

Predictors of Drug Treatment Completion Among Black Women: A Black  
Feminist Intersectionality Approach

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Dissertation submitted to the Faculty of  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the degree

Doctor of Philosophy  
in  
Sociology

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October 25, 2010  
Blacksburg, VA

Keywords: Intersectionality, black feminism, and Afrocentrism

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## ABSTRACT

This study used a national sample of substance abuse treatment centers to analyze predictors of drug treatment completion among a sample of black women compared to white women, white men, and black men. Data are drawn from the Treatment Episode Data Set - Discharges (TEDS-D) 2006, which is representative of treatment programs in 42 states and the District of Columbia. The sample consisted of black (n= 356,701) and whites (n=926,216). Results indicated that race, gender, and level of education (social class variable) all had statistically significant associations with drug treatment completion. That is, when compared to all the other respondents in the study, (i.e., black men, white women, and white males) black women were less likely to complete drug treatment. This study also found that blacks were underrepresented in drug treatment programs when compared to whites. This disparity is even more prevalent for black women. Overall, analyzing group differences in treatment outcomes and sociodemographic characteristics, black women appeared to be socioeconomically worse off than black men, white women, and white men. In fact, black women had significantly lower rates of employment and were almost twice as likely to report that their income source was from public assistance. Black women were less likely to be married, employed full-time, and were significantly more likely to report using cocaine or crack at the time of admission and indicate that cocaine or crack was their problem drug. Finally, when compared to other groups, black women were less educated, had lower drug treatment completion outcomes, were more likely to receive public assistance, and have lower employment rates. Again, these findings are not surprising and are consistent with a multitude of literature on drug treatment outcomes.

## ACKNOWLEDGEMENTS

I would like to thank my dissertation committee chairperson Dr. Biko Agozino, Dr. Bernadette J. Holmes, Dr. Ellington T. Graves, Dr. Carol Bailey, Dr. Kwame Harrison, Dr. James Hawdon, Dr. Michael Hughes, and Dr. Donald Shoemaker. Additionally, I would like to thank Dr. Terry Kershaw and Marilyn Kershaw. Also, I would be remiss if I did not thank Dr. James A. Nolan for several years of patience, hours of telephone conversations, guidance and support. You have always believed in me professionally. All of you have provided guidance and support in all areas which has helped me to accomplish my research goals. I would like to give special thanks to all of my family members, particularly my four beautiful children and seven grandchildren, Jason (Fatima, Asia, and Jason), Jennifer (Jovoski, Nariya, Niavani, Nasir) Jocelynn (Jalia and William Kye), and Jamahl. I would also like to thank my sister Deidra Reese (Wesley and Isis), my aunt Cheryl Sims (Lovey), Claude L. Mills, Dr. Tammy Holmes, Marvin (Isaiah, Shari), Shelton Norwood, Alisha Carver, Dominique Pierre, Dr. Mark Giles, Dr. Mark Hensley, Patrick Sheppard, Laquana Young, Efua Akoma, Heidi Browne, Virginia Rothwell, Mrs. Shirley Floyd, Tifanie Pulley, Dionna Campanella (my assistant), Lanesha Allen (my assistant), Dr. Leon Geter, Mellie Torres, and the staff, computer lab consultants, and faculty at the University of Michigan's ICPSR Summer Program. I would also like to especially thank my aunt Cassandra D. Gwynn (and uncle Dale), without you I would not have finished high school and Mrs. Thelma R. Parker, without you, I would not have made it out of undergraduate school. Other acknowledgements include, 2008 Frederick Douglas Teaching Scholar, Indiana University of Pennsylvania, 2005-2006 recipient of the Powell Fellowship, Graduate School, Virginia Tech, 2005-2006 Graduate Student of Distinction, College of Liberal Arts and Sciences, Virginia Tech.

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## CHAPTER ONE

Substance abuse among black women remains a significant social and health problem particularly if left untreated (Allen 1994; Beatty 1994; Sowers, Ellis, Washington, and Carrant 2002; Johnson, Wiechelt, Ahmed, and Schwartz 2003). In the mid 1980s, the American society was introduced to a “Smokable form of cocaine” (Cornish and O’Brien 1996:259) referred to as “crack.” The appearance of crack cocaine in inner city America, an environment overrepresented with single and poor black women (Young and Boyd 2000), posed significant problems in cities across the nation as massive percentages of black women became involved in the use of crack cocaine (Windsor and Negi 2009). As such, crack cocaine addiction and the issues associated with cocaine use and addiction became one of America’s most widely debated social, political, and public health issues when compared to any other drug in its class. Moreover, although “crack” cocaine users are from diverse socioeconomic backgrounds, the use of crack cocaine was publicized in the media as a drug which was disproportionately used by blacks (Surratt and Inciardi 2004), and in particular black women.

The proliferation of black women’s addiction to crack cocaine was sensationalized in the media and publicized as a national social and public health epidemic (Grella and Greenwell 2007; Windsor and Negi 2009). This was in part due to the emerging stories of crack addicted babies, increased reports of child



abuse and neglect cases, and the increase in cocaine related hospital emergencies (Surratt and Inciardi 2004) which sparked tremendous political attention. The public attention subsequently resulted in swift public and criminal justice policy changes (Grella and Greenwell 2007), which in turn has had a direct impact on the lives of black women, men, and children (Nobles and Goddard 1989; Zerari 2000) as black women were disproportionately incarcerated for their addiction to crack cocaine (Surratt and Inciardi 2004). In fact, the criminalization of black women addicted to crack, the unprecedented negative attention (Doris, Meguid, Thomas, Blatt, and Eckenrode 2006), and the negative consequences associated with cocaine abuse and dependence, and the socioeconomic disadvantages associated with being poor, black, and female (Nobles and Goddard 1989; Turner and Wallace 2003) has made the drug treatment process among black women and arduous task. In fact, new data indicate that cocaine is the “Second most prevalent illicit drug used in the United States” (SAMSHA 2009; Wu, Pan, Blazer Tai, Stitzer, and Woody 2010).

### ***The Statement of the Problem***

The purpose of this research was to examine the predictors of drug treatment outcomes using a sample of black women who participated in a national community based administrative substance abuse treatment study that provides descriptive information about discharges from drug treatment facilities (Treatment

Episode Data Set- Discharges 2006). This study addressed the factors associated with drug treatment completion using a secondary data set obtained from the Inter-University Consortium for Political and Social Science Research (ICPSR), the Treatment Episode Data Set - Discharges (TEDS-D). The Treatment Episode Data Set - Discharges (TEDS-D) is a component of a national reporting system, the Treatment Episode Data Set (A), which was designed in 1992 to provide annual information on the characteristics of individuals admitted to both public and private drug treatment programs. The TEDS-D component, however, was created in 2000 to analyze treatment discharges among clients participating in drug and alcohol treatment programs across 42 states and the District of Columbia (Substance Abuse and Mental Health Services Administration, Office of Applied Studies 2009). Specifically, this study explored if gender, race, and social class were associated with drug treatment completion by comparing black women's treatment completions to white men, white women, and black men. This study also explored the significance of crack cocaine abuse on drug treatment completion, since crack cocaine has been consistently reported as the primary problem drug among black women in treatment programs (TEDS [2006] 2007; Substance Abuse and Mental Health Services Administration, Office of Applied Studies 2009).

The problem, however, is that in general, women are less likely to complete drug treatment compared to men (Substance Abuse and Mental Health Services

Administration [SAMSHA], Office of Applied Studies [2005] 2009) and the disparity in treatment completion is even greater among black females. For example, in a study on treatment outcomes among clients discharged from outpatient treatment programs, males were more likely than females to complete treatment, 39 percent compared to 32 percent (SAMSHA 2009). Further, when comparing racial and ethnic groups, whites were more likely to complete drug treatment at 40 percent, compared to blacks, who had the lowest rates of completion at approximately 27 percent (SAMSHA 2009). Other significant findings in the treatment literature suggests that when compared to black men, white women, and white men, black women were more likely to be treated for cocaine and opiate addiction. In fact, in a special report on “Black Admissions to Substance Abuse Treatment in 1999” the primary drug of choice among black women was cocaine at 40 percent compared to 28 percent among black men. Furthermore, blacks who were admitted to drug treatment programs in 1999 for cocaine addiction, were more likely to report smoking crack cocaine in higher proportions than in the total treatment population (SAMSHA 2002:2). In a more recent study on treatment admissions, black females were three times more likely than black males to report crack cocaine as the primary substance of abuse, 12.6 percent versus 4.2 percent respectively (SAMHSA 2010). The above findings are consistent with an earlier study on treatment outcomes in 2005 which suggest that

males are more likely to complete residential drug treatment than females, 58 versus 52 percent respectively and that higher proportions of whites completed drug treatment compared to blacks, 42 percent versus 34 percent (SAMHSA 2009). As suggested in the above studies, crack cocaine addiction remains a significant problem for black women since they are less likely to receive treatment, less likely to remain in treatment once admitted, and when compared to all other groups, are less likely to complete the treatment process (SAMHSA 2010).

Although there is a substantial body of literature on drug treatment completions among women, which has contributed to the body of knowledge on women and drug addiction in general, these studies have tended not to discuss treatment disparities among black participants relative to successful drug treatment completions. There is a lack of available data, on the association of one's race, one's gender, and social class and drug treatment completion because many studies (Cowan, Deering, Crowe, Sellman, Futterman-Collier, and Adamson 2003; Grella and Joshi 1999; SAMHSA 2009) have only compared black women's drug treatment outcomes discussing the sociodemographic differences between samples of whites and other racial and ethnic groups. As such, these studies focus on the extent to which these groups differ in their drug treatment outcomes particularly in treatment participation, pathways to drug use, treatment barriers, and completion rates (Grella and Joshi 1999; Hser, Anglin, and Booth 1987). Finally, to address

this gap in the treatment literature, this study used a black feminist intersectionality approach to test the association of race, class, and gender on drug treatment completion and attempt to answer the questions listed below.

### ***Research Questions***

The research on substance abuse reveals that there is a complex set of factors which influence the treatment process among black women in drug treatment. This study analyzed the treatment outcomes among black women who participated in drug treatment programs throughout the United States. Considering the previous drug abuse literature, this research addresses the following questions:

1. Is there an association between race and drug treatment completion?
2. Is there an association between gender and drug treatment completion?
3. Is there an association between educational attainment and drug treatment completion?

### ***Significance of the Study***

Traditionally, theorists and practitioners in the field of alcohol and drug abuse research have relatively ignored the experiences unique to women, ethnic groups, and other marginalized groups until the 1970s (Finnegan 1998). During the past two decades, however, there has been an increased interest in the drug behaviors of black women. The increased interest has primarily been the result of strict drug laws and media attention given to black women, who have reported

addiction to crack cocaine (Roberts, Jackson, and Carlton-LaNey 2000). Although there has been a large body of research generated on drug use and addiction among black women (Jackson 1995; Shapre 2001), data are still needed in this area (Shearer, Myers, and Ogan 2001). The majority of available literature on black women has come from data whereby subsamples of black women are used as comparison groups (Turner and Wallace 2003). Thus, according to Turner and Wallace (2003) and Asante (2003:51), this method of inquiry “Limits important aspects of the total African experience” including the experiences of both black males and females, because the behaviors of blacks have been set by the standards of whites. While many studies include samples of black women in their research, little is known about black women’s individual experiences in drug treatment programs and even less is known about how their race, gender, and social class impact their treatment outcomes.

Much of what is known about black women’s drug addiction has been derived from studies on criminality, research on substance addicted babies, and the interest in the factors which contributed to the increased incarceration among black women as a result of their drug use and addiction. In effect, many of the studies on gender and crime only focus on comparing demographic characteristics between black and white respondents, hence, minimizing black women’s unique and individual experiences with drug treatment. According to Agozino (1997:3),

“Whether researchers assume that the problems facing black women are unique or that they are common, there is a need to study such problems compared to the problems of similar categories of people to understand them and help to overcome them.” Specifically, Agozino (1997) recommended the decriminalization of illicit substances and reliance on education and healthcare to reduce drug use and the negative factors associated with drug use and addiction or “The end to the use of criminal law to address individual drug use or the reduction of penalties or no penalties for first time offenders (McBride, Terry-McElrath, Harwood, Inciardi, and Leukefeld 2009:76) by providing intervention and prevention strategies to deter black women from using drugs.” Agozino’s ([1997] 2008) position, particularly the need to study black women’s issues, is one that has been supported by many black scholars, for example, bell hooks (1993), Kimberley Crenshaw (1991), and Assata Zerari (2000). The idea is to remove black women’s lived experiences from their typical marginal status and place their life experiences first.

