

California State University, San Bernardino

CSUSB ScholarWorks

Theses Digitization Project

John M. Pfau Library

2002

Causes of substance abuse relapse among Mexican American and Anglo males

Carlos Alberto Mauriz

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd-project>

 Part of the [Social Work Commons](#), and the [Substance Abuse and Addiction Commons](#)

Recommended Citation

Mauriz, Carlos Alberto, "Causes of substance abuse relapse among Mexican American and Anglo males" (2002). *Theses Digitization Project*. 2092.

<https://scholarworks.lib.csusb.edu/etd-project/2092>

This Project is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

CAUSES OF SUBSTANCE ABUSE RELAPSE AMONG
MEXICAN AMERICAN AND ANGLO MALES

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Carlos Alberto Mauriz
June 2002

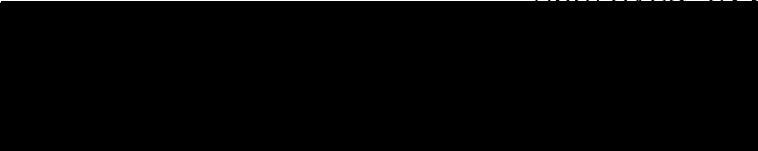
CAUSES OF SUBSTANCE ABUSE RELAPSE AMONG
MEXICAN AMERICAN AND ANGLO MALES

A Project
Presented to the
Faculty of
California State University,
San Bernardino


by
Carlos Alberto Mauriz

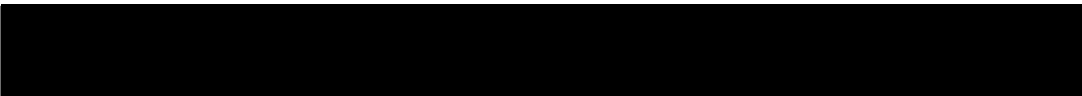
June 2002

Approved by:


Rachel Estrada, LCSW, Faculty
Supervisor Social Work

6/01/02
Date


Olivia Sevilla, LCSW, Bilingual Family
Counseling Services


Dr. Rosemary McCaslin,
M.S.W. Research Coordinator

ABSTRACT

Causes of substance abuse relapse among Mexican American and Anglo males were examined in a sample of 28 individuals attending substance abuse relapse groups at Bilingual Family Counseling Service. Data was gathered using a single, one time distribution of two scales, the Acculturation Rate Scale for Mexican Americans-II (ARSMA-II), which measured cultural assimilation towards the Anglo culture and a substance abuse scale developed by the researcher. Anglo participants completed only the substance abuse scale. The Mexican American participants completed both the ARSMA-II and substance abuse scale. Findings of this study provided scores of behavioral, environmental, physical cues and acculturation levels that influence substance abuse relapse.

The findings of this study indicated no significance in relation to causes of substance abuse due to small sample size. In relation to acculturation, findings indicated that acculturation levels had a limited influence on substance abuse relapse, but indicated a higher percentage of environmental influence in relation to substance abuse relapse. Other findings suggested a pattern of responses between demographics and

environmental situations that triggers substance abuse relapse.

Future studies need to further examine a larger sample size so that conclusions drawn about these two populations increase both the reliability and validity of the findings.

Furthermore, potential characteristics of environmental situations associated with substance abuse relapse require additional assessment to better identify preventive measurements.

ACKNOWLEDGMENTS

The fact that this thesis and the completion of my Master's Degree is at last a reality and is attributable to many individuals who have given their time to me.

To Dr. Hunt, who entered my life briefly, but powerful during the first year of insecurities.

To Rachel Estrada, for her guidance and patience.

To my parents, Carlos Mauriz Sr. and Dora Augusta Paez de Mauriz for teaching me the importance of responsibility and love.

To my sister and brothers for being great human beings.

To my friends, here and far away.

To Bilingual Family Counseling Services for their constant support and faith. Without their support, this project would not have been possible.

To Nana Joyce, who is protecting us among the angels.

To my beloved Joy, who supported me without questions and whose love and dedication to our family is unconditional. I love you, Joy!

And to my beautiful daughters, Jessica and Gabriela for their big hearts, love and innocence. Thank you all, for helping me reach my goals. Now we can have some fun!

TABLE OF CONTENTS

ABSTRACT	iii
ACKNOWLEDGMENTS	v
LIST OF TABLES	viii
CHAPTER ONE: INTRODUCTION	
Problem Statement	1
Policy Context	2
Practice Context	3
Significance of the Project	6
for Social Work	6
CHAPTER TWO: LITERATURE REVIEW	
Introduction	8
Comparing Groups	8
Human Behavior in the Social	11
Environment Theories	11
Cultural Aspects	14
Summary	17
CHAPTER THREE: METHODS	
Introduction	19
Study Design	19
Sampling	21
Data Collection and Instruments	22
Procedures	25
Protection of Human Subjects	26
Data Analysis	26

Summary	28
CHAPTER FOUR: RESULTS	
Introduction	30
Presentation of the Findings	30
Summary	35
CHAPTER FIVE: DISCUSSION	
Introduction	37
Discussion	38
Limitations	39
Recommendations for Social Work	40
Practice, Policy and Research	40
Conclusion	42
APPENDIX A: ACCULTURATION SCALE	44
APPENDIX B: SUBSTANCE ABUSE RELAPSE SCALE	48
APPENDIX C: INFORMED CONSENT FORM	53
APPENDIX D: DEBRIEFING STATEMENT	55
APPENDIX E: LETTER OF APPROVAL	57
REFERENCES	59

LIST OF TABLES

Table 1. Demographics	31
Table 2. Acculturation Levels.....	32
Table 3. Behavior Influence	34
Table 4. Emotional Statuses	35
Table 5. Environmental Situations	36

CHAPTER ONE

INTRODUCTION

Problem Statement

While substance abuse disorder has been recognized as a chronic relapsing condition, it has been recently that clinical research has been attending to the nature of relapse. Substance abuse has been a societal problem for many decades. How to prevent substance abuse addiction and relapse is a matter of concern in our society because of the social cost that addiction incurs. It was not until the 1970s, that researchers began to attend to the nature and process of relapse. Much of the research on substance abuse related issues had been conducted on samples of Anglo males and ignored potential influence among ethnic minorities.

For example, although "a thorough nationwide household alcohol survey in the United States has been consistent since 1964, the first national control survey with an emphasis on Blacks and Hispanic men was implemented only in 1984" (Caetano, Clark, & Tam, 1998). Our knowledge and understanding of the close relationship between addiction and its cultural context is so minimal that, in many cases, the treatment approaches offered to

these groups is either irrelevant or of inferior quality. Over the past two decades, however, considerable advances have occurred primarily in the quality of research focused on substance abuse and ethnic minorities, including Mexican American males.

