

**HYPNOSIS AS AN ADJUNCT IN THE TREATMENT OF  
ALCOHOL RELAPSE**

**By**

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Abstract

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Over the years a great deal of correlational research has gone into finding possible causes and maintaining constructs of excessive alcohol use, but very little research has been done to utilize the information in outcome studies. The maintaining constructs identified in the majority of the research are self-efficacy in drinking situations and alcohol related expectations. The purpose of this study was to determine if patients who underwent traditional substance abuse treatment plus three hypnotic protocols would show a significant change in drinking related self-efficacy and a significant change in alcohol expectancies as compared to a control group. The experimental group's hypnosis protocols were aimed at increasing drinking refusal self efficacy (DRSE) and decreasing the number of positive alcohol expectations (AE). The control group in this study only received simple relaxation hypnosis protocols. Another purpose of this study was to determine if the experimental group would exhibit a significantly lower relapse rate as compared to the control group after a 30-day follow-up.

The participants for this project were nine substance abuse patients from the Substance Abuse Clinic (SAC) at a Midwestern Veterans Administration Medical Center (VAMC)

At the first meeting several instruments were administered to gather information about the participants' DRSE and AE. This information was then used to develop individualized hypnotic protocols for each member of the experimental group. The protocols were then used to hypnotically induce imagery rehearsal of refusing alcohol in situations the participants identified as being difficult. The control group participants were read simple relaxation scripts.

Analysis of the data at posttest showed that the hypnosis group drank significantly less alcohol than the control group during the 30-day follow-up period. Further, while comparisons of the experimental group and control group did not show any significant differences with regards to DRSE or AE at posttest, the experimental group did show a significant increase in DRSE and a significant decrease in positive alcohol expectancies from pretest to post test.

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## CHAPTER 1

### Introduction

#### Problem

Alcohol abuse and dependence have long been problems in the United States. In 1995 the National Institute on Alcohol Abuse and Alcoholism released results from the largest national longitudinal survey on epidemiological data for alcohol use and abuse to date (NIAAA.NIH, 1995). The results showed that in 1992 approximately 13,760,000 adults would meet the criteria for alcohol abuse or dependence and that the yearly cost of alcohol abuse and alcoholism in the United States was an estimated 148 billion dollars. Also, as of 1992, the total estimated spending for health care services was 18.8 billion dollars for alcohol problems and medical consequences of alcohol consumption. The specialized services of treatment for alcohol alone cost an estimated \$5.6 Billion (NIDA 1992). To show that changes in the problems related to alcohol were not decreasing, follow-up research reported that in 1998 the total estimated economic costs from alcohol increased 25 percent to 184 billion dollars (NIAAA.NIH, 2000). In 2001 the CDC reported that 75, 766 deaths were directly attributable to alcohol.

One of the possible reasons for the continued physical, emotional, and financial costs of alcoholism may be a lack of consensus as to either the cause or treatment of the disorder. Some current explanations for alcoholism include Tension Reduction Theory, Social learning theory, and Expectancy Theory.

While an overall cause for alcoholism is not yet forthcoming, Earle and Crow (1990) put a common set of denominators forth for all people suffering from addictions:

1. The tendency to hold low opinions of themselves and to remind themselves constantly of personal shortcomings
2. Unrealistic or distorted beliefs about their behavior, events in the external

world, and about themselves.

3. A desire to suppress unpleasant emotions, and a desire to escape.
4. Difficulty coping with stress.
5. At least one powerful memory of an intense “high” experience at a crucial time in their life.
6. An uncanny ability to deny that they have a problem (p. 102).

Regardless of the current beliefs about the causes of alcoholism the fact remains that a large reason for the continued problem is the extremely low success rates of current alcohol treatment and prevention.

Many of the current treatment programs in the United States today focus on psycho-educational treatment with no psychotherapy being given, while others focus on a 12-step approach and may use a minimal amount of psychotherapy. The majority of treatment programs appear to use a combined 12-step and psycho-educational approach and adhere to a disease concept of alcoholism. Once it is established that psychotherapy will be integrated into a treatment program the question of which type of psychotherapy should be utilized and what area of a person’s life the therapy should focus becomes important.

One treatment approach that uses a combination of psychotherapy and psychoeducation is Rational Recovery. This is a treatment based on the Rational Emotive Behavior Therapy approach developed by Albert Ellis (Trimpy, 1989). This approach focuses on encouraging the individual to change his or her self-defeating and irrational thoughts that may be responsible for their choosing to continue drinking, and then to replace those thoughts with more rational thoughts that can enable the person to refuse to drink. While this treatment approach lacks an empirical research base it does have many subjective reports of its success (Trimpy, 1989, Ellis, 1992, and Gelman, D., Leonard A. E. , & Fisher, B. 1991).

Another treatment approach to alcoholism, that some may consider an alternative approach, is Moderation-Oriented Cue Exposure (Heather, N., Brodie, J., Wale S., Wilkinson, G., Luce, A., Webb, E., & McCarthy, 2000). The MOCE is based in behavioral response theory and hypothesizes that there is a level of blood alcohol content (BAC), or a cue, that triggers the alcoholic to lose control over his or her ability to stop drinking. Heather, et al describe MOCE as an extinction procedure with the goal of the patient learning to control their drinking rather than a goal of remaining abstinent. This treatment approach, like Rational Recovery lacks an empirical base describing its efficacy. In fact, the article reviewed only compared the outcome of its subjects to another treatment approach that also lacks any empirically reported efficacy.

Treatment approaches that have been shown to be empirically successful do exist in the literature, but have not been adopted on a large scale. Some of these alternatives have even been shown to have greater success rates than the average treatment facility. For example, in two separate studies patients who were treated with a technique described as “Brainwave Neurofeedback Training” had very good outcome treatment results. The success rates for these two studies were well above the national average with 80 and 97 percent abstinence rates being reported (Peniston and Kulkosky, 1989, Peniston and Saxby, 1995).

Published research that investigates using hypnosis as a treatment for alcoholism has been around since the early 1950’s, but has joined the other non-hypnotic treatment approaches in showing inconsistency for treatment outcomes. The way that hypnosis has been used to treat alcoholism appears to vary as much as all the other non-hypnotic treatment approaches combined. Some researchers used hypnosis to increase ego strength (Stanton, 1987), some to encourage participation in treatment (Beahrs, 1971), while others have used hypnosis to induce an aversive reaction to alcohol (Edwards, 1966). As for the success of the treatment, it appears

more related to design of the study than how the hypnosis is applied. There appears to be a split in the hypnosis treatment literature between case studies, which do report successful outcomes, and experimental designs, which typically show no advantage to using hypnosis over existing treatment approaches. In response to this ambiguity Wadden and Penrod (1981) compiled a literature review of research that used hypnosis as a treatment for alcoholism. At the end of their report they made several suggestions aimed at helping researchers produce more valid and reliable research. The suggestions they made are repeated in the body of the literature review in this dissertation. In spite of better controls being utilized the need for a research study that directly addresses the maintaining factors of alcoholism while utilizing hypnosis has not been produced.

Over the course of the last twenty years there has been much work done in discovering the contributing factors that may perpetuate alcohol abuse. Constructs such as self-efficacy and expectancy are now thought to be the maintaining factors of alcoholic behaviors. Alcohol specific self-efficacy and expectancies have been addressed in treatment approaches that do not utilize hypnosis (Annis & Smith, 1989 & 1991; Marlatt & Gordon, 1980 & 1985), however the majority of the research done up to this point only continues to examine these maintaining factors in correlational studies. The most recent attempt to address the maintaining factors of alcoholism using hypnosis was done by Maurice Smith in 1988 as a dissertation, but his research only addressed alcohol expectancies and not self-efficacy and worked with an inpatient population.

This dissertation research attempted to directly modify the constructs that have been identified as the main contributing factors in the maintenance of alcoholic drinking patterns. This modification was attempted as an adjunct to an already existing treatment program, which

addressed the psycho-educational aspects of alcoholism and provided the participants with a long-term support network. Hypnosis was utilized to help the participants become more focused and open to suggestion in order to help them more easily increase alcohol related self-efficacy and decrease positive alcohol expectations.

### **PURPOSE OF THE STUDY**

The purpose of this study was to determine if patients who received hypnotic protocols aimed at modifying their alcohol expectancies and alcohol related self-efficacy would show a significant increase ( $\alpha < .10$ ) in alcohol related self-efficacy and a significant decrease ( $\alpha < .10$ ) in positive in alcohol expectancies as compared to a control group of individuals who only received the standard treatment administered through the Ann Arbor Veterans Administration.

Another purpose of this study was to determine if participants who received the hypnosis would exhibit a significant decrease ( $\alpha < .10$ ) in the amount of alcohol they consumed weekly.

## HYPOTHESES

- 1). The experimental group in this study would differ significantly in relapse prevention from the control group as measured by a greater number of abstinent participants at the end of the thirty day follow-up period ( $\alpha < .10$ ).
  
- 2.) The experimental group in this study would differ significantly in relapse prevention when compared to the control group as measured by a significantly lower level of alcohol consumption after the 30-day follow-up period as ( $\alpha < .10$ ).
  
- 3). The experimental group in this study would differ significantly in drinking refusal self efficacy when compared to the experimental group, as measured by higher reported scores on the Situational Confidence Questionnaire after the 30-day follow-up period ( $\alpha < .10$ ).
  
- 4). The experimental group would show significantly lower overall reported alcohol expectations when compared to the control group as measured by a smaller number of positive expectancy statements endorsed on the Alcohol Expectancy Questionnaire after the 30-day follow-up period ( $\alpha < .10$ ).

## **OPERATIONAL DEFINITIONS**

### Drinking Refusal Self-Efficacy (DRSE)

The level of self-efficacy an individual feels about refusing alcohol in specific situations as measured by the Situational Confidence Questionnaire.

### Alcohol Expectancies (AE)

The physiological and psychological expectations an individual has about the way they believe alcohol will affect them as measured by the Alcohol Expectancy Questionnaire-90.

#### Positive Alcohol Expectancies (PAE)

When the individual associates a positive outcome from drinking alcohol

#### Negative Alcohol Expectancies (NAE)

When the individual associates a negative outcome from drinking alcohol

### Relapse Prevention (RP)

A form of treatment that takes into consideration the fact that the majority of individuals trying to stop drinking alcohol will return to drinking after a period of abstinence and that this return to drinking is not a failure, but a part of the recovery cycle.

### Alcoholic/Alcoholism

The terms alcoholic and alcoholism are broadly used in our society, but they do not officially relate to a diagnostic category. For the sake of simplicity and continuity in this dissertation the terms alcoholic or alcoholism will occasionally be used to designate individuals diagnosed by DSM-IV criteria for alcohol abuse or alcohol dependence.

## CHAPTER 2

### Literature Review

This literature review includes a broad overview of non-hypnosis related treatment approaches that are relevant to this research. It includes a review of the most recent literature that has examined constructs that are believed to be the contributing factors of alcohol use behaviors. It also includes of the available research that has been published in the area of hypnosis in the treatment of excessive alcohol use.

#### Hypnosis

One treatment method that has reported successful as well as unsuccessful results using both empirical research and case study designs is hypnosis. In some studies hypnosis is used as an adjunct to already existing treatment programs, while in other studies it is the only treatment administered. Hypnosis can be described as a mechanism that leads to an altered state of consciousness in which the individual achieves a high level of cognitive focus and attention. With this increased state of focus and attention comes an increase in the persons openness to suggestions made during the hypnosis. The three most widely known theories of hypnosis are the Neo-dissociation theory put forth by Ernest Hillgard (1992), Ego-Psychological theory by Erika Fromm (1992), and Social Psychological theory as described by Nicholas Spanos and William Coe (1992).

While hypnosis has been proven viable in the treatment of many disorders the research done in the area of alcoholism is limited, therefore a review of old as well as new literature is conducted in this dissertation. Stanley Abrams did the oldest comprehensive review of the literature in the area of hypnosis as a treatment for alcoholism in 1964. In his review Abrams compared the alcohol treatment literature that used a chemically induced aversion to alcohol with

those studies that used a hypnotically induced nausea for aversion. His focus in the literature review was not to report on the efficacy of one approach as compared to the other, but to discuss the advantages and disadvantages of using one or the other, or even both, to help the alcoholic patient quit drinking. The most significant advantage identified in the article was that while both approaches were successful in inducing nausea, the hypnosis had virtually no chance of a toxicity effect, which is especially important when treating older patients. Of course the point was also made that not many individuals are willing to subject themselves to aversion therapy. He made two important concluding statements about the research he examined; 1) that the use of hypnosis in treating alcoholism is “highly equivocal” and 2) there may be a difference in the outcome dependent upon the “particular type of alcoholic” receiving the treatment. While particular types of alcoholics were not defined in the Abrams review, both sentiments have been repeated in subsequent reviews of literature that investigate the efficacy of the use of hypnosis in the treatment of alcoholism.

While the majority of reported research done during the period that Abrams reviewed was focused on aversion therapy, and had few empirical measures, a change was forthcoming. In 1973 Jacobson and Silfverskoid used hypnosis for five, 15-30 minute sessions aimed at inducing indifference to alcohol, increasing relaxation, increasing a sense of well-being caused by sobriety, and encouraging the patients to find help following their first drink. Both the experimental group and the control groups received the traditional treatment prescribed by the treatment facility, but the hypnosis group received a hypnosis intervention in place of the psychotherapy sessions that the control group received. The authors concluded that there was no statistically significant difference in the outcomes between the control group and the group that received hypnosis. Probably the greatest contribution of this research was the use of several

outcome measures as opposed to just subjective reports done previously. For example, they used average number of sick days, and number of alcohol related citations for six months following the treatment, and interviews with family member for corroboration. While the use of several empirical outcome measures was a significant improvement over prior research, there may have been other methodological shortcomings to the research. These shortcomings include; a lack of a reported quantitative measurement of participant suggestibility, a failure to match groups according to severity of alcoholism, the brief time of actual induction utilized, and a failure to take into consideration the effects of the traditionally utilized non-hypnotic treatment regime used by the facility and a lack of reported correlation between the constructs addressed and the amount of alcohol the participants drank.