One proponent of the idea of placing black women’s issues first or “centralizing” black women’s problems is Patricia Hill Collins (2000). Therefore, the theoretical underpinning for this study is Collins’s version of black feminist theory. The conceptual framework in this dissertation incorporated a “Crenshaweian” intersectionality framework as a means to understand the interactive effects of race, gender, and class for black women regarding their drug

treatment outcomes. In her latest edition of *Black Feminist Thought*, Collins (2000) points out the necessity of placing black women's issues, problems, research, and life histories at the "center of analysis" when conducting research on black women. While Collins (2000) has argued for the importance of privileging black women's standpoint, Crenshaw (1991) discussed intersectionality in the following manner:

...many of the experiences black women face are not subsumed within the traditional boundaries of race or gender discrimination as these boundaries are currently understood, and that the intersection of racism and sexism factors into black women's lives in ways that cannot be captured wholly by looking at the race or gender dimensions of those experiences separately.

(P.1244)

The black feminist ideology of both Collins (2000) and Crenshaw (1991) contextualizes the importance of removing black women's life experiences from their typical marginal position. Also key in Collins work is the inclusion of an "African-centered framework" (Collins 2000), which replaces the traditional "universalistic" (Zerari 2000) ideas about black women, particularly regarding addiction, at the center of analysis. The above ideology has been supported by numerous black scholars in their research on black people.<sup>1</sup>

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<sup>1</sup> See the research by Akbar 2003, Azibo 2003, Nobles, Goddard, and Gilbert 2009, Goddard 1993, Wilson 1978, Turner and Wallace 2003.



The analyses in this study has advanced our understanding of the treatment processes, including treatment outcomes and type of treatment programs that black women were more likely to complete (i.e., short, long term, outpatient, inpatient). Furthermore, this study incorporated an African centered framework, a framework which has been proposed by multiple researchers in the area of substance abuse such as, Jackson (1995), Jackson, Stephens, and Smith (1997), Longshore, Grills, Annon, and Grady (1998), and Nobles, Goddard, and Gilbert (2009). These researchers have all posited in their research that traditional (i.e., early drug treatment programs) drug treatment programs lacked cultural sensitivity and that black and other people of color may benefit from drug treatment that is sensitive to their particular cultural experiences considering their history. One theory, which has been labeled a “culturally sensitive” approach, is the black feminist intersectionality approach grounded in Afrocentricity. The Afrocentric intersectionality approach, which is a fundamental framework in this research, is not a new idea, but follows the ideas laid out by Anna Julia Cooper, Ida B. Wells, W.E. B. Du Bois, Kimberly Crenshaw, Assata Zerai, and Patricia Hill Collins, to name a few. Together, the Afrocentric intersectionality approach as articulated by Collins (1990) and Crenshaw (1991) is used in this study to place the historical experiences of black women at the center of analysis. That is, black women’s historical experiences confronting racism, classism, and gender oppression

becomes fundamental in the way their experiences in drug treatment programs are interpreted and understood. This ideology is a framework that allows the researcher to place emphasis on black women's experiences with "interlocking systems of oppression" and the impact these "oppressive" systems may have on drug treatment completion (Collins 2000).

Therefore, it is critical to any research on black women to integrate Afrocentricity, black feminism, and intersectionality, to explain that the disadvantages "For women are by race, class, and gender are not simply additive (as if each has a single, direct, and independent effect on women's status) but are interactive effects of three interdependent systems of social stratification" (Collins 1990; Osmond, Wambach, Harrison, Levine, Imershein, and Quadagno 1993:101).

### ***Important Considerations***

Important in this research is to address whether or not the black feminist intersectionality perspective is fully capable of addressing the unique experiences of black women participating in a drug treatment program. This idea is not meant to imply that it does not; rather the idea is to test this perspective on a sample of black women in treatment for drug addiction. In fact, the black feminist conceptual framework has only limitedly been considered in studies on black women and drug use, addiction, and treatment (Gentry, Elifson, and Sterk 2005; Roberts, Jackson, and Carlton-Laney 2000), because many drug treatment studies have used

theoretical underpinnings which use traditional theories. This study operates under the assumption that traditional theories lack some of the fundamental considerations needed to address black women's drug treatment issues, for example, black women's historical experiences. Furthermore, this study is sensitive to and takes in consideration the differences in substance use, addiction, and treatment completions across racial groups as well as the gendered status of individuals participating in this study. This method of inquiry allows the interpretation of the full range of historical experiences experienced by black women because this framework allows the researcher to contextualize fully black women's history. Perhaps of more importance is to understand that, when compared to black men, white men, and white women, black women's historical, social, cultural, and psychological experiences, which may be and have been said to be contributors of black women's drug use and addiction to drugs (Resnicow, Soler, Braithwaite et al. 2000). That is to say that, as a result of the intersectionality of race, gender, and social class, (West 2004) when compared to other groups, black women may be at a greater risk of using drugs to self medicate (Resnicow, Soler, Braithwaite et al. 2000). Furthermore, it is suggested in this study that researchers whose research includes black women, incorporate the importance of the interplay of gender, race, culture, and social class in their analyses, which may

be significant determinants in understanding, predicting, and treating drug use and addiction among black women (Collins 2000; Crenshaw 1991).

The significance of race in mental health has been argued by several mental professionals namely Brown in 1999. According to Brown (1999) race is an important factor of mental health status but aggregation can “mask” many of the subtle and nonsubtle cultural as well as gender variations within groups. More significantly, Brown (1999) argued that it is reckless to clinically “Categorize, sample, or theorize about racial groups...without recognizing the ethnic variation and cultural influences” within populations of whites, Asians, blacks, and Hispanics (Brown 1999: 167), which has been the tradition of mainstream research. Furthermore, aggregating the behaviors of all groups or even making limited comparisons may cause misdiagnoses, particularly if the researcher is comparing all groups to the experiences of white males (Kumpfer 1991; U.S. Department of Health and Human Services 2002), which has been the typical trajectory.

### ***Definitions of Substance Abuse and Dependency***

According to the Diagnostic and Statistical Manual DSM-IV (American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders (1994:181-183), substance abuse is defined as a “Maladaptive pattern of substance use leading to clinically significant impairment or distress as manifested by one (or

more)” characteristics (outlined by the American Psychiatric Association) occurring within a 12-month period.” This study does not challenge this traditional definition; rather this study operates from the assumption that the most popular and most common drug treatment programs do not always meet the needs of clients of color (Belgrave, Brome, and Hampton 2000; Longshore and Grills 2000; Nobles, Goddard, and Gilbert 2009; Roberts, Jackson, and Carlton-Laney 2000). The key concepts used in this study are race, gender, social class, intersectionality, Afrocentricity, and black feminism. Furthermore, in this study, social class was measured asking questions about the level of education. Gender was measured asking about sex, and black feminism and intersectionality were contextualized using the theories of Collins (1999) and Crenshaw (1991). In this study, race is measured by asking the respondents to identify their race. Finally, to analyze the predictors of drug treatment completion, treatment completion was measured asking respondents if they completed drug treatment.

### ***Outline of the Study***

The dissertation consists of five chapters. The current chapter presents a summary of the problem of drug use among black women and drug treatment and states the research questions to be addressed. Chapter two reviews the literature on black women and substance abuse and highlights the theoretical underpinning of the study, which is black feminist theory. There will be a discussion of the

framework in the context of its relevance to explain the complexities of drug treatment among black women. Chapter three discussed the methodological aspects of the study including source of data, sampling technique, measurement of the independent and dependent variables, and statistics used in data analysis. Chapter four reported the results of the study while chapter five is the discussion and conclusion.

## CHAPTER TWO LITERATURE REVIEW

### THE HISTORY OF DRUG USE IN AFRICA

This chapter begins with a discussion of drug use among indigenous African populations before European conquest. Next, there will be a discussion of the treatment of African women during enslavement to highlight the oppression and inequitable treatment black women (men and children) endured during that time, which is a necessary discussion to support the argument of the necessity to place black women's life experiences in the context of their sociohistorical experiences being black in America. This section in the chapter is fundamental in that it supports the conceptual framework undergirded in this study. Finally, this chapter ends with a discussion of the theory as well as the hypotheses tested in this study.

#### ***The Importance of the Colonial Model in Studies on Substance Abuse among Black Women***

Limited empirical research in Africana studies, sociology, criminology, and mental health begin contextualizing the historical experiences of black people during colonization particularly while studying drug use, abuse, and treatment among this population. Typically, the researcher investigates common social context factors and is less likely to consider the tumultuous history of blacks during enslavement. One framework, in particular that has been suggested recently by several scholars in sociology and criminology (Agozino 2005; Tatum 2002; Gabbidon 2010) was

the “Colonial Model.” Specifically, the Colonial Model is an interdisciplinary perspective which highlights the historical development of systemic racism focusing on Europe’s colonization of Africa as well as the social-psychological effects of slavery on people of color. Typically, this framework has been used by black scholars and historians. However, more recently, several scholars in the disciplines of sociology and criminology have pointed out the necessity to include the “Colonial Model” when addressing the inequalities experienced by people of color within criminal justice institutions. However, this model was applicable in other studies including studies on black women and drug treatment. For example, Rosich (2007:4) posits that:

It is important to emphasize that the discrimination experienced by African Americans and other minorities has deep roots in U.S. history. These experiences reveal an important part of the story of discrimination and racial prejudice in America. The focus of much historical analysis has been on the experiences of African Americans under slavery, Jim Crow laws, Black Codes, and other forms of legal discrimination (including decisions by the U.S. Supreme Court upholding slavery), as well as oppressive and brutal treatment by legal authorities.”



Likewise, Gabbidon (2010:1) purports that “The colonial model is vastly underappreciated as a potential perspective to contextualize the overrepresentation of racial and ethnic minorities in justice systems....”

### ***The Relevance of Cultural Considerations in the Study of Blacks***

Studies of alcohol and drug abuse among black populations rarely begin with an examination of alcohol and drug use patterns in Africa (James and Johnson 1996). Typically, researchers begin to understand addicted populations considering universal models and/or traditional ideas about drug use and addiction excluding the cultural and historical experiences of the group under study. Furthermore, what has tended to happen when blacks and other people of color have gained access into drug treatment programs was that they participated in “universal” treatment modalities that claim to work for all populations. Arguably, these “one size fits all” approaches to recovery remove the essential characteristics and diversity between groups, including their cultural and historical experiences (Nobles, Goddard, and Gilbert 2009). As a result, there was a lack of understanding and awareness about one’s cultural, social, psychological, and historical experiences, which are critical to understand in intervention and prevention programs which include blacks (Nobles, Goddard, and Gilbert 2009). In 1978, black scholars argued that to understand black life in the United States, one must begin in Africa (Christmon 1995) to analyze the behavioral impacts of slavery and racism as well as the

psychological dimensions of oppression. One caveat, however, was that not all scholars agree on the level of psychological distress or “The degree or significance of the effects of slavery on contemporary African Americans” (West 2004). Consequently, two prominent black psychologists, namely, Akbar and Wright (Anderson 2003:13) have both supported this ideology and agree that the impact of slavery has had a continuing influence of the psyche of African Americans.

### ***Drug Use Among Indigenous Populations***

Through the years, only a few studies have been conducted analyzing patterns of drug use among indigenous African populations, particularly African women (Belgrave and Allison 2006; James and Johnson 1996). As mentioned, while the literature on drug use among African men and women was limited, the available data demonstrate that African communities permitted the use of alcohol and other drugs (AOD) in religious and other cultural ceremonies (Belgrave and Allison 2006) as it was common for certain African nations to consume alcoholic beverages during courtships, as an offering to deities and other spirits and to celebrate the harvest and other community events (James and Johnson 1996). For example, “When the Asante celebrated the harvest festival, Odwira, it was commonplace to have liquor as an integral part of the festivities” (Belgrave and Allison 2006:306). One anthropological study revealed that Africans used alcohol and other drugs in moderation. The same study suggested that individuals did not

drink alone and that patterns of disruptive behavior were not associated with alcohol consumption commonly associated with more contemporary drinking behaviors (James and Johnson 1996).

