

The University of San Francisco

USF Scholarship: a digital repository @ Gleeson Library | Geschke Center

Master's Theses

Theses, Dissertations, Capstones and Projects

2000

A Comparative Evaluation of Cognitive-Behavioral Therapy and Insight-Oriented Psychotherapy in the Treatment of Comorbid Substance Abuse, Anxiety, and Depression in Substance Abusing Families

Terry Michael McClanahan

Follow this and additional works at: <https://repository.usfca.edu/thes>



Part of the [Education Commons](#)

The author of this thesis has agreed to make available
to the University community and the public a copy of this thesis project.

Unauthorized reproduction of any portion of this thesis is prohibited.

The quality of this reproduction is
contingent upon the quality of the original copy submitted.



University of San Francisco
Gleeson Library/Geschke Center
2130 Fulton Street
San Francisco, CA 94117-1080 USA

UNIVERSITY of SAN FRANCISCO

A COMPARATIVE EVALUATION OF COGNITIVE-BEHAVIORAL THERAPY
AND INSIGHT-ORIENTED PSYCHOTHERAPY IN THE TREATMENT OF
COMORBID SUBSTANCE ABUSE, ANXIETY, AND DEPRESSION IN
SUBSTANCE ABUSING FEMALES

A Dissertation

Presented to

The Faculty of the School of Education

Department of Counseling Psychology

In Partial Fulfillment

of the Requirement for the Degree

Doctor of Psychology

by

Terry Michael McClanahan

San Francisco, California

May 2000

LD
4881
S16588
M222

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Psychology. The content and research methodologies presented in this work represent the work of the candidate alone.

Terry Michael McClanahan
Terry Michael McClanahan
Candidate

5/4/2000
Date

Dissertation Committee:

Elena Flores
Elena Flores, Ph.D.
Chairperson

5/4/2000
Date

Brian Gerrard
Brian Gerrard, Ph.D.

5/4/2000
Date

Robert Burns
Robert Burns, Ph.D.

5/4/00
Date

ACKNOWLEDGEMENTS

The dissertation is for me a *magnum opus* - the project that culminates from years of education and professional clinical training. Certain people have contributed to this journey, and to which I would like to convey my gratitude.

Three people were not able to walk with me in the footsteps along this path, but they have been by my side nonetheless. My father, Elgie, labored for forty-five years as a coal-miner in West Virginia. He instilled in me the fact that in order to succeed you must have a vision, and to achieve that vision you must prepare yourself thoroughly. My mother, Ruby, taught me at a very early age what commitment and dedication truly meant, and I gained sensitivity and respect from my brother Nathan who is afflicted with cerebral palsy. These three people instilled in me the values that enabled me to transcend many barriers. I owe each of these very special people a gratitude that I would like to express. This gratitude is beyond the conveyance of mere words, and my feeble attempt to express my gratitude is just that.

Several friends provided support along the path leading to the doctorate and deserve many thanks: Dr. Craig Perman-Weisman, Dr. Robert "Bob" Awalt, Valerie Sive-Ramirez, and

last, but certainly not least there is Laura Elliott. Each of these individuals provided words and deeds that smoothed over many of the bumps in the journey, which made the journey more enjoyable. A supervisor, H. Westley Clark, M.D., J.D., M.P.H., provided many professional opportunities that enriched my training and professional skills, and to which I am grateful.

Sincere gratitude is also extended to Dr. Elena Flores, Dr. Brian Gerrard, and Dr. Robert Burns, my dissertation committee, for their encouragement and support in the completion of this project. Dr. Flores is deserving of a special thank you for permitting me to conduct such an arduous study and for providing the direction to help me accomplish it in an efficient and competent manner. I will remember Dr. Gerrard's quite manner as well as his humor, and looking at the data with Dr. Burns and discussing the most appropriate statistical procedures to run.

These acknowledgements would be incomplete without acknowledging the many clients with whom I have had the pleasure to work with over the years. These clients opened their lives to my scrutiny - - I hope that the information that I imparted was deserving of their trust.

I have reserved the final thank you for my wife, Rhonda. When my sails were full, she kept the keel filled in order

that the ship would remain upright. When the winds threatened to veer me off course, she provided the compass to redirect me. When opportunities were presented that might have increased the distance to this day, she provided the sextant that was essential to closing the distance to this day. Without her support, this product may not have materialized in the manner in which it did.

Table of Contents

ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER	
I. INTRODUCTION	2
Statement of the Problem	2
Background and Need for the Study	6
Purpose of the Study	16
Theoretical Framework for the Study	17
Research Questions	28
Definitions of Terms	29
II. REVIEW OF THE LITERATURE	31
Overview	31
Components of CBT & IOP in the Treatment of Addiction	31
Psychosocial Functioning in Substance Abuse Treatment	38
CBT and IOP Comparative Studies	45
Summary	50
III. METHODOLOGY	54
Restatement of the Problem	54
Research Design	54
Characteristics of the Study Sample	56
Procedures	61
Protection of Human Subjects	68
Instrumentation	69
Structured Clinical Interview (SCID)	70
Addiction Severity Index-Female (ASI-F)	74
Profile of Mood States (POMS)	79
Data Analysis	83
IV. RESULTS	92
Overview	92
Addiction Severity Index Composite Scores	92
Profile of Mood States	102
Summary	106

V. LIMITATIONS, DISCUSSION, RECOMMENDATIONS, & IMPLICATIONS	
Overview	108
Limitations	109
Discussion of the Findings	114
Research Question One	114
Research Question Two	117
Research Question Three	118
Research Question Four	120
Research Question Five	120
Conclusions	122
Recommendations	126
Recommendations for Clinicians	126
Recommendations for Further Research	128
Implications for Practice	129
References	131
Appendix A: Research Design Schematic	144
Appendix B: Research Participant Recruitment	145
Appendix C: Telephone Pre-Screen Script	146
Appendix D: Telephone Pre-Screening Inclusionary/Exclusionary	147
Appendix E: Consent to Participate in a Research Study	148
Appendix F: Research Study Participant Reimbursement Schedule	150
Appendix G: Structured Clinical Interview using the Diagnostic and Statistical Manual (SCID)	151
Appendix H: Addiction Severity Index, Female (ASI-F) .	180
Appendix I: Profile of Mood States (POMS)	203

List of Tables

TABLES

1. Demographic Characteristics at Intake	59
2. Alcohol- and Drug-Status ASI-F Composite Scores	93
3. Multivariate Test for Alcohol and Drug Status	96
4. Multivariate Analysis of Variance for Alcohol & Drug Status	97
5. Psychosocial Composite Scores of the ASI-F	98
6. Multivariate Test for Psychsocial Variables	100
7. Profile of Mood States Subscale Scores	103
8. Multivariate Test for Anxiety and Depression	105

List of Figures

FIGURES

1. Mean ASI-F Alcohol- and Drug-Status Composite Scores .. 95
2. Mean POMS Anxiety and Depression Scores 104

Chapter I

Statement of the Problem

Over the past two decades substance abuse in females has reached epidemic levels in America (Clark & McClanahan, 1998; Clark, McClanahan, & Sees, 1998; Substance Abuse and Mental Health Services Administration [SAMHSA], 1997; National Institute on Drug Abuse [NIDA], 1997). In fact, recent morbidity data indicate that an estimated 200,000 females will die annually of substance-related illness -- more than four times the number who will die of breast cancer (Blumenthal, 1998).

Accumulating evidence indicates that there are differences in both the etiology and the epidemiology of male and female substance abuse. For instance, neurochemical research indicates that females are more sensitive than males to the rewarding effects of substances. This corroborates data that indicates that females proceed more rapidly to drug abuse and addiction than males after initial drug use, and that substance abuse has more severe medical implications for females than males (Leshner, 1998). Medical data reveals that female emergency room admissions for methamphetamine and other stimulants, tranquilizers, and sedatives exceed those of males (SAMHSA,

1998b). Females also have significant numbers of admissions for cocaine/crack, non-smoked cocaine, and heroin (SAMHSA, 1998b). These differences indicate that treatment approaches for each gender should also be different (Leshner, 1998).

While epidemiological data indicates an obvious need, treatment for substance abuse has predominately focused on male clients (Hatsukami et al., 1997). This is compounded by the fact that the traditional therapeutic community approach to drug and alcohol treatment uses behavioral techniques that tend to be confrontational and may not be appropriate for female substance abusers (Hatsukami et al., 1997). In fact, current research suggests that the optimal treatment approach for females may be to focus on the process of negative emotions and interpersonal relations that are more typical relapse indicators for female substance abusers (Stocker, 1998).

Another issue in the treatment of substance abuse in females is the fact that females have been hesitant to seek out treatment. Research indicates that females under utilize mental health services because of fear of personal safety and various other reasons (Coletti, 1998). Females also report that they are hesitant to seek out traditional drug treatment due to issues of safety, a lack of knowledge

about women and drug abuse on the part of treatment providers, transportation, long waiting lists, lack of youth specific services such as day care, distrust of the system (e.g., fear of children being taken from them), and being more reluctant than males to accept random assignment in a research protocol (NIDA, 1998).

The barriers previously mentioned have contributed to an under representation of females in clinical trials. Other studies (Carroll, Rounsaville, Nich, Gordon, & Gawain, 1995; Hall, Munoz, & Reus, 1994; Hollon & Beck, 1994; Ojehagen, Berglund, & Hansson, 1997; Woody et al., 1983) have included females in their clinical samples, but failed to analyze treatment outcome by gender. Traditional approaches such as Cognitive-Behavioral Therapy (Beck et al., 1991) and psychodynamic derivatives (Luborsky, 1984) have been reported as being effective, but specific outcome data by gender is lacking. Thus, there is a need to evaluate these treatments specifically among women who abuse substances.

The Cognitive-Behavioral Treatment (CBT) in this study draws from the principles of Beck (1979), Ellis (1962, 1986), and Meichenbaum (1977). The CBT principles (Carroll, 1998) diverge from the traditional behavioral approach of the therapeutic community treatment that is typically

applied to substance abuse, and includes a functional analysis of the substance abuse and individualized training related to the substance abuse. It is also more client-centered in its approach than previous CBT models. The client-centered aspects are designed to develop rapport and trust between the client and therapist.

The Insight-Oriented Psychotherapy (IOP) condition is based on contemporary psychodynamic theory espoused by Khantzian's (1985, 1986, 1988, 1990) self-medication theory, which posits that when some people experience intrapsychic pain they turn to mood altering substances to alleviate that pain. This intrapsychic pain or distress is manifested in females as depression, anxiety, low ego integration, and obsessiveness (Brook, Whiteman, & Cohen, 1998).

The literature suggests that aspects of both CBT and IOP may be effective in the treatment of female substance abuse. For instance, learning theory suggests that educating an adult regarding the topic facilitates clinical work. Thus, psychoeducational techniques such as those in the CBT treatment of this study have proven effective with adults previously and should provide similar results with a female population. Similarly, the literature suggests that the process orientation of the IOP treatment of this study

should also provide efficacious treatment for females who abuse substances. This approach may be effective with females who turn inward and abuse substances to relieve intrapsychic pain. The efficacy of this approach may be a function of providing a forum for the females to discuss their pain rather than seeking a self-soothing action such as abusing substances.

While both of these treatment conditions have been successfully applied to substance abuse with predominantly male subjects, females have been underrepresented and no study has reported their individual effectiveness with females who abuse substances. Thus, the purpose of this study was to determine which treatment approach, Cognitive Behavioral Therapy or Insight Oriented Psychotherapy, is more effective in the treatment of female substance abuse.

Background and Need for the Study

Using substances to alter one's mind is nothing new to humans. Alcohol and tobacco are the most prevalent substances that modern age humans abuse, however, these two substances are relative newcomers to the arena of substance abuse - - anthropological digs have discovered that humans have used substances to alter mood states for thousands of years. *Papaver somniferum* (opium poppy) and *Cannabis sativa* (hemp) were cultivated by stone-age farmers (Rudgley,

1995). In fact, recent excavations have discovered that opium poppy was domesticated in Mediterranean areas as early as the sixth millenium BC; charred hemp (which indicates that it was burned and resulted in mood altered states), opium poppy, and even *Amanita muscaria* (fly-agaric mushroom hallucinogenic) are common references in palaeoethnobotanical literature. The oldest recorded prehistoric use of substances was found in Spain where burial sites that date to 4200 BC revealed opium capsules. Similar archeological digs have unearthed hashish, marijuana, and hallucinogens in other European sites. Never before, however, has substance use been so prolific in societies around the world, and especially within the American society.

Patterns of Substance Use and Abuse in Females

Substance use has reached pandemic proportions in America during the twentieth century (Clark & McClanahan, 1998; NIDA, 1998; SAMHSA, 1998a). Substance abuse is generally considered a male phenomenon and has been at epidemic proportions since the 1960s. Medical evidence, however, reveals that females have abused substances longer than males. For instance, females accounted for 60-75 percent of opium-morphine addicts in the 1800s (Blumenthal, 1998).

Recent data from the National Household Survey on Drug Abuse, conducted annually since 1979, reports that in 1997 there were 111 million Americans age 12 and older (51 percent of the general population) who were current users of alcohol (SAMHSA, 1998a). This number represents 58 percent of the male population and 45 percent of the female population.

Of the thirty-two million Americans who engaged in binge drinking (5 or more drinks on at least one occasion during the past 30 days), females represent 8.1 percent (SAMHSA, 1998a). Of the 11 million heavy drinkers (5 or more drinks per occasion on 5 or more days during the past 30 days), females represent 2.1 percent (SAMHSA, 1998a).

SAMSHA (1998a) also reports that there were an estimated 64 million Americans who were current smokers in 1997. Females more than males (20.7 percent versus 19.1 percent) are more dependent on tobacco and have a higher risk of becoming addicted to psychotherapeutic medications being used non-medically (Kandel, 1998).

Illicit drug use is equally at epidemic proportions. For instance, in 1997 an estimated 13.9 million Americans were current illicit drug users, which included 1.5 million current cocaine users and 171,000 new heroin users (an increase of 25 percent from the 1996 level) (SAMHSA,

1998a). New heroin use is typically used as a barometer of the severity of new drug use and as a general indicator of hard drug use. Although males (8.5 percent) report a higher current illicit drug use than females (4.5 percent), the current illicit drug use in females extrapolates to approximately 4.5 million females (SAMHSA, 1998a).

The pattern of male substance use and abuse is more prolific for most classes of illicit substances than for females. However, female usage is equal to or exceeds that of males in certain classes -- female admissions to the emergency room for methamphetamine and other stimulants, tranquilizers, and sedatives exceed those of males (SAMHSA, 1998b).

Prevalence of Comorbid Psychiatric Illness

The use of illicit drugs often occurs with comorbid psychiatric conditions. The landmark Epidemiologic Catchment Area study (ECA; Reiger et al., 1990) reports that over 53% of individuals who have a lifetime diagnosis of a drug use disorder have a co-occurring psychiatric diagnosis. Two-thirds of individuals with a cocaine or opiate use disorder will have at some point in their lives a comorbid psychiatric condition.

The National Comorbidity Survey (NCS; Kessler et al., 1996) report similar comorbid psychiatric and substance

abuse disorders. For instance, the NCS data indicates that 51% of those with a lifetime addictive disorder will have a lifetime mental disorder (Kessler et al., 1996). While the NCS study reported that drug dependence was more prevalent in males than females in general, females are more likely to have a comorbid anxiety and substance use disorder than males. Comorbid depression and substance abuse is also more prevalent in females than males (Kessler et al., 1996).

When substance use and abuse, both licit and illicit, is combined with comorbid psychiatric conditions, the magnitude of the problem is exponentially compounded, and the resultant pressure on the individual, families, and American society is also exponential. For instance, the Center for Substance Abuse Treatment (CSAT; 1998) reports that the economic cost of alcohol and other drug abuse in 1992, the most recent year studied, was \$246 billion. Of this \$246 billion, \$148 billion was attributed to alcohol abuse and \$98 billion was attributed to the abuse of other drugs. Costs associated to alcohol abuse was illness (47%), premature death (21%), health care costs (13%), crime (9%), and unidentified other costs (11%). This is compared to the cost associated to other drug abuse, such as crime (59%), premature death (15%), illness (16%), and health care

(10%). These figures highlight the magnitude of the negative effect that substance use has on American society.

Traditional Treatment

Traditionally treatment providers have maintained the view that recovery from substance abuse or addiction is a process. For some individuals, this process may be life long with relapse being a part of that recovery process. The recovery process is viewed as another symptom of addiction, and can be broken down into a rule of thirds: one-third of clients achieve permanent abstinence through their first attempt at recovery; another one-third have a period of brief relapse episodes that eventually result in long-term abstinence; and, the last one-third have chronic relapses that result in eventual death as a result of their addiction (Gorski, Kelley, Havens, & Peters, 1995).

Relapse is often predicated by individual triggers (cues), high-risk situations, or associations which set in motion the road of relapsing to substances (Gorski et al., 1995). Treatment is predicated on the notion that once the individual's particular events that lead to relapse are identified, treatment should focus to help the individual overcome these threats through strategies designed to increase self-awareness, strengthen resistance, and create positive coping options.

Substance abuse treatment has predominately served male clients (Hatsukami et al., 1997) with females being underrepresented in clinical trials. This practice continues even though there is growing evidence of significant differences between males and females in patterns of substance use and abuse and psychological illness (Hatsukami et al., 1997). Furthermore, conclusions from studies with only male clients lead to threats of the generalizability of results to a female population (Hatsukami et al., 1997).

Gender Specific Treatment

Research indicates that females under utilize mental health services because of a variety of reasons (Coletti, 1998). This may also account for some of the under representation of females in empirical clinical trails. Additionally, the traditional approach to drug and alcohol treatment is a behavioral approach that tends to be confrontational (Coletti, 1998). This contrasts to the view that the optimal treatment approach for females may be to focus on process and to utilize techniques that call upon the therapeutic relationship in order to promote the necessary motivation in the client to change their behavior (Blumenthal, 1998; Geshshan, 1993; Hatsukami et al., 1997; Kandel, 1998; Leshner, 1998; Moras, 1998b). Another

complication is the fact that treatment research that examines comorbid psychiatric conditions is not prevalent in the professional literature (Onken, Blaine, Genser, & Horton, 1997). There is a similar dearth of efficacy research with female clients who have comorbid substance abuse (Clark, McClanahan, & Sees, 1998).

Given the fact that females use and abuse different substances and that those substances (including alcohol and tobacco) affect females differently, the fundamental question is: "Do female substance abusers require gender-specific therapies?" (Moras, 1998b). Because females are socialized differently than males, females present with different problems than male substance abusers. For instance, female substance abusers present with lower self-esteem and late entry into treatment (Coletti, 1998). These issues may corroborate the view that treatment services for substance-abusing females should be different than those for males (Coletti, 1998). As an example, CBT focuses on content and problem solving and has proven highly effective for substance-abusing males (Beck et al., 1991; Clark & McClanahan, 1998; Liese & Najavits, 1997; O'Brien et al., 1995; Onken et al., 1997; Woody et al., 1983). However, negative emotions (depression and anxiety) and interpersonal relations (lack of social support) are more

typical relapse indicators for females and may be more appropriate as the focus of treatment for females.

The most significant issue with regard to gender specific treatment is the lack of empirical studies that have examined female substance abuse. Several studies have included females in their study sample (Carroll et al., 1995; Hall, Munoz, and Reus, 1994; Kadden, Cooney, Getter, and Litt, 1989; Luborsky, 1984), however, outcome by gender was not reported.

Principles of CBT and IOP Treatment

The Cognitive-Behavioral Treatment in this study diverges from the traditional behavioral approach (Hatsumakmi et al., 1997) that is typically applied to substance abuse in a therapeutic community treatment paradigm. Instead, the CBT approach espoused by Carroll (1998) includes: focusing on a functional analysis of the substance abuse, individualized training in recognizing and coping with cravings, examining the client's cognitive processes related to substance abuse, examining high-risk situations, encouraging extra-session skills, and practicing of skills within session.

The Insight-Oriented Psychotherapy (IOP) condition in this study draws primarily from contemporary psychodynamic theory espoused by Khantzian. Khantzian's (1985, 1986,

1988, 1990) Self-Medication theory states that when some people experience intrapsychic pain, they attempt to alleviate that pain with mood altering substances. The goal of the insight-oriented treatment condition is to develop defenses that would remove the underlying basis for continued substance abuse (Khantzian, 1990). The fundamental dynamic that fosters this change in behaviors is the therapeutic relationship (therapeutic alliance) that the client develops toward the therapist. This alliance is developed through the use of interpretation, clarification, empathy, involvement, and support that the therapist provides during treatment. The relationship allows the client to trust the therapist and to gain the intrapsychic insight necessary to discontinue the substance abuse.

While both of these treatment conditions have been successfully applied to substance abuse, females have been underrepresented and no study has examined the effectiveness of either approach with only female subjects. Thus, the objective of this study was to determine which treatment approach, Cognitive Behavioral Therapy or Insight Oriented Psychotherapy, was more effective in the treatment of female substance abuse.

Purpose of the Study

The purpose of this study was to determine whether Cognitive Behavioral Therapy (CBT) that focused on psychoeducational interventions was more effective than Insight-Oriented Psychotherapy (IOP) which focused on intrapersonal issues in increasing psychosocial functioning and reducing substance abuse in females.

Psychosocial functioning is the ability of the individual to interact with the environment in an adaptive manner. Domains that are associated with psychosocial functioning include: employment, family relations, and social relations. Other areas may also indicate problematic functioning. For instance, if a person has legal action taken against them (i.e., on parole, probation) then their functioning is likely to be impaired. Similarly, if a person manifests certain medical conditions, these too may be a result of impaired functioning.

Outcome variables (dependent variables) included: the reduction in substance use and/or abuse, depression, and anxiety; and, increased psychosocial functioning.

Instruments that measured the outcome variables were: (a) the Addiction Severity Index, Female Version (ASI-F), and (b) the Profile of Mood States (POMS).

Theoretical Framework for the Study

This study draws from two theoretical frameworks: Cognitive Behavioral Therapy and Psychodynamic Psychotherapy. While each of the treatment regimens is based upon the traditional theories, each has incorporated principles of contemporary practice.

Cognitive Behavioral Therapy

The three preeminent theorists that pioneered the development of Cognitive-Behavioral Therapy are Meichenbaum (1977), Beck (1979), and Ellis (1962, 1986). Meichenbaum (1977) developed Cognitive Behavior Modification (CBM); Beck (1979) developed Cognitive Therapy (CT); and, Ellis (1962, 1986) developed Rational Emotive Therapy (RET).

Cognitive Behavior Modification. Cognitive restructuring is the central theme of Meichenbaum's (1977) Cognitive Behavior Modification. According to Meichenbaum (1977), negative self-statements are as detrimental as derogatory statements made by another person. In order for change to occur the individual must be able to perceive how they think, feel, behave, and be cognizant of the impact that they have on others. Thus, CBM treatment is a self-instruction model wherein behavioral change occurs through a sequence of mediating processes that involves the

interaction of inner speech (self-deprecating statements), cognitive structures, and behaviors.

CBM treatment is a three-phase process of change that integrates the interaction of thinking, feeling, and perceiving. Phase 1, *self-observation*, is where the individual learns to observe their own behavior. Phase 2, *starting a new internal dialogue*, begins once the client can observe their own behaviors, but where more adaptive behavioral alternatives are developed that lead to behavioral, cognitive, and affective changes. Phase 3, *learning new skills*, consists of teaching the individual more effective coping skills, which are practiced *in vivo*.

Cognitive Therapy. Beck's approach to Cognitive Therapy is based on the rationale that what a person feels and how he or she behave is determined by the manner in which they structure their experience (Corey, 1991). Beck posits that cognitive therapy attempts to reduce excessive emotional reactions and self-defeating behavior by modifying the faulty or erroneous thinking and maladaptive beliefs that underlie these reactions (Beck et al., 1991). Beck (1979) states that in order to understand the nature of an emotional disturbance, it is essential to focus on the cognitive content of an individual's reaction to the event or stream of thoughts. Beck drew from his training in

psychoanalysis and employed many of the client-centered techniques of that theoretical paradigm. For instance, Beck (1979) states that cognitive techniques are most appropriate for individuals who have the capacity for introspection and for reflecting on their own thoughts and fantasies - - both of which are central to insight oriented therapy.

Beck (1979) posits that distortions in processing information lead to faulty assumptions and misconceptions. *Arbitrary inferences* are formed without sufficient and relevant evidence (neurotic anxiety). *Selective abstractions* are conclusions that are based on an isolated detail of an event and therefore misses the overall context. *Overgeneralization* is a process of holding extreme beliefs on the basis of a single incident. *Magnification and exaggeration* consists of overestimating the significance of negative events. *Personalization* is a tendency for people to relate external events to themselves, even when there is justification for doing so, and *polarized thinking* involves thinking in an all-or-nothing paradigm.

Rational Emotive Therapy (RET). Ellis' (1962) Rational Emotive Therapy (RET) is based on the assumption that cognitions, emotions, and behaviors interact significantly

and have a reciprocal cause-and-effect relationship. RET is a school of psychotherapy that provides clients with the tools to restructure their philosophical and behavioral styles (Ellis & Yeager, 1989). The fundamental premise of RET is that emotions stem primarily from personal beliefs, evaluations, interpretations, and reactions to life situations (Corey, 1991). Ellis states that "coulds", "shoulds", and "musts" are the reasons that individuals react to their environment in maladaptive ways (personal communication, August, 1998). In other words, an activating event (A) leads to the interjection of a personal belief (B), which leads to an emotional and behavioral consequence (C). Ellis (1986) expanded on this early theory by stating that often there is a disputing intervention that challenges the personal belief (D) that results in the creation of a new feeling (E). Thus, the expanded A-B-C-D-E theory of RET (Ellis, 1986).

Techniques of RET include: disputing irrational beliefs, assigning cognitive homework (i.e., lists of problems, beliefs surrounding those problems), changing one's language, using rational-emotive imagery, role playing, shame-attacking exercises, and using force and vigor in the session (a way of going from the intellectual to the emotional level).

Cognitive Behavioral Therapy (CBT). The Cognitive Behavioral Therapy model espoused by Carroll (1998) draws from each of these three pioneers of cognitive therapy. Carroll's model is similar to Beck's Cognitive Therapy in that it emphasizes a functional analysis and identifies cognitions associated with the behavior. The Carroll (1998) model differs from Cognitive Therapy in terms of identifying, understanding, and changing underlying beliefs of the self and the self in relation to substance abuse. The initial emphasis of the Carroll CBT model is on learning and practicing a variety of coping skills, of which only some are cognitive.

Initial CBT strategies involve behavioral aspects of coping (i.e., avoiding high-risk situations) rather than the cognitions associated with a high-risk situation. In Beck's Cognitive Therapy, a reduction in substance abuse is brought about by changing the cognitions associated with the substance abuse. In CBT, a reduction in substance abuse is brought about by first changing behavioral patterns (i.e., avoiding high-risk situations) and then addressing the cognitions.

The Cognitive Behavioral Therapy of this study (Carroll, 1998) focused on the following treatment interventions: (1) functional analyses of substance abuse, (2) examination of

the client's cognitive processes related to substance abuse (i.e., managing thoughts associated with substance abuse, problem solving, planning for emergencies, and refusal skills), (3) identification and debriefing of past and future high-risk situations, (4) encouragement and review of extra-session implementation of skills, and (5) practice of skills within session.

Specific topics covered in the sessions included: (1) introduction to treatment and CBT, (2) coping with craving, (3) shoring up motivation and commitment to stop, (4) refusal skills and assertiveness, (5) seemingly irrelevant decisions, (6) coping plan, (7) problem solving, (8) case management, (9) HIV risk reduction, (10) significant other discussion, and (11) termination (Carroll, 1998).

Curative Factors of Cognitive Behavioral Therapy. There are many parallels between the three founding theorists of CBT. For instance, each of the theorists posits that there is an activating event (A) in the environment that causes a reaction of some sort in the individual (B) that results in a behavior (C). Each of the theories includes self-deprecating statements that are harmful to the individual. Each theory also includes a component where the individual must learn how to change themselves. Cognitive Therapy

helps to "cure" a person by restructuring cognitions associated with a particular behavior.

Cognitive Behavioral Therapy (CBT) is based on the premise that cognitions are the primary pathway in which an individual distorts their environment (Beck et al., 1991). These cognitive distortions encumber the individual's ability to cope with stress in the environment. Thus, the individual turns to alternative methods of coping, such as substance abuse.

Several features of CBT make it a promising approach to treatment for substance abuse. For instance, CBT is short-term which makes it well suited for the limited resources of most clinical programs. CBT has been extensively evaluated in clinical trials and evidence indicates that it is an efficacious treatment for a variety of issues (Beck et al., 1991; Clark & McClanahan, 1998; Liese & Najavits, 1997; O'Brien et al., 1995; Onken et al., 1997; Woody et al., 1983). CBT is structured, goal-oriented, and focused on the immediate problems that substance abusers face in their recovery process (NIDA, 1998).