In 1971 Baehrs and Hill conducted a case study that involved a group intervention that utilized hypnosis to “stimulate a more dynamic group session”. To accomplish this goal Baehrs and Hill reported using hypnosis in three distinct ways. The first use was described as “analytical” and was “directed towards a particular patient to facilitate uncovering a psychic mechanism that the patient was employing (p. 61) . ” The second was self-hypnosis used for relaxation. The third use of hypnosis was reported by the authors to be the most important to the overall success of the intervention. The authors utilized suggestions that were aimed at “reinforcing the patient’s positive productions as occurred spontaneously, for any evidence of healthy, constructive thinking. (pg. 61)”. The treatment in this study consisted of 15 group therapy sessions lasting 1½ hours each. The participants were to have scored a minimum of seven on a “modified 10 point hypnotic susceptibility scale (pg. 60)”. The authors admitted that the biggest drawbacks to their study were what they termed as a “rough eight month follow-up” (pg. 62) and a lack of participants with lower levels of hypnotic susceptibility. Another apparent

methodological shortcoming was the lack of a control group. In spite of these shortcomings the authors concluded the article by claiming an overall success rate of 50% as compared to the normal 10% that was typically seen at the institution.

In response to the variability of results and methodology incorporated in the research utilizing hypnosis in the treatment of alcoholism Waddon and Penrod (1981) compiled a comprehensive review of both case studies and experimental research prior to 1980. They reported that the majority of experimental studies found no significant difference between the experimental groups and control groups (i. e. Jacobson and Silverskoild, 1973, Edwards, 1966), but that the case studies always seemed to report successful outcomes (i.e. Beahrs and Hill). They went on to cite several methodological shortcomings in both the case studies and experimental research, and to give several recommendations for future experimental studies:

1. Patients should be randomly assigned to treatment conditions, with the inclusion of placebo-attention and waiting list control groups to allow for the determination of a treatment's efficacy and therapeutic components.
2. The use of homogeneous samples of drinkers, matched for severity and history of alcoholism (and other relevant subject factors i.e. SES).
3. A minimum of 15 treatment sessions should be employed, with follow-up evaluations extending to at least 6-month post treatment.
4. Hypnotic susceptibility should be assessed prior to treatment, with estimates of hypnotic depth taken during sessions.
5. A variety of outcome measures should be used.
6. Subject characteristics and personality factors should be examined to determine their relationship to treatment outcome (p. 45)

In a follow-up study written by Penrod and Anderton (1982) the viability of the hypothetical constructs associated with hypnosis in the treatment of several disorders, to include addictions, were investigated. The constructs investigated included relaxation, enhancement of

imagery, and augmenting of suggestibility. In this article the authors made the same suggestions from the previous article, but added a similar sentiment to that of Abrams in that “hypnosis might be more effective if it were better tailored to the stages involved in the recovery process from alcoholism”. Penrod and Anderton also added that prior to treatment a “thorough assessment should be made to determine the etiology and maintaining conditions of the disorder in questions (pg. 237.)”. Many researchers have thus tried to identify the maintaining conditions of alcoholism. In order to do this many correlational research studies have been conducted and have identified strong connections between particular hypothetical constructs and the amount of alcohol a person drinks. Research has also found that there is a strong correlation between particular hypothetical constructs and success of alcohol treatment.

#### Relapse Prevention (RP)

In 1985 Alan Marlatt and Judith Gordon described a treatment approach that utilizes a very comprehensive approach to alcoholism that is based in social cognitive psychology known as Relapse Prevention. This approach utilizes the fact that the alcoholic will inevitably return to drinking alcohol during or following their initial treatment. This return to alcohol is termed as relapse. “Traditional alcoholism treatment approaches often conceptualize relapse as an end-state, a negative outcome equivalent to treatment failure (M. E. Larimar, R. Palmer, A. Marlatt, 1999, pg. 151).” However, according to the Marlatt and Gordon model, relapse is a process in and of itself that begins prior to the first post-treatment alcohol use and continues after the initial use (1985). Thus the entire treatment process from the perspective of Marlatt and Gordon should focus on relapse prevention.

Marlatt and Gordon (1985) posit that two specific factors can be identified as being directly responsible for an individual’s alcohol relapse. One factor includes what are defined as

immediate determinants. These immediate determinants include how one responds in high-risk situations, how effective one's coping skills are, what a person's outcome expectancies are for their behaviors, and something known as the abstinence violation effect. The abstinence violation effect is described as the individual's experience of guilt following their perceived failure at treatment. The second factor outlined by Marlatt and Gordon is described as being comprised of more covert antecedents and includes lifestyle imbalances, urges, and cravings.

It is believed that the more covert antecedents are so well ingrained in a person's life style that they are much harder for the active drinker to recognize as contributing factors. Thus in order to help a patient decrease their alcohol intake, or quit all together, the Relapse Prevention modality requires that an assessment of the environmental and emotional characteristics of situations that are potentially associated with relapse must be done prior to beginning treatment. The treatment procedure for the alcoholic client then requires the development of coping strategies for their high-risk situations, enhancing self-efficacy, eliminating myths and placebo effects, lapse management, and cognitive restructuring.

#### Alcohol Expectancies (AE)

Simply put, alcohol expectancies are what people believe they will feel or think after they drink alcohol. The Alcohol Expectancy Questionnaire (AEQ) is the most widely used standardized assessment of alcohol expectancies (1980, Brown, Goldman, Inn & Anderson). Brown, Christiansen, and Goldman discussed the psychometric prosperities of the AEQ in a 1987 article and it will be discussed further in the instrument section of this dissertation.

Of the few research studies that attempt to modify alcohol expectancies all but one utilize college students for their samples. The one that did not utilize college students will be discussed later in this literature review. Jack Darkes and Mark Goldman (1993) recruited a sample of 74

student drinkers and divided them into groups that received their self defined “expectancy challenge”, a traditional college prevention program, and assessment only. The challenge was for sober students to identify which students had been drinking alcohol and which had not been drinking by identifying expected behaviors of the students. The overall goal of the Darkes and Goldman project was to show that modification of alcohol expectations would lead to a decrease in reported alcohol use in the sample he tested. He reported that his treatment did in fact show a significant effect with individuals reporting a decrease in their alcohol intake after a two week period. His participants also showed a change in alcohol expectations as reported on the AEQ and the Expectancy/Context Questionnaire. Limitations to this study include a short follow-up period and the utilization of a college population that did not have to meet diagnostic criteria for alcohol abuse/dependence. In fact, if the researchers believed that the volunteer had a serious problem with alcohol they were referred to a treatment program.

While there have been few research experiments reported that have utilized the modification of alcohol expectancies in the treatment of alcoholism, there has been a great deal of research investigating the connections between alcohol expectancies, the amount of alcohol an individual drinks, and relapse behavior (Oei et al. 1998, Long et al. 1998, Cooper L., Russell M., & George W., 1988, McMahon and Jones, 1996, McMahon and Jones, 1994, McMahon et al., 1994, Goldman et al., 1999). Cooper, Russell, and George conducted research aimed at showing how alcohol abuse can be predicted from a causal chain that includes “alcohol consumption and drinking to cope as proximal determinants, and general coping skills and positive alcohol expectancies as more distal determinants (1988, pg.218).” In this article the authors operationally defined all the constructs involved by citing work by Rohsenow (1983) and Brown, Goldman, Inn, & Anderson (1980) to identify the majority of the expectancies that they believed

were associated with alcoholism. They hypothesized that “expectations and general coping skills would make significant independent contributions in the prediction of drinking to cope (pg 220).” Their research consisted of interviewing 1057 participants and administering a variety of paper and pencil measures aimed at identifying the connections between alcohol expectations and the amount of alcohol consumed. One hundred and nineteen of the subjects in the study met DSM-III criteria for alcohol abuse or dependence while the other 948 had consumed alcohol in the past year, but were not considered to have a problem with alcohol. Using a Hierarchical Multiple Regression model Cooper et. al. reported that “drinking to cope, and expectancies, accounted for approximately 20% of the variance in alcohol abuse” and concluded that their study “provided strong support for their proposed model” (pg. 228). One difficulty with alcohol expectancy research is the fact that the measures used rely on retrospective data collection on previous alcohol use and the participant’s subjective self-report about what effects they expect alcohol to have. One way that researchers have chosen to avoid this difficulty is through interviewing family members of the participants.

While much of the alcohol expectancy research up to 1989 focused on examining the connections between positive alcohol expectancies and drinking, many felt that negative alcohol expectancies should also be examined. In a study done by Jones and McMahon it was hypothesized that negative expectancies about alcohol’s effects are significant in the motivation to recover from alcoholism. The authors proposed that “measures of alcohol abusers negative expectancies upon entering treatment should predict treatment outcome at least as well as positive expectancies” (pg. 544). The subjects used were 56 males whose primary diagnosis was alcohol dependence. The measures used were the Alcohol Expectancies Questionnaire (AEQ) and the Negative Alcohol Expectancies Questionnaire (NAEQ). A relapse criterion of a single

drinking day was established and assessment was made by separate interviews of both the participant and a collateral associate. They found that at “three months higher measures of total negative expectancy were associated with abstinence ...” (pg. 546). They also found that at three months there was some correlation between positive expectancies and abstinence, but it is unclear as to the direction of the relationship given the data reported in the article.

In response to what they believe had been a deficit of the current alcohol expectancy measures Young and Knight (1989) began the development of a new questionnaire that would measure both the positive and negative aspects of alcohol expectancies. They hypothesized that expectations such as those related to the fear of an inability to control ones’ drinking once they started would have an impact on their ability to refuse a drink. The factors derived from research on negative and positive expectancies were assertiveness, affective change, sexual enhancement, social enhancement, relaxation, cognitive impairment, dependence, carelessness, and aggression.

As stated previously little research has been done that actually incorporates expectancies into the treatment of alcohol abuse. In fact Goldman et al. stated, “the body of studies that show a relationship between expectancies and drinking is now so large that some researchers have called for a moratorium on simple correlational research in favor of the investigation of the moderators of the expectancy-drinking relationship” (pg. 238). The moderator hypothesized to be most connected to AE’s is self-efficacy.

#### Drinking Refusal Self-Efficacy

According to self-efficacy theory, an intervention may be effective at inducing a change in behavior by an individual, but it may be ineffective in maintaining the desired behavior (Bandura, 1977, 1982). Accordingly, the process of relapse can be defined as the failure to maintain a desired behavior that has been previously established. With regards to drinking

alcohol a person makes a decision as to whether or not they want to drink in a given situation. It has been hypothesized that individuals who continue to drink in spite of negative effects have low levels of self-efficacy with regards to refusing alcohol in given situations. A person's level of self-efficacy with regards to alcohol has been described as drinking refusal self-efficacy (DRSE).

Several measures of DRSE have been developed in recent years. In a study done by Miller, Ross, Emmerson, and Todd in 1989 the validity of one such measure was researched. The Situational Confidence Questionnaire (described in more detail later) was utilized to identify if there would be differences in scores between individuals the authors identified as long term sober (LTS) and short term sober (STS). The participants were 46 new admits to an alcohol treatment program (STS) and 25 individuals who reported being abstinent for a minimum of 12 months (LTS). "Results indicated significantly higher self-efficacy for LTS subjects than for STS subjects on seven of the eight subscales (pg 219)."

Another study was conducted by Greenfield, Hufford, Vagge, Muenz, Costello, and Weiss in 2000 to "determine the extent to which self-efficacy among alcohol dependent individuals during inpatient treatment is associated with relapse following hospitalization" (p. 346). Greenfield et al. used the Situational Confidence Questionnaire to assess levels of drinking refusal self-efficacy. The subjects for this study were 100 inpatients who met criteria for alcohol dependence. The participants were given the Alcohol Use Inventory and the Situational Confidence Questionnaire immediately following a prescribed detoxification period. The authors described using the overall composite scores and the mean scores derived from all 39 questions on the SCQ rather than comparing specific subscales on the SCQ. Follow-up was assessed by a monthly alcohol breath test, and an interview of both the participants and a

collateral associate was done to assess the amount of alcohol consumed during follow-up period. Interviews were conducted monthly for one year following treatment. They reported that their “data demonstrated a significant relationship between self-efficacy expectations during inpatient alcohol dependence treatment and subsequent likelihood of drinking during the 12 months following” (pg. 350). They found that the lower the reported level of drinking refusal self-efficacy post detoxification the greater the likelihood of relapse. They also found that the lower the level of drinking refusal self-efficacy the sooner the individuals tended to relapse.

Many of the more recent studies have worked to find the relative contributing relationship of both AE's and DRSE. In a study by Oei, Fergusson and Lee (1998) an attempt was made to address issues related to the importance of positive versus negative expectancies and the relative contribution of DRSE. “It was expected that (1) AE's and DRSE would successfully discriminate between social and problems drinkers; (2) Both positive and negative AE's would be related to consumption in social drinkers, as would DRSE and (3) neither AE nor DRSE would account for a significant amount of variance of consumption in problem drinkers as drinking behavior is no longer under the influence of conscious processes.” A number of instruments were used to investigate these hypotheses. The Drinking Expectancy Profile (DEP) parts one and two were used to assess the subjects drinking expectations and their levels of drinking refusal self-efficacy, respectively. The Khavari Alcohol test and the Short-form Alcohol Dependence Data Questionnaire were used to assess levels of alcohol intake and alcohol dependence.

