



6-1995

Differentiated Drug Use and its Relationship to Locus of Control and Personality Factors Among Women of Low Socioeconomic Status

Aubrie Catheryn Gordon

Follow this and additional works at: <https://scholarworks.wmich.edu/dissertations>

Recommended Citation

Gordon, Aubrie Catheryn, "Differentiated Drug Use and its Relationship to Locus of Control and Personality Factors Among Women of Low Socioeconomic Status" (1995). *Dissertations*. 1762.

<https://scholarworks.wmich.edu/dissertations/1762>

This Dissertation-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Dissertations by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.



**DIFFERENTIATED DRUG USE AND ITS RELATIONSHIP
TO LOCUS OF CONTROL AND PERSONALITY
FACTORS AMONG WOMEN OF LOW
SOCIOECONOMIC STATUS**

by

Aubrie Catheryn Gordon

**A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
Department of Counselor Education
and Counseling Psychology**

**Western Michigan University
Kalamazoo, Michigan
June 1995**

**DIFFERENTIATED DRUG USE AND ITS RELATIONSHIP
TO LOCUS OF CONTROL AND PERSONALITY
FACTORS AMONG WOMEN OF LOW
SOCIOECONOMIC STATUS**

Aubrie Catheryn Gordon, Ed.D.

Western Michigan University, 1995

This research is a descriptive study assessing the psychological profiles of female substance abusers, both current abusers and recovering abusers, and female nonusers. The sample for this study consisted of 90 women of low socioeconomic status (SES) between the ages of 18 and 50 from a mid-size city in the north central United States. Thirty women from each of the following groups are used in this study: (a) women who are nonusers, (b) women who are currently abusing drugs and other chemical substances, and (c) women who are recovering from drug use and abuse. This study is important because such research might lead to the development of more accurate treatment interventions for women of low socioeconomic status (SES). All three sample groups (abusers, recovering abusers, and nonusers) completed the following instruments: (a) the Michigan Department of Public Health of Substance Abuse Services Data System, which was chosen for its use in identifying demographic information on women of low socioeconomic status; (b) the Sixteen Personality Factor Questionnaire (16PF Form A) (Cattell, Eber, & Tatsuoka, 1970); and (c) the Rotter Internal-External Locus of Control Scale (Rotter, 1966). Examination of subjects' 16PF scores via a series of separate 3 (abusers vs. recovering abusers

vs. nonusers) x 2 (African-Americans vs. White Americans) factorial analysis of variance (ANOVA) yielded no significant differences except for personality Scale O, Apprehension. On the Rotter, a 3 (abusers vs. recovering abusers vs. nonusers) x 2 (White vs. African-American) factorial ANOVA yielded nonsignificant main effects for group as well as a nonsignificant interaction. The finding from this analysis suggests that low SES women are more prone to guilt, apprehension, self-reproachment, insecurity, worry, and troubled behavior. In addition, this personality factor is associated with acting out behavioral patterns. This finding is consistent with some of the behavior associated with individuals who abuse drugs and alcohol and are chemically dependent.

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

**A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600**

UMI Number: 9537091

UMI Microform 9537091

Copyright 1995, by UMI Company. All rights reserved.

**This microform edition is protected against unauthorized
copying under Title 17, United States Code.**

UMI

**300 North Zeeb Road
Ann Arbor, MI 48103**

DEDICATION

This dissertation is dedicated to:

**My mother, Catherine Ophelia Welch, whose love and ideals I
cherish; you paved the way for me; and**

Kimberly Sykes-Glass, who taught me what a true friend is.

Aubrie Catheryn Gordon

ACKNOWLEDGMENTS

I want to express my appreciation to the following:

To God for this and all blessings;

To Dr. Michael Bahr, my chair, who is a true gentleman and a scholar;

To Dr. Dennis Simpson, who has directed my path from the beginning;

To Dr. Edward Trembley, who taught me more than anyone in my academic career; you are phenomenal;

To Carol Greene, who has stood by me each step of the way and shares in this accomplishment;

To Matthew R. Gordon and Courtney A. Gordon, who have been my companions in this endeavor and have been the fire that kept me going;

To Kendall A. Gordon and Tavianna Gordon (my grandchildren), for whose births I am so thankful and who bring new joy to my life;

To Janesta Sturup, who has been my lifeline and has helped me discover the essence of my soul;

To Joy Williams, an exemplar who first suggested that I continue my education;

To Dr. Robert Wertkin, my advisor who believed in me before I believed in myself; and

To Judy Welch, my sister-in-law and my friend, who cheered me on.

Aubrie Catheryn Gordon

TABLE OF CONTENTS

ACKNOWLEDGMENTS	ii
LIST OF TABLES	v
CHAPTER	
I. INTRODUCTION	1
Background of the Problem	1
Purpose and Rationale of the Study	2
Problem Statement	3
Definition of Terms	4
Socioeconomic Status and Gender	4
Variables	5
II. LITERATURE REVIEW	7
Introduction	7
Locus of Control	12
Women, Ethnicity, and Substance Abuse	15
Summary	19
Null Hypothesis	20
III. METHODOLOGY	21
Subjects	21
Independent Variable	27
Dependent Variables	29
Sixteen Personality Factor Questionnaire	30
Rotter's Internal-External Locus of Control Scales ..	33
Study Procedures	34

Table of Contents--Continued

CHAPTER	
Data Analysis	35
Null Hypotheses	35
IV. RESULTS	37
V. DISCUSSION	43
Limitations of Study	45
Implications for Practice and Future Research	46
Issues for Future Research	51
APPENDICES	53
A. Letter to Agency Leaders	54
B. Letter to Participants	56
C. Approval Letter From Human Subjects Institutional Review Board	58
BIBLIOGRAPHY	60

LIST OF TABLES

1. Descriptive Statistics on Demographic Characteristics of Subjects	23
2. Descriptive Statistics on Demographic Characteristics of Users	24
3. Descriptive Statistics on Demographic Characteristics of Recovering Users	25
4. Descriptive Statistics on Demographic Characteristics of Nonusers	26
5. Summary Statistics for the Variable Type	27
6. Racial Makeup of Subjects by Group	27
7. Summary Statistics for the Variable Marital Status	28
8. Summary Statistics for the Variable Current Employment Status	28
9. Summary Statistics for the Variable Public Assistance	29
10. Summary Statistics for the Variable Insurance Coverage ...	29
11. Summary Statistics for The Variable Living Arrangements ..	30
12. Summary Statistics for the Variable Primary Drug Used	30
13. Summary Statistics for the Variable Secondary Drug Used	31
14. Summary Statistics for the Variable Tertiary Drug Used	31
15. Means and Standard Deviations for 16PF Scores by Race .	38
16. <u>F</u> and <u>p</u> Values for Group, Race, and Interactions	40

CHAPTER I

INTRODUCTION

Background of the Problem

Alcohol and drug abuse among women has become a growing concern for helping professionals. According to Kinney (1991), "the traditional assumption in the alcohol and substance abuse treatment field has been that alcohol dependence is alcohol dependence, regardless of gender" (p. 244). The number of women who are becoming chemically dependent on substances is increasing rapidly. Much of the data to support this claim comes from the Drug Abuse Warning Network (DAWN, 1985). The task of DAWN is to monitor the toxicity of drugs by collecting data on overdoses and drug related deaths.

Chemical dependency is one of the major social problems in the United States. It knows no boundaries, cutting across culture, learned sex roles, race, economic status, intellectual level, and religiosity (Smith, 1982). Although this is true, there is limited information addressing the ever-growing number of women who use drugs and alcohol. Research on such women remains one of the most neglected areas of research in the drug and alcohol domain (Ettore, 1992).

Kinney (1991) suggested that researchers are dealing with a largely unknown population when examining substance abusing women. Conservative estimates put the number of women alcoholics in the United States at about 900,000, or 20% of the total number of

alcoholics (Beckman, 1984). However, more recent information from the National Council of Alcoholism (1991) suggested that the range may be closer to 50%. According to Robins and Smith (1980),

The relative lack of longitudinal studies of women's drug and alcohol abuse and the small samples of women heavily involved with drugs or alcohol in the few existing studies mean that we know even less about both the causes of women's substance abuse and its natural history than we do about men's. (p. 203)

The characteristics of subjects in the aforementioned research include women alcoholics, women with drug dependency, alcoholic women who use and abuse or are dependent on other substances, and female substance users who drink or are alcoholic and dependent (Kinney, 1991). Therefore, it is not only more difficult to synthesize the material in research presented on sex-specific chemical abuse, but it is very difficult to develop treatment implementations for female abusers.

Purpose and Rationale of the Study

The review of pertinent literature suggested that a number of important issues pertaining to women and substance abuse and their interrelationships have not been studied (Ettore, 1992). Since women may constitute at least half of the population, it is clearly important, even on practical grounds alone, to know as much as possible about their substance abuse, especially since some of these problems affect their offspring of both sexes. Furthermore, no systematic psychological profile has been established regarding the characteristics that define this population. The present study attempts to provide such information.

Problem Statement

There is no consistently clear definition of the personality factors that may be associated with substance abuse, and the literature is limited regarding sex-role specific drug use. Consequently, the proposed study attempted to provide salient information on the psychological profiles for three groups of substance-abusing women of low socioeconomic status (SES): (1) women who abuse alcohol and/or other drugs, (2) women who are in recovery from alcohol or other drug abuse, and (3) those who do not abuse on alcohol or other drugs.