### ***Africans and NonAlcoholic Drug Use***

The use of nonalcoholic drugs was popular among Africans. Marijuana (ganja) and hashish were introduced to Africans by Arab traders, according to (James and Johnson 1996). In fact, marijuana and hashish were not the only drugs familiar to Africans. Africans used multiple mind-altering “herbs” (Goodson 2003) for recreational and medicinal purposes and many African women “concocted” a combination of drugs to abort unwanted children by slave masters as well as poison “the slave master” (Wyatt 1992). Furthermore, other Africans, Rastafarians, have incorporated the use of marijuana (ganja) as part of their religious practices. For example, in 1938 there was a revolt in Jamaica against the colonization of Jamaican peoples (Campbell 1987) which espoused a religious and resistance movement, called “The Rastafarians movement” (Campbell 1987), that allowed the freedom of ganja (marijuana) smoking (Savishinsky 1994). Finally, according to James and Johnson (1996) although Africans consumed alcohol and other drugs, there was no reported history of addiction among indigenous African peoples remotely similar to that of current users.

## *African Women and Slavery*

Early in history, black men, women, and children were subjected to some of the most horrific and cruel treatment of any human race during European domination. According to Feagin (2000), many individuals assess enslavement as a system of capitalism which fundamentally underdeveloped members from the African culture, creating a system of prosperity for whites. Slavery, according to Feagin (2000), was more than just a system of wealth and prosperity for whites. Slavery was a system of sexual manipulation and victimization for both African men and women. Feagin (2000:46) states that slavery was a “Well-developed system for the social and sexual control of black men and women.” Feagin (2000) states it best as he argues:

One of the most oppressive aspects of American racism lies in this sexual thread, which weaves itself through various manifestations of racism to the present. White men have often raped African American women with impunity, especially during the nation’s first three centuries. Many white men developed a contradictory set of attitudes that saw black women as human enough to be exotic objects of sexual desire, yet as less than human in their rights to protection from sexual attack. (P. 47)

The above ideology from Feagin (2000) was important in this research in several ways. First, as mentioned, few mainstream or contemporary studies begin

analyzing or evaluating black women's drug addiction referencing their historical experiences during slavery. Second, contextualizing the historical relationship of black women during the colonial era would help illustrate (Agozino 1997) the "off-centeredness" or the "residual" effects of slavery (Asante 1987; McNair 1992; Weems 1997). This history is important in the development of more elaborate discussions on the etiology of drug use among black women. To this end, it is important that researchers and others studying black women's drug addiction consider the consequences of slavery including psychological implications, which have been maintained through a variety of intentional perpetuated racist's events. Fundamentally, slavery has had a direct effect on the social status and psychological well-being of all black's and black women in particular.

There is no argument that historically, the social and political experiences of blacks have centered on racial ideologies and racial hierarchies established early in history described by Feagin (2000) as "Biological racism." Biological racism, according to Feagin (2000) was the idea that black's are biologically and intellectually an "Inferior race." Unfortunately, negative stereotypes and ideas about blacks are systemic and still permeate American social institutions. What is more important, European domination and the maintenance of hegemonic principles and practices, including the impact of enslavement and the interplay of exploitation and oppression, have played major roles in shaping the experiences of

black women including socializing black women into a society whereby they internalize that they are the “other.” To address the ideas above, the next section in this study begins with a discussion of black women’s vulnerability to sexual assault during slavery particularly the objectification of their bodies (Musgrave, Allen and Allen 2002). The final section of the study was a discussion of drug use among African indigenous peoples. This analysis was significant since numerous slave narratives imply that one fundamental survival mechanism was to repress feelings.

### ***The Victimization of the African Woman***

Many freedom narratives reveal accounts of rape and sexual abuse against African women. For example, in 1861, Harriet Jacobs discussed her life of enslavement. She recalled how her white master would “Whisper” foul words in her ear and later force her to participate in intercourse against her will (Franklin and Moss 1994). If a black woman resisted her master’s offer of intercourse, in many instances; she would receive a brutal beating or be murdered. According to several freedom narratives by women, there were many days that African men and women carried off the bodies of their beloved family members because they resisted their master’s “Licentious intercourse” (Franklin and Moss 1994:139). Unfortunately being beaten or even killed were not the only consequences of explicit engagement between an enslaved African woman and her master. Not only did African women

endure great physical pain from abuse, African women experienced a complex set of psychological abuse as well. For example, often the result of the enslaved woman's sexual encounters with her white master would render pregnancy. As such, in many instances, the enslaved African woman would be forced to give up custody of her newborn child. In fact, this was many African mothers "Biggest fears" (Belgrave and Allison 2006:61). The above narrative makes clear the importance of oral histories of the enslaved. Thus, the narratives are an integral part of the historical realities of African women.

Understanding the experiences of African women and the pain African women endured during their enslavement could help researchers develop a better understanding the black personality and the full range of social experiences which may contribute to the "off-centeredness" of black women as we include their lived experiences as an explanation of subsequent drug use and addiction as well as their lack of participation and graduation from substance abuse treatment programs. What is more important, this approach would allow a detailed explanation or exploration of their "Systematic subjugation" (Seitz 2005:36; Zerai 2000) and other experiences on the plantation. This is necessary if we intend to build conceptual frameworks which encourages behavior change that are grounded in black women's historical experiences from both current and past to facilitate retention and generate positive treatment outcomes once they have entered

substance abuse therapy. From this perspective, the arguments about black women's addiction and recovery can move from the traditional underpinnings of black pathology (LittleJohn-Blake, and Darling 1993) by focusing more on the historical explanations of addiction among black women to achieve higher percentages of treatment completion. In fact, black women participating in substance abuse treatment programs have been found to report high percentages of physical and sexual victimization (Belnap 2008; Chesney-Lind and Sheldon 1992; Curtis-Boles and Jenkins-Monroe 2000; Gil Rivas, Florentine, and Anglin 1996; McDaniels-Wilson and Richie 1996). According to research conducted by Chesney-Lind and Sheldon (1992), most of the victimization against women has been by male relatives or intimate partners (Gilfus 1992; Greenfeld and Snell 1999; McDaniels -Wilson and Belnap 2008; Richie 1996). In fact, research has indicated that women's subsequent drug use is correlated with patterns of victimization earlier in life (McDaniels-Wilson and Belnap 2008). For example, in Richie's (1996) study, approximately 20 of the 26 women interviewed were victims of sexual abuse during adulthood and 12 of those respondents were sexually victimized as children. Other research has found that women who are not on drugs and not incarcerated also report a high incidence of sexual abuse as well (McDaniels-Wilson and Belnap 2008). In some studies, the percentages of sexual abuse reported by black women have been as low as 20 percent and as high as 83



percent (Curtis-Boles and Jenkins-Monroe 2000) and individuals with who have had a history of sexual and physical abuse are less likely to complete drug treatment compared to respondents who have not been abused. In a study conducted by Boles, Joshi, Grella, and Wellisch in 2005 on childhood sexual abuse patterns and drug treatment outcomes, child sexual abuse was correlated with alcohol and other drug abuse (AOD), particularly alcohol and cocaine. Next, child sexual abuse has been associated with co-occurring disorders. Many victims of child sexual abuse, who experience major depression or antisocial personality, are significantly more likely to be involved in criminality and are more likely to have a higher number of arrests in a lifetime before they reach the age of 18 (Boles, Joshi, Grella, and Wellisch 2005).

### ***Crack Cocaine, Black Women and Substance Abuse***

During the mid 1980s, America witnessed a new street drug popularly known as “crack” (Chitwood, Murphy, and Rosenbaum 2009). Crack, an addictive stimulant derived from powdered cocaine became a very popular drug among the poor and those living in less desirable neighborhoods. While cocaine was not a new drug, the formulation of powder cocaine into a “rock” formation was a new method whereby users inhaled the fumes of cocaine which had been formed into a rock (Cornish and O’Brien 1996; Hamid 1988). With its cheap cost and immediate euphoric feeling, crack cocaine became a very popular and iniquitous drug among

all groups. In fact, in several self report studies<sup>2</sup> cocaine or crack cocaine has been reported as the primary drug of choice among black women (Wechsberg, Zule, Riehm et al.2007). The abundance of literature on drug use and addiction centered on black women suggests that cocaine or crack use and addiction among black women is a serious issue and it was for this reason, coupled with the heightened media attention, that the study of cocaine or crack addiction and treatment is fundamental and a necessary study. Furthermore, these studies have suggested that black women who report using cocaine “crack” may have lower drug treatment completion rates than those who do not report crack cocaine as their problem drug during the time of admission and to validate this claim, it was important to analyze the impact of cocaine or crack use in this study.

According to Roberts (1999:620), “The inception of crack, a smokable form of cocaine, in the 1980s introduced a new era in the world of drugs and accounted for staggering effects on morbidity and mortality across America.” Studies from the National Institute on Drug Abuse (NIDA) in 2007 have demonstrated that using cocaine in both the powdered and rock formation, has debilitating effects on the central nervous system which interferes with the “Reabsorption process of dopamine, a chemical messenger associated with pleasure and movement” (NIDA:1), which explains the feeling of euphoria associated with cocaine use.

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<sup>2</sup> The National Household Survey of Drug Use and Health, Falck, Wang, Siegal, and Carlson 2000, and Meyers 2004.

More specifically, smoking crack cocaine puts its users at risk for multiple social and health consequences such as: (a) financial hardship, (b) homelessness, (c) loss of child or children, (d) social stigma, (e) criminal record/incarceration, (f) family breakdown, and (g) violence (Centers for Disease Control 2009; Longshore et al. 1998; Miller 2005; Richie 1996; Turner and Wallace 2003). When compared to other racial and ethnic populations, the consequences of drug use and addiction among blacks are more severe (Beatty 1994; Centers for Disease Control 2009; Weiss, Kung, and Pearson 2003). In fact, compared to other groups, black women are more likely to be addicted to crack cocaine, are more likely to be overrepresented in poverty, have higher rates of unemployment, lower educational attainment, have higher rates of sexual abuse (Chesney-Lind 2006), family discord (Nobles and Goddard 1989; Turner and Wallace 2003), and intimate partner violence (Richie 2006). Additionally, given the current statistical data from the Centers for Disease Control, few would dispute that one of the most devastating consequences of drug use and addiction among black women is the incidence and prevalence of new HIV/AIDS cases, which have been directly correlated with intravenous drug use (Centers for Disease Control 2009; Guzman, Leonard, Gwadz et al. 2006; Murphy, Brecht, Herbeck et al. 2008; Younge, Salem, and Bybee 2010; Zule, Riehman, Luseno et al. 2007). Moreover, intravenous drug use has accounted for approximately 51 percent of new HIV/AIDS diagnoses, including children

(Centers for Disease Control (CDC) 2007). This figure was up 10 percent since 1994 (Grella, Anglin, and Joshi 1996). For example, in 2006, HIV/AIDS was the leading cause of death among black women aged 25-34, the third leading cause of death for black women aged 35-44, and the fourth leading cause of death for black women aged 45-54; the only other diseases causing more deaths of women were cancer and heart disease (Centers for Disease Control 2008:1; Roberts and Nishimoto 2006). According to MacMaster Rasch, Kinzly et al. (2009):

Individuals who smoke crack cocaine have been found to be three times more likely than nonsmokers to be infected with HIV, are less likely to adhere to medical care and more likely to continue high-risk sexual behaviors after being diagnosed with HIV...the use of crack cocaine can contribute to the spread of the epidemic when users trade sex for drugs or money, when they engage in risky sexual behaviors that they might not engage in when not under the influence, or when their use has an effect on access to health care services...Women appear to be at particular risk for HIV infection due to the nature of their role both in the larger society and in the crack-using subculture. (P. 283-291)

There is a correlation between cigarette smoking and HIV regarding the progression of the virus (Hoffman, Starks and Gritz 2009; Wewers, Diaz, Wewers, et al.1999). Many clinical trials suggest "... that the incidence of bronchitis

bacterial pneumonia and lung burden of HIV is increased in HIV-seropositive smokers. These findings suggest that immune defects exist in HIV-infected smokers. Yet HIV-seronegative smokers have significantly higher percentages of CD4 blood lymphocytes than do nonsmokers” (Wewers, Diaz, Wewers, et al.1999:1543).

