack of AoD education in graduate psychology programs would be best met through intentional and substantial integration of AoD issues in existing core course work. It was argued that this is a more realistic, cost,

and time-effective option rather than creating an additional, AoD-specific class, which would overburden the already time and resource-demanding psychology curriculum.

However, many more participants (80%) endorsed the view that an AoD-specific course (s) should be mandated in graduate psychology programs. Findings suggest that psychologists find that integrating AoD issues into core course work is not sufficient to raise psychology students' AoD counseling competencies. Based on the findings, the profession of psychology may wish to consider mandating graduate psychology AoD education and have a dialogue about how it would be implemented.

It is currently possible to become and continue to be a licensed psychologist without having any or only very limited knowledge of SUDs (APA Practice Directorate, 2003; Burrow-Sanchez et al., 2009; Hardwood, Kowalski, & Ameen, 2004; SAMHSA, 2008). This is problematic in light of the deficits that practitioners have in AoD counseling competencies (e.g., APA Practice Directorate, 2001, 2003; Cellucci & Vic, 2001; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; Evans, 2006).

The finding suggests that many psychologists believe that licensure standards for AoD knowledge should be increased, which the field should consider implementing. Psychologists are also conflicted over whether or not continuing AoD education should be mandated for licensure renewal, calling for a dialogue about this issue.

AoD Counseling Certification

Research suggests that despite the great demand for AoD counseling services, psychologists lack interest in pursuing doctoral-level AoD counseling certification (APA, 2001; Cellucci & Vic, 2001). The majority of participants in the current study did not hold an AoD certification, which is consistent with the research mentioned above.

Credentialing has become the primary method of determining minimum competencies for AoD counselors, highlighting the importance of psychologists obtaining AoD counseling certification (SAMHSA, 1988).

The literature warns that if psychologists maintain low interest in AoD counseling certification, they may find themselves excluded by the AoD boards, the government, and managed care systems from the right to provide AoD treatment services (Nathanm 1997; West et al., 1999). Although, in this study, AoD certification was not predictive of participants' functioning as AoD counselors, the above mentioned ramifications of not having an AoD-counseling certification suggest that psychologists may wish to reconsider the value of getting certified.

The Society of Addiction Psychology (Division 50) asserted that in order to remain an ethical, legitimate, and viable force in the managed care area, psychologists need to reevaluate APA's withdrawal of the APA-CPP (APA, 2013). In the current study, when participants were asked about their views on the most appropriate response to APA's withdrawal of the APA-CPP, over one third believed that it should be reinstated.

However, over half of participants held the belief that an American Board of Professional Psychology (ABPP) AoD specialty should be created. These findings suggest that the profession may wish to consider moving toward recognizing addiction as a formal EBPP specialty area. The differences in opinion among participants suggest that the field of psychology may wish to enter a dialogue about how to legitimize psychologists' role as AoD counselors to the AoD treatment field.

Continuing AoD Education

The majority of participants took continuing AoD education, with an average of 2.4 hours within the past two years, which may reflect their interest in addiction, as suggested by their high membership rate in APA Division 50. Nonetheless, as many as one third of participants did not complete any continuing AoD education in the last two years, a concerning finding which is consistent with previous research (Mendez, 2006). Overall, however, the current and past research suggests that the number of continuing AoD education hours that psychologists take has increased over the years, suggesting that psychologists are recognizing that they need further AoD education in order to engage in competent clinical practice. (APA, 2002; Hardwood et al.; Mendez, 2006).

Career Motivation

The current study found high levels of career motivation to engage in AoD counseling practice among participants, suggesting that psychologists perceive the profession as highly rewarding of AoD counseling practice and as providing professional rewards and advantages of being an AoD counselor, which is an encouraging finding.

However, the findings are inconsistent with the past literature. For example, given the low number of psychologists' interest in AoD practice and the APA's withdrawal of the APA-CPP, it is questionable whether the profession of psychology promotes and supports psychologists' involvement in AoD counseling practice. The literature also suggests that helping and medical professionals hold moralistic attitudes toward clients with SUDs, believe that treatment is ineffective, find SUDs difficult and frustrating to treat, and notoriously dislike, and avoid AoD-counseling practice (Imhoff, 1991; Margolis & Zweben, 2011).

In addition, the literature suggests that the profession of psychology can offer few incentives to attract psychologists to AoD counseling practice (NeATTC, 2006; 2011). NeATTC found that helping professionals believe that AoD counseling practice holds lower status than other helping professions, which deters them from AoD practice. Furthermore, NEATTC reported that providers experienced few financial incentives and rewards from engaging in AoD counseling practice (NeATTC, 2006).

Participants in the current study may have had higher perceptions of career motivation to practice AoD counseling than noted in the previous literature because many were members of Division 50, which provides professional support related to AoD counseling practice to its members.

It is also possible that the profession may be currently providing higher levels of career motivation to psychologists than the past literature suggests, which would be encouraging. Despite psychologists' low involvement in AoD counseling practice, the field of psychology has indeed increased its interest in addiction, as is seen in its support of psychologists conducting addictions research and the APA's creation of two addictions Divisions.

Informal Support

Participants in the current study believed that they received a lot of encouragement, guidance, and mentoring in AoD counseling issues from coworkers and peers they work closely with. This is inconsistent with a much older study of primary care workers (Cartwright, 1980), which found that mainstream practitioners did not have many colleagues to turn to for support and consultation.

Perhaps psychologists perceive having informal support from co-workers because - with the increasing recognition of their role and involvement in AoD counseling - more psychologists have the legitimacy and knowledge to provide informal support to less experienced colleagues. Alternatively, perhaps this study's participants perceived having informal support in AoD-related clinical issues because over 50% actively endorsed having an interest in AoD issues (as indicated by their membership in APA Division 50) and thus, may be more connected to colleagues who are knowledgeable in AoD issues.

Participants' reports of having high levels of informal support - over 50% of whom worked in solo private practice - is intriguing, given that they likely work by themselves. Perhaps, when answering the survey, participants were thinking of peers outside of their work setting as a source of informal support in AoD issues.