This study is significant foremostly because it may assist in the development of treatment interventions with chemically dependent women. Moreover, the present research may also be useful in identifying characteristics or personality factors that are prominent in substance abusing women. It is also important because such research might lead to the development of more accurate treatment interventions for women of low socioeconomic status (SES). It is also imperative that data be collected in areas typically underrepresented, leading to a broader knowledge of dependent women. According to Kalant (1980), the problem of drug dependency in women is often compounded by other factors that make it difficult to provide a profile of chemically dependent women.

Women of low socioeconomic status were examined in this study due, in part, to the lack of information on this segment of the population. Further examination of women of low SES will add to the knowledge by providing a more comprehensive profile of the substance

abusing woman. Specifically, this study examined the relationship between measures of locus of control and personality factors for low SES women who are (a) nonabusers, (b) recovering from alcohol and drug abuse, and (c) abusers.

Definition of Terms

Alcohol abuse/dependence (Diagnostic and Statistical Manual of Mental Disorders [DSM-IV-R], American Psychiatric Association [APA], 1994), a pattern of pathological alcohol use, is defined as the need for daily use of alcohol for adequate functioning.

Cocaine abuse/dependence (DSM-IV-R, APA, 1994) is defined as the inability to reduce or stop use, intoxication throughout the day, or episodes of cocaine overdose.

Illicit drugs is defined as the use of illegal drugs.

Sex-role specific is defined as pertaining to women only.

Socioeconomic Status and Gender

This study investigated gender and socioeconomic status as factors related to alcohol and other drug dependency. Encompassed in this examination was an underlying assumption that some or many of the respondents from the inner city would be of minority status or classification due to geographic representation. Although current estimates concerning specific substances of abuse may differ between Blacks and Whites, it is imperative to recognize that substance abuse is a significant problem in both populations (Dawkins, 1980).

Although the prevalence of problematic drinking and alcoholism has been estimated to be approximately 9% of the U.S. adult population, this rate has been reported to be as high as 26% among lower socioeconomic groups (Clifford & René, 1986). Robins and Smith (1980) asserted that there is a relationship between low SES and drug use among women, contending that lower SES women are more likely to engage in alcohol and drug abuse than higher SES women.

Some consideration must be given to the study of women who comprise this respondent group. There continues to be a need for further research with women of all races and socioeconomic classes. Few studies have compared Black and White female alcoholics (Corrigan & Anderson, 1984). Commenting on this lack of information, Dawkins (1980) stated:

Even when comparisons have been made between black and white females in terms of alcohol-related experiences, the research is usually based on misconceptions about black behavior or is simply not clear in terms of implications for developing effective treatment services. (p. 41)

Variables

There are two dependent variables for this study: (1) scores on the Sixteen Personality Factor Questionnaire (16PF) (Cattell, Eber, & Tatsuoka, 1970), which yield a personality profile; and (2) scores on the Rotter Internal-External Locus of Control Scale (Rotter, 1975).

To provide demographic information, the Michigan Department of Public Health of Substance Abuse Services Data System was used to assess low SES. Low SES individuals are defined as individuals annually earning below the poverty level as determined by the Congressional

Budget Office (1992).

The independent variable for this study is substance abuse status. There are three levels to this variable: (1) women who abuse alcohol and other drugs, (2) women in recovery from alcohol and other drug abuse, and (3) women who do not abuse alcohol or other drugs.

CHAPTER II

LITERATURE REVIEW

Introduction

There are many critical issues to be addressed when surveying the literature on substance abuse and women. Research has been conducted in many disciplines and from various theoretical perspectives. The consensus among many researchers supports the notion that women who use and abuse chemical substances have "special needs" which require further investigation. This call for more empirical research is due to the limited body of literature on women substance abusers. According to Reed (1987), many articles, books, and book chapters written about drug dependent women continue to appear, many of which are nonempirical (e.g., Beckman & Amaro, 1984; Lex, 1991; Morrissey, 1986; Rosenbaum, 1981; Rosenbaum & Murphy, 1981).

Fagan (1994) noted that much research on female drug use has been "situated in the literatures on prostitution, 'street hustling,' and crime" (p. 180). While a number of researchers (e.g., Fagan, 1994; Kinney, 1991; Reed, 1987) reviewed the literature, others (e.g., Marlatt, 1985; Pickens & Heston, 1976; Spotts & Shontz, 1986; Trimble, 1991) described treatment models or research that continues to add to the knowledge of drug dependent women, their needs, and their racial and ethnic backgrounds. However, the literature lacks a systematic examination of the theoretical, programmatic, and organizational implications

of the relatively new knowledge about women's drug dependence. According to Fagan (1994), "when women were the focus of research, variation in paradigms for men and women led to vastly different pictures of drug use by gender" (p. 179). In terms of character, for instance, women who used substances were considered to be immoral and less than a woman. Men, however, escaped the moral implications and were regarded as having problems.

In fact, the literature is very limited regarding gender specific substance abuse, and many investigations have focused on the male substance abuser. After reviewing the research on gender issues in substance abuse, Reed (1987) concluded:

The researchers, theorists and policy makers are predominantly men, as were the majority of those within drug dependence treatment programs. In research studies, women were either ignored, combined with men, or their results were so puzzling that they were called unpredictable and, thus, not interpreted. . . .

One consequence of the male definition for drug dependence is that drug dependent women experience double deviance. They are not properly female if they drink, use unacceptable drugs or engage in unladylike behaviors while they are intoxicated or high. In addition, they are not properly alcoholic or addicted because their behaviors and psychological profiles do not fit the masculine patterns that are called alcoholism or addiction. (pp. 152-153)

A great deal of research on women and substance abuse was conducted in the 1970s and focused on alcoholism. Until recently, there have been no theoretical paradigms from which to draw additional information about women who use drugs and alcohol. For example, women have had difficulties being represented in studies. "Although research on women's drug use increased in the 1970's, it applied theories and models developed from men's experiences with heroin to

explain gender differences" (Fagan, 1994, p. 179). Only recently has research addressed substances such as cocaine and other stimulants for women (e.g., Boyd & Mieczkowski, 1990; Erickson & Murray, 1989; Hamid, 1991; McCoy & Miles, 1992). Most articles focus on women and alcohol or lump drugs together in a generic fashion (Fagan, 1994). The literature regarding hard drugs is nonexistent. Clearly, women with substance abuse problems have been neglected in the literature.

Kinney (1991) pointed out that image plays an important role in the representation of women in substance abuse research. The image of American women held by Hirsch (1989) supported her theory by suggesting that the public has formed an impression of alcoholic women and degraded them. She further stated that because the role of women has been equated with the stability function of wives and mothers, drunken women have seemed to be a special threat to society. No one likes to believe that the hand that rocks the cradle might be a shaky one (Hirsch, 1989). Women represent an important social and moral symbol that is the bedrock of society (Ettore, 1992).

By centering on men, the most social, "visible" participants within our drug using cultures, "scientific" researchers in the addiction field tend to uphold traditional patriarchal images of men and women. As a result, the significance of substance use for women as a social group is concealed, if not actively subverted or hidden. This notion becomes even more significant when one considers that the research data that are presented are often misleading. Women alcoholics are often ignored or lumped together with men alcoholics in both research and treatment efforts. (Ettore, 1992, p. 17)

Much of the information available relies on data collected through police seizures, mortality rates, and treatment programs. These data ignore gender specific characteristics. The traditional bias against

research on alcoholism in women has made it difficult to determine the actual prevalence in female populations. In addition, a number of methodological problems with the studies that have been done make it likely that the reported figures are underestimates. The researchers, theorists, and policy makers are predominantly men, as were the majority of those subjects within drug dependence treatment programs (e.g., Henderson & Anderson, 1982).

Despite the potential for underestimation, the problem of alcoholism in women is believed to be substantial. It was estimated that 6% of the general adult female population in the United States in 1985 were alcohol abusers or alcoholics (Reed, 1987). This is in contrast to a prevalence of 14% for alcohol problems in adult men (Cyr & Moulton, 1990).

Litman (1986), in her review of women and alcohol-related problems, suggested that some caution should be taken when drawing conclusions about alcoholic women based on previous studies. She noted that although attempts have been made to address the issues involved with women and drinking, the fact remains that only 7% of alcoholic subjects studied are women. Bry (1983) concurred with the estimate that alcohol is the most frequently abused substance among women. Researchers are consistent in all studies that the 7% estimates are accurate; however, estimates range from 2% to 11% (Ferrence & Whitehead, 1980). Bry (1983) suggested that some writers claim that these figures are too low because of the problem of hidden alcoholism.

According to Harrison and Belille (1987), very little research on women and substance abuse was published before 1970. There appears

to be no universal agreement or understanding about what factors define a substance using/abusing woman, although early publications on the topic of women and alcoholism focused on roles. According to the stereotypes, a woman who has deserted her feminine role sufficiently to be an alcoholic has deserted respectability in all areas, especially the sexual ones (Curlee, 1968).

Other early research found that emotional problems are considered to be predisposing factors in substance abuse (Ansubel, 1952). It has also been suggested that the central feature of alcoholism in women is a preoccupation with being inadequate, inept, and a sense of futility about being able to fulfill the female role (Ansubel, 1952). An important factor in the etiology of alcoholism in women is said to be role confusion. Kinsey (1966), in a social-psychological study of alcoholic women, noted that his subjects had difficulties in obtaining female images of themselves and in defining the female role.