Insight-Oriented Psychotherapy (IOP)

The second theoretical foundation, Insight-Oriented Psychotherapy, is ultimately based on the extensive works of Freud. However, much of Freud's work has been criticized

and contemporary theorists and researchers have revised his early formulations. For instance, contemporary insight-oriented psychotherapies focus on the ability of the individual to maintain interpersonal relations. One of these contemporary theories that espouses a relational view is the Time-Limited Dynamic Psychotherapy (TLDP; Levenson, 1995).

Another contemporary theorist and researcher is Khantzian. Khantzian's extensive work with persons addicted to substances led to the development of the Self-Medication Model of addiction (Khantzian, 1985; 1986; 1988; 1990), which suggests that a person chooses a substance based on the psychotherapeutic effects of that particular substance.

Time-Limited Dynamic Psychotherapy (TLDP). Levenson (1995) posits that there are seven basic conditions that apply to the situation of an individual who has difficulties in interpersonal relationships. These seven fundamental conditions are: (1) the client's problems stem from disturbed interpersonal relationships, (2) dysfunctional styles were learned in the past, (3) dysfunctional styles are being maintained in the present, (4) the client will reenact interpersonal difficulties with the therapist, (5) the therapist can and will function as a participant observer, (6) the therapist will help the

client reenact difficulties, and (7) that there is one identifiable, problematic relationship problem.

According to Levenson (1995), the basic principles of TLDP reflects a larger paradigm shift that is occurring with psychoanalytic theory and practice. This relational view contrasts with the traditional psychodynamic view of drive theory, which emphasizes predetermined mental constructs to deal with conflicts between gratification and social constraints (Levenson, 1995).

The Self-Medication Model. Khantzian (1985; 1986; 1988; 1990) posits that addiction is an individual's attempt to reach homeostasis. In essence, the individual self-medicates in an attempt to alleviate emotional suffering. This emotional crisis or problem is the result of dysfunctional coping mechanisms. For instance, a functional approach to a crisis situation is to problem solve alternatives or solutions to the situation. In an individual that abuses substances, this problem-solving function either does not begin or is abandoned during the process and the individual copes with the crisis situation by escaping from it through a self-soothing technique of using substances. Over time this self-soothing or self-medication becomes the preferred manner to avoid intrapersonal conflict or turmoil.

According to the Self-Medication Model, substance abusers do not choose their drugs of choice by mere coincidence. They choose them because of the specific psychopharmacological action of the substance that helps the individual return to a state of homeostasis (Khantzian, 1986; 1988; 1990). For instance, the pain relieving properties of opiates modulate feelings of rage that many victims or perpetrators experience. The hypnotics have sedating properties, which are attractive to the tense, emotionally restricted individual to help them overcome their fears surrounding intimacy and dependency. Cocaine appeals to both high- and low-energy individuals because of its activating properties - - it can help overcome the feelings of boredom, fatigue, or low self-esteem.

According to Khantzian (1988), individuals self-medicate because of deficiencies in their ability to self-regulate. The self-regulatory deficiencies include: deficits in self-care, self-development and self-esteem, self-object relationships, and affects. Khantzian (1988) believes that interventions which he labels as the four "C's": *control*, *containment*, *contact*, and *comfort* are essential to treating substance abuse.

Control is more correctly defined as loss of control around substances or maintaining boundaries. Through the

empathic interaction with the drug user/abuser, the therapist builds trust and fosters the therapeutic alliance. The client's insight into their inability to self-regulate their feelings and subsequent problems is essential to effective treatment.

Containment refers to the ability of the client to rely on the belief that the therapist can contain and ultimately maintain appropriate stability of the client. Support and empathy are interventions that allow this to be manifestly true.

Contact and *Comfort* are human solutions that Insight Oriented Psychotherapy provides to the alcoholic or drug-abusing client who has become isolated from family and society through their use and abuse of substances (Khantzian, 1988). The therapeutic relationship allows for both the substance-abusing client and the therapist to appreciate the extent of emotional suffering that has contributed to the substance abuse.

The Curative Factors of Insight-Oriented Therapy. The primary principles that foster a "cure" of the client in a psychodynamic or insight-oriented therapy is the therapeutic alliance, support from the therapist, and a venue for expression of feelings. When a person introjects the feeling of anxiety or depression, the feeling will be

projected and manifested through acting out, which in the case of substance abusers would be the use of a substance.

The goal of the Insight-Oriented Psychotherapy treatment condition is to instill and build normal defenses that remove the underlying basis for continued substance abuse (Khantzian, 1990). The fundamental dynamic that fosters this change in behaviors is the therapeutic relationship (therapeutic alliance) that the client develops toward the therapist. This therapeutic alliance is fostered by the therapist through the use of empathy, support, interpretation, clarification, and involvement. This relationship enables the client to trust the therapist and to gain the intrapsychic insights into how behaviors are adversely affecting them, either inter- or intra-personally.

Research Questions

This study addresses:

1. Is Cognitive Behavioral Therapy (CBT) or Insight-Oriented Psychotherapy (IOP) more efficacious in the treatment of substance use/abuse in females as measured by the Drug Status and the Alcohol Status subscales of the Addiction Severity Index, Female Version?
2. To what extent does CBT and IOP increase overall psychosocial functioning of females who abuse substances as

measured by the Employment Status, Legal Status, Family/Social Relationship, and Psychological Status subscales of the Addiction Severity Index, Female Version?

3. To what extent does CBT and IOP reduce the frequency and amount of substance use as measured by the Alcohol- and Drug-Status subscales of the Addiction Severity Index, Female Version?

4. To what extent does CBT and IOP reduce feelings of depression in females who abuse substances as measured by the Depression-Dejection subscale of the Profile Of Mood States?

5. To what extent does CBT and IOP reduce feelings of anxiety in females who abuse substances as measured by the Tension-Anxiety subscale of the Profile Of Mood States?

Definitions of Terms

Addiction is a disease caused by the continued use of drugs that produce biological, psychological, and social changes in an individual (APA, 1994).

Adaptive behavior is an appropriate response to a given situation, that helps the individual interact more effectively with his or her environment (Chaplin, 1985).

Route of ingestion is the means of consuming a substance (e.g., oral, intravenous injection, smoking, intranasal).

Substance(s) include both licit (alcohol, tobacco,

prescription medications) and illicit (sedatives, opiates, stimulants, tranquilizers, and hallucinogens) drugs.

Substance abuse is a maladaptive pattern of substance use that results in recurrent and significant adverse consequences related to the repeated use of substances (APA, 1994).

Substance dependence is a maladaptive pattern of substance use leading to clinically significant impairment or distress as manifested by three of the following criteria: tolerance; withdrawal; the substance is taken in larger amounts or over a longer period than was initially intended; a persistent desire or effort to cut down or control the substance use; a great deal of time is spent in the pursuit of the substance; social, occupational, or recreational activities are given up or reduced because of the substance use; or, the substance use is continued despite knowledge of negative consequences (APA, 1994).

Substance use is the consumption of licit or illicit drugs in a manner that is not maladaptive (e.g., does not lead to social, legal, or medical complications or impairment).

Chapter II

Literature Review

The review of the literature can be summarized into three general categories: (a) components of Cognitive-Behavioral Therapy (CBT) and Insight Oriented Psychotherapy (IOP) in the treatment of addiction, (b) psychosocial functioning and substance abuse treatment, and (c) Cognitive Behavioral Therapy and Insight Oriented Psychotherapy comparative studies.

A significant difficulty in reviewing the literature is the fact that there are hundreds of substances or their derivatives, with a plethora of techniques that have been applied to the treatment of them. The majority of the studies, however, report equivocal or contradictory results and virtually no study has examined the efficacy of treatment on substance abuse in females. Therefore, for the purposes of this study, components of the two treatment conditions were included in the review and results have been extrapolated for implications to this study.

Components of CBT and IOP in the Treatment of Addiction

Several components of both CBT and IOP have been investigated in the amelioration of symptoms related to substance abuse. For instance, the therapeutic alliance (IOP) has been examined in numerous studies (Hentschel,

Kiessling, & Rudolf, 1997; Horvath & Luborsky, 1993; Ojehagen, Berglund, & Hansson, 1997). Components of cognitive behavioral therapy (thought restructuring) have also been investigated in the treatment of negative symptoms that often result or are comorbid with substance abuse, such as depression (Hall, Munoz, & Reus, 1994).

Therapeutic Alliance. Horvath and Luborsky (1993) postulate that the therapeutic alliance should be viewed under four categories: the relation between a positive alliance and success in therapy, the path of the alliance over time, an examination of the variables that lead an individual to develop an alliance, and the exploration of the in-therapy factors that foster the development of a positive alliance.

Luborsky's (1984) work on the Penn Psychotherapy Project indicated that there were two types of therapeutic alliance: Type I, which is more evident in the early stages of therapy where the client views the therapist as supportive, and Type II which is more typical of later stages of therapy where there is a sense of working together in an effort to alleviate the impediment of the client.

In an extensive review of the literature, Horvath and Luborsky (1993) found that the impact of the therapeutic

alliance has been examined in the context of behavioral therapy, cognitive therapy, gestalt therapy, and psychodynamic therapy. In each of these studies "a strong alliance appears to make a positive contribution in all of these therapies" (p. 565).

In an attempt to evaluate the effects of the helping alliance and treatment outcome, Ojehagen, Berglund, and Hansson (1997) conducted a study using outpatient treatment for the abuse of alcohol. The patients were randomly assigned to two treatment conditions: multi-modal behavioral therapy (MBT) and psychiatric treatment (PT) based on a psychodynamic approach. Seventy-two patients, 60 males and 12 females, were selected for inclusion in the two treatment conditions. Due to numerous factors, such as not completing treatment, moving out of the area, and death, only 35 subjects were included in the final analysis (MBT, $n=17$; PT, $n=18$). Of these 35 participants, three participants in the MBT and one in the PT treatment were females. The mean number of treatment sessions were 24.7 ($SD=1.7$) for MBT and 24.6 ($SD=1.7$) for PT.

The MBT treatment was based on Lazarus's (1981) Multimodal Therapy. The primary principles of MBT were based on Lazarus' *BASIC ID* - Behavior, Affect, Sensation, Imagery, Cognition, Interpersonal relationships, and Drugs

or biology. The PT model was based on Luborsky's (1984) Supportive-Expressive therapy that espouses the Core Conflictual Relationship Theme (CCRT). Luborsky posits that supportive techniques such as supportive relationships can foster the therapeutic alliance, which will alleviate the intrapsychic pain that the client experiences. Luborsky also believes that expressive techniques, such as listening and understanding, can also foster this curative process.

Ojehagen, Berglund, and Hansson (1997) reported no significant outcome differences between the two treatment regimens during the course of treatment or in the third year of follow-up. The authors assessed the magnitude of the helping alliance and the outcome on treatment, and reported that multi-modal therapy had significantly better early therapist alliance in comparison with the psychiatric treatment according to the Mann-Whitney *U*-test (MBT, $M = 67.2$; PT, $M = 61.3$). An ANOVA showed no differences in early therapist or patient alliance with regard to length of therapy. With each of the treatment conditions, there were significant correlations ($p < .001$) between early patient and therapist alliance (MBT and PT, $r_s = 0.81$). Neither treatment condition was correlated to demographic data. The most significant finding, however, was that there

were no significant positive correlations between early alliance and drinking outcome for either treatment.

The authors state that the small sample size places limitations on the conclusiveness of their findings, and several methodological issues also limit the generalizability of their findings. For instance, the therapist factor was not standardized, neither treatment condition was manualized, and the number of therapists differed between the two treatment conditions. The therapist effects included the fact that only one therapist provided the MBT treatment whereas several therapists conducted the PT treatment - - therapist effects on the outcome data were not reported.

The implications of these results on the current study include the fact that the helping alliance can be measured and is a curative factor. As Ojehagen, Berglund, and Hansson (1997) state, the helping alliance depends upon the style of the therapist and the structure of the treatment. Each of these factors were incorporated into the research design of the current study. For instance, one therapist provided both treatment regimens in the proposed study. Additionally, both treatment regimens in this study were manualized and cross-checked for adherence to treatment principles.

Thought Restructuring. Hall, Munoz, and Reus (1994)

examined the effect of a cognitive behavioral mood management intervention on smokers with a history of Major Depressive Disorder (MDD).

One-hundred and forty-nine subjects were randomly assigned to either a Mood Management condition ($n = 79$) or a standard treatment condition ($n = 70$). Of the 149 subjects, 71 were male and 46 were female. The mean age of the sample was 40.6 years ($SD = 9.2$), 131 were Caucasian, 40 had advanced degrees, 49 had completed an undergraduate degree, and only 14 had less than a high school education. Subjects reported smoking an average of 24.9 cigarettes per day ($SD = 10.9$), and reported a regular smoking pattern for a mean of 22.1 years ($SD = 9.5$), and a majority reported multiple previous attempts to quit ($n = 128$). Forty-six subjects (31%) were diagnosed as having a history of MDD at baseline.

The standard treatment condition used group support and nicotine gum (2 mg) to aid in quitting smoking. The standard treatment condition consisted of five sessions over a period of 8 weeks. The sessions provided information about smoking cessation and group support for planning individualized strategies for quitting smoking.

The Mood Management treatment condition met for ten two-hour sessions over an 8-week period (twice a week for the first two weeks, and once a week thereafter). Specific cognitive behavioral methods included monitoring of thoughts, daily activities, interpersonal contacts, and mood. The treatment emphasized the impact of thoughts, activities, and interpersonal contacts on mood. The treatment also focused on thoughts and activities so that those thoughts related to healthy mood were increased and those that were related to negative mood and smoking were decreased. Specific techniques included social skills training to increase pleasant social contacts, relaxation training, and linking maladaptive thoughts to cigarette smoking.

Hall, Munoz, and Reus (1994) reported that the cognitive behavioral method enhanced treatment outcome for subjects with a history of MDD ($\chi^2(2, N=46)=12.795, p=.0017$). Subjects without a history of depression were more likely to be abstinent in the control condition (13 of 53, 24%) than in the cognitive-behavioral condition (8 of 51, 16%). The cognitive behavioral treatment condition (POMS Depression score, $M = 53.57$) achieved the best abstinence rates of the treatment conditions (POMS Depression score,

M = 36.00) at assessment in week 52. Outcome data was not provided by gender.

The authors postulate that several factors provided the cognitive behavioral treatment condition with the more positive outcome. First, the cognitive behavioral treatment condition provided "tools to rethink risky situations and to endure bouts of poor mood..." (p. 145). The authors further state that the cognitive behavioral techniques that target mood-related problems are effective with substance abusers that have a history of MDD.

While this study involved a licit substance, tobacco, it did investigate two variables that are germane to this study. The first variable is the cognitive behavioral technique of cognitive restructuring which Carroll (1998) uses. The second variable is negative emotions such as depression and anxiety, both of which are common symptoms associated with substance use (i.e., cocaine and alcohol).

Psychosocial Functioning in Substance Abuse Treatment

Woody et al. (1983) examined the effectiveness of drug counseling, cognitive-behavioral therapy, and supportive-expressive therapy with 100 male methadone clients. The subjects were randomly assigned to either drug counseling alone, or to counseling plus six months of either supportive-expressive or cognitive-behavioral

psychotherapy. The cognitive-behavioral (CB) therapy relied on a directive, time-limited approach that focused on making lists, homework, role-playing, and identifying underlying thoughts. The CB treatment also focused on uncovering and understanding the relationship and influence of automatic thoughts and underlying assumptions on problematic feelings and behaviors. Drug counseling (DC) focused on monitoring current problems, advice giving, and on providing external services (i.e., liaison with physicians, courts, and social service agencies) rather than intrapsychic processes. The supportive-expressive (SE) therapy was analytically oriented, non-directive, and focused on helping the client identify and work through problematic relationships.

Subjects assigned to the supportive-expressive treatment condition kept an average of 12 sessions with their therapists and 12 sessions with their counselors: subjects assigned to the cognitive-behavioral treatment condition kept an average of 9.5 sessions with their therapists and 12 sessions with their counselors. The authors report that 85% of sessions lasted 30 minutes or longer.

While specific data are not presented, Woody et al. (1983) state that, "the clear overall result was that patients in all three groups showed improvement in many

outcome measures, including lessened drug use, crime days, and illegal income and improved psychological function" (p. 643).

The authors report that both the cognitive-behavioral and the supportive-expressive groups were more effective than drug counseling in the reduction of heroin use and other illicit drugs. For instance, the mean methadone hydrochloride dose for the drug counseling alone group went from a dose of 30mg at baseline to 40mg at week 25; the supportive-expressive group went from 37mg at baseline to 32mg at week 25; and the cognitive-behavioral group went from an initial dosage of 39mg at baseline to 30mg at week 25 (Woody et al., 1983). Urine samples indicated that subjects assigned to all groups showed a significant decrease in positive results over the course of the study ($F = 8.41, p < .05$), but there were no significant differences between groups ($p < .1$) (Woody et al., 1983).

The authors also reported a separate analysis of opiate-positive urine samples that revealed that all three groups showed a significant decrease in substance use over the course of the study ($F = 11.81, p < .01$). However, subjects who were assigned to either the SE or the CB group showed significantly less use of opiates than the subjects who received DC alone ($p < .05$). The authors report that

subjects in the SE group had only an 8% rate of urine test results positive for opiates during the latter part of the six-month study.

Additional findings revealed that the cognitive-behavioral group showed more improvement with legal problems, while the supportive-expressive group had more improvement in psychological functioning and employment (Woody et al., 1983). Woody et al. report that subjects in the SE treatment condition had more stable work performance and lower levels of residual psychopathology.

The implications of these findings are that both the IOP and the CBT approaches of the current study may yield similar results in enhancing psychosocial functioning. However, the subjects in the Woody et al. (1983) study were all male, whereas the subjects in the current study were all female. Thus, extrapolating the Woody et al. results to the current study may have limited utility.

McKay, Alterman, Cacciola, O'Brien, Koppenhaver, and Shepard (1999) examined the treatment effects on subjects assigned to standard group counseling versus individualized relapse prevention. Outcome variables included days of drug use, days of alcohol use, and six psychosocial variables as measured by the Addiction Severity Index (ASI; McLellan, Luborsky, Woody & O'Brien, 1980).

The subjects consisted of 132 male veterans who were diagnosed with cocaine dependence (lifetime) and who had used cocaine in the prior six months. The subjects were referred for inclusion in the McKay et al., (1999) study following a 4-week intensive outpatient program. Subjects were randomly assigned to either the standard treatment (STND) or an individualized relapse prevention (RP) treatment condition, with each treatment lasting for a period of five months.

The STND group condition was designed as the control group and consisted of group sessions with an interactional, 12-step focus. The authors state that this treatment regimen was the "treatment as usual" model in the Veterans Affairs (VA) clinic where the study was conducted. The STND treatment consisted of two group therapy sessions per week. The RP treatment condition consisted of one individual structured cognitive-behavioral relapse prevention session and one group session per week. The individualized RP treatment was designed for the treatment of substance abusers in the maintenance phase of recovery. Assessments were conducted at 6, 12, 18, and 24 months and took approximately 90 minutes to complete.

The authors state that they used mixed-effect regression models for the longitudinal analyses of the ASI data. The

authors state that they chose the mixed-effect regression model because that approach allows for the modeling of both group and individual differences over time and the interaction of effects of the individual's data. The analyses included independent variables (e.g., treatment condition, current psychiatric diagnoses, and abstinence commitment), all two- and three-way interactions between these variables, a time factor, and interaction between time and other variables.

The authors reported that significant time effects ($p < .05$) were observed on the drug, psychiatric, employment, and medical composites of the ASI. The RP produced a significant group effect on the medical composite score of the ASI. Similar results were observed on t tests with the RP treatment condition producing significant differences over the STND treatment with regard to medical outcomes at months 6 and 18. The subjects who received the RP treatment condition had better cocaine use outcomes if they were committed to absolute abstinence on entering the study, but subjects who received the STND treatment had better cocaine use outcomes if they had a less stringent abstinence goal. According to McKay et al. (1999), subjects who received the RP treatment program reported fewer heavy drinking days (more than five drinks) in the second year and that overall

treatment main effects favored RP over STND in the second year.

McKay et al., (1999) concluded that their results reveal that RP is the treatment of choice for continuing care for individuals who are committed to absolute abstinence. However, STND is the treatment of choice for individuals who have less stringent abstinence goals. There are, however, several limitations to their study. For instance, 87% of the subjects were African-American, the mean number of years of education was 12.81 ($SD = 1.55$), and all subjects reported being of lower socioeconomic status. Thus, the findings of this study may not generalize to the general population, however, the demographics of this study match very closely with those of the McKay et al. sample.

There are several implications to the current study. For instance, with the exception of the gender of the subjects, the demographic variables parallel those of the current sample. In addition to the homogenous study sample, the RP treatment regimen was manualized and was based on tenets similar to those of the CBT group in the current study. The McKay et al. (1999) study also used the ASI to measure psychosocial outcomes which this study also used. The conclusions drawn by McKay et al. indicates that aspects of a cognitive-behavioral model is the most efficacious if the

subjects are committed to total abstinence. This stringent goal, however, may be too high for most people who have a lengthy history of substance abuse but a short history of abstinence, both of which apply to the current sample.

CBT and IOP Comparative Studies

There is a body of literature that has compared cognitive-behavioral therapy with derivatives of a psychodynamic therapy model in the treatment of substance abuse. Many of these studies have been conducted in medical settings and compare various treatment conditions with a psychotropic medication.

According to Onken, Blaine, and Boren (1995), substance abuse is a behavioral problem and should be treated in behavioral therapy. Their definition of behavioral therapy includes behavior therapy, psychotherapy, and counseling. In some cases pharmacotherapy may be the treatment of choice, however, in other cases it may not be possible, practical, or necessary (Onken et al., 1995).

Carroll et al., (1995) studied the effectiveness of psychopharmacology, cognitive behavioral therapy, and clinical management in the treatment of cocaine dependence. Each of the treatment conditions were manual guided and delivered to 139 patients over 12 weeks, where each session

was videotaped and evaluated for continuity with the manual. A breakdown of subjects by gender was not reported.

The pharmacological agent was desipramine, and was administered in a 200mg per day dose. A placebo was used in order to evaluate the effects of the active medication. The cognitive behavioral treatment was an adaptation of Marlatt and Gordon's (1985) model that focused on implementing effective coping strategies. The coping strategies included exploration of positive and negative effects of cocaine use, self-monitoring for the identification of high-risk situations for relapse, and problem-solving for avoiding craving and high-risk situations. The clinical management condition included medication management, a supportive doctor [physician]-patient relationship, and medication compliance.

The mean number of sessions completed was 7.2 (SD = 3.6), and only 49 subjects completed treatment (12 weeks or 12 sessions). The desipramine group had the highest number of treatment completers with 49%. While each of the groups showed significant improvements in the reduction of cocaine use, outcomes failed to demonstrate significant main effects for psychotherapy, pharmacotherapy, or their interaction (Carroll et al., 1995).

The results of this study indicate that cognitive behavioral techniques were effective in the reduction of substance use. However, gender specifics were not provided and therefore may not be replicated in a study of substance abuse in a female sample.

Kadden, Cooney, Getter and Litt (1989) investigated the effects of coping skills training, based on a cognitive-behavioral treatment paradigm, versus an interactional therapy approach based on a psychodynamic paradigm. The study included a sample of 96 subjects who had a mean age of 39.1 years ($SD = 13.5$), 44% were married, 53% were high school graduates, and 30% had college degrees. Eighty-four percent met the DSM-III criteria for alcohol dependence and 16% for alcohol abuse. Subjects reported a mean number of 45 days of heavy drinking out of the most recent 90 days. Gender specific information was not reported.

The coping skill training group was a highly structured group designed to foster the acquisition of skills such as problem solving, interpersonal skills, relaxation, and skills for coping with negative moods and urges to drink. Homework and in-session practice were used to teach the skills. The interactional group therapy was an adaptation of Yalom's group therapy model and was designed to explore participants' interpersonal relationships and pathology in

the "here-and-now". This group encouraged expression of immediate feelings, self-reflection, and exploration of the meaning of experiences as they occurred in the session.

The use of the Addiction Severity Index (ASI; McClellan, Luborsky, Woody, & O'Brien, 1988) provided both psychiatric diagnosis as well as patterns of drug and alcohol use. The ASI was also used to evaluate the success of the substance abuse treatment.

The authors report that a MANOVA analysis indicated that there were no significant pretreatment differences between the two treatment groups on alcohol consumption, social functioning, psychological functioning, or neuropsychological status (Kadden et al., 1989). The MANOVA analysis yielded no significant differences in outcomes (heavy drinking days, ASI Psychiatric Status, ASI Employment) attributable to a therapist effect ($p < .10$). The authors state that coping skills training and interactional group therapy were equally effective over the course of a 6-month aftercare period. However, coping skills training was found to be more effective for subjects with higher levels of psychopathology (ASI Psychiatric Status score > 0.29), and the interactional group therapy was more effective for subjects lower in psychopathology.

The implication of these results is that both treatment conditions in the current study should be effective in the treatment of substance abuse. The fact that this study did not control for gender causes one to be cautious in making a hypothesis as to which treatment, if either, could be more efficacious in treatment outcome.

Khantzian, Halliday, and McAuliffe (1990) describe an empirical study in their treatment manual where they investigated the effectiveness of two short-term, six-month, group approaches versus a no-group control condition. The first group condition was a self-help condition based on a cognitive-behavioral model. The second condition was a modified dynamic group therapy, which was a supportive-expressive psychodynamic model adapted for cocaine abusers. The study evaluated the effects of treatment on psychological functioning and substance use. The sample consisted of 214 cocaine-dependent persons from the greater Boston area. Retention, which is usually problematic with any substance abuse clinical trial, was at 70% for the entire length of treatment. The authors state that preliminary results indicate that short-term psychodynamic treatment was effective in reducing substance abuse and improving psychological health.

The implications of these results is that treatment based on a psychodynamic paradigm, whether it is supportive-expressive or insight-oriented therapy, may be effective in both the reduction of substance abuse as well as increasing psychosocial functioning. Additionally, the senior investigator in this study developed the principles of the insight-oriented model that provide the basis for the current study.

Summary

Efficacy studies in the treatment of substance abuse are prolific, however, the results are often equivocal and studies that have investigated female substance abuse are virtually nonexistent.

There is a growing literature that postulates that females respond differently to drug treatment that was developed for use with male substance abusers (Moras, 1998a); interventions that emphasize increasing a female's self-esteem and choosing more positive lifestyles may be more effective in the treatment of females. It should be noted, however, that the majority of studies indicate that no treatment approach is superior to all others across psychological conditions or treatment populations (Garfield & Bergin, 1994).

Several tenets of IOP treatment have been empirically evaluated. For instance, Horvath and Luborsky (1993) report that the central principle in psychodynamic therapies, the therapeutic alliance, can foster positive outcome. To this end, Ojehagen et al. (1997) reported that a multi-modal behavioral therapy and psychiatric therapy based on a psychodynamic paradigm were equally effective in reducing alcohol use. The multi-modal therapy, however, had significantly better early therapist alliance in comparison with the psychiatric treatment.

Cognitive behavioral techniques such as thought restructuring and teaching new coping skills have also proven effective in the reduction of substance use as well as depression. Hall, Munoz, and Reus (1994) found that cognitive behavioral techniques that focused on thought restructuring, relaxation training, social skills training, and identifying maladaptive thoughts were significantly more effective than a standard treatment in achieving longer periods of abstinence and reduced feelings of negative emotions.

Studies have also evaluated treatment outcome on psychosocial variables. For instance, Woody et al. (1983) reported that cognitive behavioral therapy was as effective as supportive expressive therapy in the reduction of

substance use. However, supportive expressive therapy was more effective in enhancing psychological functioning and employment. Thus, it seems that while each treatment is effective, they differ in the aspects of the treatment approach that is more effective with outcomes, as well as in terms of outcomes they impact.

McKay et al. (1999) also found equivocal and inconclusive results in evaluating treatment on psychosocial variables, but reported that a cognitive-behavioral program was the treatment of choice for continuing care for individuals who are committed to absolute abstinence. For individuals who have less stringent abstinence goals, standard 12-step relapse maintenance produced better treatment outcome.

Several studies have also compared treatment programs based on cognitive-behavioral principles with those based on psychodynamic principles. Kadden et al. (1989) found that coping skills training was more effective at reducing substance use than an interactional therapy condition in patients with high levels of pretreatment psychopathology. Khantzian, Halliday, and McAulfie (1990) compared a self-help group approach with a modified psychodynamic group approach. These investigators report that the modified

dynamic approach has produced positive results for substance use.

The major objective of this study concerns which treatment is more efficacious in the treatment of substance abuse in females. This is of importance because empirical studies previously mentioned evaluated treatment with primarily male subjects. These studies yielded equivocal or contradictory results with respect to treatment outcomes and did not identify specific aspects of treatment that were most efficacious.