Policy Context

Drug problems became a public concern in the middle to late 1960s. People had been abusing alcohol and drugs, but preventive measures were weak. The majority of prevention programs focused on ways to reduce demand for drug and alcohol, most often by trying to change individual behavior.

The outlook on prevention has broadened considerably to include new goals, other populations and additional strategies. Several factors have contributed to this broader view of prevention. For example, there has been increasing involvement of volunteers and local actions-oriented groups such as Mothers Against Drunk Driving (MADD), Students Against Drunk Driving (SADD), the Group Against Smoking Pollution (GASP) and hundreds of parents and community based anti-drug organizations.

Community groups have been pushing for broad changes in policies and practices at all levels from grass roots

to Washington, and they have evolved a national leadership to advocate for reform. The objectives are to reduce the mortality and morbidity associated with alcohol and drug related problems as well as to reduce the rates of substance abuse and relapse.

A more comprehensive view includes "social, cultural and legislative aspects of prevention rather than emphasizing individual responsibility" (McNeece & DiNitto, 1998).

Practice Context

Existing studies do not consider the variability that exists within each ethnic group, resulting in inaccurate generalizations. Studies on drinking patterns among Hispanics have found substantial differences among Hispanic subgroups, showing "Mexican American males to have higher lifetime prevalence of alcohol disorder and higher rates of heavy drinking and alcohol related problems than do whites" (Caetano, 1998). However, a study conducted by Wilson and Williams reported that the largest differences in drinking between whites and other groups, showed white males more likely to be drinkers than other males. Regarding illicit drug use, the National Household Survey on Drug Abuse reported that in general Hispanic

Americans have a lower rate of use of most illicit drugs in comparison with the general population.

The same study reported that socio-demographic characteristics tend to vary among ethnic groups. Drinking tended to decrease with age; and separated and divorced men were more likely to be heavier drinkers than single or never married men. Also, drinking levels increased with higher levels of education and family income. The results also indicated that unemployed males were heavier drinkers than employed males. These characteristics of substance abuse are important to consider since cultural and demographic factors are fundamental to understanding treatment and relapse prevention.

Understanding relapse among substance abusers is an enduring problem, particularly since theories of relapse are quite variable. "Relapse, or the return to heavy alcohol or other drug use following a period of abstinence or moderate use" (Larimer, Palmer, & Marlatt, 1999) is a common outcome following the initiation of abstinence.

Abuse of alcohol and other drugs is a complex problem influenced by multiple factors, including psychological and physiological. For instance, stress is often considered a major factor in the initiation and continuation of substance abuse. However, stress and the

body's response to it play an important role in the vulnerability to substance use, initiation of treatment and relapse in recovering substance abusers.

Many psychological models of practice for relapse have been used as predictors of relapsing to drugs and alcohol. Most models of treatment initiated from the social-cognitive learning theory, define in general that personal and environmental factors or events affect each other.

Substance abusers deal with factors or situations that can precipitate or contribute relapse episodes. According to Marlatt's cognitive behavior model those factors or situations fall into two categories: "immediate determinants" or high risk situations (e.g., a person's coping skills, and outcome expectations) and "covert antecedents" including lifestyle factors such as overall stress level and cognitive factors such as immediate gratification (i.e., urges and cravings) that may also serve to "set up" relapse.

Purpose of the Study

This research project examined the causes of substance abuse relapse among Mexican American and Anglo males. In addition, this study presented one influential

model of relapse prevention. Included in this model, cultural factors were evaluated. Of particular importance to the profession of social work is that relapse prevention is an important component of substance abuse treatment. Predispositions to high-risk situations and relapse need to be addressed before they disrupt the recovery process. Social workers have traditionally served Mexican Americans and Anglo males and further examination and evaluation of these populations can promote the development of better practice skills with the goal of enhancing delivery of service.

Significance of the Project for Social Work

Causes of substance abuse relapse among Mexican American and Anglos males are of great importance to social work practice. By examining stress factors professionals can better assess how coping and social support mediate or moderate the direct effects of stress on an individual.

Support for interventions that specifically targets sources of stress from behaviors, emotional status and environmental situations can only assist those enduring a recovering process. Recognizing the influence that demographics such marital status, education, age and

religious preference has on the psychological health of the individual is of great importance for the implementation of preventive measurements. In addition, knowledge of substance abuse and acculturation patterns can be emphasized in school programs as well as adult recovery programs.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The literature demonstrated that substance abuse relapse is a common occurrence by both groups, Mexican American and Anglo males. Recognizing stressors is an important relapse prevention component of substance abuse treatment. Marlatt and Grodon's relapse prevention model proposed specific factors or situations that can contribute to relapse. These factors or situations are considered to be behavior, emotional statuses and environmental situations of the individual. An additional factor is the important role acculturation plays in influencing a group's values and behaviors surrounding abuse and relapse.

Comparing Groups

Reviews of the literature found a large number of published materials focused on substance abuse and relapse, in particular that of alcohol. However, very limited information on why Mexican Americans relapse from substance abuse was found. For the purpose of this research the term Mexican American means, an individual,

who was born in the United States, and either parent born in Mexico until immigrating to the United States.

Examining patterns of substance abuse can provide us with a better understanding how and when relapse occurs. Drinking patterns among Mexican American and Anglo males have shown differences historically. Specifically, Caetano (1984, 1989) has suggested "decreases in patterns of heavier alcohol consumption typically observed among males in their 20s and 30s may be more common among Anglos than minority drinkers." Anglos and Mexican American males were found to have begun drinking significantly earlier, but "Anglos appeared to shift into patterns of lower quantity and total weekly consumption roughly 3 years earlier than Mexican Americans" (Neff & Dassori, 1998).

Information surrounding relapse reinforces the importance of the topic. It was found that relapse is a common occurrence following abstinence by both groups, Mexican Americans and Anglo males. A study conducted by Hunt, Barnett and Branch (1971) found "cumulative relapse rates among persons treated for alcoholism were approximately 35% and 58% at 2 weeks and 3 months after treatment, respectively" (Connors, Maisto, & Donovan, 1996).

Other research has provided a comparable picture of post-treatment outcome. "Relapse as a return to pretreatment levels of drinking, found a relapse rate of around 50% over a 12 month post-treatment follow-up. Relapse rates as high as 90% have been reported when relapse has been defined as the consumption of a single drink after treatment" (Orford & Edwards, 1977).

Other research also found a high rate of relapse. A 4-year follow-up found that only 9% of clients treated for alcoholism had sustained continuous abstinence, although half were currently abstinent: 34% for at least the previous 6 months, and an additional 16% with 1-5 months of abstinence. Similarly, in a 5-8 year follow-up study of 1,289 alcoholics, only 15% of clients had sustained abstinence following treatment" (Polich, Armor, & Braiker, 1981).