The literature makes several suggestions about what causes women to become substance abusers, but there is little empirical evidence. Spotts and Shontz (1986) noted that current investigators must recognize that many factors determine drug use, rather than focusing on personality traits alone. Some of these include: family context and peer relations, in addition to the characteristics of each particular drug (Spotts & Shontz, 1986). Although clinical reference to the poor self-concept of women alcoholics is common, only a few studies present corroborating data (Beckman, 1978). Studies by Pickens and Heston (1976) and Derogatis, Rickels, and Rock (1976) attribute psychological stress and emotional problems as determinants in substance use by women. Blum

(1970) found poor relationships with parents was a precursor for substance use.

Zuckerman (1972) developed a theory that high sensation seekers are always seeking stimulation in order to keep themselves in a homeostatic state, and drugs and alcohol are just two of many different sources of stimulation available to them. Zuckerman found that of the respondents who had a high level of sensation seeking traits, 74% also abused alcohol.

In addition:

The literature also suggests that there may be a relationship between child physical and sexual abuse and illicit drug use. Little attention has been given to the possible influence of child maltreatment in the development of various patterns of drug taking. Despite the theoretical and methodological shortcomings, the literature supports the importance of investigating the role of children's physical and sexual abuse experiences, and their attendant loss of self-esteem, in understanding their involvement with illicit drug use (Dembo et al., 1987, p. 15)

Locus of Control

A review of the literature reveals that studies designed to compare alcoholics to nonalcoholics produced findings to support a number of contradictory hypotheses about control orientation in alcoholics. Studies designed to examine the relationship between locus of control and the treatment of alcoholism were generally developed to provide answers to two issues: (1) whether locus of control changes following treatment for alcoholism, and (2) whether a change in an internal or external direction is an appropriate treatment goal with alcoholics (Oswald, Walker, Reilly, Krajewski, & Parker, 1992). A shift from external to internal

locus of control scores has been demonstrated in a number of investigations following treatment for alcoholism (Oswald et al., 1992). However, the meaning of this shift remains ambiguous. A shift from external to internal could be the result of a number of variables that have little to do with alcoholism treatment (Oswald et al., 1992). Furthermore, both internal and external locus of control have been associated positively with treatment success (Oswald et al., 1992).

Marlatt (1985) studied both alcoholics and illicit drug users. His conclusion was that treatment models must be matched to clients' needs. Marlatt asserted that cocaine abusers and alcoholics should not be treated as a homogeneous population.

According to Rotter (1975), the relative importance of generalized expectancies decreases as a person's familiarity with a situation increases; therefore, specific measures of expectancy could be presumed to be useful for application in limited areas of interest. Oswald et al. (1992) stated:

Most of the studies designed to examine a locus of control in alcoholics have used the generalized I-E scale as a measurement instrument. Limitations in the predictive power of the generalized concept (Rotter, 1975), coupled with evidence of multidimensionality of the I-E scale itself (Mirels, 1970), may account for some of the ambiguous findings that have characterized the locus of control research with alcoholics. (p. 85)

The study by Oswald et al. (1992) was one of the first to focus on locus of control of drug addicts. The purposes of the study were (a) to develop an instrument that would measure specific expectancies of control in cocaine and (b) to examine the relationship between specific and generalized expectancies of control in these subjects.

Other theorists have suggested causation factors such as the early use of substances, problem behavior at an early age, low religiosity levels, and low achievement motivation as significant predictors of substance use/abuse. Some researchers lean toward low self-esteem as being a critical precursor to substance abuse. It should be noted, however, that although clinical references to poor self-esteem are common, only a few studies present corroborating data (Beckman, 1978). Beckman (1978) investigated the self-esteem of women alcoholics, nonalcoholics, and drug users using the Rosenberg Self-Esteem Scale and the Rotter Internal-External Locus of Control Scale. Her findings indicated that women entering treatment centers suffer from low self-esteem, and interventions focused on developing self-esteem were found to be effective in the treatment of chemical dependency.

Similarly, when comparing chemically dependent men or women with those men or women who were not chemically dependent, chemically dependent women reported the lowest levels of self-esteem, higher levels of depression, and higher levels of anxiety (Mondanaro, 1989). Relatedly, a problem also exists in that most drug treatment centers were designed for men (Fagan, 1994). In their study of heroin users, Robins and Smith (1980) found that twice as many men (9%) as women (4%) sought treatment for their heroin addiction, although the women had been using heroin longer than men. Speculating on this issue, Quinby and Graham (1993) noted that "alcoholic women may also have more difficulty accepting treatment because of feelings of powerlessness, inadequacy, and a low self-esteem" (p. 135). It would be valuable to learn whether drug treatment programs, designed primarily for men,

fail to attract women or have internal barriers to treatment for women.

Although locus of control studies have been conducted on drug users, the primary respondents were male, not female. In their profile of female narcotic addicts, Nurco, Wegner, and Stephenson (1982) studied the reasons why and how women use narcotics. Some of the reasons for females starting drug use were not different from male counterparts--peer pressure, excitement, curiosity, and escape (Nurco et al., 1982). However, though it is uncommon for a male informant to report wanting to try using drugs because of drug use by his wife or girlfriend, it is common for female informants to speak of a male partner who used narcotics to exert pressure on the female to try them. In some cases the male was pressured by the female to allow her to try the drugs because she perceived him as having pleasure, and she wanted to share that pleasure (Nurco et al., 1982).

Further, while men are the primary distributors of illicit drugs to women, it is often other women who provide peer-group support and information (Ferrence & Whitehead, 1980). Based on the lack of data on substance abusing women, what stands out is the need for further research on gender specific substance use/abuse patterns.

Women, Ethnicity, and Substance Abuse

Similar to the dearth of research on females, there have been few studies on alcohol consumption patterns and consequences of substance abuse among Blacks. Harper and Dawkins (1976) reviewed 16,000 published articles and found that only 77 contained any discussion of alcohol use by Blacks. Furthermore, only 11 articles reported studies in

which Blacks were exclusively targeted. Despite the fact that the method of selecting the articles used in this survey is unstated, one must pay attention to the magnitude of such a review and its implications.

The review by Harper and Dawkins (1976) is particularly useful in highlighting the need for future investigation of the relationship between women of low socioeconomic status (SES) and substance abuse. Women are often reluctant to enter substance abuse treatment for fear of losing custody of their children (Morley, 1990). Even though only small ethnic and racial differences were found in nationwide surveys of drug use patterns, Blacks are more likely to be targeted, tested, and prosecuted for drug abuse by health professionals than are Whites and Hispanics (Neuspiel, 1993). This is thought to result in keeping Black women who use/abuse drugs from seeking prenatal and other health care (Neuspiel, 1993).

Considerations of factors that influence women of color to enter substance abuse treatment programs are vital in adding to the body of literature surrounding this issue. Social theories explaining Black women's drinking behavior emphasize the women's supposed dominant position in the Black family (Kinney, 1991). The special susceptibility to substance abuse is a reality in this population.

In a 1984 survey of literature on alcoholism, Herd (1985) found that nearly one-half (46%) of Black women were classified as abstainers, compared with approximately one third of White women. However, the data also indicated that when Black women drank, they had a tendency to drink more heavily than did Whites. Black women's cirrhosis death

rates more than doubled during the 1980s, although there was a negligible increase among White women (Amuleru-Marshall, 1991). The data begin to suggest that substance abuse presents serious consequences to Black women.

Concerning Native Americans, the U.S. Department of Health and Human Services (cited in Closser & Blow, 1993) reported that their morbidity and mortality rates which are alcohol related are higher than those of the general population . It is also important to note that reported deaths directly related to drugs for all populations are not representative of the total number of deaths due to drugs because they do not include other deaths due indirectly to drugs, such as homicides, falls, and automobile accidents (Institute for Health Policy, 1993, p. 36). Furthermore, clinical research has noted that not enough is known about minorities and substance use, whether gender related or not.

To be a woman and a substance abuser is problematic at best. According to Brunswick, Lewis, and Messeri (1991): "Among African-American women, adult drug use was linked to unmet affiliation expectancies and corresponding need for social bonds and networks" (p. 133). However, women who are of minority status, both socioeconomically and/or of color, experience the disadvantages of being a woman, and chemically dependent, as well as the prejudices of race, culture, and language (Quinby & Graham, 1993).

The research in the area of minority women and substance abuse is difficult to interpret because of the way these populations are defined. One of the main criticisms of the existing substance abuse research on minority groups is the simplistic and artificial descriptors and groupings

used in describing them (Closser & Blow, 1993). Further, the use of the word "minority" lumps Native Americans, Asians and Pacific Americans, African-Americans, and Hispanics, or any other specific groups into one monolith. Trimble (1991) described the problem for the majority of the studies in drug use literature on ethnic minorities. He gave descriptions of research on ethnic and cultural groups which tend to rely on the use of categories. This research does not further the goal of increasing understanding of these groups because in many cases the categories are "superficial, almost vacuous" (Trimble, 1991, p. 153).

Further, classifications such as "cross-cultural" and "mixed" are used in the literature regarding ethnicity. These styles of classification can lead to questions about the respondents and inhibit use of the researchers' findings. In many studies race is simply not specified. Brunswick et al (1991) noted that the racial categories used in research are ambiguous and that the roles are linked with the subjects' low SES. In addition, there is a need for recognition of distinct individual cultural histories which are evidence against overgeneralization of racial categories (Brunswick et al., 1991).

However, the early literature suggests placing more emphasis on including race/ethnicity in alcohol and other drug research. Chambers (1971) suggested that race be considered an important variable in any attempt to formalize a theoretical frame of reference for addiction among females or in any attempt to construct a typology of female narcotic addicts. Blacks, Hispanics, Native Americans, Asians, and Whites all differ significantly in childhood home status, occupational status, conjugal home status, and regional area of residence. Chambers (1971)

concluded that "racial differences are also significant in how addicts become addicted, what drugs they use, how drugs are administered, how drugs are obtained, and what other deviances are evident in their lifestyles" (p. 10).