Oei et al. found that, consistent with previous research, problem drinker's self-efficacy drinking expectations were significantly different than those of social drinkers. They also found in their research that expectancies did not “appear to be related to consumption in problem

drinkers, and that a mixture of both positive and negative alcohol expectancies, and self-efficacy expectations, were related to consumption in non-problem drinkers. (pg. 709).” While this is consistent with their proposed model that drinkers move from expectancies influencing their drinking pattern to expectancies no longer influencing them once they are dependent, some issues are raised. First, these results are at odds with much of the research that was done previous to this. Secondly, they do not discuss why or how one would progress from a social drinker to a problem drinker based on their changing awareness of expectations. Thirdly, does the idea that alcohol expectancies no longer consciously influence drinking patterns in alcohol dependent individuals indicate that modifying their expectancies will not significantly change their drinking patterns?

Only two relatively recent studies have been done that attempted to incorporate Wadden and Penrod (1981) and Wadden and Anderton’s (1982) ideas into their research and also utilize the idea of alcohol expectancies and/or the modification of DRSE—both were done as dissertations. The first was done in 1988 by Maurice Smith who used hypnosis in conjunction with two already well-established treatment programs that used psycho-education as their primary treatment modalities. The final sample of this research consisted of 58 inpatient participants ranging in age from 18 and 60. These participants were then randomly assigned to one of three experimental groups; a hypnotic induction/relaxation group, a hypnotic induction/suggestion group, and a wait list group.

Smith’s hypnotic protocol focused on changing the participant’s expectations about the overall effects of alcohol, to include both physiological effects as well as perceived social effects. The alcohol expectations that he worked to change were suspected to be the

“maintaining conditions of the disorder.” His research focused specifically on changing four alcohol expectancies :

- 1) Alcohol enhances sexual experience.
- 2) Alcohol enhances social and physical pleasure.
- 3) Alcohol increases social assertiveness.
- 4) Alcohol reduces tension and increases relaxation.

He hypothesized that by changing these expectations on a hypnotic level the participant’s subjectively felt relapse urge or expressed relapse behavior would also change. Because Smith focused on changing only four expectations his hypnotic protocols consisted of general scripts geared to address only beliefs that he determined were related to the four expectations and were administered to groups of participants ranging from one to six members. One of the outcomes of this study did show that some expectancies were modified by hypnotic intervention and that these changes did decrease the participants relapse urge.

He stated that “AEQ2 (Alcohol enhances sexual experience) and Relapse Urge were somewhat modified at posttest, while AEQ3 (Alcohol enhances social and physical pleasure) and AEQ5 (Alcohol reduces tension and increases relaxation) appeared to be significantly modified at follow-up” (pg 151). Smith’s research did not take into account the moderation effects of Drinking Refusal Self Efficacy (DRSE) in relapse prevention. Also, while Smith’s research was the only one in the literature that focuses directly on modifying an individual’s drinking expectancies, and even reported some success at this, he only performed a 14-day follow-up to assess for behavioral change in the amount of alcohol consumed.

### Structured Relapse Prevention

One treatment approach that has utilized the concept of DRSE and has been shown to be clinically effective is described in two articles by Helen Annis and Christine Davis (1989; 1991). Their model of relapse prevention is “based on self efficacy theory and proposes that when a client enters a high-risk situation for drinking, a process of cognitive appraisal of past experiences is set into motion which culminates in a judgment, or efficacy expectation, on the part of the client of his or her ability to cope with the situation” (pg 204). The core idea of their approach is to identify and rank alcohol related situations that the person will inevitably find himself or herself in. The alcohol situations are ranked by the level of self-efficacy the client feels about given situations. Thus, at one end of the ranking would be the situations the person believes they can always refuse alcohol in while the other end of the ranking would be situations that they believe they can never refuse alcohol in. Once the client identifies these situations the person is assigned homework of entering progressively more risky alcohol situations and then attempting alternative coping responses.

The patient identifies the level of DRSE by filling out two measures. One measure is the Situational Confidence Questionnaire and the other is the Inventory of Drinking Situations (Annis, 1982, Annis et al. 1987). The SCQ was designed to assess drinking related self-efficacy or the clients perceived ability to cope effectively with alcohol” (1989, pg 88). The IDS is based on the work of Alan Marlatt (1980, 1985) and looks at several different drinking situations that have been factored into eight general drinking situations. It was designed to assess a clients high risk situations for drinking relapse (1989, pg 87). In the 1991 review of their treatment approach that they identified as “Structured Relapse Prevention,” Annis and Davis state that in order for the client to be prepared to refuse alcohol in a given situation they must work with the therapist

to identify current strengths and resources already available to them. They should identify what has worked for the person in the past that allowed them to refuse alcohol to include both cognitive coping and behavioral coping. They must also identify environmental supports such as family members who have been there for them in the past and will be there again. Once the client has developed his hierarchy of drinking situations and their strengths and resources are identified, Annis and Davis suggest that the individual rehearse a number of possible alternative ways of coping with the situations they are going to enter. According to Annis and Davis, and consistent with self-efficacy theory, as the individual becomes more successful in given drinking situations they develop more self-efficacy, and thus they enhance the chance that they will refuse a drink that is offered to them in similar situations. Annis and Davis also described five basic homework assignments that will aid in a person's relapse prevention: 1) Monitoring specific situations and cognition's; 2) Anticipating problem situations; 3) Planning and rehearsing alternative responses; 4) Practicing new behaviors in increasingly more difficult situations; 5) Noting improved competency (p. 208).

They reported that their clients typically require only eight treatment sessions. Also in their 1991 review of SRP they reported that SRP is currently utilized in a facility in Toronto, Canada and that "clinical trials evaluating the effectiveness of Structured Relapse Planning (SRP) counseling have supported that in the year following treatment, most clients dramatically reduce their substance use." While they reported that their results are based on strong empirical evidence none was provided in their 1991 article.

Annis and Graham pointed out one important consideration to treatment that utilizes the Inventory of Drinking Situations in a 1995 article. They reported, "a flat or undifferentiated IDS profile presents a challenge in that no specific antecedents have been identified as particularly

problematic” (pg. 180). They further report that more than half of the clients will provide an undifferentiated profile and the counselor will need to discuss the profile with the client to establish if they are trying to present themselves in a very favorable or unfavorable way.

In the most recent study done that utilized the suggestions put forth by Wadden and Penrod, and also utilized a component of DRSE, a hypnotic intervention was again used as an adjunct to an already established treatment regime (Young, 1996). Young randomly assigned her 40 inpatient participants to either a control group, which did not receive any additional treatment to the existing treatment program, or the experimental group. The participants in the experimental group were treated in groups of four with a total of 20 hypnotic sessions over 12 weeks. The exact modality of the treatment facilities intervention which all participants of the research received was not discussed in this dissertation. The researcher attempted to meet many objectives by using hypnosis, she wanted

- 1). To deepen the level at which learning occurs, by reducing internal resistance to assimilation of the treatment program.
- 2). To reduce anxiety and tension by eliciting the relaxation response.
- 3). To develop the subject’s ability to experience internal tranquility without the use of alcohol.
- 4). To increase cognitive clarity, which is more achievable when internal turmoil is calmed.
- 5). To assist patients in tolerating and managing full contact with the painful experiences and feelings which they may have used alcohol to avoid.
- 6). To sensitize patients to their addictive voices while simultaneously increasing the ability to tolerate their presence without feeling overwhelmed.
- 7). To assist pt’s in gaining access to the part of themselves that is an unwavering advocate of their welfare, and is the reason they chose treatment. To encourage them to visualize that part becoming larger and larger in their day to day experiences at the same time that their self-destructive part becomes smaller and weaker.
- 8). To access memories of experiences of strength and successful change in the past and

positive feelings associated with those experiences.

9). To promote imagery that supports a growing capacity to hold and tolerate addictive messages, impulses, and feelings, without reflexively acting on them.

10). To enhance efficacy expectations with respect to the patient's ability to anticipate and cope with situations by internal rehearsal.

11). To bring into existence generalizable feelings of increasing mastery as the patient learns to reduce upheaval in his or her internal environment.

12). To help pt's gradually develop or reestablish the ability to enjoy themselves and to identify unique things that bring them pleasure (p. 45).

Through meeting the above reported goals Young hypothesized that the experimental group would exhibit lower subjective distress as reported on the Symptom Checklist-90 and the Situational Confidence Questionnaire, as well as report higher abstinence rates after 90 days as reported on a retrospective drinking questionnaire. She also hypothesized that the level of the participant's hypnotizability would work as a moderator in the amount of success the patients exhibited. Young employed general hypnotic protocols aimed at ego enhancement, relaxation, and change.

While Young did not find any significant difference between the experimental group and the control group she reported that, "it should be noted that the abstinence rate for the entire sample was a phenomenal 85%, which is far beyond the success rates generally seen in the (alcohol treatment) field."

In one case study hypnosis was used to increase self-efficacy in the face of triggers that normally induced the client to drink or to use other drugs (Orman, 1991). Orman's overall approach to the client included what he termed as cognitive restructuring via hypnosis and age regression. The patient was alcohol and drug free at the six-month and twelve-month follow-ups.

A question may then be asked, “can a person increase their DRSE without actually entering into a drinking situation.” One author who has reported great success by using hypnosis to enhance the ego, increase self-efficacy, and self-esteem to treat alcoholism is H. E. Stanton (1987). In this article Stanton describes three specific case studies in which he used techniques that he derived from his approach to help people quit smoking (Stanton, 1978). Stanton’s approach, as he describes it, focused on “morale building and helping patients to feel as though they have the resources to tackle their problem successfully” (pg. 45). He further believes that “if the therapist uses a technique in which he or she believes, and they are able to convince the patient that it will help him or her solve a particular problem, then the therapeutic outcome is likely to be successful” (pg. 45). He goes on to say that “it is also likely that such success may be achieved in a relatively short time” (pg. 45).

Overall it appears that Stanton approached three constructs to help his clients overcome their alcohol addictions; 1) He used hypnosis to help the person learn to relax; 2) He helped the client improve self-esteem through the use of hypnosis; and 3) He helped the clients through Ego-enhancement. While the general idea behind each treatment was the same, Stanton claims to have individualized each person’s treatment based on their specific triggers to drinking alcohol. Using this technique between the years of 1980-1982 Stanton claims to have helped 21 patients out of 37 to overcome their alcoholic behaviors. The reported time away from alcohol was 2 to 4 years. Another important key to Stanton’s treatments is that they were done in a relatively short number of sessions (2-4). Some shortcomings are evident in Stanton’s methodology with regards to replication. He did not specifically identify the constructs he worked with and seemed to tailor each treatment to each patient making it difficult to standardize his treatment approach. Further, while measures of self-efficacy are now available, ego-

enhancement may be difficult to quantify and standardize for a quantitative experimental research design.

While using hypnosis to enhance a person's self-efficacy in the treatment of alcoholism through hypnosis is novel, it has been used to increase self-efficacy in treatment of other disorders (Ikezuki, & Harano, 1987, Stafrace 1994). In 1987 Makoto Ikezuki and Kotaro Harano found that while they were unable to directly influence self-efficacy through post hypnotic suggestions they were able to change behaviors that then influenced changes in self-efficacy. Simon Starfrace (1994) reported on a case study in which he used a combination of hypnosis and "rational therapy" to increase an individual's self-efficacy in the treatment of panic disorder with agoraphobia. Also, In addition to Stanton's reported success with alcohol dependent patients he claimed a 45% success rate using a one session method in the treatment of smokers.

Imagery techniques have been used with drug and alcohol users to help them visualize "self-control" and avoid drug use in behavior therapies for quite some time. Imagery can also be a useful technique for focusing patients on drug related beliefs and "automatic thoughts" (Beck, Wright, Newman, Liese, 1993 pg. 144 - 146 ). In this book Beck and others describe using imagery in much the same way this proposal describes using hypnosis. They state that imagery can "serve as a method for changing drug-related beliefs and thoughts." They go on to state examples of using imagery to "say no to others who offer drugs; to imagine positive, enjoyable activities as alternatives to drug use; and imagine a healthy, productive life as a result of freedom from drugs." Relaxation is also discussed in this book as a possible state of mind that will help individuals stay off of drugs and/or alcohol (pg 151 & 152). The major differences between relaxation and what this research proposes is that hypnosis allows the individual to be more susceptible to suggestions and have a higher level of focus and imaginative involvement.

As for further support of relaxation in the treatment of alcoholism, Childress, McLellan, Natale, and O'Brian (1987) hypothesize that mood states, alone or in conjunction with other drug-related stimuli, could be important triggers for drug craving, conditioned withdrawal and potential drug use. They used "focused relaxation through guided self-hypnosis" with a cognitive-behavioral psychotherapy. They found that the use of a positive mood state, euphoria, actually tended to reduce the baseline withdrawal and craving in opiate abusers when measured using the within-session subjective report. This measure assesses both the intensity and type of subjective high, craving, and withdrawal using a scale ranging from 1 to 10. Also, as previously mentioned in several of the articles reviewed in this proposal, issues relating to self-efficacy and ego-enhancement were important ideas relating to well-being and successful outcomes.

The goal of this current research was to utilize hypnotic suggestions to counter positive alcohol expectancies, and to increase individual DRSE. The literature review portion of this dissertation suggests that while previous hypnotic interventions have exhibited equivocal results, the majority did not directly address constructs that have been shown to have high correlations with maintaining drinking behaviors.

Also while other studies have investigated either AE's or Self-efficacy it may be that they are so closely connected that one cannot be affected without somehow changing the other. While the exact interactions between DRSE, AE's, and the amount of alcohol consumption is still under investigation, there does appear to be some connection. In as far as this dissertation goes, the connection between DRSE and AE's is hypothesized to follow logically. That is, as one begins to realize that their expectations about alcohol intake are irrational they may refuse to drink more often thus increasing self-efficacy thus reinforcing their ability to refuse alcohol. Since previously cited research has shown that both are individually connected to alcohol abuse

it would be imperative to facilitate change in both in order to see a possible increase in length of sobriety.