Chapter III

Methodology

Restatement of the Problem

The purpose of this study was to determine if Cognitive Behavioral Therapy (CBT) or Insight-Oriented Psychotherapy (IOP) was more effective in the treatment of anxiety, depression, and substance abuse in females. Treatment effects were evaluated on three domains: level of psychosocial functioning, level of drug use (frequency and amount), and level of affective state. These domains were measured by (a) the Addiction Severity Index - Female Version (ASI-F) and (b) the Profile of Mood States (POMS).

Research Design

This study employed a pretest-posttest comparative experimental design to evaluate the two interventions in the treatment of substance abuse in a female population (see Appendix A).

A comparative study evaluates two or more treatments without conceptualizing either as being a standard control group (Basham, 1986). This type of methodology is designed to specifically highlight that between-group outcome differences are caused by differences in the magnitude of the two individual treatment effects (Basham, 1986). In choosing the comparison groups the investigator often

chooses the "standard treatment" and compares that treatment to one that the research literature hypothesizes might be more effective for the given problem or sample population (Kazdin, 1992).

Kazdin (1986) outlines several advantages to using a comparative research design. First, the clinical question of which treatment is best under what condition is answered. Second, this type of study offers a comparison of treatment processes (similarities and differences in how treatments are executed). Third, a comparative design is often more desirable than traditional methodologies because the primary focus is on the forms of treatment rather than between treatment and control procedures. Finally, comparative studies highlight and crystallize differences between alternative treatments.

Clinical research raises special issues that the researcher must address. In clinical trials, it is often unethical to deny or delay treatment to subjects -- comparative studies addresses this problem by providing treatment to all participants who are included in the study (Basham, 1986; Kazdin, 1986; Kazdin, 1992).

A comparative study does, however, have some limitations. For instance, often the most significant limitation to a comparative design too general of a

research question such as "Which treatment is best?" (Kazdin, 1986). However, this limitation can be reduced when specific clinical problems are addressed with specific assessment criteria and when the intervention is applied under rigorous conditions (Kazdin, 1986). Each of these issues were addressed in this study. For instance, specific outcome variables were identified and assessed through the use of well-accepted, standardized instruments. Additionally, the use of treatment manuals helped to standardize the treatments and the Principal Investigator, who facilitated both treatment conditions, has received extensive training in each of the treatment approaches.

Crits-Christoph and Mintz (1991) state that therapist effects should be controlled for when there are numerous therapists. The reason that multiple therapists should be controlled for is due to the fact that a therapist may effect client outcomes. When there is only one therapist, however, each group should be effected by the same therapist effects. The issue of therapist effects was addressed in the current study with the Principal Investigator administering both treatment conditions.

Characteristics of the Study Sample

The sample for this study was recruited from an outpatient community-based mental health clinic in Oakland,

California. As individuals sought out treatment at the clinic, they were referred to the Principal Investigator for screening for inclusion in the current study. Flyers (Appendix B) were also posted in the clinic and were designed to recruit individuals who were currently or had recently experienced a number of problems associated with substance use. Following the conclusion of the study, the subjects were referred back to the mental health clinic for inclusion in an outpatient day treatment program.

Inclusionary Criteria

Criteria necessary to participate in this research project included: (1) subjects had to be female; (2) be within the ages of 18 to 44; and, (3) have a diagnosis of substance abuse or dependence according to the DSM-IV.

Exclusionary Criteria

Criteria used to exclude an individual from treatment in this research protocol included: (1) being male or transgender; (2) not having a diagnosis of substance abuse or dependence according to the DSM-IV; (3) presence of an active psychosis; or, (4) planning on leaving the area prior to completion of the treatment.

Sample Population

Twenty-four adult females were recruited and screened for participation in the current study. Five individuals

were excluded from participating in the study: four had a diagnosis of sustained full remission from substance dependence and one individual had a medical condition that precluded her participation. Thus, the sample for this study consisted of 19 participants, who were randomly assigned to the two treatment conditions via a table of random numbers. Ten individuals were assigned to Insight-Oriented Psychotherapy (IOP) treatment condition and nine individuals were assigned to the Cognitive-Behavioral Therapy (CBT) treatment condition. Two individuals, one from each treatment condition, did not complete the study, and their data were not included in the data analysis. Thus, the final sample was comprised of 17 individuals, 9 in the IOP treatment condition and 8 in the CBT treatment condition.

Demographic data consisted of variables such as age, race, level of education, and psychiatric diagnosis. The chi-square test is used to determine if there are statistically significant differences with nominal or categorical data. If significant differences are found, the implication is that the independent variable may not have caused the change but that the change may have been due to the pre-existing differences in the sample.

Table 1

Demographic Characteristics at Intake

Variable	IOP (n = 9)				CBT (n = 8)			
	<i>M</i>	<i>SD</i>	n	%	<i>M</i>	<i>SD</i>	n	%
Age (years)	35.2	2.2			34.9	4.2		
Education (years)	11.9	1.8			11.8	0.9		
Months Clean	4.1	2.9			3.5	1.6		
Ethnicity:								
African-American			8	89%			5	63%
Caucasian			0	0%			1	13%
Other			1	11%			1	13%
Sub-Related Disorder:								
Alcohol, Current			1	11%			0	0%
Cocaine, Current			8	89%			7	88%
Amphet., Current			0	0%			1	12%

Table 1 presents specific demographic data by treatment condition. Chi-square analysis revealed no statistically significant differences between the two treatment conditions for age [$\chi^2(1, n=17)=.73, p=.12$], years of education [$\chi^2(1, n=17)=.67, p=.19$], ethnicity [$\chi^2(1, n=17)=.95, p=.51$], substance-related psychiatric diagnosis

$[\chi^2(1, n=17)=.86, p=.03]$, or length of time since the last substance use $[\chi^2(1, n=17)=.92, p=.01]$.

The average age for the IOP participants was 35.22 ($SD = 2.17$) and 34.87 ($SD = 4.19$) for the CBT participants. Both treatment conditions had comparable levels of education, with the IOP treatment condition having a mean of 11.89 years ($SD = 1.76$) and the CBT treatment condition having a mean of 11.75 years ($SD = .89$). Participants in both treatment conditions also had similar ages of first substance use with the IOP treatment condition reporting a mean of 14.67 years ($SD = 8.97$) and the CBT treatment condition reporting a mean of 14.63 years ($SD = 2.56$). Participants reported similar patterns in the number of months since their last substance use with the IOP treatment condition having a mean number of months since their last substance use of 4.11 ($SD = 2.93$) and the CBT treatment condition having a mean number of months since their last substance use of 3.50 ($SD = 1.60$).

As Table 1 indicates, African-Americans ($n = 14$) comprised 82% of the total sample ($n = 17$). American Indian ($n = 1$), Asian of the Pacific Islands ($n = 1$), and Caucasians ($n = 1$) comprised the remaining 18% of the total sample. The majority of the sample (88%) had a diagnosis of Cocaine Dependence, Early Partial Remission. One subject in

the IOP treatment condition was diagnosed with Alcohol Dependence, Early Partial Remission and one subject in the CBT treatment condition was diagnosed with Amphetamine Dependence, Early Partial Remission.

Procedures

Two methods were used for data collection with this study, both of which relied on self-report by the participants of the study. The first method used to collect data was the use of structured interviews (i.e., the Structured Clinical Interview using the DSM and the Addiction Severity Index, Female Version). The second method was the use of questionnaires (i.e., the Profile Of Mood States). The Principal Investigator administered each of the assessment instruments to all study participants.

In designing this study, the Principal Investigator had two primary concerns. The first was the recruitment of subjects into substance abuse treatment, which has proven problematic for reasons previously outlined. The second concern dealt with the complexity of the assessment and the implementation of the treatment regimens.

In order to make the prospect of treatment more appealing several incentives were built into the design of the study. First, the treatment was conducted at a reputable substance abuse program centrally located with

nearby public transportation. Another item incorporated into the study was reimbursement, which was graduated and disbursed on a pay-as-you-go schedule.

The second concern, the complexity of the design and implementation of the treatments, required significant training and expertise. An effort to recruit additional therapists proved to be unsuccessful due to two factors: a lack of competency of the additional therapists and the time requirement of the study that the additional therapists would not commit. Thus, the principal investigator conducted the study as a sole investigator.

The research protocol was administered in the following manner: (a) prospective participants telephoned the Principal Investigator who gave them a brief overview of the study (see Appendix C), (b) if the caller was interested, they were asked some brief questions to determine if they met certain conditions which would exclude them from the study (see Appendix D), (c) if the caller remained interested an appointment was set up where the informed consent was conducted (see Appendix E), (d) if the individual signed the informed consent, then the pre-test and diagnostic assessment were administered and the participant was scheduled for their weekly group treatment. Treatment used a group format with each session lasting 90

minutes and ran for eight weeks. At the conclusion of the last treatment session, a post-test appointment was conducted.

Telephonic Pre-Screening

The first stage in the assessment process was conducted via the telephone in order to pre-screen the prospective participant. The prospective subjects were read a background statement concerning the study (e.g., rationale of the study, length of treatment) (see Appendix C) by the Principal Investigator. If the subject remained interested in participating in the study, they were asked a series of questions that might prohibit them from participating in the study (see Appendix D).

Specific items were chosen due to the nature of potential problems that they might uncover. For instance, a person who has a history or is currently experiencing a psychosis would be inappropriate for inclusion in either group treatment (Yalom, 1985), and would have been excluded from participating in the study.

Informed Consent

The informed consent included potential risks, benefits, the right to withdraw from treatment, and emergency contact procedures (see Appendix E). After the informed consent was executed, the pretest assessment was conducted and the

participant was scheduled for their first treatment session. If the individual decided not to participate, they were given a list of community-based agencies that provide treatment for substance abuse. The referrals included treatment within the referring mental health clinic as well as other agencies that specialized in substance abuse and mental health services.

Pre-test and Diagnostic Assessment

Pretest assessment consisted of the administration of the Structured Clinical Interview using the DSM (SCID; Spitzer et al., 1990), the Addiction Severity Index, Female Version (ASI-F; SAMHSA, 1997), and the Profile Of Mood States (POMS; McNair, Lorr, & Droppleman, 1961/1981). The SCID is a diagnostic instrument and was used as such. The ASI and POMS have been used extensively in the assessment and treatment of alcohol and drug abuse treatment and are viewed as standard assessment instruments (Clark, McClanahan, & Sees, 1998). Due to the varying length of time necessary to administer the assessment instruments, a two- to three-hour appointment was scheduled for the initial assessment interview.

Assignment to Treatment Condition

Study participants were randomly assigned to the two treatment conditions (CBT or IOP) via a table of random

numbers. Thus, each participant had an equal chance of being assigned to either treatment condition. Each treatment condition contained a similar number of participants and ran for eight sessions. Weekly therapy appointments involved group counseling that used either Cognitive Behavioral Therapy (CBT) or Insight Oriented Psychotherapy (IOP). Each group counseling session lasted for 90 minutes and was conducted at the referring mental health clinic. The Principal Investigator facilitated each group condition.

Cognitive-Behavioral Treatment Approach. The Cognitive-Behavioral Therapy developed by Carroll (1998) originally consisted of 12 sessions. For the purposes of this study, however, the treatment was reduced to eight sessions which consisted of the following topics: Session 1, introduction to treatment and coping with feelings of craving a substance (distraction, talking about the craving, going with the craving instead of fighting them, recalling the negative consequences of substance abuse, and using self-talk); Session 2, shoring up motivation and commitment to stop (addressing readiness for change, current position toward abstinence, identifying treatment goals); Session 3, developing refusal skills and assertiveness (how to handle suppliers, developing appropriate refusal skills); Session

4, seemingly irrelevant decisions (identifying personal examples, practicing safe decision making); Session 5, developing a coping plan (emergency phone numbers, recalling negative consequences of substance use, developing positive thoughts to use in high-risk situations, developing a list of safe places to go in a crisis; Session 6, introduction to the problem solving model (i.e., identifying the problem, brainstorming solutions, generating advantages and disadvantages of each solution, choosing the best solution); Session 7, HIV risk reduction (assessment of risk, build motivation to change, establish goals, problem solve barriers); and, Session 8, termination (Carroll, 1998).

Insight-Oriented Psychotherapy. The IOP treatment approach used in this study also consisted of eight sessions and included: Session 1, introduction to treatment (developing relationships with other group members); Session 2, setting treatment goals (explanation of the treatment process and setting realistic goals of treatment); Session 3, establishing a relationship of trust and rapport (listening, understanding, responding, and returning to listening); Session 4, understanding and responding to the client's problems (hidden meanings, client's symptoms, matching goals to alleviate the

symptoms); Session 5, identifying the importance of and developing supportive relationships; Session 6, evaluating and developing the helping alliance (helping the client trust the therapist, developing understanding by the therapist, developing optimism); Session 7, evaluating the core conflictual relationship theme (evaluate current in-treatment relationship, current out-of-treatment relationships, past relationships) to determine patterns and linkage to maladaptive coping mechanisms; and, Session 8, termination.

Posttest Assessment

At the end of their eight-week treatment, a final assessment was conducted using the POMS and the ASI-F. The final assessment interview took between 1 and 2 hours to complete. This time requirement was less than the initial appointment because the SCID was not administered during this final interview.

Reimbursement

Treatment was provided free of charge to the clients and subjects were reimbursed for their time while participating in the study. Subjects were paid \$10 for completing the pretest assessment, \$5 for each therapy session, \$10 for the posttest assessment, and a \$10 bonus for completing each requirement of the study (see Appendix F). Thus, the

total reimbursement possible was \$70 if the participant completed each requirement. Subjects were reimbursed at each stage of the study in which they completed. For instance, each subject was reimbursed following: the intake assessment, each therapy session, and the posttest assessment. The bonus was paid after the post test assessment to each subject that completed all study requirements.

Protection of Human Subjects

Prior to client contact, the University of San Francisco's Institutional Review Board for the Protection of Human Subjects (IRBPHS) reviewed and approved this study.

To ensure the protection of the rights of human subjects, this research project adhered to the American Psychological Association's Ethical Principles and Code of Conduct (American Psychological Association [APA], 1992). The participants were thoroughly briefed concerning the nature of the study, their rights to treatment, rights to not participate, potential risks, potential benefits, right to withdraw from treatment, time required for assessments, and reimbursement for being in the research project (Appendix F).

Subjects' confidentiality was protected through the use of numbers, which each participant agreed to, on charts, instruments, and notes. All study materials were kept in a locked filing cabinet which only the Principal Investigator had access.

Instrumentation

The Structured Clinical Interview using the DSM-IV (SCID; Spitzer et al., 1990) and the Addiction Severity Index Female Version (ASI-F; Substance Abuse and Mental Health Services Administration, 1997) were utilized in this study to obtain a history of substance use, abuse, and addiction in order to develop a psychiatric diagnosis. The ASI-F was also used to obtain information on psychosocial functioning. The Profile of Mood States (POMS; McNair, Lorr, & Droppelman, 1961/1981) was used as an outcome measure for treatment effects on anxiety and depression. Each of the assessment instruments is discussed separately.

The assessment instruments were selected based on the four criteria espoused by Patterson and McClanahan (1999): (1) appropriateness or goodness of fit, (2) empirically based psychometric principles (i.e., normative criteria, reliability and validity), (3) preponderance of research literature that utilizes the instrument, and (4)

practicalities (e.g., availability, ease of administration and scoring).

Qualifications of the Principal Investigator

The Principal Investigator administered, scored, and interpreted each of the data collection instruments. The Principal Investigator has specific training which demonstrates his competence, and includes: administration, scoring, and interpretation of 169 SCIDs; administration, scoring and interpretation of 29 POMS; three years of experience in the application of Cognitive-Behavioral Therapy with substance abusers; completion of a graduate degree in Clinical Psychology specializing in Psychodynamic Psychotherapy; three years of experience in the application of psychodynamic theory with substance abuse; and, at the time of treatment the Principal Investigator was a doctoral candidate (successful completion of coursework, written and oral comprehensive examinations, and defense of the dissertation proposal) in Counseling Psychology.

Structured Clinical Interview using the DSM-IV (SCID)

The Structured Clinical Interview using the DSM (SCID; Spitzer et al., 1990) is a series of questions contained within specific modules (e.g., psychotic screen, PTSD, mood disorders, etc.) (see Appendix G). The SCID provides diagnosis(es) of each Axis I category of the DSM-IV (i.e.,

Mood Disorders, Substance-Related Disorders, Schizophrenia and other Psychotic Disorders).

For the purposes of this study, only the Psychotic Screening and the Substance Use Disorder modules were used. The Psychotic Screening Module contains 15 questions with regard to unusual experiences that the individual may have experienced. The specific questions relate to criterion set forth in the DSM-IV. Positive responses to the questions yield a diagnosis; negative responses result in not meeting threshold criteria and no diagnosis, whereby the examiner proceeds to the next module of questions. Specific questions include:

1. Has it ever seemed like people were talking about you or did you think it might have been your imagination?
2. What about receiving special messages from the TV, radio, or newspaper, or from the way things were arranged around you?
3. What about anyone going out of their way to give you a hard time, or trying to hurt you?

The Substance Use Disorder module contains numerous questions that pertain to the use of substances, both licit and illicit. The questions correlate to the criteria set forth in the DSM-IV for a diagnosis of Substance Use

Disorders. Positive responses to the questions yield a diagnosis as well as a severity specifier (Mild, Moderate, or Severe). Specific questions include:

1. What are your drinking habits like?
2. When in your life were you drinking the most?
3. During that time . . .

How often were you drinking?

What were you drinking?

4. Have you ever missed work or school because you were intoxicated, high, or very hung over?
5. Did you ever drink in a situation in which it might have been dangerous to drink at all?

Similar questions are presented for illicit substances (i.e., stimulants, opioids, etc.). These questions attempt to determine if there is abuse, tolerance, or dependence as set forth in the DSM-IV. Responses to questions are either a yes or no.

Psychometric Principles. Traditional psychometric principles are not applicable to the SCID. The reason for this is that the SCID is an exact duplicate of the DSM-IV, where verbiage has been added to DSM criteria in order for the question to read grammatically correct. Goldfinger et al. (1996) reported that the SCID correctly identified 87%

of subjects which corroborative data revealed were substance abusers.

It is assumed that the person administering the SCID is experienced with psychopathology and clinical knowledge. This is required in order that additional queries can be posed in order to clarify sub-threshold responses.

Scoring. The layout of the instrument allows the administrator to score the SCID as the particular questions are asked. For instance, a page of questions has three columns of information. The far left column contains the question, the middle columns contains the DSM-IV criteria that correlates to that particular question, and the far right column contains a Likert-like rating scale (?, 1, 2, 3). The (?) indicates that the individual provided a response that requires further inquiry. The (1) indicates that the individual responded with a negative response. The (2) indicates that the response was positive, but did not meet all of the requirements of the criterion. The score of (3) indicates that the response was positive and meets the criteria of the question that was posed.

Once the entire module is completed, the scorer counts the number of 3s that were assigned. If a sufficient number of 3s were scored, then a diagnosis that corresponds to DSM-IV diagnostic criteria will be given.

Use. The SCID was used for purposes of excluding anyone who was experiencing psychosis or had a history of it (Psychotic Screening Module). The SCID was also used for establishing a diagnosis of a Substance-Use Disorder (Substance Use Disorder module).

Addiction Severity Index - Female (ASI-F)

The Addiction Severity Index (ASI; SAMHSA, 1997) is the most widely used instrument in drug treatment in America today (Liese & Najavits, 1997). The ASI-F (Appendix H) is an expanded version of the ASI (5th Edition), and has two primary purposes: to provide systematically quantitative information to aid in the planning of treatment of the individual in drug treatment programs, and to measure treatment progress of the individual client and treatment outcome of a group of clients in a particular treatment program (US Department of Health and Human Services [DHHS], 1997).

The ASI-F contains seven sections and a section for demographic information. The demographic data that is collected includes name, mailing address, date of birth, race, language, religion, number of pregnancies, and age and location of children.

The *Medical Status* section, which is not typically used for evaluative purposes, asks questions that pertain to

medical conditions that the individual may have experienced, such as: chronic medical problems (i.e., hepatitis, chlamydia, syphilis), seizures, and the importance of receiving medical treatment. The *Employment-Support Status* section contains questions such as highest education completed, valid driver's license, length of employment, employment patterns, and income received from various sources. The *Drug-Alcohol Use* section asks three questions in regard to 26 substances. The questions are how many days in the past 30 days has the person used that particular substance, how many months has the individual used the substance in their lifetime, and what was the age that they first used the substance. This section also asks questions such as which substance is their major problem and how long was their last period of abstinence from that substance. The *Legal Status* section asks questions that pertain to legal problems that the individual may have experienced. For example, are you on probation or parole, how many times in your life have you been arrested and charged with (shoplifting, vandalism, drug charges, forgery, etc.). The *Family-Social Relationships* section pertains to social relationships that the individual has had. Specific questions asked include: marital status, if they have been homeless in the past 30 days, usual living

arrangements, close friends, family history, and if they are satisfied with these relationships. The *Psychiatric Status* section contains questions such as, have you had a significant period in which you have experienced serious depression, serious anxiety or tension, hallucinations, trouble understanding, concentrating or remembering, thoughts of suicide, and attempted suicide.

Psychometric Principles. The ASI-F was normed on a population of 405 substance abusing females in order to develop specific situations and problems that are germane to female substance abusers. Reliability of the ASI-F using Cronbach Alpha coefficients are reported as: Medical Status .53; Alcohol Use .83; Drug Use .83; Legal Status .80; Family/Social Relationships .71; and Psychiatric Status .80. Interrater reliability was judged using the Guilford Chi Square formula and was found to have a very highly significant degree of agreement (Chi square = 211.6 (p < .01)).

Discriminant validity (the ability of the test to accurately differentiate various domains) of the ASI-F has also been reported as being superior in its ability to discriminate female drug abusers from female subjects who are from relatively similar backgrounds and circumstances but who are not drug abusers (DHHS, 1997). A sample of 135

subjects revealed that with the exception of a correlation of $r=.41$ between the *Family/Social Relationships* and the *Psychiatric Status* subsections, composite scores of all seven sections were small. The authors state that a correlation of .41 is high enough to negate the usefulness of a composite score between these two subscales whereas all other subscales were found to justify separate composite scores. Correlations between other subscales ranged from a low of $-.09$ (Alcohol and Legal) to a high correlation of $.23$ (Drug and Family/Social).

Construct validity was tested via factorial analysis, which indicated that the seven domains measured by the ASI-F were unique and distinct. Varimax rotation yielded 14 factors that included items that had factor loadings from $.47$ to $.96$. The authors state that, "the basic concept of the ASI, to the effect that each of the seven problem area sections was measuring a type of problem that was relatively distinct and unique, was supported by several results of this factor analysis" (DHHS, 1997, p. 8).

Predictive validity was evaluated as to whether the ASI-F could be used to predict treatment outcome. The methods used to determine this was a comparison of the percentage of reduction in the ASI-F drug problem composite scores from pretreatment to post-treatment six months later. The

percentages of the ASI-F compared to the ASI were similar (47% versus 46%), which further establishes the predictive validity of the ASI-F.

Scoring. Scoring of the ASI-F is based on the summation of critical items within each subscale. Composite scores for each subscale is based on the following formulas:

Medical Status (A8/30)

Employment Status [1 - (A4+B4+C120+log D36)]

Alcohol Status (A210+B210+C210+D28+E56+logF32+logG63)

Drug Status (A,B,C,D,E,F,G,H,I,K,L,M450+log N69+O450)

Family-Social (A20+B20+C,D,E30+E,F,G,H10+I300)

Psychiatric (A,B,C,D,E,F,G,H,I14+J,K,L,M42+N420)

The scores can range from 0 to 1, with scores approaching 1 indicative of more severe impairment and lower scores indicating more adaptive functioning. A computerized program, which was made available to the Principal Investigator from the Center for Substance Abuse Treatment (CSAT), Washington, DC, was used to generate composite scores for the ASI-F.

Use. The ASI-F was developed in order to assess the types of problems and situations that are more likely to be relevant for females, although the additional items (i.e., trading sex for illicit substances) are also relevant for male drug abusers (DHHS, 1997).

The ASI-F is in the public domain, with no copyright restrictions. Therefore, not only is it the most widely used instrument for data collection regarding substance use, it is also the most readily available.

Two subscale scores of the ASI-F (Alcohol- and Drug-Status) were used to determine which treatment condition was more efficacious in the reduction of substance use. Four subscales of the ASI-F (Employment, Legal Status, Family/Social Relationships, and Psychiatric) were used to determine if the treatment conditions affected the level of psychosocial functioning of the study participants. Traditional parametric statistical procedures were used to calculate quantitative findings and to evaluate within group differences on the data generated by the ASI-F. MANOVA procedures were used to determine statistical significance for between group differences.

Profile of Mood States (POMS)

The Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1961/1981) is a 65-item self-report instrument designed to measure six mood or affective states: Tension-Anxiety; Depression-Dejection; Anger-Hostility; Vigor-Activity; Fatigue-Inertia; and, Confusion-Bewilderment (see Appendix I). Each item is rated on a 5-point scale (0=not at all, 1=a little, 2=moderately, 3=quite a bit,

4=extremely). There are two versions of the POMS, an Outpatient Form (OP) and a College Form (C). The Outpatient form was used for the current study. Administration time is approximately five minutes.

Psychometric Principles. The Outpatient Form is based on norms collected for 650 female and 350 male psychiatric outpatients. Ninety-five percent of respondents will yield a total score of between 30 and 70. Internal reliability (alpha coefficients) ranged from .87 to .95 for the male psychiatric patients and alpha coefficients ranged from .84 to .95 for the female patients. Stability coefficients (r_{tt}) ranged from .66 to .74 from intake to pre-therapy, and from .43 to .52 from intake to six weeks. These coefficients are considered stable for predicting a variable state such as one's mood.

In regard to validity data, the publishers report that six studies have been conducted to establish the validity of the POMS domains. Of the fifteen items that comprise the *Depression-Dejection (D)* domain, factor loadings (decimals omitted) ranged from 34 to 58 in study 1; from 24 to 54 in study 2; from 38 to 57 in study 3; from 25 to 64 in study 4; from 31 to 48 in study 5; and from 25 to 46 in study 6. Symptom distress correlates of the POMS with a female sample (n=650) found that the depression mood factor

correlated with the Tension-Anxiety (T) mood factor (.70), the Anger-Hostility (A) factor (.58), the Vigor (V) factor (-.42), the Fatigue (F) factor (.69), and with the Confusion-Bewilderment (C) factor (.70) (McNair, Lorr, & Droppleman, 1961/1981). Validity coefficients for this same sample revealed that the anxiety mood factor correlated with the Dejection-Depression factor (.69), the Anger-Hostility factor (.52), the Vigor factor (-.30), the Fatigue factor (.61), and with the Confusion-Bewilderment factor (.68).

Concurrent validity of the POMS has also been established. Coefficients for the Tension-Anxiety mood factor of the POMS correlated with the Manifest Anxiety Scale ($r=.80$); and the Dejection-Depression mood factor of the POMS correlated to the Inpatient Multidimensional Psychiatric Scale ($r=.30$)

It should be noted that in the validity studies, women tended to score higher than males on the Tension, Depression, Fatigue, and Confusion scales, and older patients tended to score somewhat lower on the Anger and Confusion scales (Lorr et al., 1961). The authors report that POMS scores are little affected by background differences.

Scoring. To obtain a score for the POMS, individual subscale item responses are added together to obtain a subscale score. All items are scored in the same direction except for Item 2 and Item 54, a higher score in either of which indicates a less favorable state. A Total Mood Disturbance (TMD) score can be obtained by summing the scores on the six mood factors. The TMD score was not used in the current study.

Use. The Depression-Dejection (D) and the Tension-Anxiety (T) subscale scores of the POMS were used in the current study. The Depression-Dejection subscale consists of 13 items that indicates feelings of personal worthlessness, a sense of emotional isolation, sadness, and guilt. The maximum score that can be assessed on the Depression-Dejection subscale is 56.

The Tension-Anxiety subscale consists of 9 items, and represents observable somatic states (e.g., Tense, On Edge). The maximum score that can be assessed on the Tension-Anxiety subscale is 36.

Unlike many instruments, the authors (McNair, Lorr, & Droppleman, 1961/1981) do not provide data on the interpretation of scores, but state that the POMS should be used to assess the degree of change in individual scores. Scores in the current study were obtained in both the

pretest and posttest stages of treatment to determine if the treatment conditions produced any affect in the two domains of functioning -- depression and anxiety.

Data Analysis

Several instruments were used to collect data in this study. The SCID and the ASI-F were used to collect demographic data (please refer to page 56 for an in-depth analysis of demographic variables). Parametric statistical procedures such as means, standard deviations, effect sizes, and Multivariate Analysis of Variance (MANOVA) were used to analyze the ASI-F and POMS results.