Organizational Legitimacy

In the current study, participants endorsed high perceptions of organizational legitimacy (i.e., workplace support) to practice AoD counseling. Studies that have measured similar constructs (Amodeo and Fassler, 2001; Durand et al., 2009) found mixed levels of organizational support among helping and medical professionals. Perhaps the discrepancy in findings is related to the different ways that organizational legitimacy was operationalized and measured.

Role Adequacy

In the current study, participants endorsed high levels of role adequacy. These findings are inconsistent with prior research, which suggests that mental health professionals including psychologists perceive their ability to treat AoD problems as inadequate (Addy et al., 2004b; Anavai, Tauge, Ja, & Duran, 1999; Burrow-Sanchez,

Call, Adolphson, & Hawken, 2009; da Silva Cardoso, Pruett, Chan, & Tansey, 2006; Madson, Bethea, Daniel, & Necaise, 2008; Wheeler & Turner, 1997).

The current findings are consistent with one researcher (Chandler, 2009) who found that licensed mental health counselors had high levels of confidence in providing AoD counseling. It is possible that the current study truly reflects an increase in role adequacy among psychologists because of their increasingly active role in providing screenings, assessment, prevention, and treatment of SUDs.

Alternatively, in light of previous findings showing that the field does not provide adequate AoD training (Chiert et al., 1994; Lubin, Brady, Woodward, & Thomas, 1986; Margolis & Zweben, 2011; Selin & Svanum, 1981), participants may have lacked awareness of their lack of AoD knowledge and had a false sense of confidence in having the necessary knowledge and skill to respond to AoD issues.

Participants may have lacked awareness of their AoD knowledge gaps, consequently feeling overconfident about their abilities to treat SUDs. This could be problematic, as being ignorant to the fact that one does not know as much about AoD counseling as a competent clinician should could lead participants not to seek consultation or further AoD training, thus perpetuating poor AoD counseling practices.

Role Legitimacy

In the current study, participants tended to endorse high levels of role legitimacy to practice AoD counseling, which is consistent with the one study that examined practitioners' perceptions of role legitimacy (Roche & Pidd, 2010). The finding is inconsistent, however, with an alternate argument that psychologists have low perceptions of role legitimacy due to a lack of an AoD specification in their generic

license and because, historically, AoD counseling has been viewed by the AoD treatment field as outside their competencies (Miller and Brown's, 1997). However, it is very possible that psychologists endorsed high perceptions of having the authority and responsibility to intervene with AoD issues because of their increasing acceptance into the AoD treatment field due to the need for their services (Roche & Pidd, 2010).

Motivation and Reward

In the current study, participants tended to endorse high levels of motivation and reward from engaging in AoD counseling practice. Previous research has shown mixed levels of motivation and reward from AoD counseling practice among graduate students (Mendez, 2006; Allnut, 2004; Skinner et al., 2005).

The current findings may reflect positive changes in the profession's attitudes toward substance-using clients. Alternatively, participants may have had a false impression that they were motivated and personally rewarded from providing AoD counseling, as not feeling this way is inconsistent with the profession's ethical emphasis on having empathic attitudes and regard for one's clients.

Implications for Graduate Education in Psychology

Questions have been posed in the literature as to where the responsibility lies - with individual psychologists, with educational institutions, licensing boards, or workplaces - for ensuring that future and present psychologists are competent AoD counselors. Findings suggest that interventions for improving graduate psychology students' AoD counseling competencies must include all of the above individual and systems-oriented entities.

According to the current findings, there is a need for the field of psychology to develop networks of communication and support between trainees, professors, clinical supervisors, employers, AoD counseling boards, and APA. Only then will the profession begin to move towards effective training programs that bring sustainable improvements to AoD counseling practice.

Lubin et al. (1986) asserted that graduate psychology students will continue to have low career motivation to engage in AoD counseling practice if they don't have adequate role models to carry a positive message about AoD counseling practice and to counter the existing bias against SUDs and AoD counseling practice (APA, 2012). The current study suggests that the profession must reexamine the messages it sends psychology graduate students about its regard and encouragement for engaging in AoD counseling practice.

Graduate psychology students should be informed about the importance of AoD counseling practice and the enormous contribution they can make to improving the lives of persons with SUDs. Students should also be encouraged to explore and evaluate their attitudes towards substance-using clients and AoD counseling practice. Furthermore, AoD educators must teach graduate students essential interpersonal competencies such as the ability to establish a meaningful therapeutic relationship and to offer compassion and hope to their substance-using clients who are often challenging to treat (APA, 2012; Lubin et al., 1986)

In the current study, AoD training emerged by far as the most significant factor in improving psychologists' functioning as AoD counselors. Historically, training for addiction treatment tended to resemble an apprentice model which emphasized

supervised experience. The findings suggest that, in addition to classroom instruction, the field of psychology should consider implementing the traditional apprentice model in the training of future psychologists. AoD-counseling experience obtained through practica, internships, and post-doctoral residencies should be considered as essential elements of graduate psychology education. In order to provide adequate AoD training, the field must also provide access to experienced clinical supervisors who have up-to-date knowledge of AoD counseling.

The current findings also stress the importance of providing high-quality AoD education in psychology graduate programs. As such, it is recommended that the APA mandate AoD education among the criteria for program accreditation and reaccreditation. In order to achieve this goal, policy-making bodies such as the APA must prioritize AoD education in graduate psychology programs. The challenge of proponents of mandating AoD education in graduate psychology programs is finding the appropriate language and a constructive tone that respects the long and strong traditions of graduate psychology training programs.

According to Miller (1997), the field will need to find efficient and effective strategies for disseminating the growing AoD knowledge base in a way that does not overburden the already demanding graduate psychology curriculum. Miller asserted that this can be accomplished through integrating AoD content into mainstream graduate psychopathology, assessment, and psychotherapy coursework. The findings suggest that APA ought to develop a set of specific guidelines for the inclusion of AoD content into core psychology courses. Elective AoD coursework should also be made readily available in graduate psychology programs.

Training programs should also develop AoD-counseling competencies expected of their graduates. In addition, the field should establish a competency-based curriculum and verify, through assessment, that graduate students have the necessary knowledge, skills, and attitudes for competent AoD counseling practice (SAMHSA, 1998).