The above findings from the Centers for Disease Control place in to context the urgency to address the persistent disparities in drug treatment completion among black women, particularly since drug use was “One of the predominant routes by which black women are becoming infected” (Grella, Anglin, and Annon 1996:278). As a result, significant attention must be paid to the 2.9 percent of Americans classified as being in need of treatment for an illicit drug problem during 2008 (Office of Applied Studies, Substance Abuse and Mental Health Services Administration 2010:7). Even though women from all racial and ethnic groups and socioeconomic backgrounds are susceptible to drug addiction, black women’s addiction to crack cocaine and their underrepresentation in drug treatment programs and underrepresentation among drug treatment completions, deserve more attention than it has received in the past, with particular emphasis placed on black women’s use of crack cocaine. For example, in a special study on “Black Admissions to Substance Abuse Treatment Programs” approximately 40 percent of black women indicated that their primary substance or problem drug

was crack cocaine compared to black men, whose primary problem substance was alcohol at approximately 35 percent. What was more; a national study on drug abuse treatment admissions has shown that approximately 809,000 people reported substance abuse treatment for cocaine addiction (SAMSHA 2008). Finally, in 2006, cocaine use accounted for approximately 548,700 emergency room visits, 127,000 of which involved women (SAMSHA 2007).

Barr, Farrell, Barnes, and Welte (1993), have argued in their study on drug addiction and black males, that blacks report slightly higher rates of illicit drug use compared to people from other racial and ethnic groups. For example, approximately 30 percent of blacks in their study used marijuana, compared to whites at approximately 28 percent. In that study, blacks were more likely to use cocaine at 11 percent compared to whites at 8 percent (Barr, Farrell, Barnes, and Welte 1993). The results from Barr, Farrell, Barnes et al. (1993) study are consistent with the results from the National Survey on Drug Use and Health (2007) which revealed that the illicit drug use among blacks was slightly higher at 9.5 percent compared to 8.2 percent for whites (Substance Abuse and Mental Health Services Administration, Office of Applied Studies (SAMSHA 2008). The growing trends in black women's crack cocaine use and addiction has called for an investigation to increase the number of black women's participation in drug treatment programs as well as to improve their drug treatment outcomes once they

are admitted to a drug treatment program. In the past two decades, many efforts have been focused on reducing the incidence and prevalence of both licit and illicit drug use among black women (Nobles and Goddard 1986[1993]; Roberts, Jackson and LaNey 2000; Jackson 1995). For example, one study found that black women participating in treatment programs for crack cocaine addiction have been “Difficult to treat and retain” (Rowan-Szal, Joe, and Simpson 2000). Another study found that black crack abusers are had an effect on by factors such as lack of daycare, gender bias, lack of transportation, no health insurance, and lack of motivation to name a few (Wechsberg, Zule, Riehm et al. 2007). These factors alone make drug treatment retention a difficult process.

For instance, Roberts, Jackson, and LaNey’s (2000) study on African American women and substance abuse revealed that 71 percent of black women who used illicit substances were victims of sexual abuse compared to others in the study at approximately 23 percent. Approximately 86 percent of black women were emotionally abused compared to 47 percent of other women in the study. Other significant findings in their study suggested that compared to other women, black women were more likely to come from families with substance abuse histories. That is, black women were more likely to report that both parents and siblings struggled with addiction compared to other women in the study (Roberts, Jackson, and LaNey 2000).

To address the increased participation among women addicted to drugs as well as the complex set of social and economic factors associated with women and their addiction to drugs, several gender specific initiatives have been created by the National Institute on Drug Abuse (The National Institute on Drug Abuse 2005). More specifically, in 1974, government agencies expressed an interest in understanding women's drug addiction during pregnancy and the harm the drugs would cause on unborn children (Grella 1999; Grella and Greenwell 2004; Grella, Polinsky, Hser, and Perry 1999; Hawkins, Arthur, and Catalano 1995; National Institute on Drug Abuse 2008; Rosenbaum 1981; Sharpe 2001). It is worth mentioning that the primary drug women were involved in during the 1970s was heroin (Rosenbaum 1981). Although heroin remains a popular drug of abuse reported in many treatment programs, particularly among white females, the primary drug of abuse or drug of choice among many black women in drug treatment was crack cocaine (SAMSHA [2006] 2007).

Even though cocaine treatment admission rates for the United States as a whole has declined by approximately 16 percent between 1996 and 2006, black women are overrepresented in treatment admissions for cocaine use, than any other drug (Treatment Episode Data (TEDS) 2006). Consequently, although in 2006, both black and white women's treatment admissions for crack cocaine were the same, 19 percent each, compared to white women, black women are still



underrepresented in drug treatment programs (Neighbors, Bashshur, Price, Selig, Donabedian, and Shannon 1992; Treatment Episode Data (TEDS) 2006). In 2007, the most current data available on drug treatment outcomes, smoked cocaine or crack cocaine represented approximately 72 percent of all primary cocaine admissions (Treatment Episode Data (TEDS) 2007). According to Turner and Wallace (2003:583), one factor which contributes to the overrepresentation of black women's use of crack cocaine centers on the power and control that they experience while under the influence of drugs. Specifically, Turner and Wallace (2003) argued that black women are attracted to crack cocaine because using the drug gave them "A false sense of empowerment." The argument from Turner and Wallace's (2003) study was significant in this research in that their discussion supports the overarching theoretical framework in this study, which centers on the idea that black women are less empowered because of what one researcher defined as the "Prism of oppression" (Valandra 2007). The prism of oppression centers on black women's experiences with racism, sexism, and classism.

When compared to white women, black women are more likely to be single parents, have little or no marketable skills, earn significantly less money, are more likely to receive public assistance, and have lower levels of educational attainment. Because of their marginalized status, using crack cocaine brings an empowerment that black women are less likely to experience. Thus, this false sense of power

allows black women to escape, temporarily, the systemic and pervasive societal strains and stereotypes associated with race, social class, and gender oppression that so many of them are likely to experience in their often “marginalized” social position as a black female in America.

As expounded upon earlier, a major concern of drug addiction specialists and others was the association between drug use and the spread of the HIV infection (The National Institute on Drug Abuse (NIDA) 2009). In particular, according to the Centers for Disease Control and Prevention (2006), among cases that progress to a diagnosis of AIDS, drug abuse accounts for a greater percentage of cases among women than among men. Approximately 47 percent of all women diagnosed with AIDS are intravenous drug users compared to male intravenous drug users who account for approximately 32 percent of AIDS cases. An additional 19 percent of women, compared to 2 percent of men, with AIDS report having sex with users who inject drugs. In all, drug abuse was nearly twice as likely to be directly or indirectly associated with AIDS in women at 66 percent compared to men at 34 percent. Finally, there was documented evidence that drug use was a risk factor related to this illness and that black women are the population that was most wounded by this dreadful disease (i.e., since they are overrepresented in HIV/AIDS cases and report higher addiction to crack cocaine) (Centers for Disease Control (CDC) 2006). As such, a discussion of the correlations between HIV/AIDS

and drug use was necessary to focus on prevention and treatment initiatives. To illustrate, a study conducted by National Institute on Drug Abuse (The National Institute on Drug Abuse (NIDA) 2005), found that a reduction in crack cocaine use after treatment revealed a significant drop in HIV risk, mainly as a result of fewer sexual partners and less unprotected sex.

### ***Biological versus Social Factors of Drug Addiction***

The National Institute on Drug Abuse has defined addiction as a “chronic disease” that causes it’s users to actively seek drugs. Depending on the length of time individuals use drugs, users may experience long term biochemical changes in the brain that may alter the behavior in its users. Not only do users experience health consequences when they use drugs long term, addiction to drugs may cause significant social consequences as well. Since this study was theoretically grounded in sociology, it is important to understand that this research analyzed the social context factors of drug use, including race differences in drug use and addiction as well as differences in educational attainment, and environmental factors to name a few. Finally, it was also important to understand that the onset and socialization into drug use among males and females are different considering multitude of factors. Important in this study, however, was to highlight the differences in drug use, abuse, and treatment completion by gender and understand the effects that drug use has on women and men. Still, this research focuses on

patterns of addiction and treatment comparing black women, white women, black men, and white men, highlighting black women's experiences with drugs and drug treatment completion, sociologically and not biologically.

***Gender Differences in Substance Use, Abuse, and Treatment Outcomes***

According to Ettore (2007):

As a threat to white, male, middle class values, drug use is emblematic of one's failure to engage properly with conventional society. When women are included in this representation, scholars challenge traditional assumptions which lack an awareness of gender dynamics in the drugs field. In this context, women appear in the drug world in different ways than men and connections between women's pursuits in the illegal and conventional worlds are able to be made.

(P.227)

Women's involvement in cocaine use was a fairly new trend. Historically, the issue of drug addiction has primarily been viewed as a male issue (Bride 2001) including the use of cocaine. As such, many of the early substance abuse treatment programs were designed for men who participated in outpatient drug therapy. Consequently, the majority of these programs used a treatment modality traditionally know as the Minnesota treatment model, characterized by group counseling, drug education, and participation in a 12 step support group (Veach,

Remley, Kippers et al. 2000) has been the “leading model” in drug treatment programs throughout the United States. Moreover, approximately 95 percent of treatment programs nationwide use the Minnesota drug treatment modality (Veach, Remley, Kippers et al. 2000). However, due to the outgrowth of the feminist movement and reviews of male-dominated substance abuse treatment models (Bride 2001), women’s issues with drug addiction have become a valid research agenda. Although some of the literature on women’s drug treatment outcomes has suggested that women are still underrepresented in drug treatment programs and in general have been an understudied drug addicted population compared to their male counterparts, there has been an increase in the number of treatment programs designed to address women’s unique needs (Bride 2001). According to Bride (2001), although women’s drug treatment needs have been addressed in the research literature, only a few gender specific studies describe treatment outcomes.

Understanding why one enters or does not enter drug abuse treatment has been complicated (Cowan, Deering, Crowe et al. 2003). Moreover, when compared to men, women are less likely to enter and complete drug treatment. Further, among black women, the likelihood of entering and staying in treatment was even less. For example, in 2007, women represented only about 32 percent of all treatment admissions. In fact, when comparing racial differences, whites were more likely to be admitted to drug treatment at 60 percent compared to blacks at 21

percent (SAMSHA 2009). To address the disparities in drug treatment access and participation, multiple treatment programs have been created, including Afrocentric models, to the underutilization of drug treatment among individuals who identify a need for substance abuse treatment.

There have been efforts to meet the often unique treatment needs of women as well. Although it has been established in multiple national drug treatment outcome studies (i.e., the Drug Abuse Treatment Outcome Study (DATOS) 1991-1993 and the Treatment Episode Data Set (TEDS) 2007), that definitive gender differences exist throughout the drug treatment process, rates of retention, treatment entry, and completion are significantly lower for women than for men. Several studies have tried to address gender differences in treatment outcomes among men and women since gender has been found to be a significant predictor of drug treatment completion (Knight, Logan, and Simpson 2001; Chou, Hser and Anglin 1998). For example, according to Knight, Logan, and Simpson (2001), even when a treatment program meets all the unique and the often challenging social problems women bring with them, women still fail to complete treatment. Others, however, purport that type of treatment program makes a significant difference (Veach, Remley et al. 2000). Accordingly, Veach and colleagues (2000) suggest that early treatment models have typically relied upon residential substance abuse treatment modalities. However, new studies have supported outpatient drug

treatment as an alternative to increase the treatment outcomes among individuals participating in drug treatment programs. For example, among clients discharged from outpatient service settings in 2005, client characteristics were a significant determinant of successful treatment completions. In this study, individuals who used alcohol had the highest completion rates while those who reported using cocaine reported had the lowest treatment completion rates. Additionally, males were more likely than females to complete outpatient treatment, 39 percent versus 32 percent respectively. At the same time, clients who were more educated were more likely to successfully complete the program. In the same study, differences in treatment outcomes also varied by gender and racial background. Whites were more likely to complete drug treatment at approximately 40 percent, compared to blacks at approximately 27 percent (SAMSHA 2009). Finally, another factor which has been associated with drug treatment outcomes was coercion. Coercive mechanisms as well as social control have also been found to impact drug treatment completions (Hiller, Knight, Broome et al.1998). According to Young (2002), coercion may enhance treatment retention and in particular may impact those women and people of lower socioeconomic backgrounds. One caveat, however, was that some have argued that mandated drug treatment, such as a criminal justice referral, was a coercive mechanism and a mechanism of social

control among black women, pregnant addicted women, and women on welfare (Young 2002).