Regarding illicit drug abuse relapse, "a significant percentage of substance abusers begin to abuse their drug of choice relatively quickly after abstinence" (Hunt, Barnett and Branch, 1971; Brownell et al., 1986). In two studies of treatment for cocaine abusers, more than 45% of the subjects relapsed within the first 6 months of follow-up (Hall, Havassy and Wasserman, 1991; McKay, McLellan and Alterman, 1992). Regardless of the type of

substance abused, frequency of use and quantity of the substances, the numbers of individuals who relapsed were considerably high.

Human Behavior in the Social Environment Theories

Studies indicate that stress in general was the main factor to relapse. The term stress "generally refers to the reaction of the body to certain events or stimuli that the organism perceives as potentially harmful or distressful. Such stress-inducing events or stimuli, which are referred to as stressors, can be either physical (e.g. unusual environmental conditions or a physical attack) or psychological (e.g., occupational or familiar difficulties) in nature. An event that is perceived as extremely stressful by one person may be perceived as harmless by another" (Alcohol Research & Health, 1999).

Recognizing stressors is an important relapse prevention component of substance abuse treatment. Few theories of substance abuse relapse prevention have been considered in order to understand the process of relapse. Marlatt and Gordon's relapse prevention model proposes specific factors or situations that can contribute to relapse. "According to this model, a person who has initiated a behavior change, such as alcohol abstinence,

should begin experiencing increased self-efficacy or mastery over his or her behavior, which should grow as he or she continues to maintain the change. Certain situations or events, however, can pose a threat to the person's sense of control and, consequently, precipitate a relapse crisis" (Larimer, Palmer, & Marlatt, 1999).

Those situations or events fall into two categories. The first category is "immediate determinants" which frequently serves as the immediate precipitator of substance abuse relapse and it is associated with the highest rate of relapse. This category includes "Negative emotional states, such as anger, anxiety, depression, frustration, and boredom. These emotional states may be caused by primarily intrapersonal perceptions of certain situations (e.g, feeling bored or lonely after coming home from work to an empty house) or by reactions to environmental events (e.g., feeling angry about an impending layoff at work)" (Larimer, Palmer & Marlatt, 1999).

Another situation that is included in the "immediate determinant" category is that involving another person or a group of people. This theory places emphasis on interpersonal conflicts such as an argument with a family member, which results in negative emotions and precipitate

relapse. In fact, intrapersonal negative emotional states and interpersonal conflict situations served as triggers for more than one-half of all relapse episodes in Marlatt's (1996) analysis. Also within the "immediate determinant" category social pressure is included, which consist of "both verbal and nonverbal situations (e.g., being around other people who are drinking)" (Larimer, Palmer & Marlatt, 1999).

Another factor in this grouping is the positive emotional states, which Marlatt describes as "exposure to alcohol-related stimuli or cues." These factors include, seeing an advertisement for an alcoholic beverage or passing by one's favorite bar which tests one's personal control (i.e., using "willpower" to limit consumption)" (Larimer, Palmer & Marlatt, 1999).

Marlatt's second category is "covert antecedents" which are less obvious factors that influence the relapse process. Included in this category are lifestyle factors. "A person whose life is full of demands may experience a constant sense of stress, which not only can generate negative emotional states, thereby creating high-risk situations, but also enhances the person's desire for pleasure and his or her rationalization that indulgence is

justified" For example, feeling that one owes himself a drink (Larimer, Palmer & Marlatt, 1999).

Finally, the last factor in the second category includes urges and cravings. These factors can take physical as well as psychological forms. In addition, coping in a high-risk situation is a particular determinant of relapse. "Coping is the person's response to the situation that determines whether he or she will experience a lapse...Thus, a person who can execute effective coping strategies (e.g., behavioral strategy, such as leaving the situation, or a cognitive strategy, such as positive self talk) is less likely to relapse compared with a person lacking those skills" (Larimer, Palmer, & Marlatt, 1999).

These two categories provide a general understanding on why individuals relapse. However, other issues applying to these groups require consideration such as attitudes towards alcohol and other drug use and the important role acculturation plays in influencing a group's values and behaviors surrounding abuse and relapse.

Cultural Aspects

Often clinicians in substance abuse and social service agencies are under-prepared to work with clients

from different cultures. Clinicians regularly have culturally diverse caseloads, including natural citizens of the United States, generations who immigrated to the United States many years ago and new immigrants to this country.

It is assumed that individuals belonging to a different ethnic group, who were born and live in this country are acculturated and accepted by their predominant group. However, this assumption cannot be generalized. Attention to cultural issues need to be taken into account during the relapse process. "Culture can contribute to the development of alcoholism by reinforcing the benefits of escaping from reality or, in contrast, can discourage alcoholism by educating people about the dangers of excessive use" (Stivers, 1976).

One traditional explanation for heavy drinking patterns among Mexican American males is the concept of "machismo." This concept, which has been neither well defined nor measured empirically, implies that Hispanic men strive to appear strong and masculine and that the ability to drink large amounts of alcohol exemplifies their masculinity. To date, however, no convincing association between "exaggerated machismo" and drinking

patterns has been demonstrated (Caetano, Clark & Tam, 1998).

A statewide household survey of substance abuse conducted in 1986, suggested that "the stronger the ties to the Hispanic culture, the less likely the use of drugs is to occur; or conversely, the stronger the ties to the American culture, the more likely the drug use. Of Hispanics born in the United States, 53% reported using some illicit drugs during their lifetime, compared to only 11% of Hispanics born in Latin-American countries" (Lowinson, Ruiz & Millman, 1992).

Socio-cultural factors need to be considered when dealing with the Mexican American culture. Current socioeconomic and cultural environments of Mexican American males are characterized by contradictions between rich and poor, and a type of poverty combined with a strong push toward assimilation into the majority Anglo culture. In addition, the role of church affiliation whether Catholic, Jehovah's Witness or other non-orthodox beliefs, such as Espiritismo, Santeria, Brujeria and Curanderismo could play a major positive role in the networking systems' development, treatment compliance, and primary prevention (Lowinson, Ruiz & Millman, 1992).

In addition to acculturation being an area of importance to the individual's recovery and to preventing relapse, acculturation is also an area open to intervention and to the development of treatment approaches for different ethnic groups. The culture's view of using alcohol and other drugs, developing problems, seeking help, relapsing and recovering from relapse, has a profound effect on the ability of individuals or families to identify themselves as needing help, to gain access to services, to receive effective help, and to maintain behavior change. It also affects the ability of families to reach out for help for family members who cannot (or choose not to) identify themselves, the ability of the community to acknowledge the problems and the availability of natural support networks to serve a protective or healing function (Amodeo & Jones, 1997). If causes of relapse are evaluated, taking into consideration cultural aspects, relapse prevention programs may illicit a successful outcome.