Summary

The review of the literature points to the need for further investigation of gender-specific research. It is difficult to develop programs and treatment initiatives for women addicts when there is no clear consensus about who they are, how they are affected, and what recommendations are needed to serve them effectively.

That many drug users are "poly-drug" users, meaning they abuse more than one substance, means many of them are cross-addicted (Spotts & Shontz, 1986). In relation to the problem of cross-addiction, use of hard drug and/or specific descriptors (e.g., cocaine, crack, heroin) creates problems in external and internal validity and prevents replication (Trimble, 1991). In other words, drugs with different pharmacological properties are often lumped together when researchers study drug abuse.

The review of the literature on substance abusing women hinders a clear and accurate perspective for the problem as it relates to their needs for recovery programs. Mortality and disease data cannot be the primary source for gaining insight to the problem of why and how these women are substance abusers. A better source of information is to examine the experiences and information provided by the women substance abusers themselves.

Null Hypothesis

The primary null hypothesis and alternative hypothesis for the study are as follows:

H_0 : There will not be differences in the psychological profiles of women of low SES who abuse substances, are recovering from substance abuse, or do not abuse substances.

H_1 : There will be differences in the psychological profiles of women of low SES who abuse substances, are recovering from substance abuse, or do not abuse substances.

CHAPTER III

METHODOLOGY

Subjects

This research is a descriptive study assessing the psychological profiles of female abusers, both current abusers and recovering addicts, and female nonusers. The data were obtained from women of low socioeconomic status (SES) between the ages of 18 and 55. Volunteers were recruited from substance abuse agencies and nonusers were recruited from community centers.

Nonusers were defined by having used no illegal drugs and less than one ounce of alcohol per week. Current abusers were identified from client files at a residential or outpatient drug rehabilitation program. In order to be considered an active abuser, subjects must have used drugs or alcohol heavily in the past 30 days. More specifically, alcohol abusers must have drunk five or more drinks per occasion on 5 or more days in the past 30 days. Current abusers may also include those who used any illicit drugs in the past month. Recovering substance abusers are those who have completed an inpatient and/or outpatient substance abuse treatment program within the past 2 years.

Permission to conduct the research was requested from counselors, the administrators at local substance abuse programs, women abusers, and women in recovery from chemical dependence. Potential subjects were identified from agency recommendations of possible

participants. The subjects were then interviewed at substance abuse agencies to determine eligibility and placement into one of the three categories. At that time, subjects were asked if they were willing to participate in the research on a voluntary basis.

Each participant filled out the same questionnaire, the Michigan Department of Public Health Substance Abuse Services Data System. This instrument contains items related to biographic information, demographic information, and drug and arrest histories. A total of 37 items were used as variables and entered into the data set.

In terms of recruiting nonusers, leaders of community groups and organizations in low socioeconomic neighborhoods were contacted to obtain permission to distribute an instrument packet (described below) for the purpose of collecting data. Letters of introduction were distributed to all organization leaders explaining the purpose of the dissertation, which was carried out through the Department of Counselor Education and Counseling Psychology, Western Michigan University (see Appendix A).

Ninety-four participants were included in the study. By group, 31 were users, 38 recovering abusers, and 27 were nonusers. Table 1 shows summary statistics on several demographic variables. One interesting note is that of the 77 participants who responded to the question, none of them were arrested in the last 6 months for drunken or impaired driving. The average respondent did not complete the 12 grade. The average age at first use of the primary drug was higher than the average age at first use of the secondary drug, which in turn was slightly higher than the average age at first use of the tertiary drug.

Table 1
Descriptive Statistics on Demographic
Characteristics of Subjects

Demographic characteristic	<u>N</u>	<u>M</u>	<u>SD</u>
Education	86	11.79	1.87
Age	82	32.07	7.38
Number of dependents	85	2.32	1.39
Total arrests/6 months	82	0.22	0.47
Possession arrests/6 months	77	0.03	0.16
Drunk, impaired arrests/6 months	77	0.00	0.00
Total arrests/5 years	85	1.71	2.41
Possession arrests/5 years	83	0.31	0.88
Drunk, impaired arrests/5 years	80	0.16	0.58
Age at first use of primary drug	56	19.41	6.81
Age at first use of secondary drug	39	17.82	5.65
Age at first use of tertiary drug	15	17.47	4.88

Table 2 shows the summary statistics of the same demographic characteristics as Table 1 but only for participants who were users. Once again, the average user did not complete the 12th grade. The average age at first use of the primary drug was again higher than the average age at first use of the secondary drug, which in turn was higher than the average age at first use of the tertiary drug. This indicates that the average user began using the primary drug at an older age and the tertiary drug at a younger age.

Table 2
Descriptive Statistics on Demographic
Characteristics of Users

Demographic characteristic	<u>N</u>	<u>M</u>	<u>SD</u>
Education	27	11.59	1.62
Age	26	32.88	6.22
Number of dependents	30	1.77	1.19
Total arrests/6 months	27	0.41	0.64
Possession arrests/6 months	27	0.07	0.27
Drunk/impaired arrests/6 months	27	0.00	0.00
Total arrests/5 years	27	2.93	2.88
Possession arrests/5 years	27	0.74	1.40
Drunk/impaired arrests/5 years	26	0.19	0.57
Age at first use of primary drug	28	20.61	6.58
Age at first use of secondary drug	21	18.71	5.84
Age at first use of tertiary drug	8	15.25	1.98

Table 3 shows the summary statistics for the participants who were recovering from drug use. The average recovering user did not complete the 12th grade. Varying from the users, the average of recovering users' first use of the tertiary drug was highest, followed by the average age at the first use of primary drug, and the average age at the first use of the secondary was the lowest.

Table 4 shows the summary statistics for the participants who were nonusers. In contrast to the other groups, the average nonuser

Table 3
Descriptive Statistics on Demographic Characteristics
of Recovering Users

Demographic characteristic	<u>N</u>	<u>M</u>	<u>SD</u>
Education	33	11.39	1.77
Age	35	33.29	7.34
Number of dependents	32	2.63	1.60
Total arrests/6 months	30	0.23	0.43
Possession arrests/6 months	25	0.00	0.00
Drunk/impaired arrests/6 months	25	0.00	0.00
Total arrests/5 years	34	1.74	2.30
Possession arrests/5 years	32	0.19	0.40
Drunk/impaired arrests/5 years	30	0.27	0.78
Age at first use of primary drug	28	18.21	6.94
Age at first use of secondary drug	18	16.78	5.39
Age at first use of tertiary drug	7	20.00	6.08

completed 12.5 years of education. Of the 25 nonusers who responded to the 6-month arrest history questions, none were arrested for any offense in the last 6 months. Of the 24 who responded to the 5-year arrest history questions, none were arrested for possession or drunken/impaired driving in the last 5 years.

Tables 5-14 provide other demographic information on the subjects. It should be noted that when there are missing values, as noted under a table, frequencies and percentages are based on the number of

Table 4
Descriptive Statistics on Demographic
Characteristics of Nonusers

Demographic characteristic	<u>N</u>	<u>M</u>	<u>SD</u>
Education	26	12.50	2.10
Age	21	29.05	8.24
Number of dependents	23	2.61	1.12
Total arrests/6 months	25	0.00	0.00
Possession arrests/6 months	25	0.00	0.00
Drunk/impaired arrests/6 months	25	0.00	0.00
Total arrests/5 years	24	0.29	0.62
Possession arrests/5 years	24	0.00	0.00
Drunk/impaired arrests/5 years	24	0.00	0.00

subjects responding to the question rather than the total number of subjects in the study. Another point to note is that with the tables for the variables involving the drugs that were used, there is a category called "none." This is because nonusers were given a value of 0 for these variables and were counted by the frequency procedure. For the secondary and tertiary drugs used, the category "none" would also include recoverers and users who did not use a second or third drug.

The most commonly used primary drug was cocaine/crack. The most common answer for secondary drug used and tertiary drug used was none. A majority of the subjects were Black (53.8%), never married (56.80%), and not on public assistance (55.80%).

Table 5
Summary Statistics for the Variable Type

Type	Frequency	Percent
User	31	32.3
Recovering	38	39.6
Nonuser	27	28.1

Table 6
Racial Makeup of Subjects by Group

Type	Black	White
Nonabuser	20	12
Recovering	9	18
Abuser	13	19
Total	42	49
Percent	46.2%	53.8%

Independent Variable

The independent variable in this study is status of drug abuse. This variable has three levels: abuser, recovering abuser, and nonuser. The identifying criteria for membership in each of these three groups was described in the Subjects section.

Table 7
Summary Statistics for the Variable Marital Status

Status	Frequency	Percent
Never married	50	56.8
Married/cohabiting	12	13.6
Widowed	2	2.3
Divorced	19	21.6
Separated	5	5.7

Note. Eight observations are missing.

Table 8
Summary Statistics for the Variable
Current Employment Status

Status	Frequency	Percent
Full-time	27	29.7
Part-time	7	7.4
Unemployed	39	42.9
Homemaker	10	11.0
Student	5	5.5
Other	3	3.3

Note. Five observations are missing.

Table 9
Summary Statistics for the Variable Public Assistance

Assistance	Frequency	Percent
No	48	55.8
Yes	38	44.2

Note. Ten observations are missing.

Table 10
Summary Statistics for the Variable Insurance Coverage

Coverage	Frequency	Percent
None	24	28.9
Blue Cross/Blue Shield	10	12.0
Commercial carrier	11	13.3
Medicare disability	1	1.2
Medicaid	33	39.8
Health maintenance	3	3.6
Other	1	1.2

Note. Thirteen observations are missing.