Several studies have analyzed the variations between men and women in drug treatment programs (Grella, Joshi, and Hser 2000; Grella and Joshi 1999; Kandall 1998). In general, women have differences in their experiences with drug use and addiction ranging from initial use to treatment outcomes. Moreover, women are less likely to have support from family members when they seek help, are more likely to be rearing children on their own, suffer from more severe physical, social, and psychological effects of addiction, and are less likely to complete drug treatment than men. While both men and women have the same chance of using and becoming addicted to drugs, research has shown that there are multiple differences among drug users regarding their gender and race, their drug use behaviors and their “vulnerability” to certain drugs (Grella, Hser, and Hsieh 2003; Grella and Joshi 1999; National Institute on Drug Abuse 2000). One of the earliest findings on the differences between women and men’s addiction suggest that women are more likely to begin drug use at a later age than men (Grella and Joshi 1999) and that women are more likely to use drugs more frequently than men and develop dependency faster than men as well as have faster physical deterioration (Nelson-Zlupko, Kauffman, and Dore 1995). However, women are more likely to become addicted faster and report higher percentages of social



consequences associated with drug use and addiction. Further, according to Grella and Joshi (1999), the women in their study were more likely to report having a drug dependent partner, (Nelson-Zlupko, Kauffman, and Dore 1995) have been hospitalized for cocaine dependence, and were more socioeconomically disadvantaged compared to men. Consequently, Nelson-Zlupko, Kauffman, and Dore (1995) also suggested that women are more likely to report that one or more family members were also drug-dependent as well.

Both men and women have discussed similar reasons for their initial drug use. Women are more likely to use drugs as a result of their relationship with men (Rosenbaum 1981; Walton, Blow, and Booth 2001) and men typically began using drugs earlier than women and become associated with drugs to generate income. Women are also more likely to be socioeconomically disadvantaged, live in neighborhoods with high crime and violence, and are in greater need of special services, such as Medicaid, housing, obstetrical care, transportation, child care, and mental health services (Grella, Joshi, and Hser 2000). In fact, according to Grella, Joshi, and Hser (2000), when women have access to these services, they are more likely to complete drug treatment. In recent years, a considerable amount of studies on gender differences in drug use, abuse, and treatment have been focused on women's victimization (Boles, Joshi, Grella, and Wellisch 2005; Chesney-Lind 1994; Crenshaw 1991; Richie 1996). Moreover, both male and female victims of

sexual abuse have had lower participation rates in drug treatment, higher rates of relapse, and lower drug treatment completions (Boles, Joshi, Grella, and Wellisch 2005). Accordingly, Boles, Joshi, Grella et al. (2005:45), posit that when compared to nonabused patients, those patients with a history of childhood sexual abuse had more severe alcohol and drug problems, had mental health challenges, were more likely to engage in criminal behavior, and were more likely to be addicted to cocaine. Women are also more likely to have more responsibilities in the home. For example, Nelson-Zlupko, Kauffman, and Dore (1995) purports in their discussion of psychosocial characteristics of women who were addicted to drugs, that addicted women are more likely to assume roles as primary caregivers, belong to families who used drugs to contend with difficulties and experience greater family disruption compared to men. The women in their study were also less likely to receive support from family members in treatment and are often discouraged by family members, when she makes the decision to participate in a drug treatment program.

Stereotypes about drug users also impact women differently than men. Because of socially defined gender roles, women who use drugs are often treated more harshly by society than men. Since women are viewed as the primary care giver of children, negative perceptions about their drug use and addiction may impact their decision to enter treatment and when controlling for race, more than

any other group, black women's drug use and addiction was even further scrutinized. Another important finding that many studies have reported was that women were more likely to fear losing children and that many women feel they are more stigmatized for their drug use and addiction than are men. Women also reported that they experienced higher levels of "Guilt, shame, anxiety and depression" because of their drug use (Nelson-Zlupko, Kauffman, and Dore 1995:47).

According to Knight, Logan, and Simpson (2001), women with a history of polydrug use and more severe drug issues are less likely to complete drug treatment than men. Consequently, married women, women who have the support of family members, and women referred by the criminal justice system were more likely to stay in drug treatment longer and are more likely to complete the program as well (Knight, Logan, and Simpson 2001). Finally, women with co-occurring disorders also have low retention rates as well. Women who present in drug treatment programs with mental health issues, issues with shelter, childcare and financial problems are less likely to complete a drug treatment program (Knight, Logan, and Simpson 2001). Other factors such as legal coercion, interpersonal pressure, and negative social consequences, and prior treatment experience impact an individual's decision to enter treatment. Other studies on drug treatment have findings consistent with the studies listed above. For example, Tims, Inciardi,

Fletcher, and Horton (1997) revealed that 76 percent of the sample reported cocaine use 12 months before treatment entry. The majority of those who reported cocaine use were crack smokers. Many of them were involved in risky sexual behaviors, criminal activity, and reported more mental health challenges.

### ***Black Women, Substance Use, Abuse, and Drug Treatment Outcomes***

As mentioned earlier, few studies have examined drug treatment outcomes among samples of black women. In fact, many early analyses of substance abuse treatment outcomes excluded black women (Beatty 1994). In general, the data suggests, compared to white men, white women, and black men, black women are less likely to seek, complete, and gain access to substance abuse treatment (McCaul, Svikis, and Moore 2001). For example, in McCaul, Svikis, and Moore's (2001) study, the average length of stay in drug treatment among white males was 171 days, white women, 137 days, black males 108 days, and black females, 99 days. In fact, according to data from the National Evaluation Data and Technical Assistance Center (1999:3), "Marginalized groups are overrepresented among substance abusers (Magruder, Ouyang, Miller, and Tilley 2009) and drug related emergency hospital admissions. Further, when compared to whites, people of color are less likely to seek treatment and less likely to complete treatment once begun." Many arguments have been presented to explain the differences in race and drug treatment completion (Brome, Owens, Allen et al. 2000; Wechsberg, Zule,

Riehm et al. 2007; McNair 1992). For example, McNair (1992:6) demonstrated that part of the problem with black women and drug treatment therapy centers on black women's historical experiences, rather what she calls "Socialization history." That is, black women are reluctant and are less likely to seek outside help. Several arguments have been postulated to explain why black women are reluctant to seek help. The first was that black women do not trust mental health professionals, particularly when they are white, due to the inequitable treatment and sociohistorical experiences that black women have had to endure as a result of their social status, such as being a woman and being black (McNair 1992). According to hooks (2004), black women have been socialized to handle problems such as substance abuse at home and are often likely to minimize issues. For example, many black women with an addicted family member may try to protect the family member from further harm by developing strategies for treatment on their own. Furthermore, McNair (1992) also reported that in many instances, black women are misdiagnosed and "misinterpreted" by treatment professionals because many therapists have compared black women's behavior to that of white males.

Other arguments suggests that one primary reason blacks are less likely to complete drug treatment was the inability of treatment programs to address the needs of culturally diverse populations (Longshore and Grills 2000; Turner and Wallace 2003). What is more important is that many of drug treatment programs

have strict screening criteria which may hinder the treatment process for black women (Grella 1999). In many cases, black women have had a complex set of social factors which may interact with the treatment process, such as receiving public assistance, being pregnant, having children, or a limited income. In some programs the above socioeconomic disadvantages may prevent access into drug treatment programs (Grella 1999; Grella, Joshi, and Hser 2000). Unfortunately, among black women, these factors are common, as black women are disproportionately affected by the above treatment barriers compared to other female drug addicts (Beatty 1994; Guzman, Leonard, Gwadz et al. 2006). Scott-Lennox, Rose, Bohlig's et al. (2000) study on the role of family status and demographic characteristics in explaining high drug treatment dropout rates established that the likelihood of not completing treatment was greatest for women who were black, pregnant, had custody of minor children, or were younger than age 21. The authors also mentioned that the more children respondent's had the less likely they were to complete drug treatment. In Magruder, Ouyang, Miller et al. (2009) study, younger blacks were more likely to leave drug treatment compared to older people. Types of drug and polydrug use were also associated with lower retention rates as well.

Black women who use, abuse, and are dependent on drugs have different needs compared to white men, white women, and black men, as the research has

demonstrated in multiple studies (Pelissier and Jones 2005). Race and gender alone pose important considerations for black women seeking drug treatment. Entering drug treatment has been a challenge for many black women and these challenges complicate the treatment process (Roberts and Nishimoto 2006). In many instances, black women are faced with multiple issues which interfere with the treatment process due to their significantly high rates of underemployment or unemployment, lack of educational attainment, and risky environmental factors (i.e., living in socially disorganized and socially dislocated neighborhoods characterized by high crime, violence, gang activity, and drug sales). These negative social factors place black women at greater risk of addiction and limited opportunities to seek drug treatment, when compared to white women, black men, and white men. Furthermore, the above challenges pose a significant threat to entering, remaining, and completing drug treatment. To address these challenges, a large body of literature has approached these issues by analyzing the factors which interfered with the treatment process and have identified those issues as treatment barriers. A barrier, according to Allen (1995:725) was defined as an “External and subjective (internal) phenomena that obstruct, restrain, or serve as obstacles to receiving health care.” Several explanations are available to explain some of the roadblocks black women experience while attempting to enter or complete substance abuse treatment, including the argument that black women have a

“unique” (MacMaster, Rasch, Kinzly et al. 2009) set of treatment barriers incomparable to those of their white counterparts. It has been argued and empirically supported that black women, particularly if they have limited incomes or live in lower socioeconomically developed neighborhoods (Guzman, Leonard, Gwadz et al. 2006; Sowers, Ellis, Washington, and Currant 2002), are more likely to have multiple external and internal barriers to treatment (Roberts and Nishimoto 2006) compared to those without similar challenges.

Over the past several years, the National Institute on Drug Abuse (NIDA) has produced an abundance of research which has identified gender and race differences in the pathways of drug use and the risks and protective factors associated with drug use, abuse and addiction as well as drug treatment effectiveness (The National Institute on Drug Abuse (NIDA) 2000). Between 1973 through 1974, the National Institute on Drug Abuse (NIDA) developed the first program designed to meet women’s drug treatment needs (Grella 2008). While these studies targeted women, according to Turner (2000:286), “Insufficient attention was given” to populations of color in part due to lack of access to drug treatment programs and lack of participation by people of color in drug abuse research (Longshore 1992). What is more important when these studies have had large samples of blacks and other populations of color, researchers have rarely reported significant findings on this population (Turner 2000). However, due to the



increased participation in drug use among women and people of color, several studies have begun to focus on the gender and race (Barr, Farrell, Barnes et al. 1993) differences in substance use, addiction, and treatment (Cao, Marsh, and Shin 2008; Compton, Cottler, Abdallah et al. 2000; Grella and Joshi 1999; Mangrum, Spence, Steinley-Bumgardner 2006; Walton, Blow, and Booth 2001). In many instances, black women enter into drug treatment with multiple family and relational issues. Again, when compared to all other groups, black men, white men, and white women, the criminalization of black women for their drug use and addiction, particularly crack cocaine, has had a devastating the black family in general, due to incarceration, loss of wages, and loss of children. In fact, one of the biggest fears that many women have was losing their children.

In a recent report on substance use among black adults, which were the findings from the National Household Survey on Drug Use and Health ([2002] 2008), compared alcohol and other drug (AOD) use among black respondents, reported that the rate of past month illicit drug use was higher among blacks at 9.5 percent compared to the national average of 7.9 percent. The percentage of individuals in need of substance abuse treatment for use of an illicit substance was higher among blacks at 4.4 percent compared to the national average which was approximately 2.9 percent (SAMSHA 2010). Additionally, compared to white women, black women had lower rates of past month alcohol use and binge alcohol

use but black women had a slightly higher rate of past month illicit drug use compared to their white counterparts. Furthermore, black males also had lower rates of past month alcohol use and binge alcohol use and a slightly higher rate of past month illicit drug use compared to the national averages. Finally, among older black adults, past month alcohol use was considerably lower than the national average of older adults at 20.3 percent and 38.3 percent respectively. Their rates of binge alcohol use and past month illicit drug use, however, did not differ significantly from the national averages.