Summary

The literature findings on relapse among Mexican American and Anglo males suggested that both populations have a high incidence of substance abuse relapse after

treatment regardless of time and frequency of relapse. However, Marlatt's theory of substance abuse relapse showed that the main causes of relapse to substance abuse included different factors or events that predisposes the individual to continue abstinence. These factors or events were indicated to be of internal and external conditions effecting the individual. Although, these are general conditions that can cause relapse, cultural factors were taken into consideration as well. Cultural factors are important "instruments" to be considered when assessing relapse prevention and causes of substance abuse.

CHAPTER THREE

METHODS

Introduction

This study explored and examined the causes of substance abuse relapse among Mexican American and Anglo males. A quantitative approach was used to measure various variables objectively. This study utilized two scales, the Acculturation Rate Scale for Mexican Americans-II (ARSMA-II) and a self designed substance abuse scale. Participants were from Bilingual Family Counseling Services. And included only those who were receiving services related to substance abuse. Data analysis was completed by utilizing the Statistical Package for the Social Sciences, which allows for quantitative analysis procedures.

Study Design

The purpose of this study was to further examine the causes of substance abuse relapse among Mexican American and Anglo males. The characteristics of both groups differed culturally and posed unique barriers that affect substance abuse relapse. This study presented one influential model to prevent or limit relapse. Included in this model, cultural factors were evaluated as well as

possible behaviors, emotional statuses and environmental situations that might trigger substance abuse relapse.

This study utilized a post-positivist perspective as it allowed the researcher to examine and consider data without the constraint of a hypothesis. The purpose of this study was to explore and describe high-risk situations of substance abuse relapse and how levels of acculturation could influence recovery for Mexican Americans and Anglos. The data was examined to identify trends or correlations related to the causes of substance abuse relapse among both Mexican American and Anglo males.

This study used the quantitative approach, allowing for variables to be objectively measured. Two scales were utilized to explore causes of substance abuse relapse: The Acculturation Rating Scale for Mexican Americans-II and a substance abuse relapse scale. This study relied on quantification in collecting and analyzing data and employed statistical procedures such as univariate, bivariate and multivariate analysis to test the significance of results. More specifically, this study utilized causal analysis, which assesses cause-effect relationships.

Sampling

The sampling frame consisted of clients from ages 20 to 40, who were categorized as Mexican American and Anglo males served by Bilingual Family Counseling Services with a diagnosis of substance abuse or dependency.

Participants were obtained from substance abuse relapse groups, which met weekly. With the permission of Olivia Sevilla, LCSW, Executive Director, the researcher attended each weekly relapse group and explained the purpose of the study to group members, who met the research criteria and were able to voluntarily participate in this study. Each participant was given an informed consent form and debriefing statement. The researcher dismissed himself following the distribution of the study materials. The completed questionnaires were left to the researcher immediately after the group session. A total of 42 participants voluntarily agreed to participate, but only 28 completed the entire survey and were entered into the study.

Only the Mexican American participants were given both the substance abuse relapse scale and the Acculturation Rating Scale for Mexican Americans-II.

Data Collection and Instruments

Data was collected from Mexican American and Anglo male participants who attended weekly substance abuse relapse groups only. A total of three weekly substance abuse relapse groups participated in this study. Formal consent from Bilingual Family Counseling Service and individual clients was obtained (Appendix E) prior to the administration of surveys to group members.

The data collection instrument was designed to assess causes of substance abuse relapse for both Mexican American and Anglo males. Many situations and cultural factors that precipitate or contribute to relapse episodes were included. Marlatt's high risk factors of relapse assisted in creating a substance abuse relapse scale for the purpose of this study. This allowed the study to provide clear independent variables of those factors that causes substance abuse relapse. The independent variables were classified into two groups of high-risk situations. The first group focused on individual's antecedents and behaviors relative to drug and alcohol abuse relapse. Antecedents included questions such recent substance use, type of drug(s) and behaviors such stealing, not attending counseling meetings, being irresponsible, unreliable, careless, behaving impulsively etc. The second considered

lifestyle factors such as overall stress level, and environmental factors that serve to "set up" relapse.

In addition, acculturation factors as measured by The Acculturation Rating Scale for Mexican Americans-II (ARSMA-II) was presented to assess cultural orientation to the Anglo culture and examined correlations between risks of relapse and cultural orientation or acculturation assessment (Appendix A).

The data collection instrument included the Acculturation Rating Scale for Mexican Americans-II (ARSMA-II) and a substance abuse relapse scale designed by the researcher (Appendix B). Both scales supplied demographics which had nominal and continuous measurements. The dependent variable was defined as the severity of relapse.

The ARSMA-II scale was a 30 item self-rating scale composed of an Anglo Orientation Subscale (AOS) and Mexican Orientation Subscale (MOS). The acculturation score was calculated to obtain an acculturation level for the subject by employing cutting scores for determining acculturation levels, such as level I indicated a low level of acculturation, level III a moderate and level V a higher acculturation level.

The following describes acculturation levels: Level I, very Mexican oriented with a score of less than -1.33, level II, Mexican oriented to approximately balanced bicultural with a score of equal or greater than -1.33 and equal or less than -.07, level III, slightly Anglo oriented bicultural with a score of greater than -.07 and less than 1.19, level IV, strongly Anglo oriented with a score of equal or greater than 1.19 and less than 2.45 and level V, very assimilated; Anglicized with a score of greater than 2.45.

The independent variables were ordinal measurements since both scales required answers in terms of more frequent, frequent or less frequent. Data was collected by using a survey instrument which included closed-ended questions. These questions were answered on a Likert-type scale from 1-5 on the acculturation scale and 1-3 on the substance abuse scale.

The ARSMA-II scale measured cultural assimilation towards the Anglo culture. It defined various levels of acculturation according to the generation of the individual. The ARSMA-II remained culturally specific to Mexican Americans and had limited utility with other Hispanics or ethnic groups. In addition, cultural background or acculturation processes could influence this

scale. The ARSMA-II scale was given only to the Mexican American population.

For the purpose of the study the substance abuse relapse scale was designed to assess relapse prevention goals and the achievement of these goals. Areas addressed by this scale included substance abuse antecedents, behavioral influences, emotional statuses and environmental situations that trigger substance relapse.

Procedures

Once formal permission was obtained from Bilingual Family Counseling Service, voluntary participation by respondents occurred in their weekly natural support groups. A scripted introduction and explanation of the research project was conducted by the researcher at three relapse groups. Only group members who voluntarily offered to participate were given a consent form, survey and debriefing statement. Anglo participants completed the substance abuse scale in approximately ten minutes. The Mexican American participants completed both the substance abuse scale and the ARSMA-II scale in approximately twenty minutes. Spanish version scales were not warranted as all voluntaries spoke and read English.

Protection of Human Subjects

Participants were informed of the purpose and consequences of participating in this study. Respondents received a written consent to participate in this study (Appendix C) and a debriefing statement (Appendix D). Participants were informed that there was no penalty for choosing to withdraw from this study. Utilizing measures to ensure confidentiality surveys were numbered to conceal respondents identities. This researcher followed the NASW code of ethics by maintaining and protecting the confidentiality of the participants.