Dependent Variables

There are two dependent variables in the study. These are the Sixteen Personality Factor and the Rotter Locus of Control.

Table 11
Summary Statistics for the Variable
Living Arrangements

Arrangements	Frequency	Percent
Independent	61	74.4
Dependent	15	18.3
Homeless	6	7.3

Note. Twenty-three observations are missing.

Table 12
Summary Statistics for the Variable
Primary Drug Used

Drug	Frequency	Percent
None	27	29.3
Alcohol	19	20.7
Opiates	4	4.3
Cocaine/crack	32	34.8
Marijuana	10	10.9

Note. Four observations are missing.

Sixteen Personality Factor Questionnaire

The Sixteen Personality Factor (16PF, Cattell et al., 1970) is a multidimensional set of 16 personality scales that generates individuals' scores for each subscale. It is designed to make available, in a practical

Table 13
Summary Statistics for the Variable
Secondary Drug Used

Drug	Frequency	Percent
None	33	42.9
Alcohol	24	31.2
Opiates	2	2.6
Cocaine/crack	11	14.3
Marijuana	7	9.1

Note. Nineteen observations are missing.

Table 14
Summary Statistics for the Variable
Tertiary Drug Used

Drug	Frequency	Percent
None	49	73.1
Alcohol	4	6.0
Opiates	5	7.5
Cocaine/crack	2	3.0
Marijuana	7	10.4

Note. Twenty-nine observations are missing.

testing time, information about an individual's standing on the majority of primary personality factors. Form A of the 16PF was used for this study for its low literacy version with a reading level of seventh grade.

The 16PF, Form A, has 24 scores including 16 primary factor scores. The 16PF provides a composite score for each of the following dichotomous factors: (a) reserved versus outgoing, (b) less intelligent versus more intelligent, (c) affected by feelings versus emotionally stable, (d) humble versus assertive, (e) sober versus happy-go-lucky, (f) expedient versus conscientious, (g) shy versus venturesome, (h) tough minded versus tender minded, (i) trusting versus suspicious, (j) practical versus imaginative, (k) forthright versus astute, (l) self-assured versus apprehensive, (m) conservative versus experimenting, (n) group-dependent versus self-sufficient, (o) undisciplined self-conflict versus controlled, and (p) relaxed versus tense. Sten scores are distributed over 10 equal interval standard score points (assuming normal distribution) ranging from 1 to 10. The population average or mean for a Sten distribution is fixed at 5.5 and the standard deviation is 2.0 Sten score.

The stability for the 16PF as measured by the test-retest method is .80 for short intervals and .78 for the long intervals (Cattell et al., 1970). Using Form A alone, the reliability coefficients are .80 and .52 for the short and long intervals, respectively. The 16 PF's reliability coefficients have a mean of .75 across all 16 scales, within acceptable limits of test-retest reliability (Cattell et al., 1970).

Krug (1989) provided a comprehensive review of studies that have cross validated or verified the structure of the test. Considering numerous studies involving thousands of subjects sampled across different demographic parameters and cultures, Cattell et al. (1970) and Krug (1989) concluded that the basic factorial structure of the test is correct. Multiple, exacting empirical examination the 16PF show that the number

and nature of the elementary personality dimensions it assesses is consistent with the original, underlying model. Criterion-related validity is equally satisfactory, and the instrument has been widely used in a variety of research applications (Krug, 1989).

Rotter's Internal-External Locus of Control Scales

The dimension of internal-external locus of control assesses whether a person's belief is influenced by fate (external forces) or determined by factors for which an individual is responsible (internal forces). In order to measure this dimension, Rotter (1966) designed the Locus of Control Scale. The scale consists of a 23-item, forced-choice questionnaire in which each item offers a choice between internal and external beliefs statements.

For a group of 200 male and 200 female university students, Kuder-Richardson consistency resulted in .80 for both samples. For two subgroups of this population, test-retest reliability coefficients were computed after one month: males, $r = .61$ ($n = 54$) and combined, $r = .55$ ($n = 117$). Rotter (1966) suggested that part of the lower correlation after the 2-month interval may have been due to the difference in administration procedures (i.e., group versus individual).

In terms of validity, Rotter (1966) reported that correlations with the Marlowe Crowne Social Desirability Scale ranged from .07 to -.35. Several factor analyses supported the assumption for unidimensionality of the internal-external concept. For example, based on the original university sample, much of the variance was included in a general factor:

locus of control (Rotter, 1966). All the items loaded significantly on the general factor that accounted for 53% of the total variance.

Study Procedures

Project approval from the Western Michigan University Human Subjects Institutional Review Board was obtained prior to the recruitment of participants and collection of data for the study.

Once participants were recruited, they completed a questionnaire packet. Each packet contained a letter of introduction (see Appendix B), explaining the purpose of the research and explanation of confidentiality and anonymity, the participant's right to withdraw, and expressed appreciation to all respondents for participation. It also contained the 16PF and the Rotter Scale. In addition, subjects completed the Michigan Department of Public Health Substance Abuse Services Data System, an instrument designed to collect relevant demographic information including gender, age, marital status, employment status, and socioeconomic status.

The packet was completed in either group or individual settings. For group administration, the research assistant distributed packets and was available to answer questions. Due to the nature of the agency sites in which abusers were accessed, intake workers were also trained to administer the questionnaires and to respond to any questions from respondents.

Data Analysis

The Michigan Department of Public Health Substance Abuse Services Data System was used to provide demographic data on study participants. Using the Sten score as the unit of analysis, each of 16PF scales was examined via separate 3 (abuser vs. recovering abuser vs. nonuser) x 2 (Black vs. White) analysis of variance (ANOVA). This analysis generated three F ratios: a between-group F ratio for group membership, a between group F ratio for race, and an interaction F ratio. To control for the possibility of inflating the α level and increasing Type I error, the Bonferoni Inequality (Glass & Hopkins, 1984) was used. This statistic controls family-wise α by setting an overall .05 probability level and distributing it for stepwise analyses. Thus, the criterion for statistical significance was set at .003 (.05/16 subscales = .003) for each of the separate factorial ANOVAs. If any F ratio is not statistically significant, the null (see following section) for that analysis will stand. If a significant between-group F ratio resulted for group membership, post hoc Tukey procedures were conducted to identify which scores were reliably different from one another. The Rotter Locus of Control scale was examined via a similar factorial ANOVA.

Null Hypotheses

1. There will be no statistically significant main effect for between-group differences on the 16PF or Rotter Scale.
2. There will be no statistically significant main effect for race on the 16PF or Rotter Scale.

3. There will be no statistically significant group by race interactions on the 16PF or Rotter Scale.

CHAPTER IV

RESULTS

Means and standard deviations for subjects' scores on the 16PF are in Table 15. Subjects' 16PF scores were examined via a series of separate 3 (abusers vs. recovering abusers vs. nonusers) x 2 (African-American vs. White Americans) factorial analysis of variance (ANOVA). Results of these analyses are in Table 16. Values for F and p are reported. The main effect for group membership, Factor O (apprehension) was the only scale that reached significance (i.e., $p < .003$). Therefore, the alternate hypothesis was accepted for Factor O only. Post hoc analysis on Factor O revealed the abusers and recovered abusers had reliably higher scores than nonabusers, although there was no difference between abusers and recovering abusers. The mean for the nonabusers was 5.81, whereas the recovery group mean was 7.03 and the abuser group mean was 7.62. All other means of the remaining factors of the 16PF did not yield any significant differences and, in fact, demonstrated a consistency in pattern. More similarities were revealed than differences.

On the Rotter, the abusers group obtained a mean score of 10.43 ($SD = 4.20$), while the recovering and nonabuser groups earned a mean of 9.36 ($SD = 4.30$) and 10.34 ($SD = 4.98$), respectively. A 3 (nonabuser vs. recovering abuser vs. abuser) x 2 (White vs. African-American) factorial ANOVA yielded nonsignificant main effects for group

Table 15
Means and Standard Deviations for 16PF Scores by Race

Factor	Nonabuser				Recovering abuser				Abuser			
	Black ^a		White ^b		Black ^c		White ^d		Black ^e		White ^f	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
A: Warmth	6.83	1.80	4.85	1.30	6.16	1.50	4.77	2.81	6.05	1.39	6.07	2.01
B: Reasoning	5.25	0.87	5.40	2.11	4.66	1.45	5.11	2.08	4.89	1.96	4.00	1.63
C: Emotional stability	4.66	1.37	4.90	2.10	4.61	1.75	3.22	2.04	3.47	1.57	4.07	1.89
E: Dominance	5.91	1.56	5.85	2.00	6.27	1.67	5.88	2.66	6.26	1.96	5.69	1.25
F: Liveliness	5.41	1.62	5.25	2.19	5.77	1.98	5.11	2.57	4.89	2.07	5.07	1.84
G: Rule consciousness	4.91	1.31	5.00	2.27	4.50	2.00	4.66	1.87	4.73	2.49	4.61	1.66
H: Social boldness	6.41	1.67	5.25	1.97	7.00	2.11	5.33	1.73	5.10	1.72	4.92	1.97
I: Sensitivity	5.33	1.92	5.25	1.20	5.66	1.57	5.44	1.01	5.94	1.54	6.15	1.81
L: Suspiciousness	6.33	1.66	4.40	2.21	5.55	1.65	4.00	1.80	5.57	2.47	6.46	1.76
M: Abstraction	4.00	1.70	3.50	1.05	3.94	1.30	3.88	2.47	4.00	1.52	3.84	1.67

Table 15--Continued

Factor	Nonabuser				Recovering abuser				Abuser			
	Black ^a		White ^b		Black ^c		White ^d		Black ^e		White ^f	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
N: Privatness	6.33	2.10	7.05	1.57	8.16	0.99	7.44	2.55	8.21	1.43	7.53	1.19
O: Apprehensiveness	4.83	2.12	6.40	2.01	6.88	2.05	7.66	1.80	7.52	1.57	7.76	1.96
Q1: Openness	5.91	2.02	5.80	1.90	6.94	1.55	5.55	1.74	6.63	2.00	5.92	1.92
Q2: Self-reliance	5.50	1.83	6.65	2.34	5.55	1.42	5.88	2.08	6.47	1.54	5.69	1.79
Q3: Perfection	5.66	1.66	5.15	1.81	5.50	1.24	5.00	1.87	5.00	2.23	5.61	1.75
Q4: Tension	5.66	1.55	6.00	2.12	6.44	1.68	7.33	2.29	7.10	1.28	6.53	2.02

^an = 20. ^bn = 12. ^cn = 18. ^dn = 9. ^en = 19. ^fn = 13.