Some other differences between this research and previous studies include a one-month follow-up and the type of protocol used. While the majority of other research has utilized metaphorical protocols, this dissertation used direct suggestions that were based in cognitive behavioral therapy. A hypnotic state was induced to help the person more fully engage their imaginative process. This was done so that participant would, depending on their level of hypnotizability, be able experience the suggestions as close to a real experience as possible without actually having to enter into situations where they reported feeling low levels of drinking self-efficacy. The hypnotic state would also allow the person to be more susceptible to suggestions aimed at helping them to learn to recognize the more realistic outcomes of their drinking rather than the unrealistic expectations that they have.

## CHAPTER 3

### Methodology

#### Participants

A total of 19 outpatient participants were recruited for this research over a 15-month period. Of the 19 participants nine subjects completed the entire protocol. Two subjects were not accepted into the program after the first session because they did not meet the cut off of 2.5 on the Stanford Hypnotic Clinical Scale. One was not accepted because he did not meet criteria for a DSM-IV diagnosis of alcohol abuse or alcohol dependence. One participant withdrew because he no longer wanted help modifying his drinking behaviors. One withdrew because he moved too far to commute. One withdrew because he said he was not comfortable with the procedure. Two reportedly withdrew because they did not feel they had the time to commit to the research. I was unable to contact one of the subjects.

All the participants were recruited from the Outpatient Substance Abuse Clinic (SAC) at a Midwest Veterans Administration Medical Center (VAMC). The participants were recruited to volunteer for the research with the use of announcements in the existing relapse prevention groups, announcements in staff meetings, and through counselor recommendations. All but one of the remaining nine participants had participated in at least two previous treatment programs. The participants ranged in age from 30 – 65, met DSM-IV criteria for alcohol dependence as reported by their primary care physician and results on the Addiction Severity Index (ASI). None of the participants suffered from psychopathological contraindications to hypnosis or hypnotherapy.

Thus, as reported by their primary care physician, and their results on the Addiction Severity Index, the participants did not experience or have prior known histories of psychotic or

dissociative disorders, or organic brain disorders. Two of the participants were diagnosed with bipolar disorder, three were diagnosed with a major depressive disorder, and two were diagnosed with generalized anxiety disorder. Two of the 9 participants did not have any psychological disorders in addition to alcohol dependence. In order to be considered for inclusion into this study each participant had to obtain a score of at least 2.5 on the Stanford Hypnotic Clinical Scale (SHCS). This helped to ensure that all the participants had at least a moderate level of hypnotizability. All the participants were able to identify situations that they would feel low levels of self-efficacy in as reported on the situational confidence questionnaire. Eight of the nine participants reported having used various amounts of illicit drugs in their pasts, but reported their preferred drug of choice to be alcohol. None of the participants admitted to having used intravenous illicit drugs in the year previous to participating in this research. Only one of the nine participants denied ever using illicit drugs. The participants in this study had been sober for approximately three to seven weeks prior to volunteering, with the greatest length of abstinence being 45 days. As incentive for participating in this study all the participants accepted VA coupons they could redeem through either the stores or restaurants that are in all veteran hospital facilities. They all received \$5.00 for completing the first meeting, another \$5.00 for completing the third session, and \$10.00 for completing the 5<sup>th</sup> and final session. The participants that withdrew from the research were only compensated for the time they participated.

### Researcher

The primary researcher for this project holds a Masters Degree from Washington State University and is a Ph.D. candidate in counseling psychology at Washington State University. He has completed all of the required coursework for his degree as well as his pre-doctoral internship, and has completed over 60 hours of course work and workshops on the history and

use of hypnosis. He has conducted over 100 hypnotic inductions and is clinically supervised by Marianne Barabasz and Arreed Barabasz who, together, have published more than 150 articles and books with hypnosis as a focus.

### Instruments

**Addiction Severity Index (ASI), T.A. McLellan, L. Luborsky, J. Cocciola, J. Griffith, P.**

**McGahan, and C. P. O'Brien (1985) :** “The ASI is a structured 45-minute, clinical research interview designed to assess problem severity in seven areas commonly affected in alcohol and/or drug abusers: medical condition, employment, drug use, alcohol use, illegal activity, family relations, and psychiatric condition. In each of the problem areas, objective questions are asked that measure the number, extent, and duration of problem symptoms in the patients lifetime and in the past 30 days (pg. 1).” Two types of measures result from the information gathered: interviewer severity ratings (a 10 point scale) and composite scores, which can be used to measure patient improvement from the time of admission. Results of concurrent reliability studies indicated that trained technicians estimate the severity of patients’ treatment problems with an average concordance of .89. Results of concurrent validity studies showed significance for all scales at .05 and some scales at .01. The ASI developers have also reported moderate levels of discriminate validity as compared to several other independent measures of problem areas matching the ASI’s subscales. Both the ASI severity ratings and the ASI composite ratings were tested for discriminate validity. The scores on the ASI were used to help quantify the severity of the participants psychopathology. It was also used to report general demographics of the participants such as employment history, family history, and number of previous treatment attempts.

**Situational Confidence Questionnaire (SCQ-39):** The SCQ is a self-report questionnaire designed to assess Bandura's concept of self-efficacy in relation to a client's perceived ability to cope effectively with alcohol situations. As reported earlier in this dissertation, previous research has shown that the strength of an individual's efficacy expectations will determine the persistence of coping behaviors in the face of situations that are high risk for the resumption of drinking. Thus, where the individual experiences less self-efficacy they drink, and where they experience more self-efficacy they abstain from alcohol. The drinking situations assessed by the questionnaire are based on the work of Marlatt and his associates (1980, 1985) in which high-risk drinking situations were found to fall into two major classes: (1) Personal States, in which drinking involves a response to an event that is primarily psychological or physical in nature; and (2) situations involving other people, in which significant influence of another person is involved. Personal states are subdivided into five categories: Unpleasant emotions, physical discomfort, pleasant emotions, testing personal control, and urges and temptations. Situations involving other people are subdivided into three categories: Conflict with others, social pressure to drink, and pleasant times with others. The results of the questionnaire are expressed in a percentage format representing the individual's perceived ability to refuse alcohol in specific situations with 10% increments. These percentages can be arranged to establish a perceived hierarchy of self-control in certain drinking situations from being able to resist drinking 0% of the time to being able to resist drinking 100% of the time. The lower the percentage on a given factor the less efficacious that individual feels in situations related to that factor.

With regard to reliability, Annis and Graham (1988) reported that the SCQ item-total score correlations within each of the eight subscales were moderate to substantial, ranging from

.59 to .91. The internal consistency reliability (alpha) of each subscale was reported to be .81 to .97. The reliability of the overall mean score of the 39 items was .98.

Solomon and Annis used a group of 100 male alcoholics to examine the construct validity of the situational confidence questionnaire. They assessed the level of correlation between the SCQ-39, the Outcome Expectancy Scale, the Drinking Locus of Control Scale (DRIE), the Beck Depression Inventory (BDI), and the Hopelessness Scale. The outcome expectancy scale is an outcome measure designed to assess an individual's positive and negative expectations about their own sobriety. They found a significant but small correlation with both the positive and negative outcome expectancy scores on the OES ( $r = .24$  and  $.21$ ). The relatively low scores suggest that expectations about sobriety and alcohol related self-efficacy are independent which Solomon and Annis reported to be consistent with Bandura's contention that self-efficacy and outcome expectancies are relatively independent. They found a "moderate negative correlation between the SCQ and the drinking locus of control scale ( $r = -.45$ ). This suggests that individuals who report low levels of confidence in their ability to resist the urge to drink heavily tend to attribute the reasons for their drinking to external rather than internal causes. Solomon and Annis reported that this is consistent with the contention that treatment induced gains in self-efficacy involve the attribution of behavior change to an increase in personal control rather than to external forces such as luck or other people.

Research by Miller, Ross, Emmerson and Todd Showed that the SCQ-39 also has discriminate validity (1987). They showed that the SCQ could successfully discriminate between a group of 46 participants who were early in their recovery and 25 participants who had been abstinent for at least one year. Individuals who had been sober for at least one year exhibited higher scores on the SCQ than those who had only been sober for less than one year.

**Weekly Alcohol Log:** Patients were asked to fill out a log that measured their daily alcohol intake. If no alcohol was consumed they simply wrote “no alcohol” next to the area that asks them to identify what and how much they drank. The alcohol intake log is measured in ounces. It was explained to the participant that one shot of liquor is equal to one ounce, and that one beer is either 8, 12, or 40 ounces. Because the majority of the patients seen at this clinic consume a large amount of alcohol, the patients were also able to report drinking in larger quantities such as cases of beer, full and half bottles of wine, and half-pint or pint bottles of liquor.

**Alcohol Use Inventory:** (Horn, Wanaberg, and Foster, 1986)—This questionnaire consists of 228 questions that assess an individual’s level of alcohol intake, perceived benefits from drinking alcohol and perceived negative consequences from drinking alcohol. The 228 questions on the AUI are scored and grouped into 16 primary factors, 4 second order factors, and 1 broad principal component. For the purpose of this study only the factors relating to the negative consequences of alcohol consumption were used. The factors used were post-drinking worry, fear and guilt, loss of behavior control when drinking, social-role maladaptation, psycho-perceptual withdrawal, psychophysical withdrawal, nonalcoholic drug use, drinking provokes marital problems. Each scale consists of its own independent set of items. That is to say that once an item is used on one scale it is not used on any of the other scales.

**The Stanford Hypnotic Clinical Scale (SHCS):** The Stanford Hypnotic Clinical Scale takes approximately 25 minutes to administer. It consists of a hypnotic induction followed by five items used to assess an individual’s hypnotizability, which were modified from the original scales and include moving hands, age regression, a dream with hypnosis, a post-hypnotic suggestion, and posthypnotic amnesia. Concurrent validity for the SHCS was developed by comparing total scores on a group of 111 college students on the SHCS with total scores on the

Stanford Hypnotic Susceptibility Scale, Form C. This correlation was .72. The Correlation for the four items that are similar to both measures was .81. All the students were given the Harvard Group scale of Hypnotic Susceptibility, Form A to establish the range of hypnotizability for the group.

**Alcohol Expectancy Questionnaire (AEQ):** The AEQ was developed by Brown, Goldman, Inn, and Anderson (1980). The Alcohol Expectancy Questionnaire consists of 90 true/false items that assess an individual's expectations about what they believe alcohol will do for them. Several of the 90 items have been factored into 6 general expectancy subscales. The subscales for the AEQ are Global positive change, sexual enhancement, physical and social pleasure, increased social assertiveness, relaxation and tension reduction, arousal and aggression. The development of the AEQ was based on a study that included 410 individuals who were participating in alcohol rehab and 440 individuals not involved in alcohol rehabilitation. Internal consistency for the AEQ ranged from .72 to .92 with a mean coefficient of .84. Test-retest reliability is .62.

**Interview:** To help more precisely identify the level of confidence individuals feel in situations that are specific to them, and to help build a collaborative relationship so that the participants feel as though they are taking a part in their recovery, questions were asked of the participants in the experimental group that were based on their responses to the SCQ-39 and the AEQ-90. These questions were meant to further identify a hierarchy of drinking refusal self-efficacy for given situations as well as for clarifying ambiguous situations. In many cases, responses to the questions were very vague and did not provide any further useful data. In some cases the responses to the questions were compared to responses on the questionnaires to look at the

consistency of responses between what the participants reported on the AEQ-90 and SCQ-39 and what they reported to the interviewer. The questions asked were:

- 1.) On the questionnaire you indicated that when "things are not going well at work" it is difficult for you to refuse alcohol. Can you give me some examples that are specific to you? I asked the same question for various factors on the SCQ when more clarification and/or information was needed.
- 2.) On the questionnaire you indicated that when you are "experiencing pleasant emotions" it is easier for you to refuse alcohol, can you give me some example of times where you refused alcohol that someone offered to you?
- 3.) Can you tell me what you think about when you are able to refuse drinking alcohol?

## Design

The experimental design for this research is a two-group pretest posttest design. Both groups were administered assessment measures during one pretest and one posttest session. The experimental group received three hypnosis protocols tailored to help them increase their drinking refusal self efficacy and decrease positive alcohol expectancies, while the control group received the same hypnotic induction but only simple relaxation protocols with no mention of alcohol, self-efficacy, or expectancies. The following is a summary of the research protocol.

### Session 1; The Pre-test Session: (In order of administration)

Informed Consent Form

The Stanford Hypnotic Clinical Scale

The Alcohol Expectancy Questionnaire-90 (AEQ-90)

The Situational Confidence Questionnaire-39 (SCQ-39)

Selected questions from the Alcohol Use Inventory (AUI)

Interview

There were three separate informed consent forms developed for this research. A general consent form described basic features of the research and was given to the participant before the assessment. If the participant qualified for the study they were then given another consent form that was specific to the group they were assigned to. The experimental group and control group consent forms were specific only to what the participant would experience in that group. This was done in order to help control for expectancy effects, much like a placebo does in pharmaceutical research.

Sessions 2 - 4:

The data from both the SCQ-39 and the interview were used to list a hierarchy of drinking situations that were used to aid in the development of each participant's hypnotic script. Once the hierarchy was developed hypnosis protocols were developed that addressed the specific situations identified. Each of the nine participants endorsed items in such a way that allowed for a clear cut hierarchy of their least efficacious to most efficacious drinking situations. These situations were addressed systematically over the three hypnosis sessions. That is, the most efficacious situation was addressed first, then the next least most efficacious situation and so on until the final treatment session, which addressed the situation(s) the participant felt the least amount of self-efficacy in. In order to keep from covering too many situations in each protocol no more than three situations were identified for each protocol. Since the Situational Confidence Questionnaire uses percentages for its measure the first session generally addressed situations that the participants believed they could refuse alcohol in 50 to 70 percent of the time.