Data will remain stored in a safe, locked are to ensure confidentiality and anonymity of participants. And data will be destroyed 3 years following the completion of this study. Participant names were not written on the questionnaires. No clients under the age of 18 participated in this study.

Data Analysis

Using the Statistical Package for the Social Sciences (SPSS) 10.0, quantitative analysis procedures were implemented to describe causes of substance abuse relapse and orientation levels to the Anglo culture by Mexican American males. It was the goal of this study to describe

with precision the characteristics of both populations, Mexican American and Anglo males, in order to understand that the relapse process was unique to both groups.

Demographic variables were examined using univariate analyses of central tendency, calculating the frequency mean, median, mode and the standard deviation. Likert-scaled questions were analyzed using measures of central tendency, specifically the frequency, mean, median and mode.

The Mexican American participant's level of acculturation were examined, by implementing cutting scores analysis suggested by the authors of the ARSMA-II.

Bivariate and multivariate analysis was conducted and presented relationships between the independent variables of ethnicity, educational level, marital status, religious preference, age and behavior, emotional statuses, environmental situations and acculturation scores that may affect substance abuse relapse.

Chi-square was calculated to assess significance of relationships between the independent variables, which consisted of factors causing substance abuse relapse, and the dependent variables of severity of relapse. The independent variables included the findings of the acculturation scale, which defined tendencies of relapse

according to levels of acculturation among Mexican American males. Socio-demographic information, including age, marital status, religious preference, education and generation was collected. The dependent variable was the severity of relapse reported by participants. These variables had attributes of rank-order and since both instruments utilized the items rated on a Likert type scale, ordinal measurement were most appropriate to use.

Summary

This study examined causes of substance abuse relapse among Mexican American and Anglos males between the ages of 20 and 40. This study utilized the ARSMA-II scale, which was administered to the Mexican American participants and a substance abuse scale, which both Mexican American and Anglo males utilized. This study relied on quantification in collecting and analyzing data.

Independent variables were categorized into high-risk situations such behaviors, emotional status, environmental situations and acculturation levels that may influence substance abuse relapse. Demographic variables were examined using the univariate analysis. Bivariate and multivariate analysis were utilized to describe tendencies or trends. Due to small sample size, there were no

statistical significant findings found in Chi-Square scores of equal to or less than .05. However, analysis was performed to assess trends and emphasized a need for further research in this area.

CHAPTER FOUR

RESULTS

Introduction

This study highlighted some of the major causes of substance abuse relapse among Mexican American and Anglo males. The participants were of various ages, religious preferences, marital status and educational levels. Findings of this study provided scores of behavioral, environmental, physical cues and acculturation levels that influence substance abuse relapse.

Presentation of the Findings

Of the 28 substance abuse relapse participants who met the criteria of the study, 46.4% (n = 13) were Anglos, 42.9% (n = 12) Mexican American and the remainder 10.7% (n = 3) participants marked "other" under ethnicity. Nearly 60% (57.1%) were married, 21.4% were single and 10.7% were separated or divorced.

In terms of education, the most frequently occurring responses were high school graduates 42.9% (n = 12) and less than high school 39.3% (n = 11). There were 39.3% (n = 11) responses of no religious preference, 35.7% (n = 10) Catholics and 25% (n = 7) Christians. Demographic characteristics are reported in Table 1.

statistical significant findings found in Chi-Square scores of equal to or less than .05. However, analysis was performed to assess trends and emphasized a need for further research in this area.

CHAPTER FOUR

RESULTS

Introduction

This study highlighted some of the major causes of substance abuse relapse among Mexican American and Anglo males. The participants were of various ages, religious preferences, marital status and educational levels. Findings of this study provided scores of behavioral, environmental, physical cues and acculturation levels that influence substance abuse relapse.

Presentation of the Findings

Of the 28 substance abuse relapse participants who met the criteria of the study, 46.4% (n = 13) were Anglos, 42.9% (n = 12) Mexican American and the remainder 10.7% (n = 3) participants marked "other" under ethnicity. Nearly 60% (57.1%) were married, 21.4% were single and 10.7% were separated or divorced.

In terms of education, the most frequently occurring responses were high school graduates 42.9% (n = 12) and less than high school 39.3% (n = 11). There were 39.3% (n = 11) responses of no religious preference, 35.7% (n = 10) Catholics and 25% (n = 7) Christians. Demographic characteristics are reported in Table 1.

Table 1. Demographics

	Frequency	Valid Percent
Age		
20-25	8	28.6
26-30	9	32.1
31-35	4	14.3
36-40	7	25.0
Total	28	100.0
Ethnicity		
Anglo	13	46.4
Mexican Amer.	12	42.9
Other	3	10.7
Total	28	100.0
Marital Status		
Married	16	57.1
Single	6	21.4
Separated	3	10.7
Divorced	3	10.7
Total	28	100.0
Religion		
Christian	7	25.0
Catholic	10	35.7
No Religious Preference	11	39.9
Total	28	100.0
Education		
Less than HS	11	39.3
HS graduate	12	42.9
Some College	5	17.9
Total	28	100.0

Findings indicated that 58% (n = 7) of the 12 Mexican American participants felt strongly Anglo oriented, level IV; nearly 17% (n = 2) felt slightly Anglo oriented bicultural, level III, 17% (n = 2) Very assimilated; Anglicized, level V and 8% (n = 1) felt Mexican oriented

to approximately balanced bicultural. Acculturation level of participants are reported in Table 2.

Table 2. Acculturation Levels.

Acculturation	Frequency	Valid Percent
Level II	1	8.3
Level III	2	16.7
Level IV	7	58.3
Level V	2	16.7
Total	12	100.0

Causes of substance abuse relapse were crosstabulated using high-risk situation scores. Nearly 92% (n = 11) of the Mexican American participants and 61.5% (n = 8) of Anglo participants responded that behaviors did "not at all" or "moderately" are influenced to substance abuse relapse. And 38% (n = 5) of Anglos and nearly 8% (n = 1) of Mexican Americans scored within the "extremely often or almost always" category that behaviors influence substance abuse relapse. Regarding emotional influences 83% (n = 10) of Mexican Americans and 84% (n = 11) of Anglos scored within the range of "not at all" to "moderately" and 15% (n = 2) of Anglos and nearly 17% (n = 2) of Mexican Americans strongly related their emotional condition to relapse. In addition, 50% of Mexican American and 61% (n = 8) of Anglo participants scored within the range of

"not at all to moderately" when addressing environmental situations related to relapse. A 38% (n = 5) of Anglos and 50% (n = 6) of Mexican Americans felt that environmental situations influenced "extremely often or almost always" substance abuse relapse.