Table 16
F and p Values for Group, Race, and Interactions

Factor	Group		Race		Interaction	
	F	p	F	p	F	p
A: Warmth	0.790	.454	8.720	.004	2.690	.073
B: Reasoning	1.870	.160	0.067	.796	1.130	.327
C: Emotional stability	2.690	.073	0.217	.642	2.230	.113
E: Dominance	0.077	.926	0.703	.404	0.141	.868
F: Liveliness	0.385	.681	0.233	.630	0.288	.751
G: Rule consciousness	0.254	.777	0.009	.924	0.037	.964
H: Social boldness	2.760	.069	5.890	.017	1.110	.334
I: Sensitivity	1.900	.155	0.010	.922	0.142	.868
L: Suspiciousness	5.020	.009	0.415	.521	1.870	.159
M: Abstraction	0.116	.891	0.482	.489	0.158	.854
N: Privatness	2.600	.080	3.910	.051	4.310	.016
O: Apprehensiveness	9.380	.001*	4.200	.043	0.907	.408

Table 16--Continued

Factor	Group		Race		Interaction	
	<u>F</u>	<u>p</u>	<u>F</u>	<u>p</u>	<u>F</u>	<u>p</u>
Q1: Openness	0.462	.632	3.270	.074	0.773	.465
Q2: Self-reliance	0.319	.728	0.333	.565	2.070	.131
Q3: Perfection	0.054	.947	0.116	.734	0.961	.387
Q4: Tension	3.036	.053	0.301	.585	1.120	.328

Note. The df for all F ratios are as follows: Group = (2,85) Race = (1,85) Interaction = (2,85). Use of the Bonferroni Inequality results in a criterion of .003 for statistical significance.

*p < .003.

($F(2,90) = .44$, and race, $F(1,85) = .65$, as well as a nonsignificant interaction, $F(2,85) = .15$).

CHAPTER V

DISCUSSION

The topic of substance abuse and women remains timely and important. This population remains underresearched. However, this study will lend to the scant knowledge base that already exists. Women substance abusers are a special population in that little is known about them except that their numbers are rapidly growing.

The intent of this study was to develop and compare personality profiles of low socioeconomic status (SES) women who either abused drugs and alcohol or were in recovery from drugs and alcohol abuse or did not abuse drugs. The findings indicated that the characteristics of the groups were largely similar with one exception. Scale O on the 16PF revealed that a statistically significant difference existed between abusers and recovering abusers versus nonabusers when examining low SES women who were in recovery from drug abuse or currently abusing drugs. The finding from this analysis suggests that low SES women who are recovered abusers or abusers are more prone to guilt, apprehension, self-reproachment, insecurity, worry, and troubled behavior. These findings are consistent with findings of other studies that consider guilt, apprehension, and anxiety to be major contributing factors to substance abuse in women (Beckman, 1978; Gomberg, 1987; Mondanaro, 1989). These factors appear somewhat interrelated in that they impact heavily on the perception of substance abusing women. Guilt is generally

associated with the action of drug taking and the consequences that follow such behavior. Gomberg (1975) hypothesized that women were more likely to deal with guilt and shame and internalize it. Apprehension may be a result of drug taking and may be attributed to the lifestyle associated with drug abuse. Criminal activity may increase a woman's sense of apprehension, resulting in higher scores on Scale O and thus supporting this personality trait in the findings.

In addition, Scale O is associated with addicted individuals who abuse drugs and alcohol and are chemically dependent. According to Quinby and Graham (1993), addicted women develop increased problems with violence and acting out behaviors.

A wide range of behaviors are available to any intoxicated person. However, the female abuser learns that by using substances she can assume roles not traditionally ascribed to her by society. This may be particularly true of low SES women, and higher instances of acting out behavior may be evident when a therapist sees a woman who fits this profile. Based on the findings of this study, low SES women will be prone to acting out behavior. This finding is consistent with some of the behavior associated with individuals who abuse drugs and alcohol and are chemically dependent. According to Quinby and Graham (1993), as women's substance use increases, "so do problems with depression and suicide attempts" (p. 131).

Thus, Scale O is important, first, as one of the largest factors in anxiety and, secondly, as tending to be generally high in neurotics, alcoholics, and many psychotics (Cattell, Tatro, & Komlos, 1965).

The hypothesis related to the Rotter Internal/External Locus of Control Scale stated that there would be no statistically significant difference between any of the groups. This was in fact the case, and the null hypothesis was retained. There has been limited investigation of expectancies of control in this population. To date, the most comprehensive work that has been done to elucidate the meaning of control in addicted populations has been done with alcoholics--many of whom were men. However, findings of locus of control research with alcoholics have been ambiguous (Rohsenow & O'Leary, 1978).

Limitations of Study

The first and most obvious limitation of the study was that it relied on self-reports. Using such a method, one must hypothesize whether respondents are reporting accurately and honestly. Moreover, this study was not able to determine the length of recovery time noted by respondents; consequently, the length of recovery time may have affected their response.

This study is generalizable only to people of the same population, that is, low SES women from small cities who are either nonabusers, recovered abusers, or abusers.

This study was descriptive in nature and, therefore, cannot address causality. Moreover this study has racial and ethnic limits in that it only examined respondents from two racial categories and does not incorporate those of other racial and ethnic backgrounds.

The pharmacological properties of the chemical substances reportedly used by abusing subjects may have affected their ability to respond

adequately or may have altered the responses of the subjects. Those subjects' mindset, attending, and attention span may also have affected their responses to the instruments.

The motivational level of the abusers may have been affected due to the fact that the subjects were on a waiting list to seek treatment for their addiction.

Some subjects wrote comments on answer sheets noting the length of the 16PF. Their anecdotal comments suggested that at least some of the respondents were overwhelmed by the length of the 16PF, and this may have affected their responses.

Implications for Practice and Future Research

This study presents data with some potentially significant clinical implications. The findings indicate that there are no differences (with the exception of guilt) in low SES women on the basis of economic status and race. This may be relieving at first sight but may also be misleading. It could be that no differences exist, or it may be that the instrumentation used in this study was not sensitive to this group economically or ethnically. There were some areas of interest for clinicians, however. Most of the research efforts tend to focus on prevalence rates and, therefore, shed little light on etiological factors and relationships with other forms of behavior (Trimble, 1991).

Caution should be exercised when grouping individuals by race. Trimble (1991) noted that researchers may know what information the literature provides about drug taking patterns and addicts, but very little about drug addiction within the African-American culture.

There are, however, several interesting findings in this study regarding demographic information that may have implications for clinicians who work in the substance abuse arena. In terms of education, the nonabusers had a mean of 12.50 years, thus completing high school. In contrast both the abuser group ($M = 11.59$) and the recovered abuser ($M = 11.39$) had not completed high school, although they came close to it. It could be speculated that this may be an issue regarding clinical treatment. It may be that abusers and recovering abusers lack a sense of mastery. They may, indeed, get close to being successful and then, for whatever reason, fail to meet personal goals. The implication for clinical treatment then would be that low SES women who are currently abusing substances or have abused substances may sabotage their ultimate goal, which is sobriety. Some prevention techniques should be reviewed with these women as they address goals in their treatment. In terms of education, this study suggests that the abusers and recovering abusers came close to completion of their high school education, thereby suggesting that they have relatively adequate cognitive ability to learn and respond to treatment. The implication for treatment is that a clinician can structure treatment and intervention to this level of ability rather than making assumptions that they are lower functioning educationally. What differs, however, is the sense of accomplishment between the nonabusers, abusers, and recovering abusers and that difference may provide valuable information for clinicians treating this population.

The age of first use for drug use in low SES women revealed some interesting data. The mean age for abusers was 33.29 years and

32.88 years for nonabusers.

The age category indicated that low SES women are much older at the time they begin to abuse substances. Furthermore, low SES women's age of first use is 18.2 years for recovered abusers and 20.61 for abusers. However, there is a shift in the drug of choice resulting in use of initiation drugs (tertiary) such as alcohol and graduating to more illicit drugs (primary) such as cocaine. What this suggests is that drug use is graduated; consequently, their initial drug was not the drug that introduced them to dependency. This is an important finding insofar as treatment facilities can pay attention to tertiary drugs and provide education to offset the use of harder more evasive drugs. The implications for treatment are far reaching in terms of prevention. This study suggests that treatment facilities and educational facilities have more time to provide information to this group of women. Prevention should begin at an early age; however, the results of this study indicate that low SES women could benefit from some form of prevention through their 20s. This information can also aid agencies in developing models that address the concerns of this population. Models may also need to be developed to include developmental and theoretical models that would appeal to low SES women in these categories.