The second protocol generally addressed situations that the participant identified as being able to refuse alcohol in 30 to 49 percent of the time, and the final protocols included situations the participants identified as only being able to refuse alcohol in 29 percent of the time or less. In two instances where there were more than three situational areas identified within a percentage range one was moved to the next session. While one of the goals of the treatment was to stick within the guidelines of self-efficacy theory and only initially introduce subjects to situations they believed they could refuse alcohol in and then gradually introduce them into more difficult situations, it was not always possible. In one case a participant indicated a large number of areas of very low self-efficacy. Therefore the areas were addressed in order of least likely to be encountered in to most likely to be encountered in.

The protocols for the experimental group all had an initial induction and deepening technique. The induction was drawn from the Stanford Hypnotic Clinical Scale while the deepening technique was drawn from the *Handbook of Hypnotic Induction* written by George Gafner and Sonja Benson. Following the induction and deepening the situations were described for the participants. In order to help make the situation identified by the participants feel more real they were instructed to experience sights, sounds, and smells that they might typically find in the identified situations.

Participant's responses to the Alcohol Expectancy Questionnaire, the Alcohol Use Inventory, and the interview were used to address the thoughts the person may have been having about the effects of drinking alcohol. The irrational expectations were identified by looking at the positive expectancies endorsed on the AEQ as compared to the negative effects of alcohol reported in the AUI and the interview. The experimental groups irrational expectations were then replaced with more realistic outcomes of what drinking alcohol really did, or would do, to them. For example, alcohol would deteriorate their health, make them feel worse when the alcohol runs out, anger and disappoint friends and family, and spend all their money.

The expectancies were intended to operate as moderators for the participant's behaviors in the visualizations. For example, one participant was told that as he or she approaches a particular drinking situation they may begin to expect that the alcohol will make them more sociable, while in fact the truth that they knew to be true is that they will only embarrass themselves and have to deal with negative consequences when the alcohol runs out. Another example was that a participant reported the expectation that alcohol would help him sleep better when in fact the person knows that the sleep they get after drinking is not a healthy restful sleep and in fact the effects of the alcohol force the person to wake up much earlier than they would if

they went to sleep without the alcohol. The series of three protocols for one of the participants can be found in the appendix.

#### Sessions 5

This session was used for re-administration of the SCQ-39, the AEQ, and the collection of the weekly assessment of alcohol intake.

## Procedures

The data collection for this research took approximately 15 months. The subjects for this research were recruited with the aid of the physicians, nurses, and social workers at a Midwest Veterans Medical Center. Flyers were placed at the reception desk of the Substance Abuse Clinic (SAC) and an announcement about the research was made during weekly SAC team meetings. When a participant was identified his or her chart was investigated and the referring care providers were consulted with regards to current diagnosis, exclusion factors such as organic brain damage or delusions, diagnostic status, and recent drinking history.

The patient was then contacted and a brief description of the research was given. After the brief description was given the participant was offered an appointment for the initial assessment meeting. The ASI was administered to each participant during their initial intake into the VAMC treatment program and the other instruments were administered during the first session of the research. The participants were assigned to either the experimental group or the control group following the initial assessment by the toss of a coin.

It was decided that if the coin toss came up heads the first participant would be assigned to the experimental group and if it came up tails the first participant would be assigned to the control group. In this research the first participant was assigned to the experimental group. Participants were then alternately assigned to groups depending their SCQ profile. There were only three instances where the participant's profiles were relatively undifferentiated. In order to help control for flat or undifferentiated profiles participants were alternately assigned to either the control group or experimental group independent of the well differentiated profiles. That is, the first of three participants with an undifferentiated profile was assigned to the control group the next to the experimental group. This was done regardless of whether or not a participant had

just been assigned to one of those groups. While this procedure had the probability of making one group larger than the other it was believed that trying to control for undifferentiated profiles at pretest was more important.

The subsequent four meetings were scheduled at the initial assessment meeting and were scheduled to take place within a two-week period. A final contact was made 30 days following the last hypnotic session. One of the participants in the experimental group was incarcerated 26 days following his final hypnosis session so that the follow-up meeting took place in the prison. Each participant contact lasted from 35 to 90 minutes. The initial meeting that involved administration of the instruments typically took the longer period of time, while the treatment sessions and follow-up sessions only lasted between 30 and 45 minutes. The participant's alcohol logs were not collected until the final meeting.

## CHAPTER IV

### Results

#### Analysis

Because the data collected did not meet the assumptions for multivariate analysis of variance, independent t-tests were conducted to analyze the data from the Situational Confidence Questionnaire (SCQ-39) and the Alcohol Expectancy Questionnaire (AEQ-90) at posttest. The t-test analysis was conducted on grand mean scores for each measure for each group as well as sub-scale scores from each measure.

The data collected comparing the number of participants that drank alcohol with those that did not drink during the research was analyzed utilizing a two-way 2 X 2 contingency table chi-square test.

While many statistical research designs typically utilize an alpha level of .05 or .01 it has been argued that setting such stringent levels can obscure findings that would otherwise provide useful clinical information (Barabasz and Barabasz, 1992). The rationale being that the numbers of subjects required to find significance at alpha levels of .05 or .01 may not be as readily available for clinically oriented research as they are for other types of research. With this in mind an alpha level of .10 was set for the analysis of all data related to the hypotheses developed for this research.

All data analysis was conducted with SPSS 11.5.

#### Demographic data

19 participants volunteered for this study, only nine completed the entire protocol. Of the nine remaining participants 7 were male and 2 were female. They ranged in age from 30 to 65 years of age. One of the participants was Lebanese, one was Hispanic and the other seven were

Caucasian. Participants were alternately assigned to either the control group or experimental group following a coin toss at the beginning of the study. All but one of the participants had been through at least two prior treatment programs. Seven of the nine participants were self described as homeless and were housed at the local YMCA. All but one of the participants in each of the groups was diagnosed with a psychological disorder in addition to alcohol dependence. In the experimental group two participants were diagnosed with major depression, one was diagnosed with bipolar disorder, and one was diagnosed with both panic disorder and generalized anxiety disorder. In the control group two members had a diagnosis of major depression and one had a diagnosis of bipolar disorder. All the participants with additional diagnoses were taking medications prescribed for their disorders.

The participants had been sober for three to six weeks prior to volunteering for this study. The other participants reported that they would drink whenever they had money and continue to drink until there was no more alcohol available.

#### Hypothesis I

To test the first hypothesis that there would be more abstinent participants in the experimental group than the control group at posttest a 2X2 two-way cross tabulation table was developed to utilize a chi-square analysis (Table 1).

Table 1

Cross tabulation table for experimental group vs. control group members that drank at post test

	<u>Drink</u>		<u>Totals</u>
	<u>No Alcohol</u>	<u>Alcohol</u>	
Control Group	2	2	4
Experimental Group	5	0	5
Totals	7	2	9

The resulting chi square analysis showed that a significantly greater number of participants in the control group drank as compared to the experimental group,

$$\chi^2 (1, N = 9) = 3.21, p = .073.$$

### Hypothesis II

Hypothesis two stated that the experimental group in this study would differ significantly in relapse prevention as indicated by a decrease in alcohol consumption as compared to the control group when measured at the end of a 30 day follow-up period.

Initially it was believed that all the participants in this research would be recruited at initial intake to the treatment facility and directly after drinking episodes. Because participants reported that they had been sober for anywhere from three to six weeks prior to volunteering for this study and the majority was unable to provide quantifiable data about how much they would drink on average no statistical analysis was conducted on this hypothesis.

### Hypothesis III

In order to test the hypothesis that self reported Drinking Refusal Self Efficacy (DRSE) was greater for the experimental group than for the control group at posttest a grand mean was derived from all responses on the Situational Confidence Questionnaire for each participant. The scores were then compared between groups at posttest. Independent t-tests were also run on each subscale of the SCQ-39 to determine if the experimental group reported greater DRSE than the control group for specific areas. It was discovered that there were no statistically significant differences between group grand mean scores and only one subscale showed a significant difference at posttest (Table 2).

Table 2

Comparisons of experimental group and control group means on the SCQ-39 at posttest

<u>SCQ-39 Subscales</u>	<u>t</u>	<u>Sig. (one tailed) *</u>	<u>Mean Difference</u>	<u>Std. Error Difference</u>
1 (unpleasant emotions)	-.394	.353	-4.44	11.27
2 (Physical Discomfort)	.864	.208	6.75	7.81
3 (Social Problems at work)	.088	.467	.67	7.60
4 (Social Tension)	.171	.435	1.20	7.01
5 (Pleasant Emotions)	-.188	.429	-1.00	5.33
6 (Positive Social Situations)	-1.83	.430	2.06	11.24
7 (Urges and Temptations)	.684	.258	8.00	11.70
8 (Testing Personal Control)	.418	.344	6.75	16.13
Grand Means Score results	.503	.315	3.95	7.86

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\* 7 degrees of freedom for all scores

Hypothesis IV

The fourth hypothesis stated that the experimental group would endorse a smaller number of positive alcohol expectations on the Alcohol Expectancy Questionnaire (AEQ-90) than the control group at posttest. Statements on the AEQ-90 are endorsed as either true or false. The total numbers of positive endorsements from the AEQ-90 were compared at posttest between the experimental and control group for grand mean comparisons. The AEQ-90 also has six subscales which are drawn from the first 90 items. Independent t-tests were also run on each of the subscales by counting the number of statements endorsed as positive. Findings did not show any

significant difference between the experimental group and the control group grand means at post test. Findings also did not show any significant differences between subscale means at post test.

Table 3

Comparisons of experimental group and control group means on the AEQ-90 at posttest

<u>AEQ-90 Subscales</u>	<u>t</u>	<u>Sig. (one tailed) *</u>	<u>Mean Difference</u>	<u>Std. Error Difference</u>
1 (Global Positive Change)	.566	.295	2.90	5.12
2 (Sexual Enhancement)	-.530	.306	-.85	1.60
3 (Physical and Social Pleasure)	-.198	.424	-.40	2.02
4 (Increased Social Assertiveness)	.491	.319	1.20	2.44
5 (Relaxation and Tension Reduction)	.541	.303	1.10	2.03
6 (Arousal and Aggression)	.770	.233	.75	.97
Grand means comparison all 90 items	.830	.217	13.75	16.57

\* 7 degrees of freedom for all scores

The results from the posttest analysis did not show significant differences between the experimental group and the control group on either the SCQ-39 or the AEQ-90. However while conducting an independent t-test on the pretest data it was discovered that there was a significant difference between the control group and the experimental group on the SCQ-39,  $t(7) = 2.79, p = .014$ .

Because it was believed that the significant difference between the control group and the experimental group on the SCQ-39 at pretest had potential to mask treatment effects at posttest further analyses were conducted. The data in question did not meet the assumptions for utilizing

an ANCOVA thus paired t-tests were used. Paired t-tests for within groups from pretest to posttest were conducted on the results from the Situational Confidence Questionnaire for both the experimental and control groups.

Results of the data analysis showed that the experimental group grand mean score of situational confidence increased significantly from pretest to posttest with a p value less than .01.

The control group also showed significance at a p value of .10.

Table 4

Pretest to posttest comparisons of grand mean for experimental and control groups on the SCQ-39

	Mean	Std. Deviation	t	Sig. (1-tailed)
Control Group	-13.43	14.15	-1.89*	.08
Experimental Group	-40.27	16.72	-5.38**	.003

\* 3 degrees of freedom for the control group

\*\* 4 degrees of freedom for the experimental group

Further examination of the data revealed that all of the subscale scores for the experimental group showed a significant increase in situational confidence from pretest to posttest, only two of the subscale scores for the control group showed any significant increase, Tables 5 and 6.

Table 5

Pretest to posttest comparisons of Subscale means for the experimental group's SCQ-39 scores

<u>SCQ-39 Subscales</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>t</u>	<u>Sig. (1-tailed)*</u>
1 (unpleasant emotions)	-43.00	18.41	-5.22	.003
2 (Physical Discomfort)	-33.00	18.91	-3.90	.009
3 (Social Problems at work)	-40.00	26.24	-3.41	.014
4 (Social Tension)	-43.20	16.10	-6.00	.002
5 (Pleasant Emotions)	-22.67	30.03	-1.69	.084
6 (Positive Social Situations)	-46.40	22.04	-4.71	.005
7 (Urges and Temptations)	-45.00	19.69	-5.11	.004
8 (Testing Personal Control)	-49.00	14.75	-7.43	.001

\* 4 degrees of freedom for all cases

Table 6

Pretest to posttest comparisons of Subscale means for control group SCQ-39

SCQ-39 Subscales	<u>Mean</u>	<u>Std. Deviation</u>	<u>t</u>	<u>Sig. (1-tailed)*</u>
1 (unpleasant emotions)	-15.00	24.24	-1.24	.152
2 (Physical Discomfort)	-12.50	11.90	-2.10	.064
3 (Social Problems at work)	-11.58	17.46	-1.33	.139
4 (Social Tension)	-12.25	20.69	-1.18	.161
5 (Pleasant Emotions)	-16.64	15.86	-2.10	.064
6 (Positive Social Situations)	-13.08	27.20	-.96	.204
7 (Urges and Temptations)	-8.75	16.52	-1.06	.184
8 (Testing Personal Control)	-1.25	30.92	-.08	.471

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\* 3 degrees of freedom for all cases

While the data for the AEQ-90 did not reveal a statistical difference at either pretest or posttest between groups, additional analysis was conducted from pretest to posttest within groups. It was found that the pretest to posttest grand mean score for the experimental group was significant,  $t(4) = 2.22$ ,  $p = .045$ , but the data for the control group from pretest to post test was not,  $t(3) = -1.35$ ,  $p = .135$ . While the pretest to posttest data for the AEQ-90 grand mean was significant for the experimental group none of the individual subscale scores were significant from pretest to posttest.