The APA should consider utilizing the Addiction Technology Transfer Center's (ATTC) TAP 21 Competencies, which provides a list of Transdisciplinary Foundations that all mainstream professionals should possess. According to SAMHSA (1998), the TAP 21's Competencies provide state-of-the art recommendations that should be emulated by the mainstream sector of the field (ATTC, 1995). Alternatively, the field of psychology could model their AoD education from the APA-CCP competency criteria before they develop separate criteria for graduate psychology students.

The AoD content in graduate psychology core courses should also contain the most up-to-day, relevant AoD education, and address current issues in AoD practice. For example, graduate AoD education should highlight the fact that SUDs often co-occur with other disorders, teach about interdisciplinary approaches to AoD counseling practice, and focus on teaching evidence-based treatment and culturally competent care. Graduate psychology AoD education should also be broadened beyond the traditional clinical paradigm to include prevention, early intervention, and recovery-oriented approaches to client care (Hoge et al., 2002; SAMHSA, 1998).

Furthermore, AoD education must address mistaken beliefs and stereotypes about addiction. AoD education should stress the non-obvious nature of addiction which all clients should be screened for; correct stereotypes about the "typical" substance-misusing client's clinical presentation; challenge the misconception that clients won't tell the truth

about their substance use; and stress that AoD treatment is effective, which would likely increase future psychologists' motivation to assess and intervene in clinical cases involving substance-using clients (Freimuth, 2010). Freimuth also suggested that graduate psychology programs should expand their AoD education content to include behavioral addictions, which commonly co-occur with SUDs.

Furthermore, Hoge (2002) asserted that the field must ensure that graduate psychology students obtain the knowledge necessary to practice AoD counseling in the current healthcare environment. Thus, graduate psychology students should be taught practical skills for surviving and thriving in the managed care system. These skills include knowing the utilization management process, medical necessity, working with managed care organizations, and quality management as it pertains to AoD counseling practice.

Pollard (2005) pointed out that graduate faculty's teaching activities are seldom the basis for advancement or compensation, and there are few incentive for them to advance their knowledge of SUDs and AoD counseling practice. As such, to improve graduate psychology AoD education, universities must reevaluate on what basis they compensate graduate psychology faculty and implement rewards for having up-to-date knowledge of AoD issues.

Furthermore, because of the paucity of formal AoD education and training among faculty, faculty development should be pursued in this area. Miller (2002) described the Multi-Agency Initiative on Substance abuse Training and Education for America (Project Mainstream), the Association for Medical Education and Research in Substance Abuse's (AMERSA) collaborative interdisciplinary training project, which is geared toward

developing academic faculty's ability to provide quality AoD education. In order to improve graduate psychology faculty's AoD counseling competencies and attitudes, graduate psychology programs should consider implementing Project Mainstream Strategic Plan's recommendations for faculty development.

The current findings also point to the importance of APA Division 50 membership in promoting role adequacy. Accordingly, graduate psychology students should be encouraged to join APA Division 50 in order to obtain professional support, educational opportunities, and access to information regarding best AoD counseling practices. Furthermore, APA Division 50 should be encouraged to play a more active role in providing a vehicle for coordinated and comprehensive AoD-counseling focused internship and clinical placement programs.

The learning process that occurs during graduate training must continue once the individual enters the workforce. For this purpose, graduate psychology students should be "taught to learn" and to engage in the process of "lifelong learning." Students should also be taught to know how to access the educational resources that should be available to them after completion of their graduate training (Polcin, 2005).

Implications for Clinical Practice

The findings suggest that state licensing boards should include an appropriate proportion of AoD content in psychologists' licensing exam (i.e., the EBPP), and issue appropriate study materials. Findings also suggest that the profession should consider the possibility of pursuing an ABPP specialty in addiction. Furthermore, the current study suggest that state licensing boards should consider requiring continuing AoD education for license renewal, and at the very least, encourage dialogue about this issue.

In order to raise psychologists' career motivation to practice AoD counseling, the profession of psychology, the AoD treatment field, AoD counselor licensing boards, and the government will need to put forth more effort toward destigmatizing substance-using clients and the AoD counseling profession. Furthermore, it is critical for employers to provide more opportunities, support, recognition, and incentives for psychologists to engage in AoD counseling practice (da Silva Cardoso et al., 2006).

The current study suggests that addiction societies may wish to take more active roles in promoting APA Division 50 membership and encourage psychologists to join it. The study also supports Roche and Pidd's (2010) recommendation that the APA addiction Divisions become stronger leaders in providing professional support, job opportunities, and AoD training to psychologists.

According to Hoge et al. (2002), opportunities for obtaining AoD-counseling experience, continuing AoD education, follow-up consultation, and supervision are needed for psychologists' long-term adoption of AoD counseling skills. The current findings suggest that it is crucial for the field to make post-graduate job opportunities available for psychologists in order for them to obtain the AoD training they need to function effectively as AoD counselors.

In addition, it is important that organizations where psychologists work recognize the importance of providing incentives, funding, and opportunities for mainstream practitioners' professional development. The current findings suggest that only AoD education that is relevant to psychologists' clinical practice will improve their functioning as AoD counselors. Employers of mainstream practitioners should recognize the importance of conducting regular needs analyses in order to identify their workers'

training needs (Pollard, 2005). According to Pollard, training needs analysis would ensure that clinicians receive AoD education that is relevant to their needs and job responsibilities.

Furthermore, organizations should require their employees to demonstrate that they have acquired the AoD counseling competencies that they need to possess in order to practice competently, and reward them for improving their skills (Pollard, 2005). Moreover, Pollard pointed out that clinical supervisors receive little instruction in the mentoring, teaching, and evaluative aspects of their role. As such, employers should provide training to develop clinical supervisors' supervisory skills and update their competencies as new AoD treatment practices become available.

The current study supports the notion that the field of psychology needs to encourage psychologists to pursue continuing AoD education. Davis et al. (1999) presented evidence showing that single-session training that is passive and didactic has a limited impact on improving practitioners' competencies. The data on this issue are so consistent that Davis et al. concluded that continuing education credit should not be offered for most continuing education events. Unfortunately, this type of training predominates in continuing education, likely wasting enormous amounts of training time and resources.