### ***Social Class and Drug Treatment Completion***

The sociodemographic data, which combined 2005 to 2008 data has indicated that almost one quarter of black adults, approximately 23.3 percent, were living in poverty, a percentage higher than the national average of 11.5 percent (SAMSHA 2010). What is more important the percentage of past month illicit drug use among blacks living in poverty was slightly higher at 12.9 percent compared to the national average of adults living in poverty at 11.7 percent (SAMSHA 2010). Even though there were no statistically significant changes in illicit drug use among black males and females aged 12 or older in 2008 (National Survey on Drug Use and Health 2008), the study did find that black women were underrepresented in drug treatment programs when compared to other groups (Treatment Episode Data 2006). For example, white males accounted for approximately 39 percent of all

treatment admissions in 2006, followed by white females at 20 percent, black males at 15 percent, and black females at 6 percent.

Many black women live in geographic locations that are socially dislocated (Sampson and Wilson 1995; Wilson 1991) environments, overrepresented in high rates of crime, high rates of underemployment, unemployment, and teen pregnancy (Beckett, Nyrop, Pfingst, and Bowen 2005; Moore 1995) as well as “street corner” adult and adolescent drug dealers. These factors have been directly correlated with drug use and addiction. The high visibility of small time drug dealers as well as operative drug networks, including shooting galleries, which are designated locations where people who use drugs go to when they want to buy drugs and use drugs, (Chitwood, McCoy, and Incardi 1990) makes acquiring drugs an easy task and complicates the treatment process. In fact, research on community structure and crime are abundant in sociological and criminological research. In 1989, Sampson and Groves revisited the original work of Shaw and McKay’s theory of social disorganization, testing neighborhood characteristics and crime. Specifically, past research on the relationship of neighborhood dynamics and crime have considered how structural factors, such as, low socioeconomic status, residential mobility, and ethnic heterogeneity are disruptive community characteristics which may lead to disorganization and contribute to crime and deviance. One caveat, however, was that most of these studies have been used to

explain delinquency among adolescent samples and do not discuss the addictive behaviors among black women.

In principle, traditional ecological studies have been useful to explain many of the factors that are important to understand the relationship between one's community and their criminal activity with only limited data on the neighborhood characteristics and risk factors among black women addicted to drugs. In 2003, Turner and Wallace discussed substance abuse among African Americans analyzing epidemiology, prevention, and treatment. Their study highlights several important factors relevant to this study. First, they argued that it was important to consider epidemiology and understand that substance dependency was both "Biogenetic and person-specific" (Turner and Wallace 2003:583). Moreover, they argued that ecology was important as the environment where the people live was a significant predictor of substance use. In the same manner, Wilson's (1991), discussion of social dislocation has been widely used to explain neighborhood dysfunction as well. Wilson (1991) argued that social isolation (the detachment from mainstream communities) create social, economic, and political disadvantages among people living in those disadvantaged neighborhoods. Thus, the lack of employment opportunities, neighborhood crime, domestic violence, dilapidated housing, no medical insurance, lack of transportation, and lack of economic resources, challenge stability for women in recovery and may create the

revolving door in drug treatment programs (Walton, Blow, and Booth 2001). Left with few options, many black women find themselves on many of the same vicious pathways which contributed to their drug use in the first place. In fact, according to Hiller, Knight, and Simpson (2006), is that reintegrating back in society was challenging for newly released prisoners with a history of substance abuse. Many return to their respective communities untreated, having to live in environments where drugs and crime are rampant. The reason, according to Hiller, Knight, and Simpson (2006) treatment was not always available for everyone seeking it. In 1993, Kirvo and Peterson analyzed urban violence among blacks and found that racial segregation was a strong predictor of homicide rates than any other predictor. In fact, Krivo and Peterson (1996) argue that extreme levels of violence in disadvantaged communities are promoted through (1) the presence of conditions that encourage individuals to behave violently and (2) the absence of mechanisms to discourage violence, which they explain as processes of socialization and role modeling. Thus, without these social markers in place, individuals were more likely to engage in negative behaviors, such as drug use and the sale of drugs (Sampson and Wilson 1995). Moreover, neighborhoods with high concentrations of blacks are often plagued with concentrated poverty, female-headed households, teen pregnancy, joblessness, crime, and drugs (Kirov and Peterson 1999; Sampson and Wilson 1995; Wilson [1987] 1996). These factors, according to Wilson (1996)

challenge social organization and social control. Other literature on neighborhood disadvantage have also concluded that “Neighborhood disadvantage has a significant effect on the likelihood of adult drug use above and beyond the influence of individual level socioeconomic status and other sociodemographic factors” (Boardman, Finch, Ellison et al. 2001:161).

### ***Public Panic, Criminalization, and Social Reaction to Black Women’s Addiction***

No matter what socioeconomic status, gender, racial or ethnic background, substance abuse can destroy families, destabilize communities, and negatively influence society in multiple ways (Beatty 1994; Boyd 2004; Miller 2005).

Ideologies about drug use vary “depending on who” is using them (Ettorre 2007:227). As such, the way drugs are dealt with in society is loaded with prejudicial perceptions and assumptions about particular drugs and specific people.

To demonstrate, in 1973, Musto discussed how American culture (i.e., white Americans) developed ideologies of moral panics about illicit drugs creating public panic as particular drugs have been associated with specific groups of people (McBride, Terry-McElrath, Hardwood et al. 2009; Saxe, Kaudshin, Tighe et al. 2006). Further, during the late 1800s, the “antidrug crusades” (James and Johnson 1996:13) focused on Chinese opium smoking, Mexican marijuana smoking, and black’s use of cocaine. Although studies have linked the use of drugs, particularly illicit drugs, to people of color at particular times in history, there have been

differential sanctions issued considering ones racial or ethnic background. It is important to add, that in the mid to late 1970s, cocaine was used primarily by elite whites (Cornish and O'Brien 1996). However, because professional and elite populations used this drug, the adverse consequences were "Shielded from public view" thus many of the consequences of cocaine use were not reported. Moore (1991:545) adds that "For a while, the epidemiological data made cocaine look more like marijuana use than heroin: lots of use, but few adverse consequences." Ironically, according to Moore (1991), the nationwide public panic about the dangers of cocaine use did not occur until cocaine use became a drug of the urban community in the form of crack. In fact, public panic of drug use, particularly, the use of cocaine as crack was labeled "an epidemic" because people presented in hospital emergency rooms with chronic drug crises (Moore 1991). The latter subsequently led to the unprecedented rates of incarceration primarily among black men and women accused and convicted of drug violations (Roberts, Jackson, and Carlton-LaNey 2000).

In fact, according to Sterling (2004:52), "Drug use and drug trafficking has generated fear throughout American society for more than a century." More recently, Chitwood, Murphy, and Rosenbaum (2009) argued that in the "Late 1960s and early 1970s heroin was the epidemic, in the 1960s, it was LSD, 1970s PCP, marijuana at the end of the 1970s, crack in the 1980s, MDMA in the 1990s,

and methamphetamine in the 1980s and currently” (Chitwood, Murphy, and Rosenbaum 2009:30). Another significant point from Chitwood et al. (2009) was that when the term epidemic was used, people immediately began to act rather than to think rationally. Specifically Chitwood et al. (2009) have argued that “When any drug was characterized this way, and simultaneously portrayed as the most dangerous drug in existence, fear rather than reasoned action was usually generated, leading to reactive and punitive measures meant to stem the advance of the deadly menace that infects society and threatens its survival” (Chitwood et al. 2009:34). From this perspective, the above argument directly supports what has happened to black women “caught up” in the war on drugs. The idea is, however, that there has been a history of differential responses to social issues by mainstream society regarding people of color, particularly blacks. Furthermore, “The war on drugs cannot be explained as resulting from good intentions that lead to poor policies, such as the 1980s mandatory minimum drug sentencing laws which initiated long prison terms for persons convicted of nonviolent drug offenses”(Chitwood et al. 2009:34). Considering the literature, the responses to white women addicted to drugs compared to the responses to black women during the peak of the crack cocaine epidemic was different.



### ***Length of Stay (LOS) and Treatment Retention***

The time spent in drug treatment has been a significant predictor of treatment completion. Studies on treatment retention have demonstrated that the longer a participant remains in therapy, the more likely they are to successfully complete the program (Knight, Logan, and Simpson 2001). According to Chou, Hser and Anglin (1998) treatment retention was one of the most important predictors of treatment completion and in order for treatment to be effective, the treatment program must retain clients. In fact, a substantial body of literature has indicated that individuals who stay in drug treatment at least 30 days or longer are more likely to engage in behaviors that reduce drug usage (McCal, Svikis, and Moore 2001; Redko, Rapp, and Carlson 2007). At the same time, Sung and Richter (2007), Farabee, Hser, Anglin et al. (2004) and Roberts (1996) have argued that retention in treatment programs was the biggest factor of treatment success.

The longer one stays in drug therapy, the more likely they are to complete the drug treatment program. To be more specific, Sung and Richter (2007), suggests that time in treatment has been consistently associated with positive treatment outcomes. What is more important longer stay in treatment was correlated with reduction in drug use and lengthy post abstinence success (Farabee, Hser, Anglin et al. 2004; Roberts 1996). In fact, Sung and colleagues (2007) also purport that staying in treatment was the most important goal in treatment

programs and the primary factor mediating ones success in staying drug free. In 2004, Greenfield, Burgdorf, Chen et al. analyzed 1154 female clients who participated in long term residential (LTR) substance abuse treatment. The respondents participated in interviews considering their participation in long term residential (LTR) programs in the Drug Abuse Treatment Outcome Studies (DATOS), the National Treatment Improvement Evaluation Study (NTIES) and the Residential Women and Children (RWC) and the Pregnant and Post Partum Women (PPW) programs. The study reported that the overall percentages of former long term residential (LTR) clients who reported no drug or alcohol use from discharge to the follow-up interview were highest among the participants in the RWC/PPW at approximately 60 percent, followed by Drug Abuse Treatment Outcome Studies DATOS participants at 46 percent, and NTIES participants at approximately 40 percent. Overall, the findings revealed that, although each program had different treatment modalities as well as client characteristics, approximately 68 to 71 percent of the clients in those studies who had received at least 6 months of drug treatment reported no drug or alcohol use since leaving treatment and women who participated in short term treatment had similar success rates. Finally, participants who participated in the “Residential Women and Children and the Pregnant and Post Partum Women” programs RWC/PPW,

showed significantly higher post-abstinence rates at approximately 43 percent or above (Greenfield, Burgdorf, Chen, Porowski et al. 2004).

The findings in this study support the idea that long term substance abuse treatment tends to work best, with the exception of the RWC/PPW short term program, a program specifically designed to meet the unique needs of pregnant and parenting women. In another study conducted on the factors impacting treatment completion, the authors suggested that women who successfully completed drug treatment had less children, more education, job skills, and were employed.

### ***Pregnancy and Parenting***

Many of the drug treatment programs available for women are not designed to meet their unique needs (Marsh, D'Aunno, and Smith 2000). For example, many women seeking help for their addiction are mothers and are the primary caregivers of children in the home (Ashley, Marsden, and Brady 2003; Marsh, D'Aunno, and Smith 2000; Sowers, Ellis, Washington et al. 2002). As such, many women with children have had a more difficult time entering or remaining in treatment. Further, only recently have these issues been addressed and as a result, there have been more programs designed to address women's distinctive treatment needs. In many instances, pregnant or parenting women fear losing custody of their children (Brady and Ashley 2005; Jackson 1995) since there have been several new laws

created to protect children who have drug addicted parents by temporarily removing custody from mothers who have been incarcerated as a result of their addiction. The research has consistently established that many mothers feel that entering drug treatment would increase the likelihood that authorities may take their child or children away from them if they participate in drug treatment. It was no wonder why women are concerned about losing custody of their children, since this issue has been a matter that has recently been taken up by Congress in 1996. The Adoption and Safe Families Act (ASFA; PL 105-89) was designed to protect children from being placed in multiple foster homes if they have to remain in care for extended periods of time (Rockhill, Green, and Furrer 2007). These regulations apply to children who may have to be removed from the home if that the parent(s) are unable to care for the child, particularly if they are addicted to drugs (Grella, Needell, Yifei et. al. 2009). Again, black women are more at risk for losing their children because they have longer sentences to serve for their convictions, lack of family support, and monitored more by both the Department of Social Services and the criminal justice system than their white counterparts. If treatment programs do not have childcare or prenatal care services, a lack of these services not only restrict women's participation but impact their success in completing the program. Even though there are many programs that accept pregnant women, many are not equipped to treat the special needs of pregnant women (Grella 1999). For example,

a study which was conducted in 1992, that surveyed approximately 300 drug treatment programs, found that only a few programs referred participants to prenatal care services (Grella, Joshi, and Hser 2000). Furthermore, (Grella, Joshi, and Hser (2000) that among their sample of women, those who were pregnant or had children were more likely to remain in treatment compared to women without children or pregnant. In fact, being pregnant poses a significant threat to substance abuse treatment entrance and completion. That is, women who were pregnant and had children did not stay in the treatment program when compared to other women (Grella, Joshi, and Hser 2000). Further, according to the findings in the Drug Abuse Treatment Outcome Study (DATOS), approximately 49 percent of pregnant or parenting women remained in the program compared to 59 percent for women without children (Grella, Joshi, and Hser 2000; Sowers, Ellis, Washington et al. 2002).