## CHAPTER V

### Summary

This research attempted to help fill a gap in the alcohol expectancy and drinking refusal self-efficacy research data. There is a great deal of correlational data showing a significant relationship between participants reported levels of drinking refusal self efficacy, the number of positive alcohol expectations, and the amount of alcohol the participants report drinking. This correlational research suggests that individuals who report a lower number of positive alcohol expectations relative to individuals who report a higher number of positive alcohol expectations will drink less alcohol. The correlational data also suggests that individuals who report greater self-efficacy in drinking situations will drink less alcohol. However, there are a very limited number of studies that attempt to change those same variables with alcoholic patients. This current study recruited outpatient alcoholic participants from a Midwestern veteran's hospital and attempted to help them modify their drinking refusal self-efficacy and their positive alcohol expectations.

The modification of the participants AE and DRSE was attempted through the use of three hypnosis protocols that were individually tailored to their reported expectations and situations. The protocols were tailored by drawing from responses to the AEQ-90 and the SCQ-39. The induction from the Stanford Hypnotic Clinical Scale was used at the beginning of each protocol for the induction.

In summary, analysis of the data at posttest showed that the hypnosis group drank significantly less alcohol than the control group during the 30-day follow-up period. Further, while overall comparisons of the experimental group and control group did not show any significant differences with regards to DRSE or AE at posttest, the experimental group did show

significant increases in DRSE and a decrease in positive AE's from pretest to post test on the grand mean of the SCQ-39 and all the subscales. The control group only showed a significant difference on the grand mean of the SCQ-39 from pretest to posttest and on only two of the subscales on the SCQ-39. Additionally, the mean increase in situational confidence for the experimental group from pretest to posttest was approximately 40 percentage points compared to 13 percentage points for the control group. The control group did not show any significant decrease in positive alcohol expectancies on the AEQ-90

### Discussion

It's interesting to note that much of the correlational research to date, and discussed in this dissertation, has established a strong statistical relationship between a persons perceived level of self efficacy in drinking situations, the number of positive alcohol expectations they report, and how much a person drinks. Typically, the greater the drinking refusal self-efficacy and the lower the relative number of positive alcohol expectations reported the less alcohol a person reportedly drinks (see literature review for references).

However, all the participants in this research reported high self-efficacy at posttest and there was no significant difference between the control group and experimental group with regards to the number of positive alcohol expectations they endorsed at pretest or posttest. In spite of the high DRSE within both groups and the lack of differences between groups AE at posttest the control group had two of the four members relapse and the experimental group had no member report a relapse. Thus much of the data for the control group's results appears to represent a lack of correspondence with the current literature in this field.

The first and most obvious rationale to explain the lack of correspondence between this study's control group data on the SCQ-39 and the body of previous work done would be the

small sample size recruited. The small sample size may not have allowed enough representation from the population to show a significant difference between the experimental group and the control group at posttest. Another possible explanation for the discrepancy between groups at posttest would be experimenter error or bias. Because the chief researcher is also the author of the research unintentional verbal or nonverbal communication may have been relayed to the experimental and control group participants affecting their self report.

In addition to the data not being in correspondence with the common literature for reported DRSE and alcoholic relapse, the participants reported alcohol expectancies were not statistically different between groups at posttest. This also suggests that neither group should have drunk more alcohol than the other. The more common potential confounds discussed earlier may have effected those results just as they may have effected the results for the SCQ-39. In addition, other factors may have played a role. It was hypothesized by Oei, Ferguson and Lee in their 1998 study that alcohol expectancies for chronic alcoholics move out of conscious awareness making it difficult to assess on paper and pencil tests. While this type of hypothesis would go a long way towards helping explain the lack of differences between the groups it is a difficult proposition to prove.

Another possible reason for the discrepancy between the results of the AEQ-90 in this research and the majority of correlational data to date may be that the instrument used to assess the expectancies is not sensitive enough. A small number of researchers have argued that only assessing for differences in the numbers of positive alcohol expectancies reported is not viable enough for prediction of relapse (McMahon, Jones, and O'Donnell, 1994, Young and Knight, 1989). Perhaps if the participants were able to consider both positive and negative expectancies greater differences would have been found.

Whatever the reason for the discrepancies, there was an effect on the relapse rate between groups at posttest thus further analysis was conducted. This further analysis found that there was a statistically significant difference between the pretest scores on the SCQ-39 but not on the AEQ-90. Because it was felt that this difference might have masked treatment effects additional analyses was conducted. A significant increase in DRSE from pretest to posttest was found for the experimental group and the control group, while a significant decrease in positive alcohol expectancies was found for the experimental group only.

One reason for the significant increase from pretest to posttest in the experimental group's DRSE may have been treatment effect. This is reasonable to consider when looking at the relapse differences between the two groups in conjunction with the increase in reported DRSE in the experimental group and the amount of research that supports greater self-efficacy and lower drinking rates. It may also be reasonable to consider the treatment was effective when considering the subjective reports of the two groups. Some members in the control group spoke about how relaxing they found the treatments to be while some members in the experimental group spoke specifically about how they thought the treatment was helping them to consider negative consequences of drinking more frequently.

With regards to the increase in DRSE it is important to note that one would naturally expect the participants self-efficacy to increase just as a matter of increased sobriety over time. That is, as each participant was able to refuse the temptation to drink over time one would expect their self-efficacy would increase because they were able to do what they set out to do, that is, stay away from alcohol. This type of rational would help to explain the modest increase in DRSE within the control group and would leave the significantly greater increase in the

experimental group to a combination of the patient's experiences outside of the treatment and their experiences during the treatment.

However, as mentioned earlier, just reporting high DRSE did not suggest abstinence during the follow-up period. In fact, looking at the data within the control group the two individuals who drank reported that highest levels of self-efficacy at pretest and the lowest increase in DRSE from pretest to posttest. Thus while reported greater levels of self-efficacy may initially suggest how little alcohol a person drinks it may be the increase in self-efficacy over time that suggests abstinence over time. Two questions then are raised from this information, one is why would the two individual's who drank alcohol still report even a modest increase in DRSE at posttest and how would an individual's DRSE ceiling be assessed? The idea of a DRSE ceiling effect will be discussed first.

This concept of an individual ceiling effect may have relevance to an alternative explanation for the differences between both groups on the SCQ-90 from pretest to posttest. The mean level of DRSE reported for the experimental group at pretest was about 45 while the mean level of DRSE for the control group at pretest was about 76. Scores on the DRSE range from 1 – 100 with the higher number representing more DRSE. Considering that both groups were comprised of individuals with admitted drinking problems it may be that the ceiling for them would only be in the high 80's or low 90's, which was the case at posttest for both groups. It may have been that if the mean scores were reversed there would not have been any significant increase in either group from pretest to posttest. That is if the experimental groups pretest mean score had been 76 then they may not have increased any higher than the control group. However, just because the control group mean was significantly higher at pretest does not indicate that the individuals did reach their DRSE ceiling. It's also important to point out that

the two members of the control group that did not drink showed a slightly greater increase in DRSE than the two that did drink.

Further, the absence of any relapse in the experimental group may also be related to the groups reported lower DRSE at pretest. That is, if you ascribe to the idea that individuals who enter treatment are more successful when they are more willing to admit to their triggers and that low-self efficacy drinking situations are triggers then it follows that they would drink less alcohol. It may be that when the alcoholic participant admits to and is well aware of their low-self efficacy situations they make a point of avoiding them so they will not be tempted to drink.

In a research study published in 2003 by Robert Fiorentine and Maureen Hillhouse, after this dissertation was already proposed, the role of drinking and drug use related to self-efficacy was called into question. The authors operationally defined self-efficacy in drinking situations as either high or low “control use self-efficacy” (Pg 148). Fiorentine and Hillhouse administered measures to 360 participants at pre-test and 8 months later at posttest to measure their participant’s reported control use self-efficacy and abstinence acceptance. They reported finding that “a decrease in control use self-efficacy over time predicted higher levels of abstinence acceptance, and that high and increasing levels of abstinence acceptance predicted alcohol and drug abstinence” (pg. 346). At the conclusion of the article the authors go on to describe an alternate view to the current broadly accepted relapse prevention theory. They even go on to suggest that high drinking related self-efficacy reported by alcohol dependent patients may be more of a symptom of alcohol dependence than a sign of potential abstinence (pg. 347). One idea that Fiorentine and Hillhouse brought to their research that others had not was the idea of abstinence acceptance and its relationship to situational drinking self-efficacy. This concept may be an important part of all future research involving drinking related self-efficacy and may have

even played a part in the results from this research. While one of the goals of this treatment was total abstinence the participants were never directly questioned about whether or not that was also their goal. However it was made clear to the participants that total abstinence was required in order for them to participate in the veterans medical center program.

Given that it's been shown that when hypnosis is used adjunctively with cognitive oriented treatments the improvement is typically 70% greater than those not using hypnosis, the resulting sobriety in the experimental group is not entirely unfounded (Kirsch, Montgomery, & Saperstien, 1995). But, given the small sample size there could be some other reasons why two individuals drank in the control group and no one drank in the experimental group. However, because of the small sample size with this study the significant difference shown for the amount of alcohol drank between groups may still be called into question.

First and foremost though would again be the idea that the treatment was successful. That is, the participants DRSE increased over time because of the hypnosis protocols thus allowing the participants to more readily refuse the idea of drinking alcohol or becoming involved in drinking situations. However, there may have been other qualitative factors that played a part as well.

For example, for one of the individuals that drank during the follow-up this was their first treatment program. This participant was the only one of the 9 that did not have a previous treatment history. This participant was also the only one who, in addition to participating in the existing treatment program, reportedly did not attend alcoholics anonymous. Further, this individual was one of only two participants who did not stay in the community living center provided by veterans assistance so that the participant did not have the same social support network as the majority of the other members. However, it is important to note that the one other

participant that did not stay in the community living area was a member of the experimental group and did not drink. As for the other participant in the control group that drank, his demographic information did not differ a great deal from the other members in the study.

#### Limitations of the study

In the end the biggest limitation to this research project was the small sample size. The small sample size does not lend to generalizability and leaves many questions about the actual treatment efficacy. Also, the fact that all the participants were volunteers could have an effect because the types of people that volunteer for studies may have different results from those that don't, further making generalizability limited. Also limiting generalizability is the fact that all the participants were veterans and most were dually diagnosed and homeless, which may not be the case for the majority of individuals with alcoholism.

Follow-up time is another limitation of this study. In order to assess for lasting effects on modification of such deeply ingrained constructs as self-efficacy and expectations, follow-ups of up to 6 months would be very beneficial. Each of the participants that stayed sober showed greater increases in self-efficacy when compared to the two that relapsed, with the greatest increases coming from the experimental group.

#### Recommendations for Future Research

As stated earlier in this dissertation more outcome research is needed on moderating the effects of alcohol expectancies and drinking refusal self-efficacy in outpatient alcohol dependent patients. This dissertation may be seen as a pilot study with some promising data. Attempting a multi-site study with a larger number of participants, research assistants that are not directly affected by the outcome of the study to administer the treatment, and adding at least a six-month follow-up would contribute a great deal to the correlational data that is already established. It

would also increase generalizability if participants with more varying degrees of hypnotizability were included in future research.

Another area that may need more investigation is the apparent discrepancy between self-efficacy theory and the recovering alcoholics reporting of self-efficacy in specific drinking situations. From the results of this research and other research cited, high reported self-efficacy in drinking situations does not necessarily always correlate with a relative decrease in alcohol intake. It may be more helpful to focus on the actual reported increases in self-efficacy than just the reported high or low self-efficacy at pretest or posttest and to assess the participant's level of commitment to abstinence. It may also be helpful to utilize a more qualitative approach to this type of research in order to more fully understand the mechanisms involved.

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APPENDIX A  
WSU HUMAN SUBJECTS AUTHORIZATION



APPENDIX B  
VAMC HUMAN SUBJECTS CONSENT FORMS

## GENERAL INTRODUCTION FORM

### **Purpose:**

The purpose of this study is to find out if using hypnosis can help individuals stay away from alcohol.

### **Description:**

If you agree to participate in this study you will be asked to attend a total of 5 interview and treatment sessions. Approximately 20 subjects will be recruited in this study of the effects of hypnosis on relapse to alcohol use. In the first session of this study you will be assessed for your level of hypnotizability through the use of a scale that was developed at Stanford University. You will also have the opportunity to express any concerns you have about being hypnotized and to ask any questions about the entire process during the first session. Also in the first session you will be asked to fill out questionnaires in order to find out what you think about alcohol and what experiences you've had related to alcohol. The first session will take approximately two hours. After you fill out the questionnaires you will be informed about whether or not you are eligible for this study. If you are accepted for this study you will be randomly assigned to one of two groups. That means you will have a 50% chance of being in one of the two groups.

Hypnosis is widely used in the treatment of many physical and psychological problems. When someone is hypnotized in this study they may be more focused on what the therapist says to them and more able to think about what the effects of alcohol are. Being more focused and open to suggestions made by the therapist can help you to use your imagination more and to feel more relaxed.