Effect Size. Effect size for the *t* test for independent means is the difference between the population means divided by the standard deviation of the population, $ES = [(M_1 - M_2) / SD_{pooled}]$ (Aron & Aron, 1997; Kazdin, 1992). Effect size was used to determine whether the difference between populations was due to the independent variable and if so, to determine the magnitude of that difference. Effect size increases with greater differences between mean scores and decreases with greater standard deviations in the population (Aron & Aron, 1997). Cohen (1988) established levels of effect sizes for small, medium, and large differences for both a one-tailed test (a directional hypothesis) as well as with a two-tailed test (a non-

directional hypothesis). According to Cohen (1988), for a sample of 10 individuals in each group, .07 would equate to a small effect size, .18 would equate to a medium effect size, and .39 would equate to a large effect size.

Power Analysis. A priori power analysis was conducted prior to the initiation of the study in order to address the issue of effect size and its relationship to sample size. Cohen (1988) suggested that research should have a .80 power coefficient; others (Aron & Aron, 1997; Kazdin, 1986, 1992), however, have stated that expecting a large power coefficient makes clinical trials a virtual impossibility because of the economics needed to generate a sample size large enough to yield a power of 80%.

Kazdin (1992) suggests that other statistical analyses are just as meaningful as power analysis and are more reasonable for clinical trials. For instance, statistical significance in clinical psychology research can be achieved by using parametric statistical procedures (e.g., means, standard deviations, effect size) to evaluate outcome data.

Stevens (1992) offers several suggestions to improve power analysis: adopt a more lenient alpha level ($\alpha = .10$), employ more stringent sample selection (i.e., increased homogeneity between subjects, use of repeated measures

designs), and ensure the linkage between the treatment and the dependent variable. For the purposes of this study, all statistical analyses use an alpha level of .10 unless stated otherwise.

MANOVA Analysis. There is a large debate over whether an Analysis of Variance (ANOVA) or Multivariate Analysis of Variance (MANOVA) should be used in the analysis of an experimental design with multiple dependent variables. An ANOVA is the statistical procedure that tests the variation among the means of several groups, and answers the question of whether the means differ more than expected from sampling fluctuation.

The central issue in determining whether to use the ANOVA or the MANOVA is controlling the alpha level. If the alpha level is not controlled, the *Bonferroni Inequality* effect becomes an issue. For instance, when an investigator is evaluating the results of statistical procedures, they set an alpha level ($\alpha \leq .10, .05, .01, .001$), usually at .05. The *Bonferroni Inequality* states that when an experimenter has numerous outcome tests, the upper bound on overall α will be the sum of the α levels. In the case of the current study, the overall *Bonferroni* would equal .80 (8 dependent variables X the α of .10). This would increase

the likelihood of falsely rejecting the null hypothesis to a very high and unacceptable level. A MANOVA controls α to a level of reasonableness, while still evaluating interrelationships among the variables. This is the most compelling argument for the use of the MANOVA versus the ANOVA.

The MANOVA is similar to the ANOVA, but the MANOVA can analyze multiple independent variables on several dependent variables simultaneously, focusing on cases where the variables are correlated and share a common conceptual meaning (Stevens, 1992). Thus, the second major rationale for using the MANOVA instead of the ANOVA. Stevens (1992) concurs with this rationale and posits that the multivariate analysis of variance is indicated in the present study because this study used several criterion measures, which allows for a more comprehensive description of the phenomenon being evaluated.

For the purposes of the current analysis, three MANOVAs are indicated. Stevens (1992, 1996) states that separate MANOVAs should be run for the dependent variables where the literature indicate that main effects should be generated, and secondary MANOVAs should be run on the dependent variables that are being evaluated on a heuristic nature. Thus, one MANOVA would analyze the Drug- and Alcohol-

Status, another would analyze the Anxiety and Depression outcomes, and a third would analyze the psychosocial results.

The first step in conducting a MANOVA analysis is generating input data. Brogan and Kutner (1980) state that the most reasonable data to be used for the MANOVA analysis is the difference score (sometimes referred to as gain score). The difference score is computed by taking the posttest score minus the pretest score and computing the gain difference score, then the MANOVA is run on the gain scores. According to Stevens (1992, 1996), the experimenter should run the MANOVA analysis, and the first step in the analysis is to evaluate the Wilk's Lambda, the Roy's largest root, the Hotelling T^2 , and the Pillai's Trace to determine if these statistics are significant.

Wilk's Lambda is a measure of within-group variability and is a multivariate generalization of the univariate sum of squares within. Roy's largest root and Hotelling T statistics are generalizations of the univariate F statistic. The multivariate two-group test, Hotelling's T^2 , is analogous to the univariate t test used in the ANOVA (Stevens, 1996). Tabachnick and Fidell (1996) state that when an effect has only two levels ($df = 1, s = 1$), the statistical value for Wilk's Lambda, Hotelling's Trace, and

Pillai's Trace are identical. When an effect has more than two levels ($df > 1$), the F statistics are slightly different but all three will be either significant or nonsignificant, thus it is left to the researcher to decide which to use. If the Wilks' Lambda, Roy's largest root, the Hotelling's Trace, or the Pillai's Trace are significant, then the researcher can proceed to analyzing the MANOVA F statistic. If, however, the Wilk's Lambda, Roy's largest root, the Hotelling's Trace, or the Pillai's Trace is not significant, then the researcher should discontinue the MANOVA analysis. Stevens (1992, 1996) states that when there are two groups with multiple dependent variables, such as in the current study, the Hotelling T^2 is the preferred multivariate statistic to determine if the analysis should proceed to the second level of analysis. Thus, the current study used the Hotelling T^2 as the multivariate statistic.

The second step in analyzing MANOVA results is to determine if the F statistic is significant. If the F statistic is significant, then Stevens (1996) states that post hoc procedures should be conducted to determine which dependent variable(s) contributed to the significance. Stevens (1992, 1996) suggests three post hoc procedures to determine which dependent variable contributed to the

significance: (1) one approach is the Roy-Bose simultaneous confidence interval, (2) a second approach is to conduct separate univariate t 's on each of the dependent variable within that particular MANOVA, and (3) the final procedure is to conduct separate univariate (ANOVA) tests for the dependent variables of that particular MANOVA. The first post hoc procedure, the Roy-Bose analysis, reduces the power analysis and since the current study has a small sample size this procedure would increase the likelihood of falsely rejecting the null hypothesis and thus was not used. The second post hoc procedure (conducting t tests) and the third procedure (conducting separate ANOVAs) essentially generate similar results (the t^2 equals the ANOVA F statistic). Thus, MANOVA analyses were followed by conducting separate t tests for dependent variables where the MANOVA F statistic was significant (p divided by the number of dependent variables) (Stevens, 1996).

Research Question One. In relation to research question one (Which treatment condition [CBT or IOP] is more efficacious in the treatment of substance abuse in females?), the Alcohol- and Drug-Status subscale composite scores of the ASI-F were utilized as outcome measures. Each of these scores are ratio data, therefore means, standard deviations, and effect sizes were used to compare the

within group scores. Between group scores were analyzed following established MANOVA procedures.

Research Question Two. In relation to research question two (To what extent does CBT and IOP increase overall psychosocial functioning of females who abuse substances?), composite scores from four subscales of the ASI-F were used (i.e., employment/support, legal status, family/social relationships, and psychiatric status). Each of these scores are ratio data, therefore means, standard deviations, and effect sizes were used to compare within group scores. MANOVA procedures were used to determine if there were any between group statistical significance.

Research Question Three. In regard to research question three (To what extent does CBT and IOP reduce the frequency and amount of substance use), frequency and amount of substance use was used for evaluative purposes. The frequency and amount of substance use, for the purposes of this study, are reported in the amount of substance used and the number of days of use.

Research Questions Four and Five. In regard to research question four (To what extent does CBT and IOP reduce feelings of depression?) and research question five (To what extent does CBT and IOP reduce feelings of anxiety?), subscale scores from the Profile of Mood States (POMS) were

used. Due to the type of data generated by the *Depression-Dejection* and *Tension-Anxiety* subscales of the Profile of Mood States (POMS), means, standard deviations, and effect sizes were used to compare the within group scores. MANOVA procedures were used to determine if there were any statistical differences between group scores.

CHAPTER IV

Results

This chapter presents a comparative analysis of the data for the outcome variables (alcohol and drug use, anxiety, depression, and psychosocial functioning). For the purposes of this study, please refer to page 56 for the analysis of the demographic data. The Addiction Severity Index, Female version (ASI-F) was used to gather data on substance use (alcohol and drug use) and general psychosocial functioning. The Anxiety and Depression subscales of the Profile of Mood States (POMS) were used to gather data on these two affective states.

Addiction Severity Index Composite Scores

Research question one examined, "Is Cognitive Behavioral Therapy (CBT) or Insight-Oriented Psychotherapy (IOP) more efficacious in the treatment of substance use/abuse in females, as measured by the Alcohol- and Drug-Use subscales of the ASI-F?"

Means and standard deviations were used to analyze variability in the data for research question one; effect sizes ($ES=(M_1-M_2)/SD_{pooled}$) were used to determine statistical significance in the variance between sample means; and, a MANOVA analysis was conducted to determine if there were any statistical significance between-groups. Table 2

presents the data for each group for the Alcohol and the Drug subscale composite scores of the ASI-F.

Table 2
Alcohol- and Drug-Use ASI-F Composite Scores

	<u>IOP</u>				<u>CBT</u>			
	<u>Pre-test</u>		<u>Post-test</u>		<u>Pre-test</u>		<u>Post-test</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Alcohol	0.29	0.25	0.42	0.01	0.24	0.28	0.07	0.13
Drug	0.19	0.06	0.18	0.05	0.22	0.07	0.13	0.05

IOP Within-Group Analysis. Table 2 indicates that for the IOP treatment condition, there was an increase in the Alcohol Status composite score from pre- to post-test assessment. These scores yielded a large negative effect size ($ES = -.53$) from pre-test assessment ($M = .29, SD = .25$) to the post-test assessment ($M = .42, SD = .01$). The reason for this negative effect was a result of three individuals who relapsed during the course of treatment; additional data for these individuals is reported under Research Question Three below.

Treatment yielded a small effect size ($ES = .04$) on Drug Status from the pre-test assessment ($M = .19$, $SD = .06$) to the post-test assessment ($M = .18$, $SD = .05$) for subjects assigned to the IOP treatment condition.

CBT Within-Group Analysis. Table 2 also indicates that subjects in the CBT group reported significant changes in both the Alcohol- and the Drug-Status composite scores from pre- to post-test assessment. Treatment yielded a large effect size ($ES = .55$) on Alcohol Status from pre-test assessment ($M = .24$, $SD = .28$) to the post-test assessment ($M = .07$, $SD = .13$).

The CBT treatment also resulted in a large effect size ($ES = 1.03$) on Drug Status from the pre-test assessment ($M = .22$, $SD = .07$) to the post-test assessment ($M = .13$, $SD = .07$).

Figure 1 indicates that the CBT treatment resulted in a 71% reduction of mean Alcohol-Status composite score from the pretest assessment ($M = .24$) to the posttest assessment ($M = .07$). This is contrasted to a 45% increase in mean Alcohol-Status composite score for the IOP treatment condition from the pretest assessment ($M = .29$) to the posttest assessment ($M = .42$).

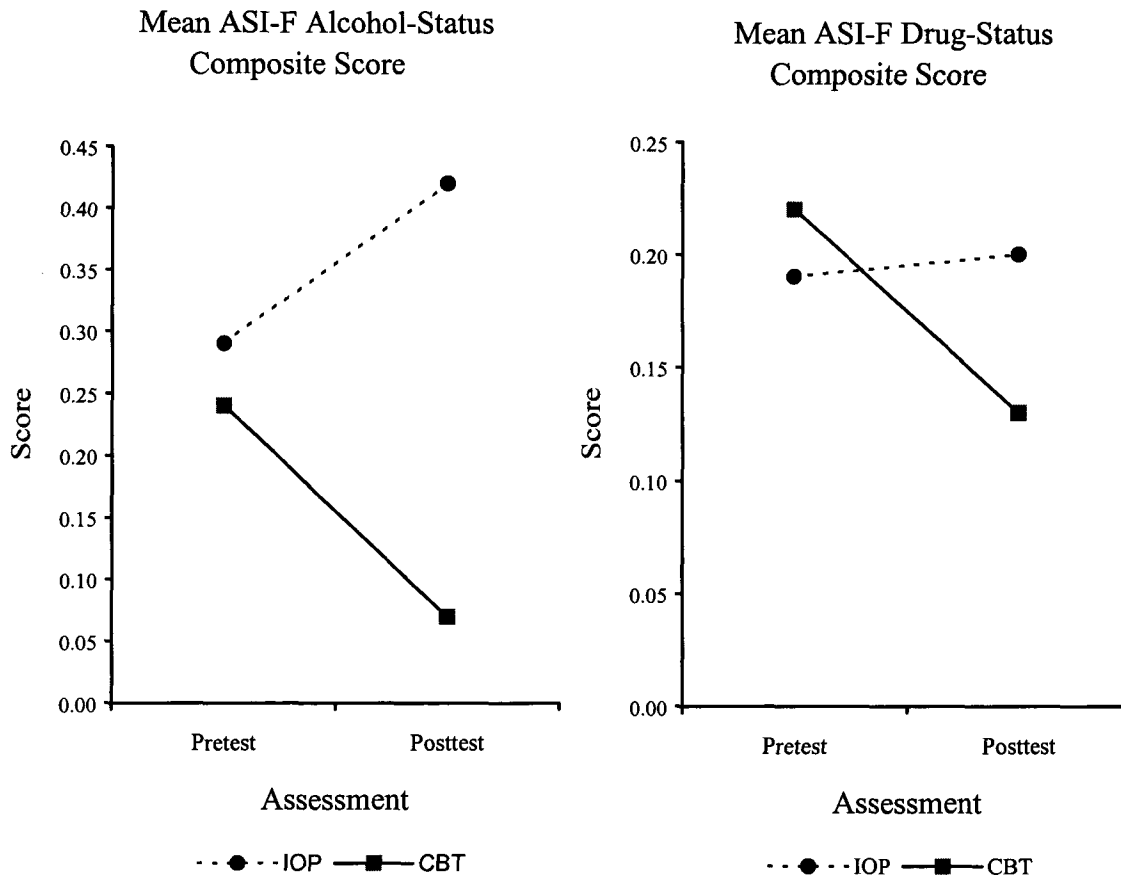


Figure 1. Mean ASI-F Alcohol and Drug-Status composite scores at pretest and posttest assessment.

Figure 1 also represents the effect of treatment on mean ASI-F Drug-Status composite scores. While there was virtually no change in mean composite scores for the IOP treatment condition from pretest assessment ($M = .19$) to the posttest assessment ($M = .18$), the mean composite score for the CBT group was reduced by 32% (pretest $M = .19$; posttest $M = .13$).

Between-Group Analysis. Table 3 presents the results from the first step in the multivariate analysis of variance for the two dependent variables: Alcohol Status and Drug Status as measured by the ASI-F. Hotelling's T^2 indicated that there was a main effect for the dependent variables.

Table 3

Multivariate Test for Alcohol- and Drug-Status

Source	<u>df</u>	Value	<i>sig.</i>
Hotelling's Trace	2	1.280	.056*

* $p < .05$

Since the initial step in the MANOVA procedure indicated that there was a main effect on the dependent variables, the F statistic was analyzed. Table 4 indicates that both the Drug Status, $F(1, 17)=10.236$, $p = .013$, and the effect for Alcohol Status, $F(1, 17)=5.566$, $p = .046$, were statistically significant at the .10 level.

Table 4

Multivariate Analysis of Variance for Alcohol- and Drug-Status

Source	<u>df</u>	<i>F</i>	<i>sig.</i>
Alcohol	1	5.566	.046*
Drug	1	10.236	.013*

* $p < .05$

In order to determine which dependent variable was contributing to the overall *F* statistic, separate *t* tests were conducted for each dependent variable. The Alcohol Status *t* test was statistically significant, $t(1, 17)=2.359$, $p = .046$, as was the Drug Status *t* test, $t(1,17)=3.199$, $p = .013$. Therefore, both dependent variables contributed to the significance of the MANOVA *F* statistic, which indicates that both dependent variables were statistically significant. Thus, treatment yielded significant outcome on both dependent variables - - Alcohol- and Drug-Status.

Research Question Two.

Research question two examined, "To what extent does CBT and IOP increase overall psychosocial functioning of females who abuse substances as measured by the Employment

Status, Legal Status, Family/Social Relationship, and Psychological Status subscales of the ASI-F?"

Means and standard deviations were used to analyze variability in the data for research question two, effect sizes were used to determine statistical significance in the variance between sample means, and a MANOVA analysis was conducted to determine if there were any statistical significance between-groups.

Table 5
PsychoSocial Composite Scores of the ASI-F

	<u>IOP</u>				<u>CBT</u>			
	<u>Pre-test</u>		<u>Post-test</u>		<u>Pre-test</u>		<u>Post-test</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Employ	0.91	0.18	0.91	0.18	0.72	0.23	0.69	0.20
Legal	0.26	0.23	0.26	0.14	0.21	0.17	0.19	0.17
Fam/Soc	0.48	0.13	0.48	0.13	0.41	0.15	0.39	0.14
Psych	0.45	0.18	0.45	0.27	0.29	0.20	0.25	0.19

IOP Within-Group Analysis. Table 5 presents the means data for pre- and post-test psychosocial composite scores of the ASI-F for both treatment conditions. The IOP

treatment produced virtually no change from pre-test to post-test for Employment Status ($ES = .00$), Legal Status ($ES = .01$), Family/Social Status ($ES = .00$), or Psychiatric Status ($ES = .00$).

The lack of significant effect size indicates that the IOP treatment was not effective with increasing psychosocial functioning for the subjects assigned to this treatment condition.

CBT Within-Group Analysis. Table 5 also indicates that subjects who received the CBT treatment condition yielded a small to medium effect size ($ES = .10$) on Employment Status from the pre-test assessment ($M = .72, SD = .23$) to the post-test assessment ($M = .69, SD = .20$). Treatment resulted in a small effect size ($ES = .05$) on Legal Status from the pre-test assessment ($M = .21, SD = .17$) to the post-test assessment ($M = .19, SD = .17$). There was a small to medium effect size ($ES = .12$) in Family/Social Status from the pre-test assessment ($M = .41, SD = .15$) to the post-test assessment ($M = .39, SD = .20$). Treatment yielded a medium effect size ($ES = .17$) in Psychiatric Status from the pre-test assessment ($M = .29, SD = .20$) to the post-test assessment ($M = .25, SD = .19$).

Between-Group Analysis. The multivariate analysis of variance for Employment status, Legal status, Family/Social

status, and Psychiatric status was conducted to determine if there were any between group differences. As Table 6 indicates, Hotelling's T^2 was not statistically significant for the psychosocial dependent variables.

Table 6

Multivariate Tests for Psychosocial Variables

Source	<u>df</u>	Value	<i>sig.</i>
Hotelling's Trace	4	.329	.451

* $p < .025$

Due to the fact that the analysis of the Hotelling's Trace did not yield a statistically significant difference, the MANOVA F statistic was not analyzed. The lack of statistical significance indicates that neither treatment condition produced a main effect for any of the psychosocial outcome variables.

Research Question Three.

Research question three examined, "To what extent does CBT and IOP reduce the frequency and amount of substance use as measured by the Alcohol- and Drug-Status subscales of the ASI-F?"

The data used for this analysis was ratio data therefore means and standard deviations were used in the analysis. Due to the fact that only three individuals relapsed, additional statistical analysis such as ANOVA and MANOVA were not used.

Data from the ASI-F indicated that three individuals assigned to the IOP treatment condition reported that they relapsed during treatment. The number of days of their use, however, was dramatically reduced from the pre-test assessment ($M = 20$, $SD = 12.91$) to the post-test assessment ($M = 4$, $SD = 2.31$). Although these three individuals relapsed, the amount of their substance use was also significantly reduced from a pre-test level ($M = 46$ oz., $SD = 31.09$) to a post-test level ($M = 24$ oz., $SD = 19.60$). No subjects assigned to the CBT treatment condition relapsed during treatment.

This finding is contradictory in nature. First, the three individuals relapsed during treatment, which suggests that treatment produced a negative effect. However, the amount of substance use and the number of days of substance use were both reduced, which suggests that treatment was effective. This finding indicates that treatment was clinically significant, even though the individuals relapsed during the course of treatment.

The Profile of Mood States

Research question four examined, "To what extent does CBT and IOP reduce feelings of depression in females who abuse substances as measured by the Depression-Dejection subscale of the POMS?"

Research question five examined, "To what extent does CBT and IOP reduce feelings of anxiety in females who abuse substances as measured by the Tension-Anxiety subscale of the POMS?"

Means, standard deviations, and effect sizes were used to analyze within-group differences for the POMS data. MANOVA procedures were used to evaluate the between-group differences. Pearson correlations were significant ($p < .01$) from pre-test to post-test for both depression ($r_{tt}=.81$) and anxiety ($r_{tt}=.89$) subscale scores.

IOP Within-Group Analysis. Table 7 presents data for both treatment conditions on the POMS Anxiety and Depression subscales. Subjects in the IOP treatment condition reported a reduction in Depression scores from a pre-test mean score of 22.89 ($SD = 13.40$) to a post-test mean score of 20.56 ($SD = 11.42$). This resulted in a medium effect size ($ES = .20$).

The IOP subjects also reported a reduction in feelings of Anxiety from the pre-test ($M = 19.33$, $SD = 12.27$) to the

post-test assessment ($M = 16.44$, $SD = 10.70$) which produced a medium effect size ($ES = .27$).

Table 7
Profile of Mood States Subscale Scores

	<u>IOP</u>				<u>CBT</u>			
	<u>Pretest</u>		<u>Posttest</u>		<u>Pretest</u>		<u>Posttest</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
DEP	22.89	13.40	20.56	11.42	14.38	5.57	9.88	6.43
ANX	19.33	12.27	16.44	10.70	7.75	4.63	5.13	5.82

CBT Within-Group Analysis. Subjects assigned to the CBT treatment condition reported a greater reduction in the feelings of depression than the IOP subjects; these individuals reported a reduction from a pre-test group mean score of 14.38 ($SD = 5.57$) to a post-test group mean score of 9.88 ($SD = 6.43$). This difference resulted in a large effect size ($ES = .70$).

The CBT subjects also reported a reduction in Anxiety scores from a pre-test group mean of 7.75 ($SD = 4.63$) and a post-test group mean of 5.13 ($SD = 5.82$). This too resulted in a large effect size ($ES = .45$).

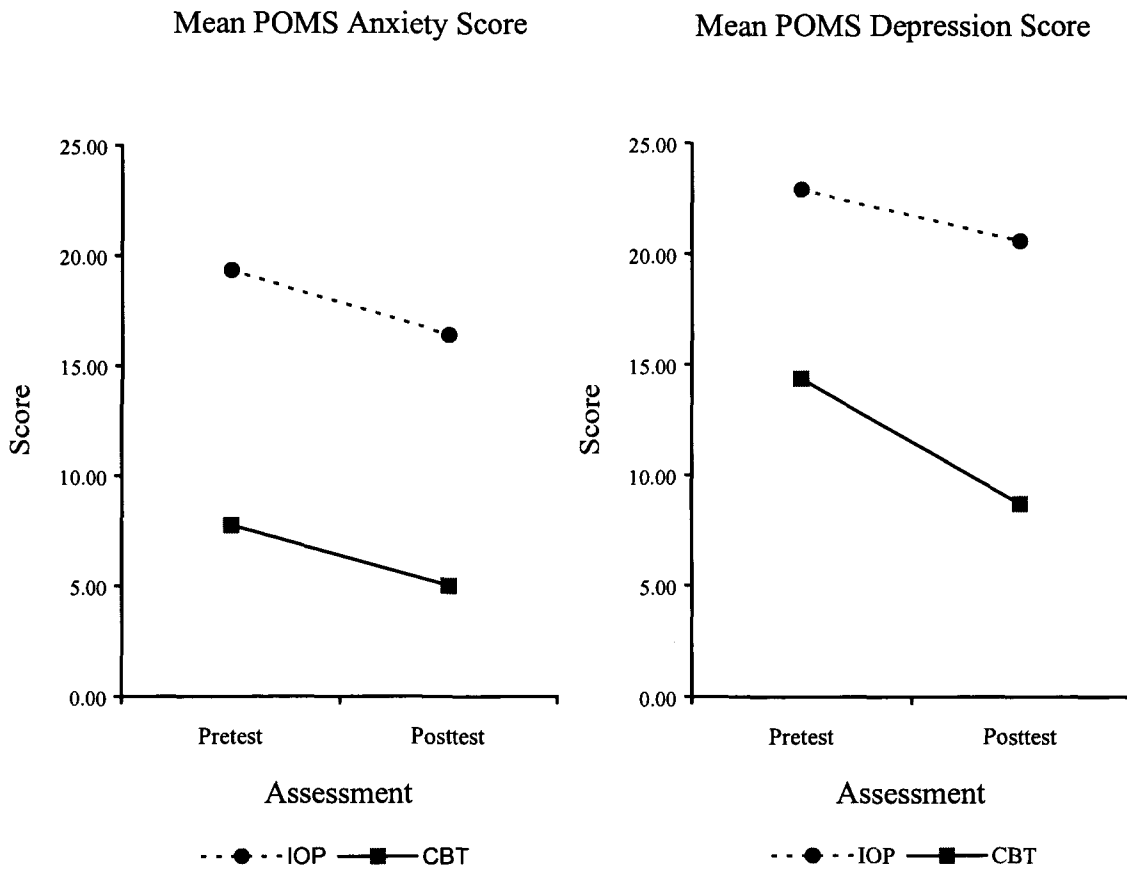


Figure 2. Mean POMS Anxiety and Depression scores at pretest and posttest assessment.

Figure 2 graphically presents the main effects for mean POMS Anxiety and Depression scores by treatment condition. The IOP treatment resulted in a 15% reduction of mean Anxiety score from the pretest assessment ($M = 19.33$) to the posttest assessment ($M = 16.44$). This is contrasted to the 34% decrease in mean Anxiety score for the CBT

treatment condition from the pretest assessment ($M = 7.75$) to the posttest assessment ($M = 5.13$).

Figure 2 also represents the effect of treatment on mean POMS Depression scores. While the IOP treatment condition produced a 10% reduction in scores from pretest assessment ($M = 22.89$) to the posttest assessment ($M = 20.56$), the mean score for the CBT group was reduced by 31% (pretest $M = 14.38$; posttest $M = 9.88$).

Between-Group Analysis. The multivariate tests were conducted to determine if there were any main effects for Anxiety and Depression. As Table 8 indicates, Hotelling's T^2 indicated that there was no main effect for either of the two dependent variables.

Table 8

Multivariate Test for Anxiety and Depression

Source	<u>df</u>	value	<i>sig.</i>
Hotelling's Trace	2	.107	.491

* $p < .05$

Analysis of the Hotelling's T^2 indicates that neither of the dependent variables, anxiety or depression, yielded a

statistically significant difference, therefore the MANOVA F statistic was not analyzed. The lack of statistical significance indicates that neither treatment condition produced a main effect for the treatment of anxiety or depression.

Because the CBT treatment condition produced large effect sizes, and the fact that a MANOVA may not be sensitive enough to detect significance in a small sample (Stevens, 1996), subsequent t tests were conducted on the dependent variables (Anxiety and Depression). This analysis indicated that there was a statistical significance for anxiety, $t(1, 17) = 3.43, p = .08$, as well as for depression, $t(1, 17) = 3.09, p = .10$. This confirmatory statistical analysis indicates that treatment produced significant outcome for both a reduction in the feelings of depression as well as anxiety.

Summary

The objective of the current study was to determine if either group was efficacious in the treatment of females who use and abuse substances.

The major findings in this study include: CBT treatment was effective in the reduction of alcohol and drug use, depression, and anxiety; IOP was not effective in the reduction of alcohol use; neither IOP or CBT was effective

in increasing psychosocial functioning of the current sample (employment, legal, family relations, psychiatric); CBT was more than ten times more effective than IOP in the reduction of alcohol use; CBT was four times more effective than IOP in the reduction of drug use; CBT was two times more effective than IOP in the reduction of anxiety; and CBT was three times more effective than IOP in the reduction of depression. Perhaps the most significant finding, however, is the fact that a CBT treatment developed at a Veterans Affairs Medical Center on male clients can be generalized to treat female outpatient clients.

Chapter V

Limitations, Discussion, Recommendations, and Implications

Overview

Empirically supported treatment for substance abuse has predominately focused on male clients (Hatsukami et al., 1997), and the traditional approach to drug and alcohol treatment uses techniques that tend to be confrontational which has led clinicians to question their appropriateness with female substance abusers (Hatsukami et al., 1997). Current research posits that the optimal treatment approach for females may be to focus on the process of negative emotions (i.e., depression and anxiety) and interpersonal relations, both of which are more typical relapse indicators for female substance abusers (Stocker, 1998).