Davis et al. (1999) asserted that continuing education is more impactful when its content is relevant to practitioners' clinical practice (e.g., reflecting the realities of work practice, such as different barriers and constraints to AoD counseling practice). Furthermore, Davis et al. asserted that continuing education training is most effective when it is dynamic and engaging, and when it uses interactive techniques such as

demonstrations, case discussion, role-plays, in vivo experiences, and other applied real world experiences. Sessions that are delivered in a longitudinal or sequenced manner have also been found to be more effective teaching methods. As such, providers of continuing AoD education should be required by accrediting bodies to employ such evidence-based teaching methods.

Finally, there is often a large unmet need for professional development in AoD organizations due to a range of constraints, such as financial cost, staff absences, and time away from engaging in clinical work. A range of alternative educational strategies to continuing AoD education that require only modest amount of time and financial resources should be implemented. These alternatives may include mentoring, clinical supervision, study groups, journal clubs, cross-organizational site visits, online learning, and professional association membership (Pollard, 2005).

Limitations of the Study

One limitation of the current study is that the response rate was only 7%, suggesting a large selection bias. The skewness of the predictor and outcome variables shows that only psychologists who already perceived their AoD education as useful, had AoD counseling experience, AoD role support, and high perceptions of functioning as AoD counselors chose to participate in this study. Thus, the study is limited in generalizability to psychologists with these characteristics.

Furthermore, the current study can only be generalized to APA Division 28, 29, 42, and 50 members. The study cannot be generalized beyond older seasoned Caucasian clinical psychologists who treat adults in private practice or community agencies, which tended to make up the sample.

Nearly 20% the participants did not practice and over one third endorsed doing research and teaching at least 33% of their time. Thus, the results mixed practitioners and non-practitioners' perspectives, making it impossible to ascertain how practitioners alone perceived AoD-counseling practice. Similarly, another weakness of the study is that some participants belonged to more than one APA Divisions, confounding the effect of single Division membership on functioning as an AoD counselor.

Another limitation of the study is the overrepresentation of APA Division 50 members compared to the other three Divisions, which likely contributed to Division 50 being a significant predictor of psychologists' functioning as AoD counselors. Similarly, Division 28 may not have been a significant predictor of participants' functioning as AoD counselors because few participants were members of this Division.

Furthermore, another weakness of the study is that it was retrospective and based on self-report, which is subject to responder bias and possible over-reporting of desirable clinical practices. It is possible that the high ratings of predictor and outcome variables may have been artificially inflated through responder bias.

Another weakness of the study is that the majority of the variables were highly correlated with each other, suggesting that they were not uniquely different from each other. Rather, they measured the same underlying construct. The correlations between the variables led to issues with multicollinearity. In addition, the AoD training and professional support variables were likely strong predictors of participants' functioning as AoD counselors because of their strong correlation with each other.

Yet another weakness of the study is that *The Work Practice Questionnaire (WPQ)* was modified from its original 4-point Likert scale to a 5-point Likert scale in

order to include an “unsure” category. In addition, one item was mistakenly omitted from the *Role Legitimacy Scale*. Thus, the current findings cannot be compared to studies that used this measure.

Another limitation of the study is the vagueness of the “usefulness of AoD education” variable, which refers to overall AoD training that participants received. As a result, participants could have had different points of reference when thinking of their overall AoD education, making the operational definition of AoD education in this study unclear.

Furthermore, the survey question inquiring into how much continuing AoD education participants took in the last two years limited the variance in the variable by having five wide-ranging answer choices. This likely contributed to the variable reaching statistical significance in predicting participants’ functioning as AoD counselors. Similarly, the imprecise answer choices to the survey question inquiring into the number of substance-using clients that participants have seen over the course of their careers also limited the variance in the variable.

A final weakness of the current study is that one cannot infer causation from the results. In other words, one cannot conclude that AoD training and professional support are the causal root of functioning as an AoD counselor. It may just as well be the case that functioning as an AoD counselor (i.e., having role adequacy, role legitimacy, and role motivation and reward from engaging in AoD counseling practice) lead a professional to having more AoD training and AoD support. Future research may wish to conduct a longitudinal study from which causation could be concluded.

Future Research

The current study needs to be replicated in order to test the current findings' reliability and generalizability and to decipher discrepancies between current and past research findings. Future studies could also build upon the current findings by further examining the variables that emerged as significant predictors of psychologists' functioning as AoD counselors in this study.

Furthermore, future studies should secure a larger sample, which would allow for the testing of the existing theories of AoD-counselor functioning and the potential development of new theories using Structural Equation Modeling. Random selection should also be utilized to secure a sample that is representative of psychologists.

Moreover, to obtain results that generalize to more psychologists, future studies wishing to study differences between addiction psychologist and generalist psychologists should randomly pool participants based on reported expertise in addiction rather than APA addictions Division membership. In addition, more refined methods of measurement should be used that allow for variance in variables.

Future research may also wish to examine the differences in psychologists' perceptions of role adequacy, role legitimacy, and motivation and reward from engaging in AoD counseling practice based on their theoretical orientation. The literature suggests that theoretical orientation may affect how psychologists view themselves in relation to AoD counseling practice (Margolis & Zweben, 2011).

Another reason why theoretical orientation is an important variable to consider in psychologists' functioning as AoD counselors is that it affects the way that they are viewed by the AoD treatment field (Margolis, 1993). For example, Margolis argued that

psychologists who explain SUDs in psychodynamic or behavioral terms (i.e., treating severe SUDs as a secondary disorder to “underlying” emotional conflicts, and focusing intervention efforts on controlling AoD behaviors, respectively) lose credibility in the AoD treatment field (which endorses the Disease Model of Addiction), consequently making their input is less valued by the AoD treatment field.

Since, in this study, it was unknown what kind of continuing AoD education participants took (i.e., its form, duration, intensity, and quality), future research could inquire into the type of continuing AoD education that participants take and how useful they perceive it to be. This would allow researchers to conclude exactly what kind of continuing AoD education improves psychologists' functioning as AoD counselors.

Furthermore, psychologists' career motivation to practice AoD counseling warrants further inquiry utilizing qualitative methodology in order to gain a deeper understanding of exactly what kind of support and professional advantages the field of psychology makes available to its members. In addition, future research could sample psychologists who are employed in settings where they have co-workers in order to be able to measure the predictive power of informal support to practice AoD counseling on their functioning as AoD counselors.