### ***Service Setting at Discharge (Treatment Modalities)***

Most substance abuse treatment programs operate under the assumption that addiction is a disease (Grella 1999). In fact, in a 1997 publication of one of the world's most leading scientific journals, the former director of the National Institute on Drug Abuse (NIDA) conveys that drug use is a neurobiological disease, or a "disease of the brain" (White 2007). Although much of the research conducted by the National Institute on Drug Abuse (NIDA) has been grounded in

scientific studies and clinical trials, the research was clear that dopamine plays a role in addiction (Foll, Gallo, Strat et al. 2009). The research from the National Institute on Drug Abuse (NIDA) should be a consideration in social science studies because the research findings suggest that “Persons addicted to alcohol and drugs have a brain disease that alters emotional, compromises judgment, impairs memory, inhibits one’s capacity for new learning, and erodes behavioral impulse control...”(White 2007:2). Even though studies from the National Institute on Drug Abuse (NIDA) and other federal agencies have had great success in drug abuse and addiction research, their research does little to protect black women from incarceration for their drug use and addiction, even when they test positive for drugs, since they are likely to be sentenced to a correctional facility as opposed to receiving an alternative sentencing program such as a drug abuse treatment program. Perhaps of more importance, according to the National Institute on Drug Abuse (2009):

The initial decision to take drugs is mostly voluntary. However, when drug abuse takes over, a person’s ability to exert self control can become seriously impaired. Brain imaging studies from drug addicted individuals show physical changes in areas of the brain that are critical to judgment, decision-making, learning and memory, and behavioral control. Scientists believe these changes

alter the way the brain works, and may help explain the compulsive and destructive behaviors of addiction. (P. 7)

Although the addiction literature has advanced scientifically, many treatment programs still rely upon traditional drug treatment models, which have been primarily applied to male populations. One of the most well known and widely used treatment modalities in the United States was Alcoholics Anonymous (AA) (Grella 2003). Alcoholics Anonymous is “A worldwide fellowship of more than one hundred thousand” (Alcoholics Anonymous 1995:15). Both males and females may participate in sessions and discuss their personal struggles to the road of recovery. Members follow a 12 step process of recovery which incorporates religious and spiritual teachings. While the 12 step method was widely practiced in many substance abuse treatment programs, many have criticized this model for several reasons. The first debate centers on the lack of research on the success of this program (Finney, Moos, and Humphreys 1999). In an earlier study, Finney Moos, and Humphreys (1999), suggested that patients participating in 12 step treatment modalities improved (drug use behaviors) significantly. However, a study conducted by Unterberger (1989), suggested that the 12 step approach sends negative messages to women that reinforce feelings of powerlessness and hopelessness during the recovery process. Fundamentally, 12 step models focus on cognitive changes among its participants whereby their addiction was not treated as

a crime, rather a disease (Finney, Moos, and Humphreys 1999). Using this model, conveying such ideas is said to help establish a social climate that is conducive of recovery from drug addiction. In addition, patients who participate in 12 step programs are more likely to identify that they have an alcohol or drug addiction issue and with a change in their behavior, as well as attendance at the meetings, they will reduce or quit their addictive habits (Finney, Moos, and Humphreys 1999). The same ideas have been applied to other therapeutic models, such as Narcotics Anonymous (NA), and Cocaine Anonymous (CA), which focuses on treating those addicted to drugs other than alcohol (Alcoholics Anonymous 1995). The problem is however, while Alcoholics Anonymous (AA), Cocaine Anonymous (CA), and Narcotics Anonymous (NA) are well respected and widely used practices; they were developed for and by white men. The problem with programs like Alcoholics Anonymous (AA) and Cocaine Anonymous (CA) is that both support the “diseased” model of addiction and fail to recognize that substance abuse is a learned behavior that can be modified using Cognitive behavior therapy (CBT) (Carroll 1998). The point, however, is that participants do not have the liberty of selecting which program they want to participate in because different treatment programs have different treatment modalities which focus on a multitude of factors including financial support, availability of clinicians and other treatment staff. As such, according to Jackson (1995) and Roberts (2000), models such as



AA, CA, NA, or CBT, are not culturally sensitive to the needs of black women. As such, black women who participate in drug treatment programs may fair better in programs that address their needs, such as an Afrocentric treatment model. The Afrocentric treatment program will be a better treatment match for black women as Afrocentric therapy can be an “Effective recovery tool when used in drug treatment of black women” (Jackson 1995:28).

The findings in a National Study on Substance Abuse Treatment Services revealed that most substance abuse treatment programs use the following treatment protocols: (a) cognitive-behavioral therapy (CBT), (b) 12 step approaches, (c) anger management (d) motivational interviewing, (e) and brief intervention.

Approximately 80 to 90 percent of all treatment facilities used the modalities listed above (National Survey of Substance Abuse Treatment (N-SSATS) 2007).

Approximately 82 percent of facilities tailored programs to meet the specific needs of the group considering “client types.” However, only 37 percent of treatment facilities had protocols available to assist clients who needed treatment for co-occurring mental health and substance abuse disorders. Those that facilitated needs for adult women were approximately 32 percent, adolescents and DUI/DWI offenders 31 percent each, criminal justice clients 27 percent, and for adult men 25 percent. Less frequently offered were programs for pregnant or postpartum women 14 percent, persons with HIV or AIDS 10 percent, seniors or older adults 7

percent, and gays or lesbians 6 percent (National Survey of Substance Abuse Treatment Services (N-SSATS) 2007).

### ***Cognitive Behavior Therapy***

Cognitive behavior therapy was a standard treatment protocol in many treatment programs. Cognitive behavior therapy (CBT) is grounded in social learning theory. People learn to use and abuse drugs (Becker 1963; Carroll 1998). The differences are as follows: (1) when people model, they learn new skills by watching others and then trying it themselves, (2) people seek and use drugs because of the pleasure associated or euphoric feeling they get when they use the drug (i.e., powerful, energetic, stimulated, less depressed, no limit to what one can do), and (3) classical conditioning, from Pavlov's demonstration of pairings of one stimulus (i.e., bell ringing) with another (i.e., the presentation of food) could elicit a reliable response (i.e., a dog salivating). The comparison to drug addiction, particularly cocaine, was that when a person is exposed to "cues" (i.e., cocaine paraphernalia, drug dealers, other users, lonely, boredom) there may be an intense craving to use (Carroll 1998). It can also be said that stress was a similar emotional cue. When a black woman experiences stressors of any type, she may get the urge to self medicate and replace that pain with pleasure, particularly if she lives in an environment that is consistently oppressive (Palthrow, Cohen, and Carey 2000). Typically, cognitive behavior therapy is a short term program which focuses on

helping cocaine dependent individuals become abstinent from cocaine and other substance use. The overarching goal of cognitive behavior therapy was to have participants avoid situations which may place them at risk for use and learn to handle difficult situations with the problems associated with drug addiction. In other words, patients are encouraged to control their addiction. Another important strategy used in cognitive behavior therapy (CBT) was the therapist's ability to coach and encourage patients to disclose feelings and thoughts about their addiction. Patients are encouraged to describe how they feel before, during, and after they use drugs. The goal of this method was to try to help clients identify what triggers the drug use. Once these triggers have been identified, the drug user was educated on how to cope with his or her addiction as the therapist teaches the client multiple problem solving strategies, in which patients generally participate in 12 to 16 sessions over a 12 week period. In many instances treatment programs incorporate "compatible intervention" programs. These programs range from self help groups such as Cocaine Anonymous (CA) and Alcoholics Anonymous (AA), to programs that provide family and couples therapy, pharmacotherapy, parenting classes and several others.

### ***Comprehensive Case Management***

Comprehensive case management programs treats individuals with chronic, ongoing or complex medical conditions. In fact, comprehensive case management

was a preferred method of treatment for many facilities because of the wide array of treatment services that were offered to clients (U.S. Department of Health and Human Services 2002). According to the U.S. Department of Health and Human Services (2002), the goal of case management was to, (a) give clients a single point of contact, (b) act as a patient advocate, (c) understand the needs of the client and be familiar with community-based resources, and (d) address the needs of the client and provide services needed to promote successful treatment outcomes. This model has several objectives. The first was to enhance the scope of addiction therapy. The second was to enhance the recovery process and the third, focuses on objectivity. Comprehensive case management equips the therapist with the tools to treat diverse population characteristics (i.e., race, gender, sexual orientation, mental illness, and criminal justice populations) (U.S. Department of Health and Human Services 2002). Another point was that many programs incorporated multiple treatment modalities to enhance success rates. A popular treatment model that has been widely used among both black and white treatment populations was Prochaska and DiClemente's Transtheoretical Model (TTM). Prochaska and DiClemente (1992), proposed a model of social change. The theoretical model of change is necessary to achieve and maintain a change in behavior. The following are the stages of change: (a) precontemplation, which is a lack of awareness that behavior change is necessary, (b) contemplation - ambivalence regarding the need

to change, (c) determination or preparation mental preparation and concrete planning, (d) action - carrying out the plan, involves learning and practice, and (e) maintenance - maintaining the new behavior. Relapse is expected and can be simply a return to any previous stage of change. Termination is when the behavior change is so ingrained that relapse is a remote possibility.

### ***Contextualizing Race, Class, and Gender in the Study of Drug Use among Black Women***

Since the 1980s, several scholars have discussed the need to formulate new arguments about the lives of black women which extend outside of racial comparisons between blacks and whites in drug treatment studies (Collins 2000; Nobles and Goddard 1989; Richie 1996; Roberts 2000). That is to say, researchers are now analyzing the lives of black women considering the factors which impede their life chances by including the impact of not only race, but social class, gender, and sexuality (Burgess-Proctor 2006; Collins 2000; Crenshaw 1991) in their research (i.e., Barak, Flavin, and Leighton, Crenshaw, Daly, Maher, Sampson and Wilson, and Steffensmeier, Ulmer, and Kramer). Crenshaw ([1991] 1992) developed the idea of intersectionality to analyze the discrimination women of color experienced in the workplace. Furthermore, Crenshaw (1995) explains that intersectionality was a useful tool to understand the interaction of racism and sexism in the experiences and lives of women of color who are victims of intimate partner violence. Crenshaw's groundbreaking intersectional approach has been

widely accepted and used across disciplines. As an interdisciplinary framework, many key social scientists have expanded Crenshaw's work, namely, Collins (1995) as she has used the intersectionality of race, class, gender, and sexuality to "Analyze multiple phenomena, social hierarchies, oppression, and power relations and their complex and conflicting power interactions" (Josephson 2002:3). From this perspective drug treatment programs can be viewed as a form of oppression and social control that dictates women's very existence. To be more specific, the "Intersectional approach recognizes that race, class, gender, and sexuality are dynamic and socially constructed power relationships that simultaneously operate at both the micro and macro structural levels" (Burgess-Proctor 2006:37) and was used to describe the interlocking and multiple inequalities of women of color.

As stated earlier in this study, many researchers have elected to use traditional sociological or criminological explanations of drug use analyzing drug use as either a violation of a social norm or a deviant or criminal act. While it was certainly important to consider all factors, such as favorable attitudes about drug use, lack of informal social or self control, very few studies consider the impact of racism, socioeconomic status, or gender, as the overarching factor or pathway to drug use or addiction. In fact, Sharpe (2001:616) contends that the effect of "Race, class, and gender marginalization among inner-city poor black women (places them) in a social position, to be exploited by the male dominated crack culture."