After the first session those accepted into the treatment research will have three sessions where they will be hypnotized for approximately 45-50 minutes (the total meeting time is about 60 minutes for each of the three sessions). These hypnosis experiences will be very similar to closing your eyes and using your imagination. However, for some people the experiences may feel very real. Depending on which group you are placed into the focus of your hypnosis will be different. After the third meeting you will be asked to keep track of your weekly alcohol intake by filling out a simple alcohol use log. This can also work to help you keep track of your recovery. You will be required to have the logs initialed by a friend or family member and bring them with you to the fifth meeting. You will be asked to sign a release of information form so that I can inform them in general of what your role in the research will be. You will then be asked for contact information for the person you identify so that I can contact them and ask them if they are willing to verify your alcohol intake and to explain what's expected. You will also be asked to sign a release form so that I can access your medical records during this research.

During the fifth session (thirty days after the third hypnosis meeting) we will again ask you to fill out some questionnaires. Because you will not be hypnotized in this session, it will only take approximately one hour to complete.

**Risks:**

The risks of participating in this research are low. Hypnosis can sometimes cause people to feel anxious because they are not used to feeling the sense of relaxation hypnosis typically creates. Also, because you may be asked to think about specific alcohol related situations you may find yourself thinking about drinking alcohol during the treatment.

**Benefits:**

From participating in this research there is the possible benefit of avoiding drinking. The benefits of participating in the research also include being able to experience a hypnotic state and learning more about your drinking patterns. The majority of people who undergo sessions that include hypnosis feel a great sense of relaxation following the session. This research can also be very beneficial to the treatment of alcohol relapse in general and will contribute significantly to research that has already been conducted with alcohol use.

**Alternate Courses of Action:**

The alternative course is not to participate in the study. You will be able at any time during this research to withdraw from the study without penalty. However, you will only be compensated for sessions that you complete. Whether or not you participate in this study will have no effect on your participation in the Ann Arbor VA Substance Abuse Treatment Program.

**Statement of Research Results:**

The research results will be published in dissertation abstracts and possibly in scientific journals. The identity of the subjects will be kept strictly confidential and all participant information will be kept in a locked file cabinet. At the end of this study any information linking you to participation in the study will be deleted from the data. Any reports generated from this research will not contain information that directly identifies the participants.

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**Special Circumstances:**

None

**Compensation:**

Should you choose to participate in this study you will be compensated with coupons from the Ann Arbor VA Canteen. You will receive a \$5.00 coupon for the first and third sessions and a \$10.00 coupon for the fifth session. The coupons will be given at the end of the first, third, and fifth sessions.

Should you choose to withdraw from this research at any time there will be no penalty, and you will receive compensation up to the point you withdraw.

**RESEARCH SUBJECTS RIGHTS**

\_\_\_\_\_ has explained the study and answered all questions. The risks or discomforts and possible benefits of the study have been described. Other choices of available treatment have been explained.

Participation in this study is entirely voluntary. You may refuse to participate. Refusal to participate will involve no penalty or loss of rights to which individuals are entitled. Subjects may withdraw from this study at any time without penalty or loss of VA or other benefits. Subjects will receive a signed copy of this consent form.

The results of this study may be published, but records will not be revealed unless required by law.

In case there are medical problems related to this study Dr. \_\_\_\_\_ can be paged at \_\_\_\_\_ during the day as well as after hours. If any medical problems occur in connection with this study, the VA will provide emergency care.

Please direct questions about the consent process and the rights of research subjects to the Institutional Review Board Coordinator, Douglas Feldman.

I understand my rights as a research subject, and I voluntarily consent to participate in this study. I will receive a signed copy of this consent form.

X \_\_\_\_\_  
Subject's signature

X \_\_\_\_\_  
Date

X \_\_\_\_\_  
Signature of Subjects Representative  
(required if subject not competent)

X \_\_\_\_\_ X \_\_\_\_\_  
Representative (Print) Date

X \_\_\_\_\_  
Signature of Witness  
(independent witness must observe)

X \_\_\_\_\_ X \_\_\_\_\_  
Witness (print) Date

X \_\_\_\_\_  
Signature of person obtaining consent  
(study personal must be approved by the VA IRB)

X \_\_\_\_\_ X \_\_\_\_\_  
(print name) Date

## **EXPERIMENTAL GROUP CONSENT FORM**

### **Purpose:**

The purpose of this study is to find out if using hypnosis can help individuals stay away from alcohol. The way this study will attempt to help you to refuse alcohol is by looking at the way you think about alcohol and then help you to learn to refuse to drink alcohol in situations that you normally would want to drink in.

### **Description:**

Now that you have completed the first session, you will be asked to participate in three sessions where you will be hypnotized and one session for follow-up questions. During the sessions you will be hypnotized for about 45-50 minutes. The total time you will spend in each session will be about 60 minutes. In this group the focus of the hypnosis will be to help you experience situations that you have had trouble refusing alcohol in. These experiences will be very similar to closing your eyes and using your imagination. However, for some people these experiences may feel very real. While you are hypnotized you will be asked to consider what you think about alcohol and to practice refusing alcohol in the given situations. You will be asked to think about what the good things about drinking alcohol are and what the bad things about drinking alcohol are. You will then be asked to focus more on what the bad effects of alcohol are in your life in order to help you refuse the alcohol.

After the third meeting I will ask you keep track of your weekly alcohol intake by filling out a simple alcohol use log for four weeks. This can also work to help you keep track of your drinking. You will be required to have the logs initialed by a friend or family member and bring them with you to the fifth meeting. You will be asked for contact information for the person you identify so that I can contact them and explain what's expected. You will then be asked to sign a release of information form so that I can inform them in general of what your role in the research will be.

Also during the fifth session we will again ask you to fill out some more questionnaires. Because you will not have to be hypnotized in the fifth session it will only take approximately one hour to complete everything.

### **Risks:**

The risks of participating in this research are low. Hypnosis can sometimes cause people to feel anxious because they are not used to feeling the sense of relaxation hypnosis typically creates. Also, because you may be asked to think about specific alcohol related situations you may find yourself thinking about drinking alcohol during the treatment.

### **Benefits:**

From participating in this research there is the possible benefit of avoiding drinking. The benefits of participating in the research also include being able to experience a hypnotic state and learning more about your drinking patterns. The majority of people who undergo sessions that include hypnosis feel a great sense of relaxation following the session. This research can also be

very beneficial to the treatment of alcohol relapse in general and will contribute significantly to research that has already been conducted with alcohol use.

**Alternate Courses of Action:**

The alternative course is not to participate in the study. You will be able at any time during this research to withdraw from the study without penalty. However, you will only be compensated for sessions that you complete. Whether or not you participate in this study will have no effect on your participation in the Ann Arbor VA Substance Abuse Treatment Program.

**Statement of Research Results:**

The research results will be published in dissertation abstracts and possibly in scientific journals. The identity of the subjects will be kept strictly confidential and all participant information will be kept in a locked file cabinet. At the end of this study any information linking you to participation in the study will be deleted from the data. Any reports generated from this research will not contain information that directly identifies the participants.

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**Special Circumstances:**

None

**Compensation:**

Should you choose to participate in this study you will be compensated with coupons from the Ann Arbor VA Canteen. You will receive a \$5.00 coupon for the first and third sessions and a \$10.00 coupon for the fifth session. The coupons will be given at the end of the first, third, and fifth sessions.

Should you choose to withdraw from this research at any time there will be no penalty, and you will receive compensation up to the point you withdraw.

**RESEARCH SUBJECTS RIGHTS**

\_\_\_\_\_ has explained the study and answered all questions. The risks or discomforts and possible benefits of the study have been described. Other choices of available treatment have been explained.

Participation in this study is entirely voluntary. You may refuse to participate. Refusal to participate will involve no penalty or loss of rights to which individuals are entitled. Subjects may withdraw from this study at any time without penalty or loss of VA or other benefits. Subjects will receive a signed copy of this consent form.

The results of this study may be published, but records will not be revealed unless required by law.

In case there are medical problems related to this study Dr. \_\_\_\_\_ can be paged at \_\_\_\_\_ during the day as well as after hours. If any medical problems occur in connection with this study, the VA will provide emergency care.

Please direct questions about the consent process and the rights of research subjects to the Institutional Review Board Coordinator, Douglas Feldman.

I understand my rights as a research subject, and I voluntarily consent to participate in this study. I will receive a signed copy of this consent form.

X \_\_\_\_\_  
Subject's signature

X \_\_\_\_\_  
Date

X \_\_\_\_\_  
Signature of Subjects Representative  
(required if subject not competent)

X \_\_\_\_\_ X \_\_\_\_\_  
Representative (Print) Date

X \_\_\_\_\_  
Signature of Witness  
(independent witness must observe)

X \_\_\_\_\_ X \_\_\_\_\_  
Witness (print) Date

X \_\_\_\_\_  
Signature of person obtaining consent  
(study personal must be approved by the VA IRB)

X \_\_\_\_\_ X \_\_\_\_\_  
(print name) Date

## **RELAXATION CONTROL GROUP**

### **Purpose:**

The purpose of this study is to find out if using hypnosis can help individuals stay away from alcohol.

### **Description:**

Now that you have completed the first session, you will be asked to participate in three sessions where you will be hypnotized and one session for follow-up questions. The hypnosis experiences you will undergo in the first three meetings will be very similar to closing your eyes and simply using your imagination. During these hypnosis sessions you will be asked to imagine yourself in various settings that are relaxing to you. This hypnosis will last for approximately 45 minutes. The total amount of time you will spend in each session is 50-60 minutes.

After the third meeting I will ask you to keep track of your weekly alcohol intake by filling out a simple alcohol use log for four weeks. This can also work to help you keep track of your recovery. You will be required to have the logs initialed by a friend or family member and to bring them with you to the fifth meeting. You will be asked to sign a release of information form so that I can inform your friend or significant other in general of what your role in the research will be and so that I can explain what is expected of them. You will also be asked to sign a release of information form so that I can access your medical records during the research.

Also during the fifth session we will again ask you to fill out some more questionnaires. Because you will not be hypnotized in the fifth session it will only take approximately one hour to complete everything.

### **Risks:**

The risks of participating in this research are low. Hypnosis can sometimes cause people to feel anxious because they are not used to feeling the sense of relaxation hypnosis typically creates. Also, because you may be asked to think about specific alcohol related situations you may find yourself thinking about drinking alcohol during the treatment.

### **Benefits:**

From participating in this research there is the possible benefit of avoiding drinking. The benefits of participating in the research also include being able to experience a hypnotic state and learning more about your drinking patterns. The majority of people who undergo sessions that include hypnosis feel a great sense of relaxation following the session. This research can also be very beneficial to the treatment of alcohol relapse in general and will contribute significantly to research that has already been conducted with alcohol use.

### **Alternate Courses of Action:**

The alternative course is not to participate in the study. You will be able at any time during this research to withdraw from the study without penalty. However, you will only be compensated for sessions that you complete. Whether or not you participate in this research will have no effect on your participation in the Ann Arbor VA Substance Abuse Treatment Program.

**Statement of Research Results:**

The research results will be published in dissertation abstracts and possibly in scientific journals. The identity of the subjects will be kept strictly confidential and all participant information will be kept in a locked file cabinet. At the end of this study any information linking you to participation in the study will be deleted from the data. Any reports generated from this research will not contain information that directly identifies the participants.

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**Special Circumstances:**

None

**Compensation:**

Should you choose to participate in this study you will be compensated with coupons from the Ann Arbor VA Canteen. You will receive a \$5.00 coupon for the first and third sessions and a \$10.00 coupon for the fifth session. The coupons will be given at the end of the first, third, and fifth sessions.

Should you choose to withdraw from this research at any time there will be no penalty, and you will receive compensation up to the point you withdraw.

**RESEARCH SUBJECTS RIGHTS**

\_\_\_\_\_ has explained the study and answered all questions. The risks or discomforts and possible benefits of the study have been described. Other choices of available treatment have been explained.

Participation in this study is entirely voluntary. You may refuse to participate. Refusal to participate will involve no penalty or loss of rights to which individuals are entitled. Subjects may withdraw from this study at any time without penalty or loss of VA or other benefits. Subjects will receive a signed copy of this consent form.

The results of this study may be published, but records will not be revealed unless required by law.

In case there are medical problems related to this study Dr. \_\_\_\_\_ can be paged at \_\_\_\_\_ during the day as well as after hours. If any medical problems occur in connection with this study, the VA will provide emergency care.

Please direct questions about the consent process and the rights of research subjects to the Institutional Review Board Coordinator, Douglas Feldman.

I understand my rights as a research subject, and I voluntarily consent to participate in this study. I will receive a signed copy of this consent form.

X \_\_\_\_\_  
Subject's signature

X \_\_\_\_\_  
Date

X \_\_\_\_\_  
Signature of Subjects Representative  
(required if subject not competent)

X \_\_\_\_\_ X \_\_\_\_\_  
Representative (Print) Date

X \_\_\_\_\_  
Signature of Witness  
(independent witness must observe)

X \_\_\_\_\_ X \_\_\_\_\_  
Witness (print) Date

X \_\_\_\_\_  
Signature of person obtaining consent  
(study personal must be approved by the VA IRB)

X \_\_\_\_\_ X \_\_\_\_\_  
(print name) Date

APPENDIX C  
EXAMPLE OF EXPERIMENTAL GROUP HYPNOSIS  
PROTOCOL

SESSION ONE SCRIPT

“Now that you are in a deep state of hypnosis I will be saying things to you that you will find very interesting and very helpful to your continued sobriety. You will experience things that may seem very real to you... you will achieve things that you have always wanted to achieve. Your conscious mind and your unconscious mind will both be working to help you realize and achieve something that you’ve known for so long now.... That you want to stay sober...to stay away from alcohol... and that you can stop drinking alcohol whenever you desire. You can refuse to drink alcohol because you know that it is bad for your life and for your health, that alcohol may have made you feel good at one time in your life, but that now you only feel worse when you drink and after you drink. Because of what you have learned from what you’ve experienced after drinking and from what you have learned in treatment settings you also now know that drinking alcohol is a choice, a choice that is based on what you think alcohol can do for you. But you know that it does nothing for you, but it does something to you. Alcohol does things to you that are bad for you.