Together, the variables in the current study explained between 37% and 57% of the variance in participants' functioning as AoD counselors, leaving a lot of variance unaccounted for. This suggests that factors other than those measured in the current study are important in shaping psychologists' functioning as an AoD counselor. Future research could explore what other variables can explain the remaining variance. Future studies

may also directly ask participants what barriers they perceive interfere with their involvement in AoD counseling practice.

Other variables that may be worth investigating in the future include clinical and personal attitudes toward substance-using clients, formal support (support from supervisors and managers), workplace pressure and support (manageability of one's workload and support in times of difficulties), financial incentives, APA's support to practice AoD counseling, and factors in the broader systemic environment (e.g., funding of AoD treatment services, AoD certification requirements). Similarly, different outcome variables could be studied such as psychologists' AoD knowledge, job satisfaction as AoD counselors, and types of AoD-counseling interventions they use in practice.

Furthermore, future research could conduct a similar study with a sample of graduate psychology students, professors, and supervisors. Such studies could provide useful information on how AoD training operates within the academic environment; student, professor, and supervisors' attitudes toward AoD counseling practice; and how students' future functioning as an AoD counselor can be improved.

Moreover, no information is available on what psychology training programs are already doing to prepare students for AoD counseling practice. Such a survey would serve as a baseline measure and provide information on the most pressing AoD training needs and promising directions for building students' AoD counseling competencies.

Finally, researchers could conduct longitudinal studies, as little data exists on changes in psychologists' functioning as AoD counselors over time. A longitudinal approach would also allow for the examination of causality between the predictor and outcome variables.

Chapter Summary

This chapter first discussed the current study's findings and compared them to past research. Next, implications for graduate education in psychology and clinical practice were presented. Finally, limitations of the study and directions for future research were discussed.

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APPENDIX

APPENDIX A

General Criteria for Substance Use Disorder

According to the DSM-V (APA, 2013), “the essential feature of a substance use disorder is a cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems” (p.483). The diagnosis of substance use disorder can be applied to 9 classes of substances. These include alcohol, cannabis, hallucinogens, inhalants, opioids, sedatives, hypnotics and anxiolytics, stimulants, and tobacco. The DSM-V

The DSM-V (APA, 2013) defines Substance Use Disorder as:

- A. A problematic pattern of substance use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:
 - 1. The substance is often taken in larger amounts or over a longer period than was intended.
 - 2. There is a persistent desire or unsuccessful efforts to cut down or control use.
 - 3. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.
 - 4. Craving, or a strong desire or urge to use the substance.
 - 5. Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home.
 - 6. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance.

7. Important social, occupational, or recreational activities are given up or reduced because of substance use.
8. Recurrent substance use in situations in which it is physically hazardous
9. Substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
10. Tolerance, as defined by either of the following:
 - a. A need for markedly increased amounts of the substance to achieve intoxication or desired effect.
 - b. A markedly diminished effect with continued use of the same amount of the substance.
11. Withdrawal, as manifested by either of the following:
 - a. The characteristic withdrawal syndrome for the substance.
 - b. The same (or closely related) substance is taken to relieve or avoid withdrawal symptoms.

The severity of the Substance Use Disorder is defined by the DSM-V (APA, 2013) as 1) Mild (presence of 2-3 symptoms), 2) Moderate (presence of 4-5 symptoms), and 3) Severe (presence of 6 or more symptoms).

APPENDIX B

Permissions

Permission to Post Survey on Division 28 Listserv

July 8, 2013 10:12 PM

From: Ryan Vandrey rvandrey@jhmi.edu
To: Yvona Pabian ypabian@me.com
Re: Yvona Pabian reg. research request

OK, sounds good.

-Ryan

On Jul 8, 2013, at 3:57 PM, Yvona Pabian wrote:

Dear Dr. Vandrey,

I really appreciate you getting back to me and Dr. Welfel. Thank you for your willingness to forward my survey participation request to the Division 28 listserv. To clarify, the consent form is incorporated into the survey, which I will make clear to participants. Also, thank you for the good advice on what to include in the recruitment letter in order to spark Division 28members' interest in the survey. Please know that I will contact you with the email I would like sent out to Division members ass soon as I have my survey and formalities finalized, which should be toward the end of the month or earlier.

If you have any questions or concerns, please do not hesitate to contact me.

Again, thank you very much for your time and consideration!

Respectfully,
Yvona Pabian

From: Ryan Vandrey rvandrey@jhmi.edu
To: Elizabeth Welfel <welfeler@yahoo.com>
Cc: Yvona Pabian <ypabian@me.com>
Sent: Monday, July 8, 2013 2:37 PM
Subject: Re: request from Dr. Elizabeth Welfel Cleveland State University

Yvona and Elizabeth,

Sorry for the delay, and thanks for your patience and persistence. I was out for almost the entirety of June for 3 conferences and then had the holiday week last week. Am just now getting back up to speed.

I will forward the e-mail to our listserv, but one thing that is unclear to me in reviewing what you provided is whether participants must send you the consent form prior to accessing the survey or whether the consent is incorporated into the survey. This should be made clear so that interested respondents know what to do.

If you could please clear that up and send me an e-mail, presented as you want it to go out to our membership, I will forward it to the division.

I will also warn you know that I sent a similar request about a month or so ago for another student and she said that there was very little response received. With so many requests to complete online surveys these days it seems as though people just dismiss them when received. I suggest you mention right up front who you are targeting as respondents and try to appeal to that audience very specifically about what your research aims are, how they will advance the field, and why they should take the time to complete the survey.

On Jul 8, 2013, at 2:01 PM, Elizabeth Welfel wrote:

Dear Dr. Vandrey,

I am writing on behalf of my doctoral student, Yvona Pabian, who has written to you to request permission to access the Division 28 Listserv to gain volunteers for her research. I believe you indicated in mid-June that you would need to bring the matter to the Executive Board of the division. I know she is hesitant to contact you again for fear of appearing to be a pest, so I decided to write instead. I believe she has sent you her informed consent document, which I am also attaching here. If you have any information about when a decision would be made that would be very helpful. As her dissertation director I am as eager as she to move this project along. She starts her pre-doctoral internship in a few weeks and it would be reassuring to have her project through the University's IRB before then. I also think this is a very worthwhile project that is well designed.