The Cognitive-Behavioral Treatment (Carroll, 1998) in this study included: focusing on a functional analysis of the substance abuse, individualized training in recognizing and coping with cravings, examining the client's cognitive processes related to substance abuse, examining high-risk situations, encouragement of extra-session skills, and practicing of skills within session.

The Insight-Oriented Psychotherapy (IOP) condition in this study draws from Khantzian's Self Medication Model (1985, 1986, 1988, 1990), and included: improving deficits

in self-care, self-esteem, self-object, and affective states.

The purpose of this study was to determine if Cognitive-Behavioral Therapy (CBT) or Insight-Oriented Psychotherapy (IOP) was more effective in the treatment of female substance abuse. Outcome variables included amount and frequency of drug use, the level of feelings of anxiety, and the level of feelings of depression. Measures that evaluated these domains included the Addiction Severity Index, Female version (ASI-F) and the Profile of Mood States (POMS).

This study was designed to (a) evaluate the effectiveness of empirically validated treatment protocols with female substance abusers, and (b) to identify potentially useful treatment techniques with this population.

This chapter will present: (a) limitations of the study, (b) a discussion of the findings, (c) conclusions drawn from the results, (d) recommendations for practice and future research, (e) and implications for practice.

Limitations

This study is limited in generalizability because outcome measures were based on client self-report data, which may be subject to problems with recall and

truthfulness of the subject when reporting their substance use history. For instance, the study participants were previously involved with Child Protective Services and they might have wanted to portray themselves in a more favorable light during the assessments, which would have lowered the pre-test assessment scores.

Sample and Generalizability

There are several other threats to the external validity of this study: the subjects in this study were from an urban inner city on the West Coast, and the subjects were primarily women of color with histories of primarily cocaine and alcohol abuse. Either of these variables may affect the generalizability of the results of the study due to demand characteristics. For instance, the pattern of drug use of inner city African-Americans on the West Coast may be different from that of inner city African-Americans on the East Coast. There may also be differences in cultural values. For instance, the West Coast may have a more liberal view of substance use than the East Coast, or visa versa. Either of these conditions, if present, might limit the ability to generalize the current findings to other females of color or Caucasian females.

This study employed controls that were designed to reduce many of the threats to the internal and external

validity of the study. For instance, treatment conditions were implemented following standardized implementation protocols (i.e., manual driven sessions). Assessment instruments that are industry standards and well-validated were used, and outcome variables were analyzed through statistical procedures other than power, such as effect size (Basham, 1986; Kazdin, 1986, 1992). Additionally, specific inclusionary and exclusionary parameters were designed to reduce the threat to the generalizability of the study by generating a homogenous sample. A homogenous sample, in theory, would highlight change caused by the independent variables rather than from demand characteristics of the sample.

The small sample size may reduce the statistical power of the study. Power is the ability of the researcher to reject the null hypothesis when it is false (Stevens, 1992). Power is effected by sample size, alpha level, and effect size. A *priori* power analysis indicates that for a two group sample of fifteen subjects in each sample, with an alpha level of .10, the power or ability to correctly reject the null hypothesis is .63. This equates to a 63% probability of correctly rejecting the null. In order for the researcher to have a power coefficient of .80 (which Cohen, 1998 suggests), with an alpha of .01, each group

would require in excess of 100 subjects, which is often not practical in clinical research (Kazdin, 1992; Stevens, 1996).

Extraneous Variables. Another possible limitation may be extraneous variables. Confounding exists when some uncontrolled factor other than the independent variable may be responsible for the results. The extraneous variables, in this study, could include: simultaneous substance abuse treatment from another provider, family dynamics, or social variables that interfere with the treatment variable. None of the subjects who participated in this study were concurrently enrolled in another treatment program. Thus, this threat was reduced.

Therapist Effects. Another limitation to this study is the possibility of therapist effects. It is theoretically possible that having only one therapist could lead to skewed outcome. Having only one therapist who facilitates both treatment condition raises the issue that the therapist may have been better trained in one theoretical orientation, the therapist may have been more aligned with one theory and thus more motivated and enthusiastic in its application.

An attempt was made at the outset of the study to address this possible limitation. For instance, a concerted

effort was made to recruit additional therapists to facilitate treatment conditions, but due to the length of training required and the commitment to the length of treatment additional therapists could not be recruited. Crits-Christoph (1991) state that when there are numerous therapists, therapist effects should also be controlled for. The therapist can effect outcome by virtue of their experience, theoretical orientation, motivation, and even the number of therapists involved in a study. Thus, having only one therapist would counter the effect of having multiple therapists. According to Crits-Christoph (1991) if there is only one therapist, the therapist will effect each treatment condition equally. This argument is analogous to the placebo effect in clinical pharmacological studies. This threat was addressed in the current study through the strict adherence to treatment manuals. Adhering to the treatment manuals theoretically should minimize any therapist effects.

It should also be noted that the CBT manual (Carroll, 1998) was more thoroughly developed than the IOP manual (Luborsky, 1984). CBT is also better suited than a psychodynamic paradigm to manualized treatment, this too may have affected the outcomes.

Methodologies Designed to Reduce Additional Threats

Many of the Kazdin (1992) suggestions were incorporated into the current study. For instance, assessment instruments with high reliability and validity were used. Each of the outcome measures generated data where traditional parametric statistical analyses (e.g., means, standard deviations, effect sizes, and MANOVAs) could be used to evaluate the data. As far as sample selection is concerned, the current study incorporates all of the suggestions offered by Stevens (1992, 1996). For instance, the sample is highly homogenous with no statistical difference on any demographic area (see page 56). The current study also used repeated measures to collect outcome data, and there is a strong linkage between treatments and the dependent variables.

Discussion

Research Question One

Is Cognitive Behavioral Therapy (CBT) or Insight-Oriented Psychotherapy (IOP) more efficacious in the treatment of substance use/abuse in females as measured by the Alcohol- and Drug-Status subscales of the ASI-F?

The current study found that for both within- and between-groups, the CBT treatment condition was more efficacious than the IOP treatment condition for both Drug-

and Alcohol-Status as measured by the ASI-F. For instance, the CBT treatment condition resulted in lower drug use and alcohol use than the IOP treatment condition. The data also reveal that the IOP treatment condition resulted in a negative treatment effect for alcohol use. Between-group analysis indicated that these findings reached statistical significance.

These findings are consistent with previous research. For instance, Hall, Munoz, and Reus (1994) found that cognitive behavioral techniques (thought restructuring, relaxation training, social skills training, and identifying maladaptive thoughts) were significantly more effective than a standard treatment in achieving longer periods of abstinence. Beck et al. (1991) also reported similar results where cognitive behavioral interventions were effective in the treatment of cocaine addiction. The research of Carroll et al. (1995) further supports the fundamental premise that substance use or addiction can be successfully treated through a cognitive-behavioral treatment approach. Woody et al. (1983) also reported that cognitive behavioral therapy was more effective than supportive expressive therapy in the reduction of substance use.

Ojehagen et al. (1997), however, found that a multi-modal behavioral therapy and psychiatric therapy based on a psychodynamic paradigm were equally effective in reducing alcohol use.

There are several hypotheses as to why the cognitive-behavioral treatment condition produced statistically significant results for the participants of this study. First is the fact that individuals in the early stages of recovery need concrete direction in learning the steps necessary to break the cycle of addiction. For instance, the cognitive-behavioral treatment condition included specific sessions on several relapse prevention techniques (coping with cravings, developing the motivation to stop, and developing skills to help the user decline invitations to use substances) (Carroll, 1998).

Another reason is that before individuals can stop using substances, they first must be committed to abstinence (Buelow & Buelow, 1998). The CBT subjects may have been more committed to abstinence or the concrete material covered in the CBT sessions most likely gave these individuals the skills necessary for abstinence.

A third reason is that cognitive-behavioral therapy is structured, goal-oriented, and focused on the immediate problems that substance abusers face in their recovery

process (NIDA, 1998). Problem-solving approaches are viewed as preferred treatment approaches for African-Americans and other ethnic groups (Clark, McClanahan, & Sees, 1998).

Research Question Two

To what extent does CBT and IOP increase overall psychosocial functioning of females who abuse substances as measured by four subscale scores of the ASI-F (employment, legal status, family/social relationships, and psychiatric)?

The current study found that with regard to these four dependent variables (employment, legal, family/social, and psychiatric), the IOP condition resulted in negligible within-group improvement and the CBT condition showed minimal within-group improvements. Between-group analysis found that neither group difference was statistically significant.

This finding is not consistent with previous studies. For instance, Woody et al. (1983) reported that both cognitive behavioral therapy and supportive-expressive therapy, based on a psychodynamic paradigm, had more improvement in psychological functioning and employment. Subjects assigned to the cognitive behavioral treatment, however, showed more improvement with legal problems. It should be noted, however, that the length of treatment in

the Woody et al. study was lengthy, whereas the length of treatment in the current study was quite short.

Khantzian et al. (1990) also reported patterns where both cognitive behavioral treatment and supportive expressive treatment was effective in improving psychological functioning.

The primary reason that explains the current findings is the fact that neither treatment specifically incorporated strategies to gain employment, improve legal situations, or to improve psychological well being. Each of these domains was used to illustrate the negative impact that substance abuse can have on one's life, however, each area would require in-depth work in order to produce significant results. This in-depth work was outside the purview of this study, and any improvements in these areas would have been an artifact extant to the current study, and not a result that the current treatment was entirely responsible for producing.

Research Question Three

To what extent does CBT and IOP reduce the frequency and amount of substance use as measured by the Drug- and Alcohol-Use subscales of the ASI-F?

The current study found that (a) subjects assigned to the CBT treatment condition reported a statistically

significant reduction in both drug and alcohol use, and (b) there was a negative effect in alcohol usage for subjects assigned to the IOP treatment condition. Three individuals assigned to the IOP treatment condition relapsed during the course of treatment.

The primary reason that the CBT treatment produced significant reductions in both alcohol and drug use is the fact that this treatment condition was specifically designed for the treatment of substance abuse. Sessions were designed to help the individual participant develop skills necessary for abstinence. Thus, the CBT treatment regimen attempted to develop functional coping skills in the participants which they could draw upon rather than turning to substances as a coping mechanism.

There are numerous reasons as to why the three individuals assigned to the IOP condition relapsed during treatment. One is that relapse is a part of treatment and is traditionally viewed as a symptom of recovery from substance abuse and not a failed treatment (Buelow & Buelow, 1998). Treatment may have uncovered psychological pain that the participants were unable to deal with, which resulted in their continued maladaptive coping mechanism -- the use of substances.

Another view of the relapse of these individuals is that the IOP treatment was at least partially effective. Treatment based on an insight oriented treatment paradigm is designed to discuss and uncover material that is often painful (Khantzian, 1985, 1988). Viewed from this perspective, the IOP treatment condition was partially successful, with the individuals needing further treatment in order to develop more adaptive coping mechanisms. Previous research has indicated that longer treatment results in better outcome or prognosis (CSAT, 1997). Thus, the current treatment may have been too time-limited in order to develop positive outcome.

Research Question Four and Five

To what extent does CBT and IOP reduce feelings of depression in females who abuse substances as measured by the Depression-Dejection subscale of the POMS?

To what extent does CBT and IOP reduce feelings of anxiety in females who abuse substances as measured by the Tension-Anxiety subscale of the POMS?

Within-group analysis indicated that both treatment conditions yielded positive results in the reduction of anxiety as well as depression. The IOP treatment condition produced a small effect size difference for anxiety and a medium effect size change for depression. The CBT treatment

condition, however, produced large effect size differences in the reduction of both anxiety and depression. Between-group analyses indicated that the CBT group difference was statistically significant.

These statistical findings corroborate previous and extensive research on the treatment of depression (Beck et al., 1991; Hall, Munoz, & Reus, 1994) and anxiety (Hollon & Beck, 1994; Wolpe, 1990), which indicates that these disorders can be successfully treated with psychotherapy.

Initial analysis indicated that the CBT treatment condition produced large effect sizes, yet the between-group MANOVA difference was not statistically significant. If only the effect size was used to analyze the results, then one would conclude that the CBT treatment condition yielded significant results. Stevens (1996) states that a MANOVA analysis may not be sensitive enough to detect significance in a small sample. Due to conflicting statistical results, separate t tests for these two independent variables were conducted (Stevens, 1996). This analysis resulted in statistical significance and corroborated the large effect size differences.

The primary reason that the CBT treatment condition produced significant results in the treatment of anxiety is that individuals who abuse substances tend to be anxious

over not being able to properly handle situations. Substance abusers often form the opinion that when they are under the influence of a substance that they can handle a problematic situation better than if they are clean. This is in fact a distorted perception, yet a firmly held one. The CBT treatment condition covered various high-risk situations with specific sessions devoted to coping with these situations. This is designed to give the subjects the confidence that they might be able to handle a problematic situation without turning to substances.

Similar to the distortions associated around false esteem is the fact that many individuals who abuse substances feel guilty because of the negative impact that substances have had on their lives (i.e., the removal of children, loss of employment). This guilt often generates feelings of shame and embarrassment. The CBT treatment condition included in-session discussions of the negative consequences of their substance use. Thus, the CBT treatment approach provided specific awareness, skills, and a change of perception. Whereas, the IOP was more relational based, and produced minimal effects.

Conclusions

Epidemiologic research has established the fact that anxiety and depression are potentiating factors that often

lead to substance use and abuse by females (Reiger et al., 1990). Etiological research has also established that substance use and abuse in females progresses faster and is more destructive than in males who abuse substances. With these facts in mind, contemporary research has consistently shown that treatment can produce significant outcomes with substance abuse (Beck et al., 1991; Buelow & Buelow, 1998; Carroll, 1998; Clark, McClanahan, Smith, & Landry, in press; Hall, Munoz, & Reus, 1994; Haller, 1991; Khantzian, 1985, 1986, 1988; Luborsky, 1984; Moras, 1998a; O'Brien et al., 1995; Onken et al., 1997; Woody et al., 1983), anxiety (Beck, 1979; Ellis & Yeager, 1989; Hollon & Beck, 1994;) and depression (Beck, 1979; Hall, Munoz, & Rues, 1994; Meichenbaum, 1977; McNair, Lorr, & Droppelman, 1981; Weissman et al., 1977; Wolpe, 1990).

It should be noted that the conclusions drawn from the current findings should be taken with caution due to the aforementioned limitations of this study. For the purposes of this section, conclusions are presented by treatment condition.

Insight-Oriented Psychotherapy

The current findings suggest that IOP treatment is not the treatment of choice for females with a history of substance use and abuse who are in the early stages of

recovery. Others have suggested that treatment based on a psychodynamic paradigm should not be used with individuals who are in the early stages of recovery because these treatments are often anxiety provoking and could lead to further substance use (Levenson, 1995). The current findings corroborate this viewpoint. Both the current findings, as well as previous research, suggest that substance abuse treatment based on psychodynamic paradigms might be used with individuals who are committed to abstinence and who have demonstrated a history of being abstinent.

Since the IOP treatment condition did not specifically cover psychosocial domains, it is difficult to reach any definitive conclusions from the current findings. Previous research, however, has established that IOP can be more efficacious than CBT in the treatment of certain psychosocial functioning domains, such as psychological functioning and employment (Woody et al., 1983).

It is theoretically logical that a relational therapy, such as the IOP treatment condition, should be more long-term. Thus, the eight-session limit may have negatively affected the outcomes of the IOP treatment condition.

Cognitive-Behavioral Therapy

The fact that the CBT treatment condition resulted in statistically significant outcomes leads one to conclude that the subjects in this study responded well to treatment based on a cognitive-behavioral paradigm. This contradicts the traditional clinical bias that females respond best to process oriented treatment.

Previous research of substance abuse has been conducted primarily in Veteran Affairs Medical Center settings with male clients, and the findings of this study indicate that a treatment approach designed for male veterans can be transported to: (1) a female population, and (2) to an outpatient community mental health setting. The findings indicate that substance abuse is a cross-cultural variable that often subsumes cultural differences, and this view is shared by other researchers (Clark & McClanahan, 1998; Clark, McClanahan, & Sees, 1998).

The CBT treatment condition also produced significant differences in the reduction of both anxiety and depression for the study sample. While this corroborates previous research, this study is the first to empirically evaluate outcomes with a female sample. The findings corroborate the fact that a CBT treatment paradigm can be used successfully with a female sample.

Recommendations

The results of this study suggest that clinicians and researchers should follow several tenets when conducting research with females who abuse substances.

Recommendations for Clinicians

1. Substance abuse treatment for individuals in the early stages of recovery should be based on a cognitive-behavioral paradigm. Individuals in early stages of recovery require concrete direction in identifying their particular patterns and associating those patterns with the negative consequences of their substance use.

2. Substance abuse treatment based on a psychodynamic paradigm might be useful for individuals who are in the latter stages of recovery and who have a history of abstinence.

3. In order that an outcome variable can be evaluated properly, each variable should be incorporated into the treatment paradigm. For instance, if an experimenter is evaluating the treatment outcome effect on employment, then the treatment should include employment strategies, such as resume building, into the treatment regimen.

4. Clinicians should conduct thorough assessments using empirically-validated instruments. One of the instruments used in this study, the SCID, is generally viewed as

cumbersome and requires fairly extensive training in order to develop a level of competency that is fundamental to its administration. In a clinical setting, however, this instrument can be shortened and only critical items included in an intake interview. This would increase the clinical utility of the instrument while gathering pertinent data. The general criticism to creating a shortened instrument is the fact that the instrument's validity would be invalid. Item analysis can re-establish validity coefficients quite easily, thereby addressing this criticism, while making the instrument more user friendly.

5. Clinicians should establish realistic goals of treatment and adapt the treatment regimen accordingly. By incorporating each individual's history into the treatment regimen, clients can make the linkage from substance use to other life problems, such as involvement with Child Protective Services. Clients can often gain insight into their own problems vicariously through others sharing their "stories".

6. A final point is the growing position that abstinence is not an all or nothing proposition. Reduced substance use is in itself a great accomplishment and should not be viewed as failure. Instead, reduced substance consumption should be rewarded.

Recommendations for Further Research

This study focused on the evaluation of which treatment approach was the most efficacious in the treatment of female substance abuse and ancillary issues, such as anxiety and depression.

These findings suggest several recommendations for future research, such as:

1. The ideal comparative study would follow a Solomon Four Group design where two therapists who would provide each of the treatment conditions. Therapist effects could then be measured and controlled for by treatment cell.

2. Subsequent research should evaluate the aspects of the CBT treatment approach that resulted in a reduction in alcohol use, drug use, depression, and anxiety (i.e., in-session discussions, didactic approach, problem solving exercises).

3. Research should be conducted using an IOP treatment condition with a sample of individuals who are in the latter stages of recovery to determine if this treatment approach is effective.

4. Research should be conducted using the CBT treatment manual (Carroll, 1998) for females with a history of substance abuse and who are in the latter stages of

recovery to determine if this treatment approach is effective for females.

5. Research should be conducted that compares this CBT manualized treatment with IOP treatment with a sample of individuals in the latter stages of recovery to determine which, if either, treatment is more effective in the treatment of substance abuse for females.

6. Researchers should evaluate the individuals' motivation for change and determine the appropriateness for inclusion in the research. For instance, an individual in the early stages of recovery but who is not committed to abstinence should be excluded from treatment. The reason for this exclusion is that the individual would not benefit from treatment and may even have a negative affect on other participants.

7. Research should be conducted to determine the leading cause(s) of relapse, and these causes should be incorporated into all treatment regimens, regardless of theoretical paradigm.

Implications for Practice

The ultimate objective of this study was to determine if a traditional approach to treating male substance abuse (Cognitive Behavioral Therapy) is a more efficacious treatment than a process oriented approach (Insight-

Oriented Psychotherapy). Previous results indicate that components of each treatment approach may be efficacious for certain subtypes of substance abuse or mood factors. As Najavits, Weiss, and Shaw (1997) state, finding the best type of treatment for the substance-abusing female is tantamount.

To this end, the current findings suggest that a treatment program based on the tenets of cognitive-behavioral therapy is the treatment of choice for females in the early stages of recovery. Additional research is needed in order to conclude whether a treatment program based on a psychodynamic paradigm is efficacious in the treatment of substance abuse for individuals in the early stages of recovery. Additional research is also needed in order to determine which, if either, treatment (CBT or IOP) is efficacious in the treatment of substance abuse for individuals in the latter stages of recovery.

References

American Psychiatric Association (1994). Diagnostic and statistical manual DSM-IV (4th Ed.). Washington, D. C.:

Author.

American Psychological Association (1992). Ethical principles of psychologists. Washington, D.C.: Author.

Aron, A., & Aron, E. N. (1997). Statistics for the behavioral and social sciences. Upper Saddle River, NJ: Prentice-Hall.

Basham, R. B. (1986). Scientific and practical advantages of comparative design in psychotherapy outcome research. Journal of Consulting and Clinical Psychology, 54 (1), 88-94.

Beck, A. T. (1979). Cognitive Therapy and the emotional disorders. New York: Meridian.

Beck, A. T., Wright, F. D., Newman, C. F., & Liese, B. S. (1991). Cognitive Therapy of cocaine abuse: A treatment manual. Unpublished manuscript.

Blumenthal, S. J. (1998). Women and substance abuse: A new national focus. In C. L. Wetherington and A. B. Roman (Eds.), Drug addiction research and the health of women (pp. 13-32). (NIH Publication No. 98-4289.) Rockville, MD: National Institute on Drug Abuse.

Brogan, D. R., & Kutner, M. H. (1980). Comparative analyses of pretest-posttest research designs. American Statistician, 34 (4), 229-232.

Brook, J. S., Whiteman, M., & Cohen, P. (1998). Warriors and worriers: A longitudinal study of gender differences in drug use. In C. L. Wetherington and A. B. Roman (Eds.), Drug addiction research and the health of women (pp. 271-284). (NIH Publication No. 98-4289.) Rockville, MD: National Institute on Drug Abuse.

Buelow, G. D., & Buelow, S. A. (1998). Psychotherapy in chemical dependence treatment: A practical and integrative approach. Pacific Grove, CA: Brooks-Cole.

Carroll, K. M., Rounsaville, B. J., Nich, C., Gordon, L., & Gawin, F. (1995). Integrating psychotherapy and pharmacotherapy for cocaine dependence: Results from a randomized clinical trial. In L. S. Onken, J. D. Blaine, and J. J. Boren (Eds.), Integrating behavioral therapies with medication in the treatment of drug dependence. (NIH Publication No. 95-3899.) Rockville, MD: National Institute on Drug Abuse.

Carroll, K. M. (1998). Therapy manuals for drug addiction. Manual 1, a cognitive-behavioral approach: Treating cocaine addiction. (NIH Publication No. 98-4308).

Rockville, MD: U.S. Department of Health and Human Services.

Center for Substance Abuse Treatment. (1997). The national treatment improvement evaluation study (NTIES). (DHHS Pub No. (SMA) 97-3154.) Rockville, MD: Department of Health and Human Services.

Center for Substance Abuse Treatment. (1998). Alcohol and other drug abuse cost the U.S. an estimated \$246 billion in 1992, CSAT by Fax, 3 (18), 1.

Chaplin, J. P. (1985). Dictionary of psychology (3rd ed.). New York: Dell.

Clark, H. W., & McClanahan, T. M. (1998). Contemporary issues in dual diagnosis. In E. F. McCance-Katz & T. R. Kosten (Eds.), New Treatments for Chemical Addictions (pp. 151-182). Washington, D.C.: American Psychiatric Press.

Clark, H. W., McClanahan, T. M., & Sees, K. (1998). Substance abuse services in systems of care: Linkages and issues in serving culturally diverse populations. In M. Hernandez and M. A. Isaacs (Eds.), Promoting cultural competence in children's mental health services (pp. 207-228). Baltimore, MD: Brookes.

Clark, H. W., McClanahan, T. M., Smith, D., & Landry, M. J. (in press). Substance-related disorders: Alcohol and

drugs. In M. Goldstein (Ed.), General review of psychiatry (5th ed.). Stamford, CT: Simon & Schuster.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Erlbaum.

Colletti, S. D. (1998). Service providers and treatment access issues. In C. L. Wetherington and A. B. Roman's (Eds.), Drug addiction research and the health of women: Executive summary. (NIH Publication No. 98-4289.) Washington, D.C.: National Institute on Drug Abuse.

Corey, G. (1991). Theory and practice of counseling and psychotherapy (4th Ed.). Pacific Grove, CA: Brooks-Cole.

Crits-Christoph, P., & Mintz, J. (1991). Implications of therapist effects for the design and analysis of comparative studies of psychotherapies. Journal of Consulting and Clinical Psychology, 1991, 59(1), 20-26.

Ellis, A., & Yeager, R. J. (1989). Why some therapies don't work. Buffalo, NY: Prometheus Books.

Garfield, S. L., & Bergin, A. E. (1994). Introduction and historical overview. In A. E. Bergin and S. L. Garfield (Eds.), Handbook of Psychotherapy and Behavior Change (4th ed.) (pp. 3-18). New York: Wiley.

Geshshan, S. A. (1993). A step toward recovery: Improving access to substance abuse treatment for pregnant

women. Washington, D.C.: Southern Regional Project on Infant Mortality.

Goldfinger, S. M., Schutt, R. K., Seidman, L. J., Turner, W. M., Penk, W. E., & Tolomiczenko, G. S. (1996). Self-report and observer measures of substance abuse among homeless mentally ill persons in the cross-section and over time. The Journal of Nervous and Mental Disease, 184(11), 667-672.

Gorski, T. T., Kelley, J. M., Havens, L., & Peters, R. H. (1995). Relapse prevention and the substance-abusing criminal offender: An executive briefing. (DHHS Pub No. (SMA) 95-3071.) Rockville, MD: Substance Abuse and Mental Health Services Administration.

Hall, S. M., Munoz, R. F., & Reus, V. I. (1994). Cognitive-behavioral intervention increases abstinence rates for depressive-history smokers. Journal of Consulting and Clinical Psychology, 62(1), 141-146.

Hatsukami, D. K., Perkins, K., Lukas, S. E., Rukstalis, M., Brady, K. T., & Wetherington, C. L. (1997). Drugs of abuse and gender differences. Problems of drug dependence 1996: Proceedings of the 58th annual scientific meeting, the College on Problems of Drug Dependence. National Institute on Drug Abuse Research Monograph 174. (NIH Publication No. 97-4236.) Washington, D.C.: US Government Printing Office.

Hentschel, U., Kiessling, M., & Rudolf, G. (1997). Therapeutic alliance and transference: An exploratory study of their empirical relationship. Journal of Nervous and Mental Disease, 185(4), 254-262.

Hollon, S. D., & Beck, A. T. (1994). Cognitive and cognitive-behavioral therapies. In A. E. Bergin and S. L. Garfield (Eds.), Handbook of Psychotherapy and Behavior Change (4th ed.) (pp. 428-466). New York: Wiley.

Horvath, A. O., & Luborsky, L. (1993). The role of the therapeutic alliance in psychotherapy. Journal of Consulting and Clinical Psychology, 61(4), 561-573.

Kadden, R. M., Cooney, N. L., Getter, H., & Litt, M. D. (1989). Matching alcoholics to coping skills or interactional therapies: Posttreatment results. Journal of Consulting and Clinical Psychology, 57(6), 698-704.

Kandel, D. B. (1998). Epidemiology of drug use and abuse among women. In C. L. Wetherington and A. B. Roman's (Eds.), Drug addiction research and the health of women: Executive summary. (NIH Publication No. 98-4289.) Washington, D.C.: National Institute on Drug Abuse.

Kazdin, A. E. (1986). Comparative outcome studies of psychotherapy: Methodological issues and strategies. Journal of Consulting and Clinical Psychology, 54 (1), 95-105.

Kazdin, A. E. (1992). Research design in clinical psychology (2nd Ed.). Needham Heights, MA: Allyn and Bacon.

Kessler, R. C., Nelson, C. B., McGonagle, K. A., Edlund, M. J., Frank, R. G., & Leaf, P. J. (1996). The epidemiology of co-occurring addictive and mental disorders: Implications for prevention and service utilization. American Journal of Orthopsychiatry, 66 (1), 17-31.

Khantzian, E. J. (1985). Psychotherapeutic intervention with substance abusers: The clinical context. Journal of Substance Abuse Treatment, 2, 83-88.

Khantzian, E. J. (1986). A contemporary psychodynamic approach to drug abuse treatment. American Journal of Drug and Alcohol Abuse, 12(3), 213-222.

Khantzian, E. J. (1988). The primary care therapist and patient needs in substance abuse treatment. American Journal of Drug and Alcohol Abuse, 14 (2), 159-167.

Khantzian, E. J., Halliday, K. S. & McAuliffe, W. E. (1990). Addiction and the vulnerable self: Modified dynamic group therapy for substance abusers. New York: Guilford.