While you remain comfortably relaxed and deeply hypnotized Let’s take a few minutes to experience a possible time in your life when alcohol can be tempting ... Let’s take a few minutes to think about what you may think alcohol can do for you ...and then we will take a few minutes to think about what alcohol will really do to you.

Now I want you to see yourself at a place that you spend much of your time... Maybe it's the VA or Maybe it's home, I don't know where it is, but you do...I want you to see yourself there, to feel as though you are there. I want you to think about what it smells like there.... what the air there feels like on you skin. . . I want you to think about the people that are around you.... When you feel as though you are someplace else I want you to raise your right index finger slightly...Good. Where are you now?...Good. Who is with you there? What are you wearing? Good. Now that your at ( ) I want you to think about having accomplished something... It may be that you've completed a job at work or something at home. It may be that you've helped somebody out and you feel particularly good about it...You may think about something that you've done recently at the place your at now or even something in the past, I don't know what it is, but I want you to feel the way you may feel after you have completed something you wanted to complete. Think about the good feelings you have because you are thinking about the work you put into this something. As you imagine what you have accomplished you may also begin to think about alcohol. You may begin to think about how having a drink could make you think you will feel even better than you do now, You may begin to think that drinking will make it easier for you to concentrate on feeling good and that it will allow you to escape and to feel even better than you do now...on some level you believe that alcohol can make you feel stronger...But your conscious mind and unconscious mind know that these thoughts you are having about alcohol are false. Your conscious and unconscious mind know that the only reason you feel good right now is because you accomplished something without alcohol and that alcohol will only make you feel worse in the long run and will take away the sense of accomplishment you are now enjoying. While you are remaining comfortably relaxed and deeply hypnotized at the place you are you will find that as you think about alcohol you begin to first think about what

alcohol really does to you and not what you think it does for you. You may think about how if you have a drink of alcohol it will only lead to another and then another until you can no longer control your drinking . . . you may think about how you will feel like a failure if you were to drink alcohol again. . . You may remember that alcohol makes you shake uncontrollably... You may remember how alcohol makes your thinking unclear... you may remember how alcohol only ruins your relationships... I don't know what you will think about first, but your unconscious mind does, and it will remind you every time you begin to think about alcohol how alcohol will only harm you.

As you think about the negative things that alcohol will definitely do to you if you use it, you begin to realize the sense it makes to refuse the craving for alcohol. You may now be more and more aware of how you have a choice about your drinking, and how you will chose not to drink. You will think about how you have chosen not to drink in the past and how much better things are when you choose not to drink.

Now think about how you have been able to keep yourself from drinking in the past. About how you feel as though you have accomplished something when you are able to keep yourself from drinking. Think about how it makes so much more sense for you to stay sober and to stay away from alcohol, about how much better you feel without the alcohol. When you refuse to drink the alcohol, how you have accomplished something.

Now that you realize how the alcohol cannot help you in any way, and in fact will only cause you harm, you may be surprised at how easy it is to refuse to drink. This may mean you

simply say no to yourself or to another person or it may mean that you walk away from a situation, or you simply stop thinking about drinking, I don't know, but you do. You will do whatever it takes to stay sober. In this case it may be that you drive straight home from work without stopping for a drink, you simply go home, or to an AA meeting and tell somebody about what you went through. You may think about how AA worked for you in the past, I don't know exactly what you will do, but you do. You know what will work because there was a time in your life when you did not drink. Now, in your mind, in the situation you are in now, you will refuse the craving.

Remember, you will do what works for you to refuse to drink because you now realize on a deeper level what you've known for so long now, that drinking alcohol only makes things worse. You know that the first thing you should think about when you think about alcohol is how bad it is for you and about how it will only make any situation worse.

#### SESSION TWO SCRIPT

“Now that you are in a deep state of hypnosis I will be saying things to you that you will find very interesting and very helpful to your continued sobriety. You will experience things that may seem very real to you...you will achieve things that you have always wanted to achieve. Your conscious mind and your unconscious mind will both be working to help you realize and achieve something that you've known for so long now.... That you want to stay sober...to stay away from alcohol... and that you can stop drinking alcohol whenever you desire. You can refuse to drink alcohol because you know that it is bad for your life and for your health, that alcohol may have made you feel good at one time in your life, but now you only feel worse when you drink and after you drink. Because of what you have learned from what you've gone through after drinking and from what you have learned in treatment settings you also now know

that drinking alcohol is a choice, a choice that is based on what you know alcohol has done to you. You know that it does nothing for you, but it does something to you. Alcohol does things to you that are bad for you.

While you remain comfortably relaxed and deeply hypnotized Let's take a few minutes to experience a possible time in your life when alcohol can be tempting ... Let's take a few minutes to think about what you may think alcohol can do for you ...and then we will take a few minutes to think about what alcohol will really do to you.

Now I want you to see yourself at work. . . It is a typical day at work...I want you to see yourself there, to feel as though you are there. I want you to think about what it smells like there.... what the air there feels like on you skin. . . I want you to think about the people who are around you.... When you feel as though you are at work I want you to raise your right index finger slightly...Good. Where are you now?...Good. Is anybody with you there? What are you doing? Good. Now that you are at work I want you to think about troubles you may have had at work... It may be that a supervisor was not happy with your work, or that a co-worker bothered you...It may be that you are concerned about what your coworkers think about you ...It may be that you did not sleep well during the night and so you did not feel well when you woke up... You may think about something that has happened recently at work or even something in the past, or it may be something you are afraid will happen to you at work, I don't know what it is, but I want you to feel the way you may feel when something bad has taken place or will take place at work. How do you feel right now? Why is that? As you experiencing these bad feelings because of ( ) you may also begin to experience something that is very familiar

to you. You may find yourself thinking about alcohol again. You may begin to think about how having a drink could make you think you will feel better than you do now, You may begin to think that drinking will make you stop thinking about feeling bad, or anything else for that matter...that it will allow you to escape and to feel better than you do now, on some level you may even believe that alcohol can make you feel stronger and that you can get back at whoever is making you feel bad, if only you had a drink...It may be that you think if you only had a drink you could pass out and sleep...But, when you really think about it you know these things are not true...your conscious mind and unconscious mind know that these thoughts you are having are not true. Your conscious and unconscious mind know the truth, the real, rational truth about alcohol. Your conscious and unconscious mind know that alcohol will only make you feel worse in the long run and take away the possibility of feeling better. *You know that if you slip and have alcohol no promotion will come your way.* Now, while you are remaining comfortably relaxed and deeply hypnotized at the place you are, you will find that now as you think about alcohol you begin to first think about what alcohol really does to you and not what you think it does for you. You may think about how if you have a drink of alcohol it will only lead to another and then another until you can no longer control your drinking . . . you may think about how you know you will feel like a failure if you were to drink alcohol again. . . You may remember that alcohol makes you shake uncontrollably... You may remember how alcohol makes your thinking unclear... you may remember how alcohol only ruins your relationships... You may remember how drinking alcohol never helps you to sleep better and that you never feel good the morning after drinking, or whenever you may wake up from after drinking...I don't know what you will think about first, but your unconscious mind does, and it will remind you every time you begin to think about alcohol how alcohol can only harm you and

make you sick. Your unconscious mind will remind you very specifically about the things I just read to you, about how alcohol is bad for you.

As you think about the negative things that alcohol will definitely do to you if you use it, you begin to realize the sense it makes to refuse the craving or desire for alcohol. You may now be more and more aware of how you have a choice about your drinking, and how you will choose not to drink, how you will choose to think about the specific negative effects of alcohol. You will think about how you have chosen not to drink in the past and how much better things are when you choose to stay away from alcohol.

Now think about how you have been able to keep yourself from drinking in the past... About how you feel as though you have accomplished something when you are able to keep yourself from drinking. Think about how it makes so much more sense for you to stay sober and to stay away from alcohol, about how much better you feel without the alcohol. When you refuse to drink the alcohol, how you have accomplished something.

Now that you realize how the alcohol cannot help you in any way, and in fact will only cause you harm, you may be surprised at how easy it is to refuse to drink. This may mean you simply say no to someone or it may be that you walk away from the situation, or you simply stop thinking about drinking, I don't know, but you do. You will do whatever it takes to stay sober. It may be that you call someone at the VA to talk with. In this case it may be that you drive straight home from work without stopping for a drink, you simply go home, or to an AA meeting and tell somebody about what you went through. You may think about how AA worked for you

in the past, I don't know exactly what you do, but you do, and you know you have many options to help you never drink again. You know what will work because there was a time in your life when you did not drink. You will do what works for you to refuse to drink because you now realize on a deeper level what you've known for so long now, that drinking alcohol only makes things worse. You know that the first thing you should think about when you think about alcohol is how bad it is for you and about how it will only make any situation worse.

### SESSION THREE SCRIPT

"Now that you are in a deep state of hypnosis I will be saying things to you that you will find very interesting and very helpful to your continued sobriety. You will experience things that may seem very real to you... you will achieve things that you have always wanted to achieve. Your conscious mind and your unconscious mind will both be working to help you realize and achieve something that you've known for so long now.... That you want to stay sober...to stay away from alcohol... and that you can stop drinking alcohol whenever you desire. You can refuse to drink alcohol because you know that it is bad for your life and for your health, that alcohol may have made you feel good at one time in your life, but that now you only feel worse when you drink and after you drink. Because of what you have learned from what you've experienced after drinking and from what you have learned in treatment settings you also now know that drinking alcohol is a choice, a choice that is based on what you *know alcohol has done to you*. You know that it does nothing for you, but it does something to you. Alcohol does things to you that are bad for you.

While you remain comfortably relaxed and deeply hypnotized Let's take a few minutes to experience a possible time in your life when alcohol *could* be tempting ... Let's take a few

minutes to think about what you may think alcohol can do for you ...and then well take a few minutes to think about what alcohol will really do to you.

Now I want you to see yourself at a place that you spend much of your time... Maybe it's the VA or Maybe it's home or maybe it's at work. . . I want you to see yourself there, to feel as though you are there. I want you to think about what it smells like there.... what the air there feels like on you skin. . . I want you to think about the people that are around you.... When you feel as though you are someplace else I want you to raise your right index finger slightly...Good. Where are you now?...Good. Who is with you there? What are you wearing? Good. I want you to stay there at that place and to listen to what I am saying to you while remained deeply hypnotized and relaxed. Some times when we are with other people we may wonder what they think about us. We may be concerned sometimes that other people don't like us. They may even say something that makes us think they don't like us. In the place you've gone to I want you to think of a time when you believed that a person around you did not like you. That, perhaps you did not feel good enough. The reason doesn't matter only the feeling. You may experience something that's happened recently at the place you're at now or even something in the past, I don't know what it is, but I want you to feel the way you may feel when you are concerned about what others think about you. As you experience these feelings you may become sad or angry or even resentful. As the emotions begin to wear on you, you may begin to think about how having a drink could make you think you will feel better. On some level you may even think that drinking is a way at getting back at the people around you. You may, on some level, think about how you believe alcohol will allow you to escape and to feel even better than you do now...on some level you believe that alcohol may make it easier for you to deal with people...You may

begin to think that alcohol really isn't a problem for you and that you can quit any time. Other thoughts that make you question why you quit may come to your mind. But your conscious mind and unconscious mind know that these thoughts you are having about yourself and alcohol are not true. Your conscious and unconscious mind know that, it will only make you feel worse in the long run and will take away any hope of feeling good for a long time to come. While you are remaining comfortably relaxed and deeply hypnotized at the place you are you will find that as you think about alcohol you begin to first think about what alcohol really does to you and not what you think it does for you. You may think about how if you have a drink of alcohol it will only lead to another and then another until you can no longer control your drinking . . . you may think about how you will feel like a failure if you were to drink alcohol again. . . You will remember that alcohol makes you shake uncontrollably... You may remember how alcohol makes your thinking unclear... you will remember how alcohol has only ruined your relationships... You may think about how drinking alcohol will seriously jeopardize your chance for a promotion. I don't know what you will think about first, but your unconscious mind does, and it will remind you every time you begin to think about alcohol how alcohol can only harm you.

As you think about the negative things that alcohol will definitely do to you if you use it, you begin to realize the sense it makes to refuse the craving for alcohol. You may now be more and more aware of how you have a choice about your drinking, and how you will choose not to drink. You will think about how you have chosen not to drink in the past and how much better things are when you choose not to drink.

Now think about how you have been able to keep yourself from drinking in the past. About how you feel as though you have accomplished something when you are able to keep yourself from drinking. Think about how it makes so much more sense for you to stay sober and to stay away from alcohol, about how much better you feel without the alcohol, think about how much stronger you really are without the alcohol. When you refuse to drink the alcohol, how you have accomplished something.

Now that you realize how the alcohol cannot help you in any way, and in fact will only cause you harm, you may be surprised at how easy it is to refuse to drink. This may mean you simply say no to yourself or to another person or it may be that you walk away from a situation, or you simply stop thinking about drinking. I don't know, but you do. You will do whatever it takes to stay sober. In this case it may be that you drive straight home from work without stopping for a drink, you simply go home, or to an AA meeting and tell somebody about what you went through. You may think about how AA worked for you in the past, I don't know exactly what you will do, but you do. You know what will work because there was a time in your life when you did not drink. Now, in your mind, in the situation you are in now, you will refuse the craving.

Remember, you will do what works for you to refuse to drink because you now realize on a deeper level what you've known for so long now, that drinking alcohol only makes things worse and not better. You know that the first thing you should think about when you think about alcohol is how bad it is for you and about how it will only make any situation worse.