Feel free to contact me if you have any questions. Thanks again for any assistance you can provide.

Regards,

Elizabeth Reynolds Welfel, Ph.D.
Professor, Counseling Psychology (APA accredited)
Cleveland State University
216 299 4355 (cell)

Permission to Post Survey on Division 29 Listserv

June 13, 2013 12:18 PM

Elizabeth Welfel <welfeler@yahoo.com>
To: Yvona Pabian ypabian@me.com
Fw: RE: listserv question

Okay from Div 29 -- I just need to post.

ERW

From: Tracey Martin assnmgmt1@cox.net
Subject: RE: listserv question
To: "'Elizabeth Welfel'" welfeler@yahoo.com
Date: Thursday, June 13, 2013, 12:17 PM

Hi Elizabeth – thank you for your message. Only members of the Division may join the listserv and post messages. If you are posting the message and are involved in the survey, then there would be no problem.
Tracey

From: Elizabeth Welfel [mailto:welfeler@yahoo.com]
Sent: Thursday, June 13, 2013 5:59 AM
To: assnmgmt1@COX.NET
Subject: listserv question

Hi Tracey,

I have a question. I am a member of Division 29 and subscriber to its listserv. I am supervising the dissertation exploring psychologists' training and experience with substance abuse disorders. This topic has taken on increasing importance in light of the emerging evidence regarding the scope of this problem and APA's removal of the certificate training program it had sponsored.

I am asking permission on behalf of my doctoral student, Yvona Pabian, to post a message to the listserv asking for their participation in a survey on this topic. Please let me know if this is possible.

Regards,
Elizabeth Reynolds Welfel, Ph.D.
Professor and Co-Director of Training, Counseling Psychology
Cleveland State University

Permission to Post Survey on Division 42 Listserv

July 2, 2013 5:35 PM

Blaine Lesnik dr.b.lesnik@gmail.com
To: Yvona Pabian ypabian@me.com
Re: General Division 42 questions

Yvona,

The excerpt from the policy below indicates that yes, you may send an invitation. I've highlighted the portion that is most salient.(In the thread below). Basically, you can make the post once, and then perhaps a briefer gentle reminder subsequently if you've gotten a less than desirable response, would be ok too. Just not more than that, so list members don't get too many requests. Again, good luck with your research.

Best
-Blaine

Blaine Lesnik, PsyD
Licensed Clinical Psychologist Chair
D42 Listserv and Social Media(c) 312-804-3786

On Jul 2, 2013, at 3:39 AM, Yvona Pabian <ypabian@me.com> wrote:

Dear Dr. Lesnik,

Thank you very much for getting back to me so promptly and for answering my question. I am a Division 42 student member and from my understanding can post an invitation on the listserv to Division members to participate in my research. Please confirm whether or not I can do this. I really hope so since Division 42 members are the sample I would like to survey in my research.

Thank you for your time and consideration.

Respectfully,

Yvona Pabian
Counseling Psychology Doctoral Candidate
Cleveland State University

On Jul 1, 2013, at 5:48 PM, Dr. Blaine Lesnik <dr.b.lesnik@gmail.com> wrote:

Yvona-

Here is the excerpted policy on student research:

“(E) Research requests. Consistent with recently adopted APA guidelines, list members are expected not to make direct solicitations to respond to survey content or items on the list, or to forward such requests from non-list members. Members may post brief requests to participate in research with which they are associated by posting a message that includes information about how to contact the investigator(s) or how to access the survey via another online site. Division members are encouraged to use the online Survey Software available through the Division.”

Fundamentally out intent with the policy was to prevent list members from being inundated with multiple surveys or the actual content of surveys on the list.

Thanks again and good luck with your research!

Best-
Blaine

Permission to Post Survey on Div 50 Listserv

June 27, 2013 6:30 pm

Vincent J. Adesso vince@uwm.edu
To: Yvona Pabian ypabian@me.com
Cc: vince vince@uwm.edu
Reply-To: "Vincent J. Adesso" vince@uwm.edu
Re: Request for Permission to Post Survey on Div 50 Listserv

Dear Ms. Pabian:

Please accept my apologies. I was out of the country and am still catching up with email. If you send me an email with a link to your survey, I will post it to the listserv.

Regards,
Vince Adesso

Vincent J. Adesso
Professor Emeritus and
Special Counsel for Human Relations and Diversity
Department of Psychology
University of Wisconsin-Milwaukee
2441 E. Hartford Avenue
Milwaukee, Wisconsin 53201
Phone: 414-229-4746
Fax: 414-229-5219
email: vince@uwm.edu

On Jun 13, 2013, at 5:36 PM, Yvona Pabian <ypabian@me.com > wrote:

Dear Dr. Adesso,

My name is Yvona Pabian and I am a doctoral candidate in counseling psychology at Cleveland State University and a student member of Division 50. I am conducting my dissertation research under the direction of Dr. Elizabeth Reynolds Welfel on psychologists' perceptions and experiences related to working with alcohol and other drug (AoD) issues. I am writing to kindly ask for your permission to post an invitation to Division 50 members on the division listserv to participate in a 10 minute anonymous online survey. Participants would be asked questions regarding their AoD training and certification, professional support systems, and attitudes and practices with substance-using clients. It is our hope that the findings will help identify psychologists' AoD workforce development needs, and provide new insights into strategies and policies that may support psychologists' treatment of substance-using clients.

Should you have any further questions, please do not hesitate to contact me at ypabian@me.com or (440) 749-2666. You may also contact Dr. Welfel at welfeler@yahoo.com or (216) 687-4605.

Thank you very much for your consideration.

Sincerely,

Yvona Pabian, M.Ed.
Doctoral Candidate in Counseling Psychology
Counseling Psychology Ph.D. Program
Cleveland State University

Elizabeth Reynolds Welfel, Ph.D.
Professor and Co-Director of Training
Counseling Psychology Ph.D. Program
Cleveland State University

APPENDIX C

RECRUITMENT LETTER



Cleveland State University

Dear Division 28/29/42/50 Member,

My name is Yvona Pabian, M.Ed., a counseling psychology doctoral candidate and a student member of Division 28/29/42/50. I am writing to kindly ask you to participate in my dissertation research conducted under the direction of Elizabeth Reynolds Welfel, Ph.D.