It is interesting that low SES women are beginning to abuse drugs at an age when transitions are being made developmentally. This bears more investigation and may present itself as a clinical issue.

The findings of this study also revealed that a higher proportion of abusing subjects selected cocaine as their primary drug of choice. The distribution was skewed in relation to cocaine usage. The implication is

that low SES women may use cocaine at a higher rate than other SES women whether they are Black or White. Thus, poverty may be a crucial variable in the context of cocaine use, especially crack. As noted in this study 42.9% were unemployed, 37.1% were employed full or part time, and 44.2% received public assistance. Crack has become a poor individual's street drug of choice, and this drug market is rapidly increasing. There are several reasons for the increase in cocaine usage in women. One proposed explanation is an economic based theory, the economic positions of drug users may make women of low socioeconomic status particularly vulnerable to the trappings of cocaine usage and addiction. This vulnerability may also be instrumental in examining Black women and other minorities that are substance abusers. Black women are more than twice as likely to be both unemployed and single as compared to White women, 71% and 33%, respectively (Murphy & Rosenbaum, 1992). While White women are equally distributed among the socioeconomic categories, two-thirds of Black women are from lower socioeconomic groups (Corrigan & Anderson, 1982). Therefore, low socioeconomic status may produce a certain vulnerability for low SES women that might affect drug usage as well as their choice of drug.

Another factor attributed to women's involvement in cocaine is what Fagan (1994) referred to as a "drug economy" for women. Dramatic structural shifts in the social and economic compositions of inner cities changed the social organization of drug use (Fagan, 1994; Fagan & Chin, 1991). More women make up inner city populations, and most of them are poor. Women have become exposed to selling and using drugs within their communities. This high visibility may affect

and/or trigger a low SES woman to experiment with drugs simply due to the structural shifts and high visibility in their community. This study suggests that low SES women are reporting abusing cocaine at a disproportional frequency when compared with other drugs. The implication of this is that treatment facilities that service the low SES woman may see a higher incidence of clients reporting cocaine addiction. This issue is unlike the national trend that assumes that alcohol would be the primary drug of choice for women in general. According to Erickson and Murray (1989), many women are cocaine users, but cocaine use has not been the usual focus of concern. The National Cocaine Hotline provides evidence to support the assertion that women's cocaine problems are being underestimated. This report suggests that more women are using cocaine than is usually reported in studies on women and addiction (Mondanaro, 1989). Thus, clinicians may suspect that the number of low SES women using cocaine may be higher than with other groups of women.

Clinicians must continue the process of investigating the problem of substance abuse as it relates to women. Further support and investigation are needed in reference to the issue of guilt and apprehension. It may be a factor that needs to be taken into account in treating them to overcome drug and alcohol addiction. It should be noted again that there is no single cause for drug and alcohol abuse among women of any class. This study, however, gives some insight into those possible issues that contribute to substance abuse among women.

Barriers for economically disadvantaged women may exist undetected by statistical inference such as financial limitations as well as

access to treatment. Therefore, clinical treatment should consider that low SES women will most likely enter treatment with more guilt and anxiety than more affluent women. The probability that acting out behaviors will exist are high with low SES women. Clinical providers should, therefore, expect some acting out to occur at any phase of treatment. Treatment providers should design treatment modalities that allow consideration for this type of behavior. Treatment providers should also take care to focus on guilt as a primary personality characteristic when treating low SES women.

This population's lower sense of unworthiness and guilt does have significance for treatment. Clinicians must develop treatment techniques that maximally affect these personality characteristics. Treatment services would do well to enhance the self-worth of women abusers. The therapist, therefore, will have an opportunity at onset to provide an atmosphere of value and acceptance. Low SES women are externally motivated, and any intervention by the therapist will more than likely motivate the low SES woman.

Issues for Future Research

There is comparably little information about the characteristics of women who abuse substances. This is especially true when examining the characteristics of females who use illicit drugs such as cocaine. Further studies need to be conducted to provide a profile of those characteristics which lead a woman to abuse substances.

The deficits of research on Black women calls for additional research on this topic. Future research should address the issue of race in

the larger context of women and substance abuse. In addition, socio-economic level remains a critical a factor in examining women substance abusers.

Future investigations should be conducted that focus on cocaine abuse exclusively for women. This is due to the fact that previous studies have examined various drugs. However, the study of substance abuse can be enhanced by focusing on specific drugs and how they may affect women and their personality characteristics. As reported in this study, cocaine is a significant drug of choice for women of low socio-economic status.

One of the clearest findings of the study is that abusers and recovering abusers of low SES report more apprehension, anxiety, and guilt than nonabusers. What is not understood in sufficient detail, however, is how these women internalize, understand, and interpret the concepts of apprehension, anxiety, and guilt. This is a question for future studies and should be investigated.

Only hypotheses can be made, at this time, regarding what the guilt, apprehension, and anxiety that women experience. There is no way of knowing from this study what these concepts represent.

Further investigation may reveal meanings and representations that are unknown in the present research.

APPENDICES

Appendix A
Letter to Agency Leaders

Dear Agency Leader:

I am a doctoral student at Western Michigan University in the Department of Counselor Education, Counseling Psychology. I am conducting a study on women and substance abuse which will provide information on the psychological profiles of substance abusing women of low socioeconomic status. This study will provide information on more effective treatment for this group of women. Toward that end, participants will complete a packet with three personality questionnaires. It will take the participants approximately 60-90 minutes to complete the three questionnaires.

In terms of participants, I am recruiting thirty women for each of three categories: (1) women who abuse alcohol and other drugs, (2) women who are in recovery from substance abuse, and (3) women who do not abuse substances. Further requirements for the subjects of this study are that they be between the ages of 18 and 55, and that they meet the annual income level requirement for low socioeconomic status of \$7,357 or lower for an individual, or \$14,764 or lower for a family of four.

I am requesting your permission to invite women to participate in this study on a volunteer basis. Strict anonymity is assured for all participants. Further, names of agencies and organizations will not be reported in the study.

Your permission and assistance with this study will be greatly appreciated. I will follow up this letter with a phone call to discuss the study in more detail and answer any questions you may have.

Thank you for your cooperation in this study.

Sincerely,

Aubrie Gordon, MSW, LLP

Appendix B
Letter to Participants

Dear Participant:

You have been invited to participate in a research project entitled "Differentiated Drug Use and Its Relationship to Locus of Control and Personality Factors Among Women of Low Socioeconomic Status." This research is designed to study personality characteristics of women of low socioeconomic status who either (1) abuse alcohol and other drugs, (2) are in recovery from abuse of alcohol and other drugs, or (3) do not abuse alcohol and other drugs.

Participation in this project means that you will attend one session at the community or substance abuse agency. The session will involve completing three questionnaires: (1) the Michigan Department of Public Health Substance Abuse Services Data System, (2) the Sixteen Personality Factor questionnaire, and (3) the Rotter Internal-External Locus of Control Scale. It will take you about 60-90 minutes to complete these.

As in all research, there may be unforeseen risks to the participant, although such risks are minimal with this project. One potential risk is that you may be concerned with the content of the questionnaires. However, your intake worker or the intern will be prepared to provide names of therapists and agencies if you wish to discuss these issues. You will be responsible for cost of therapy if you choose to pursue it.

Please understand that all the information collected from you is confidential. Further, your responses on the three questionnaires will remain anonymous. This means that your name will never appear on any project materials or forms. Since your questionnaires will not have your name on them, you may withdraw from the study at any time up until the point at which you hand in your completed questionnaires to the researcher. You may refuse to participate or quit during the study without prejudice or penalty.

If you have questions or concerns about this study, you may contact either myself at 383-7895, or Dr. Michael Bahr, Western Michigan University, at 387-5113. You may also contact the Chair of Western Michigan University Human Subjects Institutional Review board at 387-8293, or the Vice President of Research at 387-8298 with any concerns that you may have.

Sincerely,

Aubrie Gordon, MSW, LLP

Appendix C
Approval Letter From Human Subjects
Institutional Review Board

Human Subjects Institutional Review Board

Kalamazoo, Michigan 49008-3899
616 387-8293

WESTERN MICHIGAN UNIVERSITY

Date: November 11, 1994

To: Aubrie Gordon

From: Richard Wright, Interim Chair

Re: HSIRB Project Number 94-10-21

Richard G. Wright

This letter will serve as confirmation that your research project entitled "Differentiated drug use and its relationship to locus of control and personality factors among women of low socioeconomic status" has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you must seek specific approval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date. In addition if there are any unanticipated adverse or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: Nov. 11, 1995

xc: Bahr, CECP

BIBLIOGRAPHY

- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (DSM-IV-R). Washington, DC: Author.
- Amuleru-Marshall, O. (1991). African-Americans. In J. Kinney (Ed.), Clinical manual of substance abuse (pp. 147-153). St. Louis, MO: Mosby.
- Ansobel, D. P. (1952). An evaluation of recent adolescent drug addiction. Mental Hygiene, 36, 373-382.
- Beckman, L. J. (1978). Self-esteem of women alcoholics. Journal of Studies on Alcohol, 39, 491-498.
- Beckman, L. J. (1984). Treatment needs of women alcoholics. Alcoholism Treatment Quarterly, 1, 101-113.
- Beckman, L. J., & Amaro, H. (1984). Patterns of women's use of alcoholism treatment agencies. In S. C. Wilsnack & L. J. Beckman (Eds.), Alcohol problems in women: Antecedents, consequences and intervention (pp. 491-498). New York: Guilford Press.
- Blum, R. H. (1970). Students and drugs. San Francisco: Jossey-Bass.
- Boyd, C. J., & Mieczkowski, T. (1990). Drug use, health, family and social support in "crack" cocaine users. Addictive Behaviors, 15, 481-485.
- Brunswick, A. F., Lewis, C. S., & Messeri, P. A. (1991). A life span perspective on drug use and affective distress in an African-American sample. Journal of Community Psychology, 19, 123-135.
- Bry, B. H. (1983). Substance abuse in women, etiology and prevention. Issues in Mental Health Nursing, 5, 253-272.
- Cattell, R. B., Eber, H. W., & Tatsuoka, M. M. (1970). Handbook for the Sixteen Personality Factor. Champaign, IL: IPAT.
- Cattell, R. B., Tatro, D. F., & Komlos, E. (1965). The diagnosis and inferred structure of paranoid and nonparanoid schizophrenia from the 16PF profile. Indian Psychological Review, 1, 108-115.
- Chambers, C. D. (1971). An assessment of drug use in the population: Special Report No. 1. Drug use in New York State. New York: New York State Addiction Control Commission.