To examine whether the participant's ethnicity and educational level had a statistically significant relationship to causes of substance abuse relapse, multivariate analysis was performed. Findings indicated that 80% (n = 4) of Mexican Americans and 75% (n = 3) of Anglos with less than a high school education responded that behaviors were either moderately or not at all related to relapse. Of those with a high school diploma, nearly 43% (n = 3) Anglos responded that behaviors are related "extremely often or almost always" to substance abuse relapse. Table 3 presents these findings. Of those who responded that emotional status was related to substance abuse relapse 40% (n = 2) of the Mexican Americans and 25% (n = 1) of Anglos respondents held less than high school diplomas (See Table 4).

A total of 50% (n = 8) of Mexican Americans and Anglo males, who were married responded that environmental situations influence substance abuse relapse. And 38% of Anglos between the ages of 20 to 35 felt that behavioral

influences were extremely often or almost always related to substance abuse relapse.

Of great importance 75% (n = 3) of Anglo respondents and 80% (n = 4) Mexican Americans responded that environmental situations were related to or negatively influenced substance abuse relapse. Table 5 presents these findings.

Table 3. Behavior Influence

Education	Ethnicity	Behavior%	
		20 or below	21 or above
Less High School	Anglo	75 (n = 3)	25 (n = 1)
	Mexican/American	80 (n = 4)	25 (n = 1)
	Other	100 (n+7)	0
High School Graduate	Anglo	57 (n = 4)	42 (n = 3)
	Mexican/American	80 (n = 5)	0
	Other	0	0
College	Anglo	50 (n = 1)	50 (n = 1)
	Mexican/American	100 (n = 2)	0
	Other	100 (n = 1)	0

Finally, levels of acculturation were examined by crosstabulation analysis. Findings indicated that 54% (n = 6) of those participants with level IV in acculturation (strongly Anglo oriented) responded that

Table 4. Emotional Statuses

Education	Ethnicity	Emotional%	
		24 or below	25 or above
Less High School	Anglo	75 (n = 3)	25 (n = 1)
	Mexican/American	60 (n = 3)	40 (n = 2)
	Other	50 (n = 1)	50 (n = 1)
High School Graduate	Anglo	85 (n = 6)	14 (n = 1)
	Mexican/American	100 (n = 5)	0
	Other	0	0
College	Anglo	100 (n = 2)	0
	Mexican/American	100 (n = 2)	0
	Other	100 (n = 1)	0

behavioral influences were moderately or not at all related to substance abuse relapse and 66.7% (n = 4) of same level IV responded that environmental situations were extremely often or almost always related to substance abuse relapse.

Summary

Bivariate and multivariate analysis was performed to examine any correlation between the independent and the dependent variables. Pearson Chi-Square scores did not indicate statistical significant findings due to small

Table 5. Environmental Situations

Education	Ethnicity	Environment%	
		14 or below	15 or above
Less High School	Anglo	25 (n = 1)	75 (n = 3)
	Mexican/American	20 (n = 1)	80 (n = 4)
	Other	50 (n = 1)	50 (n = 1)
High School Graduate	Anglo	71 (n = 5)	28 (n = 2)
	Mexican/American	60 (n = 3)	40 (n = 2)
	Other	0	0
College	Anglo	100 (n = 2)	0
	Mexican/American	100 (n = 2)	0
	Other	0	100 (n = 1)

cell size. Percentages were examined and displayed to analyze differences and trends. The findings of this study are unable to be generalized beyond the sample population surveyed.

CHAPTER FIVE

DISCUSSION

Introduction

This study examined high-risk causes of substance abuse relapse among Mexican American and Anglo males and influence of acculturation to relapse among Mexican American males. Self reported behavioral, emotional and environmental influence and acculturation levels were examined to assess their impact on relapse for Anglo and Mexican American males.

Limitations and obstacles experienced for the purpose of this study included: Small sample size, retrospective self report, and restrictions of age and gender. Prevention programs and future studies are recommended taking in consideration all factors of this study and possibilities of additional variables and a larger sample size.

Pearson Chi-Square values were not statistically significant due to the small cell size. Bivariate and multivariate analysis examined correlations between the independent and the dependent variables. Percentages were calculated to assess differences and trends.

Discussion

In relation to causes of substance abuse relapse, findings indicated that acculturation levels had a limited influence on relapse. Level IV of acculturation showed that behavior and emotional status had moderately to no relation to relapse, however, this same level IV of acculturation indicated a higher percentage of environmental influence in relation to substance abuse relapse. Other levels of acculturation indicated no significance due to small sample size.

When comparing with Anglo and Mexican American responses there were similar characteristics in the way both responded to the impact of behavioral and emotional status. Both groups indicated that behavioral and emotional status had little to no relation to substance abuse relapse, but felt strongly that environmental influences negatively impacted relapse.

Educational level was found to have no significance in relation to causes of substance abuse due to small size. However, a higher percentage of those participants with less than a high school diploma responded that behaviors and emotional status were moderately to not at all related to relapse of substances, but environment was influential to substance abuse relapse. These findings

showed that environmental factors such as: being around people who drink or use illicit drugs, places, events, times, having cash money and physical cues is extremely often or almost always related to substance abuse relapse.

Despite small sample size, the findings of this study support previous research (Marlatt, G.A. & Gordon, J.R. 1985) that not only behavior and emotional status negatively influence substance abuse relapse, but environmental situations adversely affect the individual in recovery.

Limitations

Perhaps the greatest potential limitation of this study was that it relied on retrospective self-reports to assess factors in the relapse process. Personal subjectivity and one's insight into their recovery process also limit the reliability of the data disclosed.

In addition, the small size of the sample was considered a limitation. A sample of 30 subjects was originally desired, but 40 actually participated in the study and 12 were eliminated due to missed answers regarding substance abuse relapse.

Another obstacle was the sampling process itself. The sample could have been made broader and stronger by

eliminating the restrictions of age and incorporating other ethnic groups and females as participants.

Another limitation was that the cross sectional nature of the results do not directly address the issues of causality. Longitudinal research designs would be used to examine possible alternative explanations for the relationships observed in this study. And, although this study offers important information about how two ethnic groups differ from one another, the relationships related to substance abuse relapse were not tested directly. Thus, future examination of the direct effects of stressors and levels of acculturation on substance abuse relapse among various groups could show improved findings.

Recommendations for Social Work Practice, Policy and Research

Although the professional literature is rich with information about substance abuse relapse, little practical attention was given to discovering how to mitigate the problem at the individual, community and policy levels. Continued research is needed to assess both actual and potential substance abuse and relapse.

Prevention programs designed for both the Mexican American and Anglo male population could be structured to articulate and confront, interrelated acculturative issues

and could address the use of substance within the overall context. Prevention efforts would involve peer support groups composed of not only high acculturated individuals, but also those individuals that bring a new cultural approach to the group.