My study seeks to explore psychologists' views on alcohol and other drug (AoD) training and certification, attitudes and practices toward working with substance-using clients, and perceptions of professional support to practice AoD counseling. These topics have taken on increasing importance in light of emerging evidence showing the field's low involvement in AoD counseling and APA's removal of the AoD certificate training program it had sponsored.

The survey should take no more than 10 minutes of your time. As a psychologist with valuable experience, your participation is particularly important to us. You do not have to work primarily in addictions to complete this survey. Your participation in this study may help identify psychologists' AoD-counseling workforce development needs, and provide new insights into strategies and policies that may support psychologists' treatment of substance-using clients. Ultimately, the study hopes to contribute knowledge that will improve AoD treatment services.

As a token of our appreciation for your time, we would like to invite you to participate in a raffle for a \$100 gift card.

If you are interested in participating, you can click on the survey link below which will take you to the informed consent page. If you consent, you will then be asked to respond to several questions about AoD training, professional support systems, and attitudes and practices with substance-using clients.

Survey link: <https://www.surveymonkey.com/s/ZH369SV>

If you have any further questions, please call me at (440) 749-2666 or e-mail me at ypabian@me.com. You may also contact Dr. Welfel at welfeler@yahoo.com or (216) 687-4605.

Thank you very much for your time and consideration.

Sincerely,

Yvona L. Pabian, MEd.
Doctoral Candidate in Counseling Psychology
Cleveland State University

Elizabeth Reynolds Welfel, Ph.D.
Professor and Co-Director of Training
Counseling Psychology PhD Program
Cleveland State University

APPENDIX D

INFORMED CONSENT

You are invited to participate in a dissertation research project conducted by Yvona Pabian, M.Ed. under the direction of Elizabeth Reynolds Welfel, Ph.D. I am a doctoral student in an APA accredited counseling psychology program at Cleveland State University. The study seeks to examine psychologists' perceptions and experiences related to working with problematic alcohol and drug (AoD) issues. This project has been approved by the IRB of Cleveland State University.

If you choose to participate, you will be asked to complete a brief survey answering questions about AoD training, professional support systems, and attitudes and practices with substance-using clients. Questions will primarily be answered using Likert-type scales. The survey should take no more than 10 minutes of your time. Participation is completely voluntary and you may withdraw at any time without penalty. Your survey responses will be kept anonymous. Your name will not appear anywhere on the survey. However, please note that the security of your responses is not guaranteed as is true on all web-based servers.

Your participation in this study may help identify psychologists' AoD-counseling workforce development needs, and provide new insights into strategies and policies that may support psychologists' treatment of substance-using clients. Ultimately, the study hopes to contribute knowledge that will improve AoD treatment services.

As a token of our appreciation for your time, we would like to invite you to participate in a raffle for a \$100 gift card. If you would like to participate, please provide your email address at the end of the survey.

Anyone who participates in this survey understands the following: "I understand that if I have any questions about my rights as a research subject I may contact the Cleveland State University Institutional Review Board at (216) 687-3630." Clicking "I agree to participate" below will confirm that you are 18 years or older and have read and understood this consent statement. Clicking will constitute your informed consent to participate in the study as outlined above. If you have any further questions, please call me at (440) 749-2666 or e-mail me at ypabian@me.com. You may also contact Dr. Welfel at welfeler@yahoo.com or (216) 687-4605.

Thank you for your consideration.

Sincerely,

Yvona L. Pabian, MEd.
Doctoral Candidate in Counseling Psychology
Cleveland State University

Elizabeth Reynolds Welfel, Ph.D.
Professor
Counseling Psychology PhD Program
Cleveland State University

I agree to participate

I do not agree to participate

APPENDIX E

***Psychologists' Clinical Work with
Substance Using Clients Survey***

DEMOGRAPHICS

Please answer the following demographic questions.

What is your age?

- 20-29
- 30-39
- 40-49
- 50-59
- 59 and older

What is your gender?

- Male
- Female

Which race/ethnicity best describes you?

- Caucasian
- African-American
- Asian/Pacific Islander
- Hispanic/Latino
- Native-American
- Indian
- Middle Eastern
- Bi/Multiracial
- Other (Please specify): _____

CLINICAL PRACTICE

Please answer the following questions pertaining to your clinical practice.

How many years have you been in clinical practice since your licensure?

- I do not practice
- 5 years or less
- 6-10 years
- 11-15 years
- More than 15 years

What is your primary place of employment?

- Group private practice
- Outpatient mental health agency or clinic
- Solo private practice
- Inpatient setting
- Other (Please specify): _____

Please check all the professional activities that involve at least 33% of your time?

- Psychotherapy with adults
- Psychotherapy with children
- Psychotherapy with adolescents
- Assessment/ Testing
- Consultation
- Research and Teaching
- Other (Please specify): _____

What percentage of your current caseload has problems with drugs and alcohol or is diagnosed with a Substance Use Disorder?

- None
- 1-20%
- 21-40%
- 41-60%
- 61-80%
- 81-100%

APA DIVISION MEMBERSHIP

Check all the APA divisions in which you hold membership:

- Division 28 (Pharmacology and Substance Abuse)
- Division 29 (The Division of Psychotherapy)
- Division 42 (Psychologists in Independent Practice)
- Division 50 (Society of Addiction Psychology)
- Other Divisions (Please specify): _____

ALCOHOL AND OTHER DRUG (AoD) TRAINING

Please answer the following questions pertaining to your AoD training.

What doctoral degree do you hold?

- Ph.D in counseling psychology
- Psy.D. in counseling psychology
- Ph.D. in clinical psychology
- Psy.D. in clinical psychology

EdD. in counseling psychology
 Other (Please specify): _____

What is your certification status in the substance abuse treatment field?

Never certified
 Currently certified
 Previously certified
 Certification pending

Over the course of my career, I have treated:

Less than 10 clients with AoD issues
 10-50 clients with AoD issues
 50-100 clients with AoD issues
 100 or more clients with AoD issues

How many hours of continuing education have you completed in alcohol and drug issues in the last 2 years?

0 hours
 1-9 hours
 10-29 hours
 30-49 hours
 More than 50

USEFULNESS OF ALCOHOL AND OTHER DRUG (AoD) TRAINING

Please check the answer that best describes your level of agreement with the following statements about your AoD training.