Leshner, A. I. (1998). Gender matters in drug abuse research. NIDA Notes, 13 (4), 3-4.

Levenson, H. (1995). A guide to clinical practice: Time-Limited Dynamic Psychotherapy. New York: Basic Books.

Liese, B. S. and Najavits, L. M. (1997). Cognitive and behavioral therapies. In J. H. Lowinson, P. Ruiz, R. B. Millman, & J. G. Langrod (Eds.), Substance abuse: A comprehensive textbook (pp. 467-478). Baltimore, MD: Williams & Wilkins.

Lorr, M., McNair, D. M., Weinstein, G. J., Michaux, W. W., & Raskin, A. (1961). Meprobamate and chlorpromazine in psychotherapy. Archives of General Psychiatry, 4, 381-389.

Luborsky, L. (1984). Principles of psychoanalytic psychotherapy: A manual for supportive-expressive treatment. New York: Basic Books.

Lazarus, A. A. (1981). The practice of multimodal therapy. New York: McGraw Hill.

Marlatt, G. A., & Gordon, J. (1985). Relapse prevention: Maintenance strategies in the treatment of addictive behaviors. New York: Guilford.

McKay, J. R., Alterman, A. I., Cacciola, J. S., O'Brien, C. P., Koppenhaver, J. M., & Shepard, D. S. (1999). Continuing care for cocaine dependence: Comprehensive 2-year outcomes. Journal of Consulting and Clinical Psychology, 67 (3), 420-427.

McLellan, A. T., Laborsky, L., Woody, G. E., & O'Brien, C. P. (1980). An improved diagnostic evaluation instrument

for substance abuse patients: The addiction severity index. Journal of Nervous and Mental Disease, 68, 26-33.

McNair, D. M., Lorr, M., & Droppleman, L. F. (1981). Edits Manual for the Profile of Mood States. San Diego; Educational and Industrial Testing Service.

Meichenbaum, D. (1977). Cognitive behavior modification: An integrative approach. New York: Plenum.

Moras, K. (1998a). Psychosocial and behavioral treatments for women (pp. 49-52). In C. L. Wetherington and A. B. Roman (Eds.), Drug addiction research and the health of women. (NIH Publication No. 98-4289.) Rockville, MD: National Institute on Drug Abuse.

Moras, K. (1998b). Behavioral therapies for female drug users: An efficacy-focused review (pp. 197-222). In C. L. Wetherington and A. B. Roman (Eds.), Drug addiction research and the health of women. (NIH Publication No. 98-4289.) Rockville, MD: National Institute on Drug Abuse.

National Institute on Drug Abuse (1998). Drug addiction research and the health of women. (NIH Publication No. 98-4289). Rockville, MD: U.S. Department of Health and Human Services.

O'Brien, C. P., Woody, G. E., & McLellan, A. T. (1995). Enhancing the effectiveness of methadone using psychotherapeutic interventions. Integrating behavioral

therapies with medications in the treatment of drug dependence. (NIH Pub Number 95-3899). Washington, D.C.: National Institute on Drug Abuse.

Ojehagen, A., Berglund, M., & Hansson, L. (1997). The relationship between helping alliance and outcome in outpatient treatment of alcoholics: A comparative study of psychiatric treatment and multimodal behavioural therapy. Alcohol and Alcoholism, 32 (3), 241-249.

Onken, L. S., Blaine, J. D., Genser, S., & Horton, A. M. (1997). Treatment of drug-dependent individuals with comorbid mental disorders. National Institute on Drug Abuse Research Monograph 172. (NIH Publication No. 97-4172). Washington, D.C.: US Government Printing Office.

Patterson, T. P., & McClanahan, T. M. (1999). The Couple and Family Clinical Documentation Sourcebook. New York: Wiley.

Reiger, D., Farmer, M. E., Rae, D. S., Locke, B. Z., Keith, S. J., Judd, L. L., & Goodwin, F. K. (1990). Comorbidity of mental disorders with alcohol and other drug use: Results from the Epidemiologic Catchment Area (ECA) study. Journal of the American Medical Association, 264, 2511-2518.

Rudgley, R. (1995). The archaic use of hallucinogens in Europe: An archaeology of altered states. Addictions, 90, 163-164.

Spitzer, R. L., William, J. B., Gibbon, M., et al. (1990). Structured clinical interview using the DSM-III, patient version (SCID-P). New York: New York State Psychiatric Institute, Biometrics Research.

Stevens, J. (1992). Applied multivariate statistics for the social sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Stevens, J. (1996). Applied multivariate statistics for the social sciences (3rd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Stocker, S. (1998). Men and women in drug abuse treatment relapse at different rates and for different reasons. NIDA Notes, 13 (4), 5-6.

Substance Abuse and Mental health Services Administration. (1998a). Preliminary results from the 1997 National Household Survey on Drug Abuse. (DHHS Pub No. (SMA) 98-3251). Washington, D.C.: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Substance Abuse and Mental Health Services Administration (1998b). National admissions to substance

abuse treatment services: The Treatment Episode Data Set (TEDS), 1992-1996. (DHHS Publication No. 98-3244).

Rockville, MD: U.S. Department of Health and Human Services.

Substance Abuse and Mental health Services Administration. (1997). Preliminary results from the 1996 National Household Survey on Drug Abuse. (DHHS Publication No. (SMA) 97-3149). Washington, D.C.: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Tabachnick, B. G. & Fidell, L. S. (1996). Using multivariate statistics (3rd ed.). New York: Harper Collins.

U.S. Department of Health and Human Services (1997). Supplementary administration manual for the expanded female version of the Addiction Severity Index (ASI) instrument The ASI-F. (DHHS Publication No. (SMA) 96-8056). Rockville, MD: Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment.

Weissman, M. M., Sholomskas, D., Pottenger, M., Prusoff, B. A., & Locke, B. Z. (1977). Assessing depressive symptoms in five psychiatric populations: A validation study. American Journal of Epidemiology, 106(3), 203-214.

Woody, G. E., Luborsky, L., McLellan, A. T., O'Brien, C. P., Beck, A. T., Blaine, J., Herman, I., and Hole, A.

(1983). Psychotherapy for opiate addicts: Does it help?
Archives of General Psychiatry, 40, 639-645.

Yalom, I. D. (1985). The theory and practice of group
psychotherapy (3rd ed). New York: Basic Books.

Wolpe, J. (1990). The practice of Behavior Therapy (4th
ed.). New York: Pergamon.

Appendix A

Research Design Schematic

Study Design:

Pretest-Posttest Comparative Experimental Design.

$R_{\text{(Cognitive Behavioral Therapy)}} \quad O_1 \ X \ O_2$

$R_{\text{(Insight Oriented Psychotherapy)}} \quad O_1 \ X \ O_2$

Variables:

Independent Variable₁: Cognitive Behavioral Treatment (CBT)
Independent Variable₂: Insight Oriented Psychotherapy (IOP)

Dependent Variable₁: Drug- and Alcohol-Status
Dependent Variable₂: Psychosocial Functioning
Dependent Variable₃: Frequency and Amount of Substance Use
Dependent Variable₄: Depression
Dependent Variable₄: Anxiety

Screening: Telephone pre-screening

Diagnostic evaluation: Structured Clinical Interview using the DSM

Outcome measures:

DV ₁	ASI-F,	Drug- and Alcohol-Status subscales
DV ₂	ASI-F,	Composite Scores
DV ₃	ASI-F,	Drug- and Alcohol Use subscales
DV ₄	POMS,	Depression subscale
DV ₅	POMS,	Anxiety subscale

Appendix B
Research Participant Recruitment

Do life's pressures cause you to drink or use drugs?
Are you concerned that your drinking is out of control?
Are you using more drugs than you think you should be?
Do friends comment about your drinking or drug use?
Have you been neglecting your obligations?



If you are a **female**, between the ages of 17 and 44, and would like to receive counseling regarding your alcohol or drug use, please call Terry at (415) 422-6037. After an initial intake session regarding your drinking or drug use, you will receive eight group counseling sessions with others who have concerns similar to your own. **Counseling is free and confidential. You will be paid for your time after each session.** Your name will not be included on any records.

Please call Terry at (415) 422-6037, leave a message that indicates the best time to reach you. Your call will be promptly returned.

Alcohol or drug use call Terry 415-422-6037
Alcohol or drug use call Terry 415-422-6037
Alcohol or drug use call Terry 415-422-6037
Alcohol or drug use call Terry 415-422-6037
Alcohol or drug use call Terry 415-422-6037
Alcohol or drug use call Terry 415-422-6037
Alcohol or drug use call Terry 415-422-6037
Alcohol or drug use call Terry 415-422-6037
Alcohol or drug use call Terry 415-422-6037

Appendix C

Telephone Screening Script

Introduction. Thank you for taking an interest in the study. I would like to give you a brief description of the project. Afterward, if you're still interested I'll ask you some questions to see if you meet the basic requirements of the study.

Study Overview. This research study is investigating which treatment is more effective in the treatment of substance abuse in females. Everyone who participates in the study will receive one group counseling session per week for a period of eight weeks. Half of the people participating in the study will receive Cognitive-Behavioral (CBT) counseling and the other half will receive Insight Oriented Psychotherapy (IOP).

Prior to being accepted into the study, you will be asked to complete a thorough evaluation that will involve one two-hour appointment. After which, if you are still eligible and you decide to participate, you will be given a schedule for your counseling sessions. After each appointment you will be reimbursed for your time.

Questions & Answers.

Q. Do you have any questions?

Q. Are you interested in participating in the program?

If yes, proceed to the Telephone Pre-Screening Inclusionary/Exclusionary Form.

If no, thank the subject for their inquiry, and inquire if they would like a referral to a community treatment facility.

Appendix D

Telephone Pre-Screening Inclusionary/Exclusionary Form

Screening ID # _____
Interviewer _____
Date _____

Demographic:

Caller's name: _____
Phone number: (home) _____ (other) _____
Date of Birth: _____ SSN: _____
Age: _____ Ethnicity: _____ Marital Status: _____ Gender: _____

Current Drug Use Patterns:

Do you currently use any street drugs? ____Yes ____No
What is your drug of choice? _____
How many days/weeks have you used in the past month? _____
How much did you use in the past month? _____
What was the dollar value of the drug you used (per day for the last 4 weeks)? _____

Medical:

Have you ever had any of the following: (Y/N)
____Seizures _____Kidney Disease
____Stroke _____Liver Disease
____Heart Attack _____Bulimia
____Heart Disease or Angina
____Irregular Heart Rhythm
____High Blood Pressure

Do you have any other significant medical problems?

Are you currently taking any prescribed medications?

Have you ever been told that you have a manic-depressive disorder? (Y/N) _____

Have you ever heard voices or seen things that you knew were not there? (Y/N) _____

If yes, was it due to your drug use? (Y/N) _____

If yes, did anyone tell you that you had schizophrenia?
(Y/N) _____

Appendix E

Consent to Participate in A Research Project

Title of Study: A Comparative Evaluation of Cognitive-Behavioral Therapy (CBT) and Insight Oriented Psychotherapy (IOP) in the Treatment of Substance Abusing Females.

Investigator: Terry Michael McClanahan, M.A.
Doctoral Candidate
Dept of Counseling Psychology
University of San Francisco
(415) 422-6037

Purpose:

This study is investigating the effectiveness of two treatments to reduce the symptoms associated with substance abuse in females.

Procedures:

If you decide to participate in the study, an initial two-four hour appointment will be scheduled. During this appointment you will be asked to complete various questions concerning your drug use history, and occurrences in your life. Following this initial appointment, if you decide to participate in the study, you will be scheduled for your counseling sessions. At the end of your treatment, a final 1-3 hour appointment will also be necessary. During this final appointment you will also be asked to complete various questions concerning your drug use. There are two groups in this research project, and you have an equal chance of being assigned to either treatment. Treatment lasts eight sessions.

Risks:

There are no known risks aside from the time involved to participate, which is a total of approximately 15 hours for the entire study, and includes the 2-4 hours for the initial interview, the 1 hour per counseling session, and the 1-3 hours for the post-therapy appointment. While there are no known risks associated with either treatment, you will be asked to discuss some things in depth that have happened to you. This may cause discomfort to you, but each therapy is designed for you to raise this discomfort with your therapist.

Benefits:

This study may be beneficial to you. Therapy has been proven to be effective at reducing suffering in people with severe emotional distress.

Confidentiality:

All information concerning you will be held in confidence. A file is necessary for each person that participates in the study,

however, you will be assigned a number, and that number will be how your file is maintained. In addition, you will be instructed to use only your particular number on any questionnaire that you complete during the study.

By agreeing to participate in this study, you agree that the Principal Investigator is allowed to use the findings of this study in professional literature that includes professional presentations, journal articles, books, etc. In the event that the investigator uses the information derived from this study, the information will contain only your subject number.

Names and addresses of both yourself and your contacts will be maintained separately from your treatment chart, in a locked file to which only the principle investigator has access.

Costs and Compensation:

The treatment is provided at no cost to the study participants. Study participants may be compensated for participating in the study at the following rates: completion of the initial assessment interview (\$10), each weekly therapy appointment (\$5), final post-therapy appointment (\$10), and a bonus for completing all requirements (\$10). This equals to a total of \$70 that is possible for completing all requirements.

Right to Refuse or Withdraw from Treatment:

Participation in this study is voluntary. At any point in time during the treatment, you have the right to refuse to participate and may withdraw from the treatment study.

A pager number of Terry Michael McClanahan (Principal Investigator) will be given to you for emergency use (e.g., relapse, medical emergency) if you decide to participate in the study. Your signature below indicates that you have read and understand the information contained in this document, that you have agreed to participate in the study, that you understand that your participation is voluntary, and that you have the right to withdraw from the study at any time, should you decide to do so.

Signature of Research Participant

Date

Signature of Principal Investigator

Date

Appendix F

Research Study Participant Reimbursement Schedule

Research Participant Name _____

Please initial beside the appropriate line that you have received the amount of the reimbursement for participating in this research project:

Intake Assessment (\$10.00)	_____	(initials)
Counseling session #1 (\$5.00)	_____	(initials)
Counseling session #2 (\$5.00)	_____	(initials)
Counseling session #3 (\$5.00)	_____	(initials)
Counseling session #4 (\$5.00)	_____	(initials)
Counseling session #5 (\$5.00)	_____	(initials)
Counseling session #6 (\$5.00)	_____	(initials)
Counseling session #7 (\$5.00)	_____	(initials)
Counseling session #8 (\$5.00)	_____	(initials)
End-of-Treatment Assessment (\$10.00)	_____	(initials)
Bonus for all requirements (\$10.00)	_____	(initials)

Appendix G

Structured Clinical Interview using the DSM (SCID)

B/C PSYCHOTIC SCREENING MODULE (FOR SCID-I/NP OR P W/PSYCHOTIC SCREEN)

THIS MODULE IS FOR CODING PSYCHOTIC AND ASSOCIATED SXS THAT HAVE BEEN PRESENT AT ANY POINT IN THE PERSON'S LIFETIME. IT CAN BE USED FOR CLINICAL AND RESEARCH SETTINGS WHERE THOSE WITH A HISTORY OF PSYCHOTIC SXS THAT ARE NOT DUE TO SUBSTANCE USE OR A GENERAL MEDICAL CONDITION OR THAT OCCUR OUTSIDE THE CONTEXT OF A MOOD DISORDER ARE TO BE EXCLUDED.

FOR EACH PSYCHOTIC SYMPTOM CODED "3," DESCRIBE THE ACTUAL CONTENT AND INDICATE THE PERIOD OF TIME DURING WHICH THE SYMPTOM WAS PRESENT.

FOR ANY PSYCHOTIC AND ASSOCIATED SYMPTOMS CODED "3," DETERMINE WHETHER THE SYMPTOM IS DEFINITELY "PRIMARY" OR WHETHER THERE IS A POSSIBLE OR DEFINITE ETIOLOGIC SUBSTANCE (INCLUDING MEDICATIONS) OR GENERAL MEDICAL CONDITION. THE FOLLOWING QUESTIONS MAY BE USEFUL IF THE OVERVIEW HAS NOT ALREADY PROVIDED THE INFORMATION:

Just before (PSYCHOTIC SXS) began, were you using drugs? ...on any medications? ...did you drink much more than usual or stop drinking after you had been drinking a lot for a while? ...were you physically ill?

IF YES TO ANY: Has there been a time when you had (PSYCHOTIC SXS) and were not (USING DRUGS/TAKING MEDICATION/CHANGING YOUR DRINKING HABITS/ILL)?

Now I am going to ask you about unusual experiences that people sometimes have.

DELUSIONS

False personal beliefs based on incorrect inference about external reality and firmly sustained in spite of what almost everyone else believes and in spite of what constitutes incontrovertible and obvious proof or evidence to the contrary. The belief is not one ordinarily accepted by other members of the person's culture or subculture. Code overvalued ideas (unreasonable and sustained beliefs that are maintained with less than delusional intensity) as "2."

Has it ever seemed like people were talking about you or taking special notice of you?

Delusion of reference, i.e., events, objects, or other people in the individual's immediate environment have a particular or unusual significance.

?	1	2	3
	1		3
	POSS/DEF	PRI-	
	SUBST/GMC	MARY	

BC.
BC.

IF YES: Were you convinced they were talking about you or did you think it might have been your imagination?

DESCRIBE:

What about receiving special messages from the TV, radio, or newspaper, or from the way things were arranged around you?

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

What about anyone going out of their way to give you a hard time, or trying to hurt you?

Persecutory delusion, i.e., the individual (or his or her group) is being attacked, harassed, cheated, persecuted, or conspired against.

DESCRIBE:

?	1	2	3	BC.
	1		3	BC.
	POSS/DEF		PRI-	
	SUBST/GMC		MARY	

Did you ever feel that you were especially important in some way, or that you had special powers to do things that other people couldn't do?

Grandiose delusion, i.e., content involves exaggerated power, knowledge or importance, or a special relationship to a deity or famous person.

DESCRIBE:

?	1	2	3	BC.
	1		3	BC.
	POSS/DEF		PRI-	
	SUBST/GMC		MARY	

Did you ever feel that something was very wrong with you physically even though your doctor said nothing was wrong...like you had cancer or some other terrible disease?

Somatic delusion, i.e., content involves change or disturbance in body appearance or functioning.

DESCRIBE:

?	1	2	3	BC.
	1		3	BC.
	POSS/DEF		PRI-	
	SUBST/GMC		MARY	

Have you ever been convinced that something was very wrong with the way a part or parts of your body looked?

(Did you ever feel that something strange was happening to parts of your body?)

(Did you ever have any unusual religious experiences?)

Other delusions

Check if:

- religious delusions
- delusions of guilt
- jealous delusions
- erotomanic delusions

DESCRIBE:

?	1	2	3	BC.
	1		3	BC.
	POSS/DEF		PRI-	BC.
	SUBST/GMC		MARY	BC.
				BC.

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

HALLUCINATIONS (PSYCHOTIC)

A sensory perception that has the compelling sense of reality of a true perception but occurs without external stimulation of the relevant sensory organ. (CODE "2" FOR HALLUCINATIONS THAT ARE SO TRANSIENT AS TO BE WITHOUT DIAGNOSTIC SIGNIFICANCE)

Did you ever hear things that other people couldn't hear, such as noises, or the voices of people whispering or talking? (Were you awake at the time?)

Auditory hallucinations when fully awake, heard either inside or outside of head

?	1	2	3	BC.

DESCRIBE:

IF YES: What did you hear?
How often did you hear it?

	1		3	BC.
POSS/DEF		PRI-		
SUBST/GMC		MARY		

IF VOICES: Did they comment on what you were doing or thinking?

A voice keeping up a running commentary on the individual's behavior or thoughts as they occur

?	1	2	3	BC.
---	---	---	---	-----

How many voices did you hear? Were they talking to each other?

Two or more voices conversing with each other

?	1	2	3	BC.
---	---	---	---	-----

Did you ever have visions or see things that other people couldn't see? (Were you awake at the time?)

Visual hallucinations

?	1	2	3	BC.
---	---	---	---	-----

DESCRIBE:

NOTE: DISTINGUISH FROM AN ILLUSION, I.E., A MISPERCEPTION OF A REAL EXTERNAL STIMULUS.

	1		3	BC.
POSS/DEF		PRI-		
SUBST/GMC		MARY		

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

<p>What about strange sensations in your body or on your skin?</p>	<p>Tactile hallucinations, e.g., electricity</p> <p>DESCRIBE:</p>	<table border="1" style="border-collapse: collapse; width: 100px; text-align: center;"> <tr><td>?</td><td>1</td><td>2</td><td>3</td></tr> <tr><td colspan="4"> ----- </td></tr> <tr><td></td><td>1</td><td></td><td>3</td></tr> <tr><td colspan="4"> ----- </td></tr> <tr><td colspan="2">POSS/DEF</td><td colspan="2">PRI-</td></tr> <tr><td colspan="2">SUBST/GMC</td><td colspan="2">MARY</td></tr> <tr><td colspan="4"> ----- </td></tr> </table>	?	1	2	3	-----					1		3	-----				POSS/DEF		PRI-		SUBST/GMC		MARY		-----				<p>BC.</p> <p>BC.</p>												
?	1	2	3																																								

	1		3																																								

POSS/DEF		PRI-																																									
SUBST/GMC		MARY																																									

<p>(What about smelling or tasting things that other people couldn't smell or taste?)</p>	<p>Other hallucinations, e.g., gustatory, olfactory</p> <p>Check if: <input type="checkbox"/> gustatory <input type="checkbox"/> olfactory</p> <p>DESCRIBE:</p>	<table border="1" style="border-collapse: collapse; width: 100px; text-align: center;"> <tr><td>?</td><td>1</td><td>2</td><td>3</td></tr> <tr><td colspan="4"> ----- </td></tr> <tr><td></td><td>1</td><td></td><td>3</td></tr> <tr><td colspan="4"> ----- </td></tr> <tr><td colspan="2">POSS/DEF</td><td colspan="2">PRI-</td></tr> <tr><td colspan="2">SUBST/GMC</td><td colspan="2">MARY</td></tr> <tr><td colspan="4"> ----- </td></tr> </table>	?	1	2	3	-----					1		3	-----				POSS/DEF		PRI-		SUBST/GMC		MARY		-----				<p>BC.</p> <p>BC.</p> <p>BC.</p>												
?	1	2	3																																								

	1		3																																								

POSS/DEF		PRI-																																									
SUBST/GMC		MARY																																									

	<p>ANY ITEM CODED "3" IN "PRIMARY" SECTION</p>	<table border="1" style="border-collapse: collapse; width: 100px; text-align: center;"> <tr><td>?</td><td>1</td><td></td><td>3</td></tr> <tr><td colspan="4"> ----- </td></tr> <tr><td colspan="2">GO TO</td><td colspan="2">A PRI-</td></tr> <tr><td colspan="2">NEXT</td><td colspan="2">MARY</td></tr> <tr><td colspan="2">MODULE</td><td colspan="2">PSYCHO-</td></tr> <tr><td colspan="2"></td><td colspan="2">TIC SX</td></tr> <tr><td colspan="2"></td><td colspan="2">HAS</td></tr> <tr><td colspan="2"></td><td colspan="2">BEEN</td></tr> <tr><td colspan="2"></td><td colspan="2">PRESENT</td></tr> <tr><td colspan="4"> ----- </td></tr> </table>	?	1		3	-----				GO TO		A PRI-		NEXT		MARY		MODULE		PSYCHO-				TIC SX				HAS				BEEN				PRESENT		-----				<p>BC.</p>
?	1		3																																								

GO TO		A PRI-																																									
NEXT		MARY																																									
MODULE		PSYCHO-																																									
		TIC SX																																									
		HAS																																									
		BEEN																																									
		PRESENT																																									

<p>IF A MAJOR DEPRESSIVE OR MANIC EPISODE HAS EVER BEEN PRESENT: Has there ever been a time when you had (PSYCHOTIC SXS) and you were not (DEPRESSED/MANIC)?</p>	<p>Psychotic symptoms occur at times other than during mood syndromes</p> <p>NOTE: CODE "3" IF NO MOOD SYNDROMES OR PSYCHOTIC SXS W/O MOOD EPISODES. CODE "1" ONLY IF PSYCHOTIC SYMPTOMS OCCUR EXCLUSIVELY DURING UNEQUIVOCAL MOOD SYNDROMES.</p>	<table border="1" style="border-collapse: collapse; width: 100px; text-align: center;"> <tr><td>?</td><td>1</td><td></td><td>3</td></tr> <tr><td colspan="4"> ----- </td></tr> <tr><td colspan="2">PSYCHOTIC</td><td colspan="2">PSY-</td></tr> <tr><td colspan="2">MOOD DIS-</td><td colspan="2">CHOTIC</td></tr> <tr><td colspan="2">ORDER. IF</td><td colspan="2">DISOR-</td></tr> <tr><td colspan="2">ALLOWED BY</td><td colspan="2">DER</td></tr> <tr><td colspan="2">STUDY, GO</td><td colspan="2">LIKELY</td></tr> <tr><td colspan="2">TO NEXT</td><td colspan="2"></td></tr> <tr><td colspan="2">MODULE.</td><td colspan="2"></td></tr> <tr><td colspan="4"> ----- </td></tr> </table>	?	1		3	-----				PSYCHOTIC		PSY-		MOOD DIS-		CHOTIC		ORDER. IF		DISOR-		ALLOWED BY		DER		STUDY, GO		LIKELY		TO NEXT				MODULE.				-----				<p>BC.</p>
?	1		3																																								

PSYCHOTIC		PSY-																																									
MOOD DIS-		CHOTIC																																									
ORDER. IF		DISOR-																																									
ALLOWED BY		DER																																									
STUDY, GO		LIKELY																																									
TO NEXT																																											
MODULE.																																											

EXPLORE DETAILS AND DESCRIBE DIAGNOSTIC SIGNIFICANCE:

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

E. SUBSTANCE USE DISORDERS

ALCOHOL USE DISORDERS (LIFETIME)

IF SCREENING QUESTION #1 ANSWERED "NO," CHECK HERE ____ AND SKIP TO *NON-ALCOHOL SUBSTANCE USE DISORDERS,* E. 10

SCREEN Q#1
YES NO
|____| |____|

IF SCREENER NOT USED OR IF QUESTION #1 IS ANSWERED "YES," CONTINUE:

IF NO: GO TO
*NON-ALCOHOL
USE DISORDERS*
E. 10

What are your drinking habits like? (How much do you drink?) (Has there ever been a time in your life when you had five or more drinks on one occasion?)

When in your life were you drinking the most? (How long did that period last?)

RECORD DATE OF HEAVIEST USE AND DESCRIBE PATTERN:

During that time...

how often were you drinking?

what were you drinking? how much?

During that time...

did your drinking cause problems for you?

did anyone object to your drinking?

IF ALCOHOL DEPENDENCE SEEMS LIKELY, CHECK HERE ____ AND SKIP TO *ALCOHOL DEPENDENCE,* E. 4.

IF ANY INCIDENTS OF EXCESSIVE DRINKING OR ANY EVIDENCE OF ALCOHOL-RELATED PROBLEMS, CONTINUE WITH *ALCOHOL ABUSE,* ON NEXT PAGE.

IF NEVER HAD ANY INCIDENTS OF EXCESSIVE DRINKING AND THERE IS NO EVIDENCE OF ANY ALCOHOL-RELATED PROBLEMS, SKIP TO *NON-ALCOHOL SUBSTNCE USE DISORDERS,* E. 10

EA.

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

LIFETIME ALCOHOL ABUSE

ALCOHOL ABUSE CRITERIA

Let me ask you a few more questions about your drinking habits.

A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following occurring within a twelve month period:

<p>Have you ever missed work or school because you were intoxicated, high, or very hung over? (How often? What about doing a bad job at work or failing courses at school because of your drinking?)</p> <p>IF NO: What about not keeping your house clean or not taking proper care of your children because of your drinking? (How often?)</p> <p>IF YES TO EITHER OF ABOVE: How often? (Over what period of time?)</p>	<p>(1) recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to alcohol use; alcohol-related absences, suspensions, or expulsions from school; neglect of children or household)</p>	<p>? 1 2 3</p>	<p>EB.</p>
<p>Did you ever drink in a situation in which it might have been dangerous to drink at all? (Did you ever drive while you were really too drunk to drive?)</p> <p>IF YES AND UNKNOWN: How often? (Over what period of time?)</p>	<p>(2) recurrent alcohol use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by alcohol use)</p>	<p>? 1 2 3</p>	<p>EC.</p>
<p>Has your drinking gotten you into trouble with the law?</p> <p>IF YES AND UNKNOWN: How often? (Over what period of time?)</p>	<p>(3) recurrent alcohol-related legal problems (e.g., arrests for alcohol-related disorderly conduct)</p>	<p>? 1 2 3</p>	<p>ED.</p>
<p>IF NOT ALREADY KNOWN: Has your drinking caused problems with other people, such as with family members, friends, or people at work? (Have you ever gotten into physical fights or had bad arguments about your drinking?)</p> <p>IF YES: Did you keep on drinking anyway? (Over what period of time?)</p>	<p>(4) continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol (e.g., arguments with spouse about consequences of intoxication, physical fights)</p>	<p>? 1 2 3</p>	<p>EE.</p>

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

AT LEAST ONE "A" ITEM
CODED "3"

1

3

EF.