In addition, effective intense brief treatment could occur in addition to relapse prevention groups to stabilize the patient during those difficult early weeks and months. The use of individual and group therapy, supports in recovery, self-help techniques, identification and management of "trigger events" symptoms and education could be a powerful Holistic model for relapse prevention. In all, this early, intensive focus on relapse risks arising from early abstinence could reduce the incidence of relapse and avoid the need for future costly interventions.

Future research on substance abuse and relapse could benefit by considering the factors addressed in this study. The possibility that different types of drinking habits and use of other substances have different determinants also must be taken into account. It is possible that abstinence is more determinable by cultural, social and historical characteristics than are substance abuse and dependence. In addition, personality

characteristics and personal and family histories are of importance in the development of substance abuse and dependence. Findings also suggested the need for environmental intervention directed toward preventing or meliorating life stressors and strengthening natural sources of support. Assessment of the environmental characteristics of situations that are potentially associated with relapse need to be identified as a preventive measurement.

The social work profession has an ethical obligation to serve these two groups by political action, education, and direct intervention in schools and communities.

Conclusion

Substance abuse relapse varies on an individual level in both the Mexican American and Anglo males. Relapse appeared to vary by age, level of acculturation, ethnicity and "high-risk" factors in particular environmental situations as presented in this study.

It is obvious that empirical test of theoretical concepts concerning causes of substance abuse relapse among Mexican American and Anglo males are scarce, and this study has contributed only a small part. Further research that is carefully designed, controlled and to

include a large sample size is needed so that conclusions drawn about these two populations are both reliable and valid.

APPENDIX A
ACCULTURATION SCALE

Circle a number between 1-5 next to each item that best applies.

	Not at all	Very little or not very often	Moderately	Much or very often	Extremely often almost always
1. I speak Spanish	1	2	3	4	5
2. I speak English	1	2	3	4	5
3. I enjoy speaking Spanish	1	2	3	4	5
4. I associate with Anglos	1	2	3	4	5
5. I associate with Mexicans	1	2	3	4	5
6. I enjoy listening to Spanish language music	1	2	3	4	5
7. I enjoy listening to English language music	1	2	3	4	5
8. I enjoy Spanish language TV	1	2	3	4	5
9. I enjoy English language TV	1	2	3	4	5
10. I enjoy English language movies	1	2	3	4	5
11. I enjoy Spanish language movies	1	2	3	4	5
12. I enjoy reading books in Spanish	1	2	3	4	5
13. I enjoy reading books in English	1	2	3	4	5
14. I write letters in Spanish	1	2	3	4	5
15. I write letters in English	1	2	3	4	5
16. My thinking is done in the English language	1	2	3	4	5

17. My thinking is done in the Spanish language	1	2	3	4	5
18. My contact with Mexico has been	1	2	3	4	5
19. My contact with USA has been	1	2	3	4	5
20. My father identifies or identified himself as "Mexicano"	1	2	3	4	5
21. My mother identifies or identified herself as "Mexicano"	1	2	3	4	5
22. My friends, while I was growing up, were of Mexican origin	1	2	3	4	5
23. My friends, while I was growing up, were of Anglo origin	1	2	3	4	5
24. My family cooks Mexican foods	1	2	3	4	5
25. My friends now are of Anglo origin	1	2	3	4	5
26. My friends now are of Mexican origin	1	2	3	4	5
27. I like to identify myself as Anglo American	1	2	3	4	5
28. I like to identify myself as Mexican American	1	2	3	4	5
29. I like to identify myself as a Mexican	1	2	3	4	5
30. I like to identify myself as an American	1	2	3	4	5

APPENDIX B
SUBSTANCE ABUSE RELAPSE SCALE

Please circle the answer that best applies to you. Do not leave any questions blank.

Age

- | | | | |
|-------|-------|-------|-------|
| 1 | 2 | 3 | 4 |
| 20-25 | 26-30 | 31-35 | 36-40 |

Ethnicity

- | | | |
|-------|------------------|-------|
| 1 | 2 | 3 |
| White | Mexican American | Other |

Marital Status

- | | | | | |
|--------|---------|----------|-----------|---------|
| 1 | 2 | 3 | 4 | 5 |
| Single | Married | Divorced | Separated | Widowed |

What is your religious preference?

- | | | | | |
|-----------|----------|----------------------|-------------------|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Christian | Catholic | Jehovah's
Witness | Other
Religion | No
Religious
Preference |

Last grade you completed in school: (Circle your choice)

1. Less than high school
2. High School graduate
3. Some college
4. College graduate
5. Graduate/Professional

6. Behaving impulsively (without thinking)	1	2	3
7. Changing work habits (working more or less, etc.)	1	2	3
8. Losing interest in things (recreational activities, family life ,etc)	1	2	3
9. Isolating (staying by yourself)	1	2	3
10. Stopping prescribed medication	1	2	3

III Which of these emotional states do you think are related to your substance abuse/relapse?

	Not at all almost	Moderately	Extremely often or always
1. Argument with a family member	1	2	3
2. Feeling afraid	1	2	3
3. Feeling frustrated	1	2	3
4. Feeling depressed	1	2	3
5. Feeling neglected	1	2	3
6. Feeling nervous	1	2	3
7. Feeling sad	1	2	3
8. Feeling angry	1	2	3
9. Feeling embarrassed	1	2	3
10. Feeling happy	1	2	3
11. Feeling guilty	1	2	3
12. Feeling lonely	1	2	3

IV Which environmental situations do you think are related to your substance abuse/relapse?

	Not at all always	Moderately	Extremely often or almost
1. Being around people who drink or use illicit drugs	1	2	3
2. Being around places where substance use is frequented	1	2	3
3. Events that may trigger relapse (Anniversaries, parties etc.)	1	2	3
4. Times that may trigger relapse (Friday/Saturday night, etc.)	1	2	3
5. Having cash money	1	2	3
6. Physical cues (muscle tension heart beating faster, etc.)	1	2	3
7. Other	1	2	3

APPENDIX C
INFORMED CONSENT FORM

INFORMED CONSENT

The study in which you are about to participate is designed to explore substance abuse relapse among Mexican American and Anglo males. It is an issue of concern not only to recognize individual signs before relapse but to implement certain treatment methods to prevent relapse. This study is conducted by Carlos Mauriz, MSW student at California State University, San Bernardino. This study has been approved by the Department of Social Work Sub-committee of the Institutional Review Board at CSUSB. I am asking you to voluntarily participate in this study. I will need this informed consent form be signed before administering both scales.

In this study you will be asked to respond to questions about what may cause substance abuse relapses and acculturation. The task should take 20-30 minutes to complete. All of your responses will be held in the strictest of confidence by the researcher. Your name will not be reported with your responses. All data will be reported in group form only. You may receive the group results of this study upon its completion.