Overall, the AoD related education and training I have received helped me to improve my responses to AoD related issues in my work.

Disagree Tend to disagree Unsure Tend to Agree Agree

The AoD education and training related directly to my work.

Disagree Tend to disagree Unsure Tend to Agree Agree

The education and training provided me with the necessary knowledge and skills to respond to people with AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

I need more education and training to increase my ability to respond appropriately to AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

VIEWS ON RESPONDING TO AoD ISSUES

This part of the questionnaire contains a range of items concerning your views on responding to AoD-related issues in your work practice. Please check the statement that best describes your level of agreement with each statement.

I have the necessary experience to respond to AoD related issues.
 Disagree Tend to disagree Unsure Tend to Agree Agree

In my work, I have responded to a wide range of AoD related issues.
 Disagree Tend to disagree Unsure Tend to Agree Agree

I am confident in my ability to respond to AoD related issues.
 Disagree Tend to disagree Unsure Tend to Agree Agree

I have the necessary knowledge to help people with AoD related issues.
 Disagree Tend to disagree Unsure Tend to Agree Agree

I do not have many of the skills necessary to respond to AoD related issues.
 Disagree Tend to disagree Unsure Tend to Agree Agree

I am able to respond to people who have AoD related issues as competently as I respond to people with other problems.
 Disagree Tend to disagree Unsure Tend to Agree Agree

I have a legitimate role to play in responding to AoD related issues.
 Disagree Tend to disagree Unsure Tend to Agree Agree

I am reluctant to take responsibility for AoD related issues in my work.
 Disagree Tend to disagree Unsure Tend to Agree Agree

It is more appropriate for other colleagues to respond to AoD related issues, than myself.
 Disagree Tend to disagree Unsure Tend to Agree Agree

I am uncertain of my role in responding to AoD related issues.
 Disagree Tend to disagree Unsure Tend to Agree Agree

I am clear about my responsibilities in responding to AoD related issues.
 Disagree Tend to disagree Unsure Tend to Agree Agree

Impact of AoD Training

I have a responsibility to ask clients questions about AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

My clients believe I have a responsibility to ask them questions about AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

I prefer not to respond to AoD related problems as I find it too frustrating.

Disagree Tend to disagree Unsure Tend to Agree Agree

I refer people with AoD related issues onto others to prevent me from wasting my time.

Disagree Tend to disagree Unsure Tend to Agree Agree

I believe that responding to AoD related issues is important.

Disagree Tend to disagree Unsure Tend to Agree Agree

I get personal satisfaction responding to people affected by experiencing AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

My experience of responding to AoD related issues has been rewarding.

Disagree Tend to disagree Unsure Tend to Agree Agree

On the whole, I am satisfied with the way I work with people who have AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

I like to respond to AoD related issues in my work.

Disagree Tend to disagree Unsure Tend to Agree Agree

VIEWS REGARDING YOUR WORKING ENVIRONMENT

This part of the questionnaire contains a range of items concerning your views regarding various aspects of your working environment. If you are in private practice, please consider the term "organization" as your place of employment.

Please check the statement that best describes your level of agreement with each statement.

There are professional advantages for me to respond to AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

Impact of AoD Training

Expertise in responding to AoD related issues is highly regarded by my colleagues.

Disagree Tend to disagree Unsure Tend to Agree Agree

In career terms, there are definite advantages in improving my expertise in AoD related areas.

Disagree Tend to disagree Unsure Tend to Agree Agree

Informal supervision (e.g., encouragement, peer support, guidance, mentoring) is provided amongst staff on AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

I receive support from the people I work closely with about the work I do concerning AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

There is good communication among the people I work closely with about AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

My colleagues encourage me to intervene in AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

If I needed to, it would be easy to find someone to give me advice on responses to AoD related issues relevant to my workplace.

Disagree Tend to disagree Unsure Tend to Agree Agree

There is a philosophy that guides this organization's responses to AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

Responses to AoD related issues are consistent with this organization's responses to other health and/or social problems.

Disagree Tend to disagree Unsure Tend to Agree Agree

This organization has clearly stated goals/objectives about its involvement in AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

Staff roles and responsibilities in responding to AoD related issues are clearly laid out in their job descriptions.

Disagree Tend to disagree Unsure Tend to Agree Agree

This organization consistently strives to improve the AoD related services it provides.

Disagree Tend to disagree Unsure Tend to Agree Agree

This organization has a legitimate role to play in responding to AoD related issues.

Disagree Tend to disagree Unsure Tend to Agree Agree

This organization promotes itself as an organization that responds to AoD related issues

Disagree Tend to disagree Unsure Tend to Agree Agree

VIEWS ON AoD TRAINING

Please provide your views pertaining to psychologists' alcohol and other drug (AoD) practice.

Should AoD education be included in graduate education in professional psychology?

- It should not be
- An AoD-specific course(s) should be mandated
- AoD content should only be increased in existing courses

Should a proportion psychology licensure examination contain AoD-related content?

- Yes
- No

Should continuing education in AoD-related issues be required for psychology license renewal?

- Yes
- No

VIEWS ON THE APA-CPP

In 1996, the College of Professional Psychology began offering the Certificate of Proficiency in the Treatment of Alcohol and Other Psychoactive Substance Use Disorders (APA- CPP). This certificate was designed to provide a way for psychologists to have a credential demonstrating their proficiency in AoD treatment necessary for entry level professional functioning in the AoD field. However, in 2011, the APA's Practice Central (2011) announced its withdrawal of the certificate, posting the following announcement on the APA website:

As of January 1, 2011, we are no longer accepting new applications for the Certificate of Proficiency in the Treatment of Alcohol and Other Psychoactive Substance Use Disorders. We continue to support the credential for previously certified psychologists who maintain their certification by engaging in appropriate continuing education.

What do you believe is the most appropriate response to APA's withdrawal of the APA-CPP?

- Reinstatement of the APA-CPP
- Rely on AoD-counseling certification through AoD counseling boards
- Create an American Board of Professional Psychology AoD specialty
- Other (Please specify): _____

Please provide your email address if you would like to be included in the \$100 gift certificate raffle. _____

Thank you for participating in our survey!