IF NO POSSIBILITY OF PHYSIOLOGICAL DEPENDENCE OR COMPULSIVE
USE, GO TO *NON-ALCOHOL USE DISORDERS,* E. 10 OTHERWISE,
CONTINUE ASKING ABOUT DEPENDENCE, E. 4.

ALCOHOL
ABUSE
CONTINUE
ASKING
ABOUT
DEPEND-
ENCE
E. 4
(UNLESS
ALREADY
ASKED)

?=inadequate information

1=absent or false

2=subthreshold

3=threshold or true

ALCOHOL DEPENDENCE

ALCOHOL DEPENDENCE CRITERIA

I'd now like to ask you some more questions about your drinking habits.

A maladaptive pattern of alcohol use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following occurring at any time in the same twelve month period:

NOTE: CRITERIA FOR ALCOHOL DEPENDENCE ARE NOT IN DSM-IV ORDER

Have you often found that when you started drinking you ended up drinking much more than you were planning to?

(3) alcohol is often taken in larger amounts OR over a longer period than was intended

? 1 2 3

EG.

IF NO: What about drinking for a much longer period of time than you were planning to?

Have you tried to cut down or stop drinking alcohol?

(4) there is a persistent desire OR unsuccessful efforts to cut down or control substance use

? 1 2 3

EH.

IF YES: Did you ever actually stop drinking altogether?

(How many times did you try to cut down or stop altogether?)

IF NO: Did you want to stop or cut down? (Is this something you kept worrying about?)

Have you spent a lot of time drinking, being high, or hung over?

(5) a great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects

? 1 2 3

EI.

Have you had times when you would drink so often that you started to drink instead of working or spending time at hobbies or with your family or friends?

(6) important social, occupational, or recreational activities given up or reduced because of alcohol use

? 1 2 3

EJ.

?=inadequate information

1=absent or false

2=subthreshold

3=threshold or true

IF NOT ALREADY KNOWN: Has your drinking ever caused any psychological problems like making you depressed or anxious, making it difficult to sleep, or causing "blackouts?"

(7) alcohol 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 alcohol (e.g., continued drinking despite recognition that an ulcer was made worse by alcohol consumption)

? 1 2 3

EK.

IF NOT ALREADY KNOWN: Has your drinking ever caused significant physical problems or made a physical problem worse?

IF YES TO EITHER OF ABOVE: Did you keep on drinking anyway?

Have you found that you needed to drink a lot more in order to get the feeling you wanted than you did when you first started drinking?

(1) tolerance, as defined by either of the following:

? 1 2 3

EL.

IF YES: How much more?

(a) a need for markedly increased amounts of alcohol to achieve intoxication or desired effect

IF NO: What about finding that when you drank the same amount, it had much less effect than before?

(b) markedly diminished effect with continued use of the same amount of alcohol

Have you ever had any withdrawal symptoms when you cut down or stopped drinking like...

(2) withdrawal, as manifested by either (a) or (b):

? 1 2 3

EM.

(a) at least TWO of the following:

...sweating or racing heart?

-- autonomic hyperactivity (e.g., sweating or pulse rate greater than 100)

...hand shakes?

-- increased hand tremor

...trouble sleeping?

-- insomnia

...feeling nauseated or vomiting?

-- nausea or vomiting

...feeling agitated?

-- psychomotor agitation

...or feeling anxious?

-- anxiety

(How about having a seizure or seeing, feeling, or hearing things that weren't really there?)

-- grand mal seizures
-- transient visual, tactile, or auditory hallucinations or illusions

IF NO: Have you ever started the day with a drink, or did you often drink to keep yourself from getting the shakes or becoming sick?

(b) alcohol (or a substance from the sedative/hypnotic/anxiolytic class) taken to relieve or avoid withdrawal symptoms

EN.

?=inadequate information

1=absent or false

2=subthreshold

3=threshold or true

IF UNKNOWN: When did (SXS CODED "3" AT LEAST THREE "A" ITEMS 1 3 EO.
 ABOVE) occur? (Did they all happen CODED "3" AND ITEMS OCCURRED
 around the same time?) WITHIN THE SAME TWELVE MONTH
 PERIOD

ALCOHOL
 DEPENDENCE

Indicate if:
 1 - With Physiological Dependence
 (current evidence of tolerance or
 withdrawal)
 2 - Without Physiological Dependence
 (no current evidence of tolerance
 or withdrawal)

GO TO DEPENDENCE CHRONOLOGY, E.7

IF ALCOHOL ABUSE QUESTIONS (PAGES E.1-E.3) HAVE NOT YET
 BEEN ASKED, GO TO PAGE E.1. AND CHECK FOR ABUSE.

IF ABUSE QUESTIONS HAVE BEEN ASKED AND ABUSE IS PRESENT, CODE "3" 1 3 EQ.
 OTHERWISE, IF QUESTIONS HAVE BEEN ASKED AND ABUSE IS NOT PRESENT,
 GO TO *NON-ALCOHOL USE DISORDERS,* E.10.

GO TO *NON- ALCOHOL
 ALCOHOL USE ABUSE
 DISORDER,*
 E. 10

How old were you when you first Age at onset of Alcohol ER.
 had (ABUSE SXS CODED "3")? Abuse (CODE 99 IF UNKNOWN)

IF UNCLEAR: During the past Criteria for Alcohol Abuse ? 1 3 ES.
 month, have you had anything met at any time in past
 at all to drink? month

IF YES: Tell me more about it.
 (Has your drinking caused you
 any problems?)

PAST CURRENT
 ABUSE ABUSE
 GO TO *NON-
 ALCOHOL USE
 DISORDER,*
 E. 10

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

CHRONOLOGY FOR DEPENDENCE

How old were you when you first had (LIST OF ALCOHOL DEPENDENCE OR ABUSE SXS CODED "3")?

Age at onset of Alcohol Dependence or Abuse (CODE 99 IF UNKNOWN)

___ ___

ET.

IF UNCLEAR: During the past month, have you had anything at all to drink?

Full criteria for Alcohol Dependence met at any time in past month (or never had a month without symptoms of Dependence or Abuse since onset of Dependence)

? 1 3

EU.

IF YES: Tell me more about it. (Has your drinking caused you any problems?)

| CURRENT |
| DEPEND- |
| ENCE |

| GO TO |
| *REMISSION |
| SPECIFIERS* |
| E.8 |

SEVERITY SPECIFIERS FOR DEPENDENCE

NOTE SEVERITY OF DEPENDENCE FOR WORST WEEK OF PAST MONTH (Additional questions about the effect of alcohol on social and occupational functioning may be necessary.)

EV.

- 1 Mild: Few, if any, symptoms in excess of those required to make the diagnosis, and the symptoms result in no more than mild impairment in occupational functioning or in usual social activities or relationships with others (or criteria met for Dependence in the past and some current problems).
- 2 Moderate: Symptoms or functional impairment between "mild" and "severe."
- 3 Severe: Many symptoms in excess of those required to make the diagnosis, and the symptoms markedly interfere with occupational functioning or with usual social activities or relationships with others.

GO TO NON-ALCOHOL USE DISORDERS, E.10

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

REMISSION SPECIFIERS FOR DEPENDENCE

THE FOLLOWING REMISSION SPECIFIERS CAN BE APPLIED ONLY AFTER NO CRITERIA FOR DEPENDENCE OR ABUSE HAVE BEEN MET FOR AT LEAST ONE MONTH IN THE PAST.

Note: These specifiers do not apply if the individual is On Agonist Therapy or In a Controlled Environment (next page).

- | | | |
|--|-------|-----|
| Number of months prior to interview when last had some problems with Alcohol | _ _ _ | EW. |
| 1 Early Full Remission: For at least one month, but less than twelve months, no criteria for Dependence or Abuse have been met. | | EX. |
| 2 Early Partial Remission: For at least one month, but less than twelve months, one or more criteria for Dependence or Abuse have been met (but the full criteria for Dependence have not been met). | | |
| 3 Sustained Full Remission: None of the criteria for Dependence or Abuse have been met at any time during a period of twelve months or longer. | | |
| 4 Sustained Partial Remission: Full criteria for Dependence have not been met for a period of twelve months or longer; however, one or more criteria for Dependence or Abuse have been met. | | |

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

- Check ____ if On Agonist Therapy: The individual is on a prescribed agonist medication (e.g., valium) and no criteria for Dependence or Abuse have been met for that class of medication for at least the past month (except tolerance to, or withdrawal from, the agonist). This category also applies to those being treated for Dependence using a partial agonist or a mixed agonist/antagonist. EY.
- Check ____ if In A Controlled Environment: The individual is in an environment where access to alcohol and controlled substances is restricted and no criteria for Dependence or Abuse have been met for at least the past month. Examples are closely-supervised and substance-free jails, therapeutic communities, and locked hospital units. EZ.

?=inadequate information

1=absent or false

2=subthreshold

3=threshold or true

NON-ALCOHOL SUBSTANCE USE DISORDERS (LIFETIME DEPENDENCE AND ABUSE)

IF SCREENING QUESTIONS #2 AND #3 ARE BOTH ANSWERED "NO," CHECK HERE AND SKIP TO THE NEXT MODULE.

SCREEN Q# 2
YES NO

IF SCREENER NOT USED OR IF QUESTION #2 OR QUESTION #3 WAS ANSWERED "YES," CONTINUE:

Now I am going to ask you about your use of drugs or medicines.

SCREEN Q# 3
YES NO

SHOW DRUG LIST TO SUBJECT.

IF NO TO BOTH:
GO TO NEXT
MODULE

Have you ever taken any of these to get high, to sleep better, to lose weight, or to change your mood?

REFERRING TO LIST ON NEXT PAGE, DETERMINE LEVEL OF DRUG USE USING GUIDELINES BELOW

GUIDELINES FOR RATING LEVEL OF DRUG USE:
FOR EACH DRUG GROUP EVER USED:
Either (1) or (2):
-> IF STREET DRUG: When were you using (DRUG) the most? (1) has ever taken street drug more than 10 times in a one-month period
(Has there ever been a time when you used it at least ten times in a one-month period of time?)
-> IF PRESCRIBED: Did you ever get hooked (become dependent) on (PRESCRIBED DRUG) or take much more of it than was prescribed? (2) reports becoming dependent on a prescribed drug OR using much more of it than was prescribed
-> IF DRUG GROUP NEVER USED OR USED ONLY ONCE, OR IF PRESCRIBED DRUG USED AS DIRECTED, CIRCLE "1" FOR DRUG GROUP ON E.11
-> IF DRUG GROUP USED AT LEAST TWICE, BUT LESS THAN LEVEL INDICATED ON (1), CODE "2" FOR DRUG GROUP ON E.11
-> IF DRUG GROUP USED AT LEVEL INDICATED IN ITEM(1) OR IF POSSIBLY DEPENDENT ON PRESCRIBED DRUG (ITEM (2) IS TRUE), CODE "3" ON E.11.

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

CIRCLE THE NAME OF EACH DRUG EVER USED (OR WRITE IN NAME IF "OTHER")	RECORD PERIOD OF HEAVIEST USE (AGE OR DATE, AND DURATION) AND DESCRIBE PATTERN OF USE	INDICATE LEVEL OF USE (USE GUIDELINES, E. 10)				
Sedatives-hypnotics-anxiolytics: Quaalude, Seconal, Valium, Xanax, Librium, barbiturates, Miltown, Ativan, Dalmane, Halcion, Restoril, or other: _____	_____	?	1	2	3	EAA.
Cannabis: marijuana, hashish, THC, or other: _____	_____	?	1	2	3	EBB.
Stimulants: amphetamine, "speed", crystal meth, dexadrine, Ritalin, "ice", or other: _____	_____	?	1	2	3	ECC.
Opioids: heroin, morphine, opium, Methadone, Darvon, codeine, Percodan, Demerol, Dilaudid, unspecified or other: _____	_____	?	1	2	3	EDD.
Cocaine: intranasal, IV, freebase, crack, "speedball," unspecified or other: _____	_____	?	1	2	3	EEE.
Hallucinogens/PCP: LSD, mescaline, peyote, psilocybin, STP, mushrooms, PCP ("angel dust"), Extasy, MDMA, or other: _____	_____	?	1	2	3	EFF.
Other: steroids, "glue," paint, inhalants, nitrous oxide ("laughing gas"), amyl or butyl nitrate ("poppers"), nonprescription sleep or diet pills, unknown, or other: _____	_____	?	1	2	3	EGG.
ANY DRUG GROUPS CODED "2" OR "3"			1	3	EHH.	GO TO NEXT MODULE

?=inadequate information 1= drug never used 2= ≤10 times in a month

3=>10 times or dependence on prescribed drug

Have you tried to cut down or stop using (DRUG)?

IF YES: Have you ever actually stopped using (DRUG) altogether?

(How many times did you try to cut down or stop altogether?)

IF UNCLEAR: Did you want to stop or cut down?

IF YES: Is this something you kept worrying about?

	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
(4) There is a persistent desire OR unsuccessful efforts to cut down or control substance use	3	3	3	3	3	3	3	3
	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1
	?	?	?	?	?	?	?	?
	ERR.	ESS.	ETT.	EUU.	EVV.	EWW.	EXX.	EYY.

?=inadequate information

1=absent or false

2=subthreshold

3=threshold or true

Have you spent a lot of time using (DRUG) or doing whatever you had to do to get it? Did it take you a long time to get back to normal? (How much time? As long as several hours?)

	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
(5) A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects	3	3	3	3	3	3	3	3
	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1
	EZZ.	EAAA.	EBBB.	ECCC.	EDDD.	EEEE.	EFFF.	EGGG.

Have you had times when you would use (DRUG) so often that you used (DRUG) instead of working or spending time on hobbies or with your family or friends?

	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
(6) Important social, occupational, or recreational activities given up or reduced because of substance use	3	3	3	3	3	3	3	3
	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1
	?	?	?	?	?	?	?	?
	EHHH.	EIII.	EJJJ.	EKKK.	ELLL.	EMMM.	ENNN.	E000.

?=inadequate information

1=absent or false

2=subthreshold

3=threshold or true

IF NOT ALREADY KNOWN: Has (DRUG) caused psychological problems, like making you depressed?

IF NOT ALREADY KNOWN: Has (DRUG) ever caused physical problems or made a physical problem worse?

IF YES TO EITHER OF ABOVE: Did you keep on using (DRUG) anyway?

	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
(7) The substance use is continued despite knowledge of having had a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., recurrent cocaine use despite recognition of cocaine-related depression)	3	3	3	3	3	3	3	3
	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1
	?	?	?	?	?	?	?	?
	EPPP.	EQQQ.	ERRR.	ESSS.	ETTT.	EUUU.	EVVV.	EWWW.

Have you found that you needed to use a lot more (DRUG) in order to get high than you did when you first started using it?

IF YES: How much more?

IF NO: What about finding that when you used the same amount, it had much less effect than before?

	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
(1) Tolerance, as defined by either of the following:								
(a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect	3	3	3	3	3	3	3	3
	2	2	2	2	2	2	2	2
(b) markedly diminished effect with continued use of the same amount of the substance	1	1	1	1	1	1	1	1
	?	?	?	?	?	?	?	?
	EEXX.	EYYY.	EZZZ.	EAAAA.	EBBBB.	ECCCC.	EDDDD.	EEEEE.

?=inadequate information

1=absent or false

2=subthreshold

3=threshold or true

THE FOLLOWING ITEM MAY NOT APPLY TO
CANNABIS AND HALLUCINOGENS/PCP

Have you ever had withdrawal symptoms,
that is, felt sick when you cut down
or stopped using (DRUG)?

IF YES: What symptoms did
you have? REFER TO LIST OF
WITHDRAWAL SYMPTOMS ON E. 17

IF HAD WITHDRAWAL SXS: After not
using (DRUG) for a few hours or
more, have you often used it to keep
yourself from getting sick with
(WITHDRAWAL SXS)?

What about using (DRUG IN SAME
GROUP) when you were feeling
sick with (WITHDRAWAL SXS) so
that you would feel better?

(2) Withdrawal, as manifested by either of the following:	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
(a) the characteristic withdrawal syndrome for the substance	3	3	3	3	3	3	3	3
(b) the same (or a closely related) substance is taken to relieve or avoid with- drawal symptoms	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1
	?	?	?	?	?	?	?	?
	EFFFF.	EGGGG.	EHHHH.	EIIII.	EJJJJ.	EKKKK.	ELLLL.	

MMMM.

?=inadequate information 1=absent or false 2=subthreshold 3=threshold or true

LIST OF WITHDRAWAL SYMPTOMS (FROM DSM-IV CRITERIA)

Listed below are the characteristic withdrawal symptoms for those classes of psychoactive substances for which a withdrawal syndrome has been identified. (NOTE: A specific withdrawal syndrome has not been identified for CANNABIS AND HALLUCINOGENS/PCP). Withdrawal symptoms may occur following the cessation of prolonged moderate or heavy use of a psychoactive substance or a reduction in the amount used.

SEDATIVES, HYPNOTICS, AND ANXIOLYTICS:

Two (or more) of the following, developing within several hours to a few days after cessation (or reduction) of sedative, hypnotic, or anxiolytic use, which has been heavy and prolonged:

- (1) autonomic hyperactivity (e.g., sweating or pulse rate greater than 100)
- (2) increased hand tremor
- (3) insomnia
- (4) nausea or vomiting
- (5) transient visual, tactile, or auditory hallucinations or illusions
- (6) psychomotor agitation
- (7) anxiety
- (8) grand mal seizures

STIMULANTS/COCAINE

Dysphoric mood AND two (or more) of the following physiological changes, developing within a few hours to several days after cessation (or reduction of substance use which has been heavy and prolonged):

- 1) fatigue
- (2) vivid, unpleasant dreams
- (3) insomnia or hypersomnia
- (4) increased appetite
- (5) psychomotor retardation or agitation

OPIOIDS:

Three (or more) of the following, developing within minutes to several days after cessation (or reduction) of opioid use which has been heavy and prolonged (several weeks or longer) or after administration of an opioid antagonist (after a period of opioid use):

- (1) dysphoric mood
- (2) nausea or vomiting
- (3) muscle aches
- (4) lacrimation or rhinorrhea
- (5) pupillary dilation, piloerection, or sweating
- (6) diarrhea
- (7) yawning
- (8) fever
- (9) insomnia

IF UNKNOWN: When did (SXS CODED "3" ABOVE) occur? (Did they all happen around the same time?)

	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
SUBSTANCE DEPENDENCE At least 3 items are code "3" AND items occurred within the same twelve-month period	3	3	3	3	3	3	3	3
	xx	xx	xx	xx	xx	xx	xx	xx

Indicate type:

With Physiological Dependence (current evidence of tolerance or withdrawal)
Without Physiological Dependence (no current evidence of tolerance or withdrawal)

With Physiological Dependence (current evidence of tolerance or withdrawal)	3	3	3	3	3	3	3	3
Without Physiological Dependence (no current evidence of tolerance or withdrawal)	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx

FOR EACH CLASS CODED "3", GO TO *CHRONOLOGY*, E. 19

Fewer than 3 items coded "3"

Fewer than 3 items coded "3"	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx

GO TO *LIFETIME SUBSTANCE ABUSE*, E. 23 AND ASK THE FOUR ABUSE ITEMS FOR EACH DRUG CLASS CODED "1" ABOVE.

CHRONOLOGY

IF UNCLEAR: During the past month, have you used (DRUG) at all?

IF YES: Has your (DRUG) use caused you any problems?

(How about being high when you were at school or work, or taking care of children? How about missing something important because of being high or hung over? How about using (DRUG) while you were driving? How about getting into trouble with the law because of your use of (DRUG)?)

NOTE: YOU MAY NEED TO REFER TO ABUSE CRITERIA, PAGE E. 23.

	SED.- HYPN.- ANX.	CANN ABIS	STIMU LANTS	OPI OID	COC- AINE	HALL- PCP	POLY	OTHER
Full criteria for Dependence met at any time in past month (or never had a month without symptoms of Dependence or Abuse since onset of Dependence)	3	3	3	3	3	3	3	3
	xx	xx	xx	xx	xx	xx	xx	xx

FOR EACH CLASS CODED "3" INDICATE SEVERITY SPECIFIERS ON FOLLOWING PAGE

No symptoms of Dependence or Abuse in past month or meets partial criteria after one month without symptoms	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx

FOR EACH CLASS CODED "1" INDICATE REMISSION SPECIFIERS E. 21

FOR EACH DRUG CLASS WITH CURRENT DEPENDENCE, CODE SEVERITY:

JSE SCALE BELOW TO RATE SEVERITY OF DEPENDENCE FOR WORST WEEK OF PAST MONTH (Additional questions about the effect of the substance on social and occupational functioning may be necessary)	SED.-	CANN	STIMU	OPI	COC-	HALL-	POLY	OTHER
	HYPN.- ANX.	ABIS	LANTS	OID	AINE	PCP		
	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3

- 1 Mild: Few, if any, symptoms in excess of those required to make the diagnosis, and the symptoms result in no more than mild impairment in occupational functioning or in usual social activities or relationships with others.
- 2 Moderate: Symptoms or functional impairment between "mild" and "severe."
- 3 Severe: Many symptoms in excess of those required to make the diagnosis, and the symptoms markedly interfere with occupational functioning or with usual social activities or relationships with others.

REMISSION SPECIFIERS

THE FOLLOWING REMISSION SPECIFIERS CAN BE APPLIED ONLY AFTER NO CRITERIA FOR DEPENDENCE OR ABUSE HAVE BEEN MET FOR AT LEAST ONE MONTH IN THE PAST.

Note: these specifiers do not apply if the individual is On Agonist Therapy or In a Controlled Environment. (See page E 9 for definitions of these specifiers).

- 1 Early Full Remission: For at least one month, but for less than twelve months, no criteria for Dependence or Abuse have been met.

- 2 Early Partial Remission: For at least one month, but less than twelve months, one or more criteria for Dependence or Abuse have been met (but the full criteria for Dependence have not been met).

- 3 Sustained Full Remission: None of the criteria for Dependence or Abuse have been met at any time during a period of twelve months or longer.

- 4 Sustained Partial Remission: Full criteria for Dependence have not been met for a period of twelve months or longer; however, one or more criteria for Dependence or Abuse have been met

USE SCALE BELOW TO INDICATE TYPE OF REMISSION	SED.- HYPN.- ANX.	CANN ABIS	STIMU LANTS	OPI OID	COC- AINE	HALL- PCP	POLY	OTHER
Early Full Remission	1	1	1	1	1	1	1	1
Early Partial Remission	2	2	2	2	2	2	2	2
Sustained Full Remission	3	3	3	3	3	3	3	3
Sustained Partial Remission	4	4	4	4	4	4	4	4
Check if On Agonist Therapy	—		—	—	—		—	—
Check if In a Controlled Environment	—	—	—	—	—	—	—	—
	xx	xx	xx	xx	xx	xx	xx	xx

LIFETIME SUBSTANCE ABUSE

-> FOR EACH DRUG CLASS CODED "2" (I.E., DRUGS USED AT A LEVEL OF <10 TIMES IN ANY ONE MONTH), START THIS SECTION WITH THE FOLLOWING INTRODUCTION:

Now I'm going to ask you some specific questions your use of (DRUGS CODED "2").

-> FOR EACH DRUG CLASS CODED "3" ON PAGE E. 18 THAT DID NOT MEET CRITERIA FOR DEPENDENCE.

Now I'd like to ask you a few more questions about your use of (DRUGS CODED "3" THAT DID NOT MEET CRITERIA FOR DEPENDENCE).

SUBSTANCE ABUSE CRITERIA

A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following occurring within a twelve month period:

Have you ever missed work or school because you were intoxicated, high, or very hung over? (How often? What about doing a bad job at work or failing courses at school because of your [DRUG] use?)

IF NO: What about not keeping your house clean or not taking proper care of your children because of your (DRUG) use?

IF YES TO EITHER OF ABOVE: How often? (Over what period of time?)

(1) Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substance-related absences, suspensions, or expulsions from school; neglect of children or household)	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
	3	3	3	3	3	3	3	3
	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx

Have you ever used (DRUG) in a situation in which it might have been dangerous to be using (DRUG) at all?
(Have you ever driven while you were really too high to drive?)

IF YES AND UNKNOWN: How often?
(Over what period of time?)

	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
(2) Recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use)	3	3	3	3	3	3	3	3
	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx

Has your use of (DRUG) ever gotten you into trouble with the law?

IF YES AND UNKNOWN: How often?
(Over what period of time?)

	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
(3) Recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct)	3	3	3	3	3	3	3	3
	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx

IF NOT ALREADY KNOWN: Has your use of (DRUG) caused problems with other people, such as with family members, friends, or people at work? (Did you ever get into physical fights or bad arguments about your drug use?)

IF YES: Did you keep on using (DRUG) anyway? (Over what period of time?)

(4) Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights)	SED/ HYPN/ ANX	CANN ABIS	STIMU LANTS	OPI OID	COC AINE	HALL/ PCP	POLY	OTHER
	3	3	3	3	3	3	3	3
	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx
	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx
	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx
	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	1	1
	xx	xx	xx	xx	xx	xx	xx	xx

Appendix H

Addiction Severity Index - Female (ASI-F)

Supplementary Administration Manual

for the

Expanded Female Version of the

Addiction Severity Index (ASI) Instrument,

The *ASI - F*

U.S. Department of Health and Human Services
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Treatment

Rockwall II Building
5600 Fishers Lane
Rockville, Maryland 20857

ACKNOWLEDGMENTS

The expanded version of the ASI, the ASI-F and manual, was developed and written by Elizabeth Brown, M.D., Debra Frank, Ph.D., and Alfred Friedman, Ph.D. for the Center for Substance Abuse Treatment (CSAT), Office of Evaluation, Scientific Analysis and Synthesis (OESAS), through T. Head, Inc. (THI) located in Rockville, Maryland, under Contract Number 270-90-2207. Special thanks go to A.T. McLellan, Ph.D., the author of the original ASI, who provided consultation and encouragement in the development and selection of new items, however he is not responsible for some methods used in the psychometric development of the ASI-F. Nita Fleagle served as the government project officer for CSAT, and Susan Richards served as project manager and research coordinator for THI.

Public Domain Notice

All material appearing in this publication, except where cited, is in the public domain and may be reproduced or copied without permission from CSAT. Citation of the source is appreciated. The opinions expressed herein are the views of the authors and do not necessarily reflect the official position of CSAT or any other part of the U.S. Department of Health and Human Services (DHHS).

DHHS Publication No. (SMA) 96-8056
Printed 1997

**ADDICTION SEVERITY INDEX
FEMALE VERSION
ASI-F**

INSTRUCTIONS

1. Leave no blanks. Where appropriate code items:
X=question not answered
N=question not applicable
Use only one character per item.
2. Item numbers circled are to be asked at follow-up. Items with an asterisk are cumulative and should be rephrased at follow-up (See Manual).
3. Space is provided after sections for additional pertinent comments.

SEVERITY RATINGS

The severity ratings are interviewer estimates of the patient's need for additional treatment in each area. The scales range from 0 (no treatment necessary) to 9 (treatment needed to intervene in life-threatening situation). Each rating is based upon the patient's history of problem symptoms, present condition and subjective assessment of her treatment needs in a given area. For a detailed description of severity ratings' derivation procedures and conventions, see manual.

IDENTIFICATION INFORMATION

LAST 4 DIGITS OF SOCIAL SECURITY NUMBER: _____
 INTERVIEWER CODE NUMBER: _____
 DATE OF ADMISSION: _____ DATE OF INTERVIEW: _____
 TIME BEGUN: _____: _____ 1=A.M. 2=P.M. (circle one)
 GENDER _____ 1=Male 2=Female
 CLASS: _____ 1=Intake 2=Follow-up CONTACT CODE: _____ 1=In Person 2=Phone
 SPECIAL: _____ 1=Terminated 2=Refused 3=Unable to respond

Severity Profile

0							
1							
2							
3							
4							
5							
6							
7							
8							
9							
	M E D I C A L	E M P / S U P	A L C O H O L	D R U G	L E G A L	F A M / S O C	P S Y C H

PATIENTS RATING SCALE

- 0=Not at all
- 1=Slightly
- 2=Moderately
- 3=Considerably
- 4=Extremely

INTERVIEWER SEVERITY RATING

- 0-1 No real problem
- 2-3 Slight problem
- 4-5 Moderate problem
- 6-7 Considerable problem
- 8-9 Extreme problem

PREPARED BY ALFRED FRIED, Ph.D.