Your mark below indicates that you have understood to your satisfaction the information regarding your participation in this research project. Should you decide not to participate for whatever reason, or should you wish to withdraw at a later date, this will in no way effect the services you receive from this agency. If you have any further questions about this study, please contact Dr. Rosemary McCaslin at (909) 880-5507 or Mrs. Rachel Estrada, LCSW, Research Advisor at (909) 736-6660 and they will address them as quickly as possible.

Sincerely,
Carlos Mauriz
MSW Intern.

Yes: I AM WILLING TO PARTICIPATE IN THIS RESEARCH PROJECT AND I
AM AT LEAST 18 YEARS OLD.

Place a check mark here _____ Today's Date _____

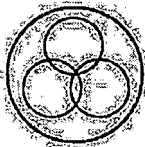
APPENDIX D
DEBRIEFING STATEMENT

DEBRIEFING STATEMENT

Thank you for participation in this study. As indicated in the informed consent form, the purpose of this study is to explore the causes of substance abuse relapse among Mexican American and Anglo males. Your therapist and/or facilitator will Not have this information about your responses. It is hoped that the results of this study will help gain an increased Social Workers understanding of the relationship between the causes of relapse and to improve treatment options.

If any of the questions asked were disturbing to you, there are counseling resources that can help you deal with those distressing issues. Sources include Alcoholic Anonymous (909) 825-4700 and Help Line (800) 300-8040. If you have any questions about the study please feel free to contact Dr. McCaslin at (909) 880-5507 or Mrs. Rachel Estrada, LCSW, Research Advisor at (909) 736-6660 . A copy of the group results of this study will be available in the library or Social Work Department of CSUSB, 5500 University Parkway, San Bernardino, CA 92407 at the end of the Spring Quarter 2002.

APPENDIX E
LETTER OF APPROVAL



Bilingual Family Counseling Service, Inc.

Center For Recovery

Executive Director
Olivia Sevilla, LCSW

Managing Director
Jan Martin

President
Bonnie Mooney, Ph.D.

Vice President
Barbara Zimmerman

Secretary/Treasurer
Lupe Perez, MSW

Board Members:
Deanna Bowers, RN
Cinda Hernandez
Sandra Ross
Joyce Trivers

Funding Sources:
San Bernardino County
Office of Alcohol and
Drug Programs

San Bernardino County
Department of Public
Social Services, Family
Preservation and
Support

San Bernardino County
Superintendent of
Schools

Ontario Montclair
School District

November 20, 2001

Carlos Mauriz
MSW student
Cal State University, San Bernardino

Mr. Mauriz:

This letter is in response to your request to conduct a study at Bilingual Family Counseling Service, Inc. I have reviewed the materials you have submitted and your request has been approved.

Our clinical and support staff will make every effort to cooperate with your needs, and in identifying clients appropriate for your study. Please contact me directly when you are ready to begin.

Sincerely,

Olivia Sevilla, MSW, LCSW
Executive Director

REFERENCES

- Amodeo-M; Jones-L-K. (1998). Viewing alcohol and other drug use across culturally: A cultural framework for clinical practice. Families in Society: The Journal of Contemporary Human Services, 12(3), 240-253.
- Bandura, A. (1986). Social foundation of thought and action. Newark, NJ: Prentice Hall Inc..
- Caetano, R., Clark, C., & Tam, T. (1998). Alcohol consumption among racial/ethnic minorities. Alcohol Health & Research World, 12(6), 33-38.
- Caetano, R. (1989). Drinking Patterns and Alcohol Problems in a National Sample of U.S. Hispanics, Alcohol Use Among U.S. Ethnic Minorities (Research Monograph No.18. DHHS Publication No. ADM 891435, pp.147-162). Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
- Caetano, R. (1984). Ethnicity and drinking in Norther California: A comparison among Whites, African Americans, and Hispanics. Alcohol and Alcoholism, 19(2), 31-44.
- Connors, G., Maisto, S., & Donovan, D. (1996). Conceptualization of relapse: A summary of psychological and psychobiological models. Addiction, 3(4), 5-14.
- Hunt, W. A., Branett, W., & Branch, L. G. (1971). Relapse rates in addiction programs, Journal of Clinical Psychology, 27, 455-456.
- Kelley, J. (1994). Relapse prevention before relapse: An intensified approach. Behavioral Health Management, 14(3), 59.
- Larimer, M, Palmer, R, & Marlatt, A. G. (1999). Relapse prevention: An overview of marlatt's cognitive-behavioral model. Alcohol Research and Health, 17(12), 151-155.
- Lowinson, J., Ruiz, P., & Millman, R. (1992). Substance abuse: A comprehensive textbook 2nd (ed.). Baltimore, MA: Williams & Wilkins.

- Marlatt, G. A. (1978). Craving for alcohol, loss of control and relapse: A cognitive-behavioral analysis, alcoholism: New directions in behavioral research and treatment. New York: Plenum Press.
- Marlatt, G. A., & Gordon, J. R. (1985). Relapse prevention maintenance strategies in the treatment of addictive behaviors. New York: Guilford, Press.
- Marlatt, G. A., & George, W. H. (1984). Relapse prevention: Induction and overview of the model. British Journal of Addictions, 79, 261-273.
- Marlatt, G. A. (1991). Taxonomy of high-risk situations for alcohol relapse: Evolution and development of a cognitive behavioral model. Addiction, 23(2), 37-49.
- McNeece, A, & DiNitto, D. (1998). Chemical dependency: A systems approach (2nd ed.). Needham Heights, MA: Allyn & Bacon.
- McKay, J., & Megan, R. (1996). Development of the cocaine relapse interview: An initial report. Addiction, 91(4), 535-543.
- Neff, J., & Dassori, A. (1998). Age and maturing out of heavy drinking among anglo and minority male drinkers: A comparison of cross-sectional data and retrospective drinking history techniques. Hispanic Journal of Behavioral Science, 20(2), 225-233.
- Niaura, R. S., Rohsenow, D. J., Binkoff, J. A., Monti, P. M., Pedraza, M., Abrams, D. B. (1988). Relevance of cue reactivity to understanding alcohol & smoking relapse. Journal of Abnormal Psychology, 9(7), 133-152.
- Orford, J., & Edwards, G. (1977). Alcoholism: A companions of treatment and advice, with a study of influence of marriage, Maudsley Monographs No. 26. New York: Oxford University Press.
- Stivers, R. (1976). Culture and alcoholism. In R. E. Tartar, & A. A. Sugarman (Eds.), Alcoholism interdisciplinary approaches to an enduring problems (pp. 573-602). Reading, MA: Addition -Wesley.

Tiffany, S. T. (1990). A cognitive model of drug urges and drug-use behavior: Role of automatic and nonautomatic processes. Psychological Review, 97, 147-168.

William, M., & Verner, W. (1996). What predicts relapse? Prospective Testing of Antecedent Models. Addiction, 91(12), 155.