- Clifford, P., & René, A. (1986). Substance abuse among Blacks and epidemiological perspective. Urban League Review, 9(2), 52-58.
- Closser, M. H., & Blow, F. C. (1993). Special populations, women, ethnic minorities and the elderly. Psychiatric Clinics of North America, 16, 199-209.
- Congressional Budget Office. (1992). Trends in family income. Washington, DC: Author.
- Corrigan, E., & Anderson, S. C. (1982). Black alcoholic women in treatment. Focus on Women: Journal of Addiction and Health, 3, 49-58.
- Curlee, J. (1968). Women alcoholics. Federal Probation, 32, 16-20.
- Cyr, M. G., & Moulton, A. W. (1990). Substance abuse in women. Obstetrics and Gynecology Clinics of North America, 17, 905-925.
- Dawkins, H. (1980). Alcohol and the black community: Exploratory studies of selected issues. Saratoga, CA: Century Twenty One.
- Dembo, R., Derkte, M., LaVoie, L., Borders, S., Washburn, M., & Schmeidler, J. (1987). Physical abuse, sexual victimization and illicit drug use: A structural analysis among high risk adolescents. Journal of Adolescence, 10, 13-33.
- Derogatis, L. R., Rickels, L., & Rock, A. F. (1976). The SCL-90 and the MMPI, a step in the validation for a new self-report scale. British Journal of Psychiatry, 108, 280-289.
- Drug Abuse Warning Network (1985). Survey of facilities for women using drugs (including alcohol) in London. London: Author.
- Erickson, P. G., & Murray, (1989). Sex difference in cocaine use and experiences: A double standard revived? American Journal of Drug and Alcohol Abuse, 15, 135-152.
- Ettore, E. (1992). Women and substance use. New Brunswick, NJ: Rutgers University Press.
- Fagan, J. (1994). Women and drugs revisited: Female participants in the cocaine economy. Journal of Drug Issues, 24, 179-225.
- Fagan, J., & Chin, K. (1991). Social processes in initiation into crack use and dealing. Journal of Drug Issues, 21, 313-343.
- Ferrence, R. G., & Whitehead, P. C. (1980). Sex differences in psychoactive drug use, recent epidemiology. In O. J. Kalant (Ed.), Research advances and drug problems: Vol. 5. Alcohol and drug problems in women (pp. 125-145). New York: Plenum.

- Glass, G. V., & Hopkins, K. D. (1984). Statistical methods in education and psychology. Englewood Cliffs, NJ: Prentice-Hall.
- Gomberg, E. L. (1987). Shame and guilt issues among women alcoholics. Alcoholism Treatment Quarterly, 4(2), 139-155.
- Hamid, A. (1991). Crack: New directions in drug research: Part 2. Factors determining the current functioning of the crack economy--a program for ethnographic research. International Journal of the Addictions, 26, 913-922.
- Harper, F. D., & Dawkins, M. P. (1976). Alcohol and blacks: Survey of the periodical literature. British Journal of Addiction, 71, 327-334.
- Harrison, P. A., & Belille, C. A. (1987). Women in treatment: Beyond the stereotype. Journal of Studies on Alcohol, 48, 574-578.
- Henderson, D. C., & Anderson, S. C. (1982). Family therapy in the treatment of alcoholism. Social Work in Health Care, 8, 79-94.
- Herd, D. (1985). We cannot stagger to freedom: A history of blacks and alcohol in American politics. In L. Brill & C. Winick (Eds.), Yearbook of substance use and abuse (Vol. 3, pp. 65-75). New York: Human Sciences Press.
- Hirsh, J. (1962). Women and alcoholism. In W. C. Bier (Ed.), Problems in addiction (pp. 16-20). New York: Fordham University Press.
- Institute for Health Policy. (1993). Substance abuse: The nation's number one health problem. Waltham, MA: Brandeis University Press.
- Kalant, O. J. (1980). Six differences in alcohol and drug problems--some highlights. In O. J. Kalant (Ed.), Alcohol and drug problems in women (pp. 1-23). New York: Plenum.
- Kinney, J. (1991). Clinical manual of substance abuse. St. Louis, MO: Mosby.
- Kinsey, B. A. (1966). The female alcoholic: A social-psychological study. Springfield, IL: Thomas.
- Krug, S. E. (1989, March). The 16PF tradition in contemporary personality assessment. Paper presented at the annual meeting of the American Psychological Association, New Orleans, LA.
- Lex, B. W. (1991). Some gender differences in alcohol and poly-substance users. Health Psychology, 10, 121-132.

- Litman, G. (1986). Women and alcohol problems: Finding the next questions. British Journal of the Addictions, 81, 601-604.
- Marlatt, G. A. (1985). Relapse prevention: Theoretical rationale and overview of the model. In D. M. Donovan & G. A. Marlatt (Eds.), Assessment of addictive behaviors (pp. 475-483). New York: Guilford Press.
- McCoy, H. V., & Miles, C. (1992). A gender comparison of health status among users of crack cocaine. Journal of Psychoactive Drugs, 24, 389-397.
- McFadden, J. (1987). Guilt is soluble in alcohol: An ego analytic view. Journal of Drug Issues, 17(1-2), 171-186.
- Mondanaro, J. (1989). Chemically dependent women: Assessment and treatment. Lexington, MA: Lexington Books.
- Morley, J. (1990, November/December). De-escalating the war. The Family Therapy Networker, pp. 24-35.
- Morrissey, E. R. (1986). Contradictions inherent in liberal feminist ideology: Promotion and control of women's drinking. Contemporary Drug Problems, 13, 65-88.
- National Council on Alcoholism. (1991). Policy statement on women, alcohol and other drugs.
- Neuspiel, D. R. (1993). Racism and perinatal addiction: The war on drug using women. Unpublished manuscript, North Central Bronx Hospital, Bronx, New York.
- Nurco, D. N., Wegner, N., & Stephenson, P. (1982). Female narcotic addicts: Changing profiles. Focus on Women: Journal of Addiction and Health, 3, 62-100.
- Oswald, L. M., Walker, G. C., Reilly, E. L., Krajewski, K. J., & Parker, C. A. (1992). Measurement of locus of control in cocaine abusers. Issues in Mental Health Nursing, 13, 81-94.
- Pickens, R., & Heston, L. L. (1976). Psychiatric factors in drug abuse. New York: Grune and Stratton.
- Quinby, P. M., & Graham, A. V. (1993). Substance abuse among women. Primary Care, 20, 131-140.
- Reed, B. G. (1987). Developing women-sensitive drug dependence treatment services: Why so difficult? Journal of Psychoactive Drugs, 19, 151-164.

- Robins, L. N., & Smith, E. M. (1980). Longitudinal studies of alcohol and drug problems, sex differences. In O. J. Kalant (Ed.), Research advances and drug problems: Vol. 5. Alcohol and drug problems in women (pp. 201-219). New York: Plenum.
- Rohsenow, D. J., & O'Leary, M. R. (1978). Locus of control research on alcoholic populations: A review. I. Development, scales, and treatment. International Journal of the Addictions, 13, 55-78.
- Rosenbaum, M. (1981). Women and heroin. New Brunswick, NJ: Rutgers University Press.
- Rosenbaum, M., & Murphy, S. (1981). Getting the treatment: Recycling women addicts. Journal of Psychoactive Drugs, 13, 1-13.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control for reinforcement. Psychological Monographs: General and Applied, 80, 1-28.
- Rotter, J. B. (1975). Some problems and misconceptions related to the construct of internal versus external control for reinforcement. Journal of Consulting and Clinical Psychology, 43, 56-67.
- Smith, K. K. (1982, March). Contemporary drug abuse patterns and chemical dependency. Speech presented at the Health and Addiction Seminar, Park City, UT.
- Spotts, J. V., & Shontz, F. C. (1986). Drugs and personality: Dependence of findings on method. American Journal of Alcohol Abuse, 12, 355-382.
- Trimble, J. (1991). Ethnic specification, validation prospects and the future of drug use research. The International Journal of the Addictions, 25, 149-170.
- Tuite, D. R., & Luiten, J. W. (1986). 16PF research into addiction: Meta-analysis and extension. International Journal of the Addictions, 21, 287-323.
- Zuckerman, (1972). Manual and research report for the Sensation Seeking Scale (SSS). Newark, DE: University of Delaware, Department of Psychology.