GENERAL INFORMATION

NAME _____

CURRENT ADDRESS _____

GEOGRAPHIC CODE _____

1. How long have you lived at this address? _____
Years Months

2. Is this residence owned by you or your family? _____ 0=No 1=Yes

3. What is your date of birth? _____ / _____ / _____

4. In what country were you born? _____ code: _____

4a. If other than U.S., how many years have you lived in U.S.? _____

5. In what country was your mother born? _____ code: _____

6. In what country was your father born? _____ code: _____

7. What race do you consider yourself to be? _____

1=White (not of Hispanic origin)

2=Black (born in U.S.)

3=Black (other)

4= Native American

5= Alaskan Native

6= Asian of Pacific Islander

7= Hispanic - Mexican

8= Hispanic - Dominican

9= Hispanic - Puerto Rican

10= Hispanic - Cuban

11= Other Hispanic

12= Other _____

8. What is the first language that you learned? _____

1=English

2=Spanish

3=French

4=Haitian Creole

5=Portuguese

6=Portuguese/Cape Verdean

7=Other

9=Unknown/Don't know

9. What language do you usually speak? _____

1=English

2=Spanish

3=French

4=Haitian Creole

5=Portuguese

6=Portuguese/Cape Verdean

7=Other

9=Unknown/Don't know

10. What language do you prefer to speak? _____

1=English

2=Spanish

3=French

4=Haitian Creole

5=Portuguese

6=Portuguese/Cape Verdean

7=Other

9=Unknown/Don't know

11. Do you have a particular religion that you follow? _____

- 1=Protestant
- 2=Catholic
- 3=Jewish
- 4=Islamic
- 5=Other _____
- 6=None

12. Have you been in any kind of a controlled residential setting like a hospital or a jail (but not a shelter) in the past 30 days? _____ 0=No 1=Yes

**If YES, check all that apply:
For each setting, indicate number of days**

	Yes/No 0=No 1=Yes	# of days
a. Jail	_____	_____
b. Alcohol or drug treatment	_____	_____
c. Medical treatment	_____	_____
d. Psychiatric treatment	_____	_____
e. Other _____	_____	_____

13. Who is the head of your household? _____

- 1=Self
- 2=Spouse/Partner
- 3=Parent
- 4=Grandparent
- 5=Other Relative
- 6=Other

14. What is the occupation of the head of household? _____

- 1=Higher Executives; Large Proprietors; Major Professionals
- 2=Business Managers; Medium Proprietors; Lesser Professionals
- 3=Administrative Personnel; Small Proprietors; Minor Professionals
- 4=Clerical/Sales Workers; Technicians
- 5=Skilled Manual Employees
- 6=Machine Operators; Semi-skilled Employees
- 7=Unskilled Labor
- 8=Disabled
- 9=Welfare
- 10=None; No Work History

15. How many times have you been pregnant? _____

16. How many times have you actually given birth? _____

17. How old were you when the first baby was born? _____

18a. Starting with the youngest child, what is the sex and birthdate of each of your children?
NOTE SEX IN COLUMN A; ENTER BIRTHDATES (COLUMN B) IN CHART BELOW.

FOR EACH CHILD ASK:

18b. Where is _____ living now? ENTER CODE IN COLUMN C OF CHART;
ASK FOR ADDITIONAL INFORMATION FOR CODES 5, 6, 7.

- | | |
|-------------------------|---------------------|
| 0=With patient | 4=Adopted |
| 1=Care of family member | 5=Institution _____ |
| 2=Foster care | 6=Died (When) _____ |
| 3=Fathers's care | 7=Other _____ |

(A)	(B)	(C)
1=Male 2=Female SEX	DOB	WHERE LIVING
1. _____	___/___/___	_____
2. _____	___/___/___	_____
3. _____	___/___/___	_____
4. _____	___/___/___	_____
5. _____	___/___/___	_____
6. _____	___/___/___	_____
7. _____	___/___/___	_____
8. _____	___/___/___	_____
9. _____	___/___/___	_____
10. _____	___/___/___	_____

19. Are there other children living with you now that you take care of? NOTE SEX AND AGES:

SEX (1=MALE 2=FEMALE)	AGE
_____	_____
_____	_____
_____	_____

MEDICAL STATUS

1. How many times in your life have you been hospitalized for medical problems? (INCLUDE ODs, DTs; EXCLUDE DETOX, PREGNANCY) ____

2. How long ago was your last hospitalization for a physical problem (NOT PREGNANCY)?
Years _____ Months _____

3. Do you have any chronic medical problems which continue to interfere with your life? ____ 0=No 1=Yes _____
Specify

4. Have you ever had any of the following health problems? USE STREET TERMS AS NEEDED TO BE SURE THE PATIENT UNDERSTANDS THE QUESTION.
0=No 1=Yes

Hepatitis _____

Chlamydia _____

Syphilis _____

Gonorrhea _____

Pelvic Inflammatory Disease _____

HIV+ _____

AIDS _____

5. Have you ever had a fit or a seizure? ____ 0=No 1=Yes

6. Are you taking any prescribed medication on a regular basis for a physical problem? ____ 0=No 1=Yes

7. Do you receive a pension for a physical disability? (EXCLUDE PSYCHIATRIC DISABILITY) ____ 0=No 1=Yes _____
Specify

8. How many days have you experienced medical problems in the past 30? (NOT PREGNANCY RELATED) ____

FOR QUESTIONS 9 & 10 PLEASE ASK PATIENT TO USE THE PATIENT'S RATING SCALE

9. How troubled or bothered have you been by these medical problems in the past 30 days? ____

10. How important to you NOW is treatment for these medical problems? ____

INTERVIEWER SEVERITY RATING

11. How would you rate the patient's need for medical treatment? _____

CONFIDENCE RATINGS

Is the above information significantly distorted by:

12. Patient's misrepresentation? _____ 0=No 1=Yes

13. Patient's inability to understand? _____ 0=No 1=Yes

COMMENTS

EMPLOYMENT/SUPPORT STATUS

1. Education completed (GED=12 years) _____
Years Months2. Training or technical education completed _____
Months

3. Do you have a profession, trade or skill? _____

0=No

1=Yes _____

Specify

4. Do you have a valid driver's license? _____ 0=No 1=Yes

5. Do you have an automobile available for use? _____ 0=No 1=Yes
(ANSWER NO IF NO VALID DRIVER'S LICENSE)6. How long was your longest full-time job? _____
Years Months

7. Usual (or last) occupation.

(Specify in detail)

8. Does someone contribute to your support in any way? _____ 0=No 1=Yes

(8a AND 8b APPLY ONLY IF ITEM 8 IS YES)

8a. Who is that person? (RELATIONSHIP) _____

1=Spouse/partner

4=Grandparent

2=Parent/foster parent

5=Other relative

3=Brother/sister

6=Unrelated other

8b. Does this constitute the majority of your support? _____ 0=No 1=Yes

9. Usual employment pattern, past 3 years. _____

- 1=full time (40 hrs/week)
- 2=part time (regular hours)
- 3=part time (irregular, daywork)
- 4=student
- 5=service
- 6=retired/disability
- 7=unemployed
- 8=in controlled environment

10. How many days were you paid for working in the past 30? _____
(INCLUDE "UNDER THE TABLE" WORK)

How much money did you receive from the following sources in the past 30 days?

- 11. Employment (net income) _____
- 12. Unemployment compensation _____
- 13. Welfare (DPA) (AFDC) _____
- 14. WIC _____
- 15. Food stamps _____
- 16. Pension, benefits or social security _____
- 17. Mate, family or friends
(Money for personal expenses) _____
- 18. Illegal activities _____
- 19. How many people depend on you for the majority of their food, shelter,
etc.? _____

20. How many days have you experienced employment problems in the past 30?

FOR QUESTIONS 21 & 22 PLEASE ASK PATIENT TO USE THE PATIENT'S RATING SCALE

- 21. How troubled or bothered have you been by these employment problems in the past 30 days? _____
- 22. How important to you NOW is counseling for these employment problems? _____

INTERVIEWER SEVERITY RATING

23. How would you rate the patient's need for employment or support counseling? _____

CONFIDENCE RATINGS

Is the above information significantly distorted by:

- 24. Patient's misrepresentation? _____ 0=No 1=Yes
- 25. Patient's inability to understand? 0=No 1=Yes

COMMENTS

DRUG/ALCOHOL USE

	PAST 30 DAYS	LIFETIME USE MONTHS	AGE OF 1ST USE
1. Alcohol, any use	_____	_____	_____
2. Alcohol, to intoxication	_____	_____	_____
3. Heroin, total	_____	_____	_____
4. Heroin, snorting	_____	_____	_____
5. Heroin, shooting	_____	_____	_____
6. Methadone, illegal	_____	_____	_____
7. Other opiates/analgesics (Percodan, Dialudid, opium, etc.)	_____	_____	_____
8. Barbiturates, all routes (Seconal "reds", etc.)	_____	_____	_____
9. Barbiturates, oral	_____	_____	_____
10. Barbiturates, shooting	_____	_____	_____
11. Other sedatives/hypnotics/tranq. (Valium, Librium, Xanax, etc.)	_____	_____	_____
12. Cocaine, total	_____	_____	_____
13. Cocaine, snorting	_____	_____	_____
14. Cocaine, shooting	_____	_____	_____
15. Cocaine, freebasing	_____	_____	_____
16. Crack Cocaine	_____	_____	_____
17. All "speed"	_____	_____	_____
18. Amphetamine, oral (Dexedrine, "Bennies, Black Beauties, etc) SPECIFY	_____	_____	_____
19. Amphetamine, shooting	_____	_____	_____

(Continued)

I.D. ____

DRUG/ALCOHOL USE

	PAST 30 DAYS	LIFETIME USE MONTHS	AGE OF 1ST USE
20. Methamphetamine snorting (Methedrine, "crystal meth")	_____	_____	_____
21. Methamphetamine shooting	_____	_____	_____
22. "Ice" smoking	_____	_____	_____
23. Marijuana, hashish THC, any cannabis Specify _____	_____	_____	_____
24. Hallucinogens (LSD, PCP, mescaline, etc.) Specify _____	_____	_____	_____
25. Inhalants, (glue gas, solvents, etc) Specify _____	_____	_____	_____
26. More than one substance per day (including alcohol)	_____	_____	_____

Note: Heroin, snorting and Heroin, shooting may add up to more than Heroin, total because both forms of administration may be used on some or all of the same days or months of use. Detailed questioning may be necessary to determine these differences. This also holds true for Barbiturates, all routes, Cocaine, total and All "speed".

COMMENTS

19. Which substance is the major problem? _____
 PLEASE CODE AS ABOVE, OR 00=No problem
 55=Alcohol & Drug (Dual addiction)
 66=Polydrug

WHEN NOT CLEAR, ASK PATIENT

20. How long was your last period of voluntary abstinence from this
 major substance? _____ (00=Never abstinent)
 Months

21. How many months ago did this abstinence end? _____
 (00=Still abstinent, 99= No clean period)

22. How many times have you:

Had alcohol d.t.'s ("horrors") _____

Overdosed on drugs _____

23. In the past 30 days, how often did you have anything with alcohol to
 drink like beer, wine, or liquor? _____

1=Never	5=3-4 times per week
2=1 time per month or less	6=nearly every day
3=2-3 times per month	7=Once a day
4=1-2 times per week	8=Twice a day or more

23b. On those days, how much did you have usually? _____
 (NUMBER OF DRINKS)

24. Do you smoke cigarettes? _____ 0=No 1=Yes

25. About how many cigarettes per day did you smoke during the past 30 days? _____

26. How many times during the past 30 days did you stay up past 4 a.m. because you were using drugs or alcohol? _____
 0=None 3=Three times
 1=Once 4=4 or more times
 2=Twice

27. Do you sleep until after 11 a.m. most days? _____ 0=No 1=Yes

27a. IF YES, Is this because of your working hours? _____ 0=No 1=Yes

28. How many times in your life have you been treated for:

Alcohol abuse: _____

Drug abuse: _____

29. How many of these were detox only?

Alcohol _____

Drug _____

30. How much would you say you spent during the past 30 days on:

Alcohol _____

Drugs _____

31. How many days have you been treated in an outpatient setting for alcohol or drugs in the past 30 days?
(INCLUDE NA, AA) _____

32. How many days in the past 30 have you experienced:

Alcohol problems _____

Drug problems _____

FOR QUESTIONS 33 & 34 PLEASE ASK PATIENT TO USE THE PATIENT'S RATING SCALE

33. How troubled or bothered have you been in the past 30 days by these:

Alcohol problems _____

Drug problems _____

34. How important to you NOW is treatment for these:

Alcohol problems _____

Drug problems _____

INTERVIEWER SEVERITY RATING

35. How would you rate the patient's need for treatment for:

Alcohol abuse _____

Drug abuse _____

CONFIDENCE RATINGS

Is the above information significantly distorted by:

36. Patient's misrepresentation? _____ 0=No 1=Yes

37. Patient's inability to understand? _____ 0=No 1=Yes

COMMENTS

LEGAL STATUS

1. Was this admission prompted or suggested by the criminal justice system (judge, probation/parole officer, etc.)? _____ 0=No 1=Yes

2. Are you on probation or parole now? _____ 0=No 1=Yes

How many times in your life have you been arrested and charged with the following:

3. shoplifting _____

4. vandalism _____

5. parole/probation violation _____

6. drug charges _____

7. forgery _____

8. weapons offense _____

9. burglary, larceny, B & E _____

10. robbery _____

11. assault _____

12. arson _____

13. rape _____

14. homicide/manslaughter _____

15a. prostitution _____

15b. contempt of court _____

15c. other - Specify _____

16. How many of these charges resulted in convictions? _____

How many times in your life have you been charged with the following:

17. Disorderly conduct, vagrancy, public intoxication? _____

18. Driving while intoxicated? _____

19. Other major driving violation (reckless driving, speeding, no license, etc.)? _____

20. How many months were you incarcerated in your life? _____

21. How long was your last incarceration? _____

Months

I.D. ____

22. What was it for? _____
(USE CODE 3 - 15, 17 - 19. IF MULTIPLE CHARGES, CODE MOST SEVERE) _____

Are you presently awaiting charges, trial or sentence? _____ 0=No 1=Yes

24. What for? (If multiple charges, use most severe) _____

25. How many days in the past 30 were you detained or incarcerated? _____

26. How many days in the past 30 have you engaged in illegal activities for profit? _____

FOR QUESTIONS 27 & 28 PLEASE ASK PATIENT TO USE PATIENT'S RATING SCALE

27. How serious do you feel your present legal problems are? (EXCLUDE CIVIL PROBLEMS) _____

28. How important to you NOW is counseling or referral for these legal problems? _____

INTERVIEWER SEVERITY RATING

29. How would you rate the patient's need for legal services or counseling? _____

CONFIDENCE RATINGS

Is the above information significantly distorted by:

30. Patient's misrepresentation? _____ 0=No 1=Yes

31. Patient's inability to understand? _____ 0=No 1=Yes

COMMENTS

FAMILY HISTORY

Have any of your relatives had what you would call a significant drinking, drug use or psych problem - one that did or should have led to treatment?

	Mother's Side			Father's Side			Siblings				
	Alc	Drug	Psy	Alc	Drug	Psy	Alc	Drug	Psy		
Grandmother	___	___	___	Grandmother	___	___	___	Brother #1	___	___	___
Grandfather	___	___	___	Grandfather	___	___	___	Brother #2	___	___	___
Mother	___	___	___	Father	___	___	___	Sister #1	___	___	___
Aunt	___	___	___	Aunt	___	___	___	Sister #2	___	___	___
Uncle	___	___	___	Uncle	___	___	___				

Direction: Place "0" in relative category where the answer is clearly no for all relatives in the category; "1" where the answer is clearly yes for any relative within the category; "X" where the answer is uncertain or "I don't know" and "N" where there never was a relative from that category. Code most problematic relative in cases of multiple members per category.

FAMILY/SOCIAL RELATIONSHIPS

1. Marital Status _____

- 1=Married 4=Separated
- 2=Remarried 5=Divorced
- 3=Widowed 6=Never Married

2. How long have you been in this marital status? (IF NEVER MARRIED, SINCE AGE 18) _____
Years Months

3. Are you satisfied with this situation? _____

- 0=No 1=Indifferent 2=Yes

4. Have you been homeless at all in the past 30 days? _____ 0=No 1=Yes

4a. Where did you mostly stay during that homeless period? _____

- 1=Shelter 4=In a building
- 2=With friends 5=Outside
- 3=In a car 6=Other _____

5. Usual living arrangements (past 3 years) _____

- 1=With sexual partner and children
- 2=With sexual partner alone
- 3=With children alone
- 4=With parents
- 5=With family
- 6=With friends
- 7=Alone
- 8=Controlled environment (residential setting like a jail or hospital)
- 9=No stable arrangements (include shelter)

6. How long have you lived in these arrangements? (IF WITH PARENTS OR FAMILY, AND ALWAYS HAS BEEN, SINCE AGE 18) _____

 Years Months

7. Are you satisfied with these arrangements (particularly the people you are living with)? _____
 0=No 1=Indifferent 2=Yes

8. Do you live with anyone who has a drug and/or alcohol problem? _____
 0=No 1=Yes

9. With whom do you spend most of your free time? _____
 1=Family
 2=Friends
 3=Alone

10. Are you satisfied with spending your free time this way? _____
 0=No 1=Indifferent 2=Yes

11. How many close friends do you have? _____

Direction for 11a - 20: Place "0" in relative category where the answer is clearly no for all relatives in the category; "1" where the answer is clearly yes for any relative within the category; "X" where the answer is uncertain or "I don't know" and "N" where there never was a relative from that category.

11a. Would you say you have had close, long lasting, personal relationships with any of the following people in your life:

0=No 1=Yes	PAST 30 DAYS	IN YOUR LIFE
a. Mother	_____	_____
b. Father	_____	_____
c. Brothers/Sisters	_____	_____
d. Sexual Partner/Spouse	_____	_____
e. Children	_____	_____
f. Friends	_____	_____

12. How much do you feel cared about, liked or loved by the significant people in your life (such as family members, friends, and so on)?
 _____ 0=Not at all 1= A little 2=Somewhat 3=A lot

13. To what degree do you feel you need more emotional support? _____
 0=Not at all 1= A little 2=Somewhat 3=A lot

Have you had significant periods in which you have experienced serious problems getting along with:

0=No 1=Yes	PAST 30 DAYS	IN YOUR LIFE
14. Mother	_____	_____
15. Father	_____	_____
16. Brothers/Sisters	_____	_____
17. Sexual Partner/Spouse	_____	_____
18. Children	_____	_____
19. Other significant family _____	_____	_____
20. Close friends	_____	_____
21. Neighbors	_____	_____
22. Co-Workers	_____	_____

Did any of these people (14-22) or any others (strangers, acquaintances) abuse you:

0=No 1=Yes	PAST 30 DAYS	IN YOUR LIFE
23. Emotionally (make you feel bad through harsh words, humiliation, manipulation) (DO NOT INCLUDE VERBAL ABUSE BY STRANGERS)	_____	_____
24. Physically (cause or threaten to cause physical harm such as: slapping, punching, kicking, hitting with an object, assaulting with a knife or other weapon, etc.)	_____	_____
25. Sexually (rape, forced sexual advances or non-consensual sexual acts)	_____	_____
26. Sexual Harassment (inappropriate physical contact, stalking, using threats to secure sexual contact, etc.)	_____	_____

27. How many days in the past 30 have you had serious conflicts (problems which threaten your relationship):

- A. with your family? _____
- B. with other people? (excluding family) _____

FOR QUESTIONS 28 - 31 PLEASE ASK PATIENT TO USE PATIENT'S RATING SCALE

How troubled or bothered have you been in the past 30 days by these:

28. Family problems _____

29. Social problems _____

How important to you NOW is treatment or counseling for these:

30. Family problems _____

31. Social problems _____

INTERVIEWER SEVERITY RATING

32. How would you rate the patient's need for family and/or social counseling? _____

CONFIDENCE RATINGS

Is the above information significantly distorted by:

33. Patient's misrepresentation? _____ 0=No 1=Yes

34. Patient's inability to understand? _____ 0=No 1=Yes

COMMENTS

PSYCHIATRIC STATUS

1. How many times have you been treated for any psychological or emotional problems?

a. In a hospital _____

b. As an outpatient or private patient _____

2. Do you receive a pension for a psychiatric disability? _____ 0=No 1=Yes

Have you had a significant period (that was not a direct result of drug/alcohol use), in which you have:

0=No 1=Yes

PAST 30 DAYS

IN YOUR LIFE

3. Experienced serious depression _____

4. Experienced serious anxiety or tension _____

5. Experienced hallucinations _____

6. Experienced trouble understanding, concentrating or remembering _____

7. Experienced trouble controlling violent behavior _____

8. Experienced serious thoughts of suicide _____

9. Attempted suicide _____

10. Been prescribed medication for any psychological/emotional problem _____

11. Experienced anorexia, bulimia, or other eating disorders _____

12. In the past 30 days, to what degree were you bothered by past experiences involving:

0=Not at all 1= A little 2=Somewhat 3=A lot

a. Physical abuse _____

b. Sexual abuse _____

c. Rape _____

d. Sexual harassment _____

13. How many days in the past 30 have you experienced these psychological or emotional problems? _____

FOR QUESTIONS 14 & 15 PLEASE ASK PATIENT TO USE THE PATIENT'S RATING SCALE

14. How much have you been troubled or bothered by these psychological or emotional problems in the past 30 days? _____

15. How important to you NOW is treatment for these psychological problems? _____

THE FOLLOWING ITEMS ARE TO BE COMPLETED BY THE INTERVIEWER

At the time of the interview, is patient:

0=No 1=Yes

16. Obviously depressed/withdrawn _____

17. Obviously hostile _____

18. Obviously anxious/nervous _____

19. Having trouble with reality testing, thought disorders, paranoid thinking _____

20. Having trouble comprehending, concentrating, or remembering _____

21. Having suicidal thoughts _____

INTERVIEWER SEVERITY RATING

22 How would you rate the patient's need for psychiatric/psychological treatment? _____

CONFIDENCE RATINGS

Is the above information significantly distorted by:

23 Patient's misrepresentation? _____ 0=No 1=Yes

24 Patient's inability to understand? _____ 0=No 1=Yes

COMMENTS

TIME ENDED: _____ : _____ I=A.M. 2=P.M. (circle one)

Appendix I

Profile of Mood States (POMS)

NAME _____ DATE _____
 SEX: Male (M) Female (F)


Below is a list of words that describe feelings people have. Please read each one carefully. Then fill in ONE circle under the answer to the right which best describes HOW YOU HAVE BEEN FEELING DURING THE PAST WEEK INCLUDING TODAY.

The numbers refer to these phrases.

- 0 = Not at all
- 1 = A little
- 2 = Moderately
- 3 = Quite a bit
- 4 = Extremely

IDENTIFICATION

0	1	2	3	4	0	1	2	3	4
0	1	2	3	4	0	1	2	3	4
0	1	2	3	4	0	1	2	3	4
0	1	2	3	4	0	1	2	3	4
0	1	2	3	4	0	1	2	3	4
0	1	2	3	4	0	1	2	3	4
0	1	2	3	4	0	1	2	3	4
0	1	2	3	4	0	1	2	3	4
0	1	2	3	4	0	1	2	3	4
0	1	2	3	4	0	1	2	3	4

Col (C) O.P. (O)	21. Hopeless 0 1 2 3 4	45. Desperate 0 1 2 3 4
1. Friendly 0 1 2 3 4	22. Relaxed 0 1 2 3 4	46. Sluggish 0 1 2 3 4
2. Tense 0 1 2 3 4	23. Unworthy 0 1 2 3 4	47. Rebellious 0 1 2 3 4
3. Angry 0 1 2 3 4	24. Spiteful 0 1 2 3 4	48. Helpless 0 1 2 3 4
4. Worn out 0 1 2 3 4	25. Sympathetic 0 1 2 3 4	49. Weary 0 1 2 3 4
5. Unhappy 0 1 2 3 4	26. Uneasy 0 1 2 3 4	50. Bewildered 0 1 2 3 4
6. Clear-headed 0 1 2 3 4	27. Restless 0 1 2 3 4	51. Alert 0 1 2 3 4
7. Lively 0 1 2 3 4	28. Unable to concentrate 0 1 2 3 4	52. Deceived 0 1 2 3 4
8. Confused 0 1 2 3 4	29. Fatigued 0 1 2 3 4	53. Furious 0 1 2 3 4
9. Sorry for things done . 0 1 2 3 4	30. Helpful 0 1 2 3 4	54. Efficient 0 1 2 3 4
10. Shaky 0 1 2 3 4	31. Annoyed 0 1 2 3 4	55. Trusting 0 1 2 3 4
11. Listless 0 1 2 3 4	32. Discouraged 0 1 2 3 4	56. Full of pep 0 1 2 3 4
12. Peeved 0 1 2 3 4	33. Resentful 0 1 2 3 4	57. Bad-tempered 0 1 2 3 4
13. Considerate 0 1 2 3 4	34. Nervous 0 1 2 3 4	58. Worthless 0 1 2 3 4
14. Sad 0 1 2 3 4	35. Lonely 0 1 2 3 4	59. Forgetful 0 1 2 3 4
15. Active 0 1 2 3 4	36. Miserable 0 1 2 3 4	60. Carefree 0 1 2 3 4
16. On edge 0 1 2 3 4	37. Muddled 0 1 2 3 4	61. Terrified 0 1 2 3 4
17. Grouchy 0 1 2 3 4	38. Cheerful 0 1 2 3 4	62. Guilty 0 1 2 3 4
18. Blue 0 1 2 3 4	39. Bitter 0 1 2 3 4	63. Vigorous 0 1 2 3 4
19. Energetic 0 1 2 3 4	40. Exhausted 0 1 2 3 4	64. Uncertain about things . 0 1 2 3 4
20. Panicky 0 1 2 3 4	41. Anxious 0 1 2 3 4	65. Bushed 0 1 2 3 4
	42. Ready to fight 0 1 2 3 4	<p>MAKE SURE YOU HAVE ANSWERED EVERY ITEM.</p> 
	43. Good natured 0 1 2 3 4	
	44. Gloomy 0 1 2 3 4	

POMS COPYRIGHT © 1971 EDITS/Educational and Industrial Testing Service, San Diego, CA 92107. Reproduction of this form by any means strictly prohibited.

THE UNIVERSITY of SAN FRANCISCO
Dissertation Abstract

A COMPARATIVE EVALUATION OF
COGNITIVE-BEHAVIORAL THERAPY AND INSIGHT-ORIENTED
PSYCHOTHERAPY IN THE TREATMENT OF COMORBID
SUBSTANCE ABUSE, ANXIETY, AND DEPRESSION IN SUBSTANCE
ABUSING FEMALES

Substance abuse accounts for over 200,000 deaths annually in American females - - more than four times the number who will die of breast cancer. While female addiction is at epidemic proportions, treatment continues to focus on males and their substance abuse. Furthermore, it is questionable whether treatment designed for male substance use can be generalized to female substance users. This is compounded by the dearth of studies that examine treatment of female substance abuse.

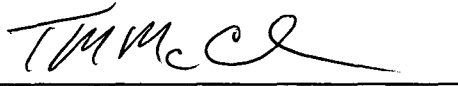
A pretest-posttest comparative experimental design was used to evaluate whether Cognitive Behavioral Therapy or Insight-Oriented Psychotherapy was more efficacious in the treatment of substance abuse in a female population. The final sample for this study

consisted of 17 participants who were randomly assigned to the two treatment conditions via a table of random numbers.

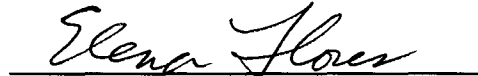
Chi-square analysis indicated that there was no significant difference between the two treatment conditions on any demographic variable. Dependent variables include Drug- and Alcohol-Status, Psychosocial variables, anxiety and depression. Instruments used included the Structured Clinical Interview using the DSM, the Addiction Severity Index, and the Profile Of Mood States. Each group counseling session lasted for 90 minutes and convened weekly for a period of eight weeks.

Statistical analyses included Means, standard deviations, effect size, and MANOVA procedures. The major findings in this study include: neither IOP or CBT was effective in increasing psychosocial functioning of the current sample; CBT was over ten times more effective than IOP in the reduction of alcohol use; CBT was four times more effective than IOP in the reduction of drug use; CBT was two times more effective than IOP in the reduction of anxiety; and, CBT was three times more effective than IOP in the reduction of depression.

The current findings suggest that (1) IOP treatment is not the treatment of choice for females with a history of substance abuse who are in the early stages of recovery; (2) females can respond well to treatment based on a cognitive-behavioral paradigm; (3) treatment approaches designed for male veterans can be applied to a female population within an outpatient community mental health setting.



Terry Michael McClanahan
Author



Elena Flores, Ph.D.
Chairperson,
Dissertation Committee