Thus, it was important to consider the intersectionality of race, class, and gender oppression (Curtis-Boles and Jenkins-Monroe 2000) and how these interlocking systems of oppression or a matrix of domination (Collins 1990; McNair 1992; Weems 1997; Zerai and Banks 2002) impact the lives of black women. The intersectionality approach (Crenshaw 1994), according to Griffin (2009):

...allows researchers to consider social identities such as race, gender, social class, sexual orientation, and age simultaneously. Intersectionality assumes that individuals' multiple group memberships create a unique space or unique outcome that cannot be explained or predicted from knowledge of individuals' group memberships in isolation of each other. (P. 24-25)

The above ideas are grounded using three major tenets of intersectionality, according to (Griffin 2009:25) which are as follows: 1) social groups are heterogeneous, 2) social structures imply power and subsequently people must be located in terms of power structures, and 3) there are unique, nonadditive effects of being a member of multiple social groups. Many researchers in drug treatment have failed to analyze the impact of this tripartite (race, class, and gender) which may conceal important differences between samples. In 2000, Curtis-Boles and Jenkins-Monroe's research on African American women's substance abuse demonstrated the importance of traumatic life event's, stress, and racism as a factor of subsequent drug use. Their qualitative study measured racial discrimination

using six questions. The findings revealed that 80 percent of their respondents report having experienced racism occurring in “the areas” of housing, employment, stores, and restaurants with approximately 53 percent of the respondents denying that any of these experiences had an effect on their behavior and/or relapse.

Whereas Curtis-Boles and Jenkins-Monroe’s study paid attention to the life experiences of women with histories of chemical dependence and compared them to those who did not use drugs, the study only included women who were from drug infested neighborhoods and had lower socioeconomic backgrounds. The study was limited to the degree that it did not describe the impact of racial discrimination in the context of drug addiction. In this case, their study did not identify racial discrimination as a pathway to drug use as discussed in previous literature or that women in their sample who had experienced racial discrimination used drugs as a coping mechanism. Other pathways to drug use and addiction are economic marginalization, social stratification (Hatch 2007), domestic violence, and mental illness. The factors above help to frame the necessity of using a theoretical perspective which highlights the importance of considering black women’s sociohistorical experiences. As such, a black feminist perspective will be the theoretical underpinning in this study.



### ***Theoretical Framework***

Few studies have offered conceptualizations on the experiences of black women in drug treatment programs. A consistent argument which has been developed throughout this study is that prior research on drug abuse treatment outcomes has typically compared the sociodemographic characteristics between black and white females. Further, it has been stated in this research that this method of inquiry “Limits important aspects of the total African experience” (Asante 2003:51) among black women because their drug treatment outcomes have been set by the standards of whites. It has been posited that although many studies have included sizeable samples of black women in their research, there are still unanswered questions and theoretical conceptualizations that explain low retention rates, underutilization of treatment services, and the reason black women are discharged from substance abuse treatment programs. This study addressed questions pertaining to treatment outcomes using the black feminist perspective since there are limited conceptual frameworks used to explore the experiences of black women that are legitimate and effective regarding issues within the black community, as well as explain the interlocking systems of oppression in the lives of black women. In particular, black feminist theory (BFT) is a nontraditional perspective which analyzes how male dominance, sexism, and inequality are intimately interwoven throughout the American social system to oppress women of color (Collins 1991).

The perspectives on people of color will continue to be interpreted by mainstream ideas if the voices of women of color from the Diaspora are not heard.

Fundamentally, the black feminist framework used in this study is derived from the work of Patricia Hill Collins groundbreaking 1991 edition of black feminist thought.

### ***Black Feminist Thought***

Collins (2000) identifies two movements of black feminist thought, the first: (1) the black women's club movement and (2) modern black feminism, which was stimulated by the antiracists and women's social justice movements of the 1960s and 1970s. Collins uses a multidimensional theoretical approach which considers the theoretical traditions of Afrocentric philosophy, feminist theory, critical theory, post modernism, and Marxist social thought (Collins 2000) to contextualize black feminist thought. Each perspective, Collins (2000) argues, expands our discussion of black women, to the degree that researchers can incorporate the interrelatedness of race, gender, and class as we centralize the experiences of black women. In fact, Collins (2000) argues against using a single theoretical framework to explain the impact of race, gender, class, and sexual inequality among black women. To this end, Collins' (2000), version of black feminist thought is fundamental. Moreover, using a framework outside of the typical mainstream ideology is significant because it provides other researchers with an awareness of black women's

successes in drug treatment programs, without focusing on group differences, racial comparisons, or pathological explanations. Essential in this study is the consideration of the sociodemographic diversity among black women since black women differ in levels of education, marital status, and criminal justice involvement. The black feminist perspective allows the researcher to analyze black women's behavior considering the social context of where they are economically, culturally, historically, psychologically, and socially, ignoring the typical "homogenous" explanations of black women's behaviors. As such, the research is guided by the history of the oppression of black women from past to present, which is outlined in more detail in later in this discussion, as the research will evaluate black women's experiences around both the individual and structural factors that are vital in the study of blacks. Thus, using a black feminist framework this study answered questions about gender, social class, and race and their drug treatment outcomes as well as answered the question of whether black feminist theory can explain the "Unique historical and cultural experiences of black women" (Holmes 2005:197), especially in a society where race matters, class matters, and gender stratification matters (Holmes 2005; hooks 2000). Several recent reviews of literature conducted on women and their drug use behavior supported the finding that there is a strong correlation between drug abuse and male dominance (Belknap 1996). Some of the assumptions that underpin women's

pathways to drug use are derived from childhood maltreatment, prior victimization, namely sexual abuse and incest, oppression, subordination, and poverty (Grella, Scott, Foss et al. 2008). Specifically, black feminist theory centers on the idea that the uncomplimentary images of black women which originated during enslavement have been used to justify the oppression of black women (Collins 1991; Lorde 1984). According to Collins (1990), without ideological hegemony, the proliferation of race, class, and gender would not exist.

In order for black women to fight their oppressive societal conditions, they must first recognize their oppression. Once that recognition is mastered, then black women can be empowered through the realization of their empowerment and then “Become their own agents of knowledge as they realize they are self defined and self reliant individuals; thus changing, and change their current social position” (Collins 1990:221). To arrive at this level of thinking, it is imperative that black women rise to a level of consciousness whereby they understand that class, race, and gender represent interrelated systems of oppression and these interrelated ideas concomitantly shape their collective experiences. This level of interpretation is what black feminism purports. While there is an abundance of empirical data on drug abuse and an emerging body of theoretical concepts on the subject, the body of research on drug abuse lacks the development of theories (Hser, Longshore, and Anglin 2007). This perspective in no way intends to discredit the pioneering,

groundbreaking, and extensive research which already exists, but rather, this study proposes an approach which has been underutilized as a framework to address the issues of black women's drug treatment outcomes. Notably, this perspective will expand what we already know about black women and drug treatment.

The term "feminist" is commonly and broadly used to refer to all those who consciously maintain that women are discriminated against because of their gender and who seek to end women's resulting subordination through social change. Black feminist theory has been well developed and is a useful framework to understand the social experiences of black women including black women's experience in drug treatment. From this view, knowledge and power are mechanisms of empowerment which may be used to mediate the s of race, class, and gender disadvantages black women encounter. Most black feminist theories are derived from the ideology that encompassing knowledge (Collins 2000) and experiences are vital elements in understanding the extent of oppression on individuals (Neville and Hamer 2001). Thus, using a black feminist theoretical perspective to analyze drug use behavior among black women will help practitioners expand their understanding of both the interlocking systems and multidimensional factors which contribute to drug use behaviors among black women; especially since the majority of substance abuse literature has been explained using dominant theories.

The purpose of using the black feminist theory is twofold. First, black feminism may be a useful framework to help programs “Reflect clear, well articulated principles about substance abuse behavior and how it can be changed” (Department of Health and Human Services 2002:15) as well as help explain substance abuse treatment outcomes among black women through an analysis of black women’s lived experiences (Collins 2000; Roberts, Jackson, and Laney 2000). Second, this perspective will place black women’s experiences at the center of analysis in this study even though the literature will also discuss the treatment outcomes among black men and white women. The following are key tenets which have been derived from black feminist theory and which should be considered when analyzing black women’s lives: (a) both the changed consciousness of individuals and the social transformation of political and economic institutions constitute essential ingredients for social change, (b) new knowledge is important for both dimensions of change, (c) knowledge is a vitally important part of the social relations of domination and resistance, (d) placing black women’s experiences at the center of analysis offers fresh insights on the prevailing ideas, paradigms, and epistemologies of this worldview and on its feminist and Afrocentric evaluations, and (e) viewing the world through a conceptual lens of the simultaneity of race, class, and gender oppression, and of the need for a humanist vision of community creates new possibilities for an empowering Afrocentric

feminist knowledge (Collins 1990; Neville and Hamer 2001). Below are five core elements of black feminist thought derived from Collins (2000:221-238) black feminist theory which helps distinguish black feminist ideology from other forms of social theory:

- (1). Viewing relations of domination for black women for any given sociohistorical context as being structured through a system of interlocking race, class, and gender oppression expands the focus of analysis from merely describing the similarities and differences distinguishing these systems of oppression and focuses greater attention on how they interconnect to explain social phenomena black women encounter.
- (2). Placing African American women in the center of analysis not only reveals much needed information about black women's experiences but also questions Eurocentric masculinist perspectives on family.
- (3). Both the changed consciousness of individuals and the social transformation of political and economic institutions constitute essential ingredients for social change.
- (4). Acknowledging and realizing the marginal position of black women and that black women have been victimized by race, gender, and social class oppression.
- (5). Inclusion of an Afrocentric feminist thought which speaks to the importance

that knowledge plays in empowering oppressed people as well as increasing the awareness of the important connections among knowledge, consciousness, and the politics of empowerment.

### ***The Significance of Afrocentricity in Black Feminist Thought***

Through the years, many scholars who study black life have proposed that traditional ways of explaining issues in the black community have failed. Specifically, these scholars, namely Nobles and Goddard, Azibo, Molefi Asante, Naim Akbar, Delores Aldridge, Vivian Gordon, Hill Collins, Kimberley Crenshaw, and Clenora Hudson-Weems have all argued for a perspective that considers the historical experiences of the people being studied. The Afrocentric perspective is one example of such a framework, which acknowledges the tumultuous history of people of African descent, not limited to the institutionalization of oppression against blacks including slavery, Jim Crow laws, and racial discrimination as well as the marginal hierarchy within the social stratum in the United States that black women represent.

In 1993, Hudson-Weems emphasized the pivotal role of the inclusion of an Africana Womanist perspective when analyzing the life experiences of the Africana and African American family. Further, Hudson-Weems (1993) argued that women of African descent are still waiting for a definition of their struggle as she asserts that Africana Womanism “Is an ideology created and designed for all



women of African descent” (Weems 1997:83). Furthermore, Hudson-Weems (1993) contextualizes that white feminism was a direct challenge against the domination, sexism, and treatment of white women and argued that the mission of the white feminist movement was to level the playing field for whites. As such, traditional women’s studies movements have tended to ignore the experiences of African American women, rendering their voices virtually invisible (Franklin 2002).

One way to eliminate the exclusion of black women’s voices and experiences in drug treatment outcome studies is to incorporate an African centered perspective, such as black feminism (Collins 2000) using an intersectionality approach and before the development of black feminism, black women’s issues fell under the umbrella of traditional (white) feminist ideology which has socially and politically excluded black women’s ideologies. The problem with mainstream theories is the lack of inquiry and significance of race, class, and gender, particularly when studying black women. Further, when studies do include the findings regarding people of color, they have typically been additive models and did not analyze the interrelated systems of oppression (Collins 1990; Neville and Hamer 2001). Understanding the full impact of interrelated mechanisms can help individuals contextualize such issues that affect the lives of people of color more critically. More recently, however, the Afrocentric theory

has been a useful perspective to explain drug use and addiction in the black community. Proponents who use an Afrocentric or Africentric perspective argue for a model that situates the research on the historical foundations of Africa. This model, by the way, has been very useful as a theoretical framework in drug studies among blacks. One caveat, however, is that these data are limited. The Afrocentric approach has been useful in the addiction literature to explain drug use, abuse, and drug treatment modalities (Belgrave, Jones, Kennon et al. 1988; Longshore, Grills, Annon et al. 2005). Overall, the addiction literature lacks theoretical perspectives underlying interventions for black women.” For example, in the sociological literature on drug use and addictive behaviors, scholars have used the following theoretical explanations of drug use, (a) differential association, which argues that behavior is learned in association with others who positive value such behavior (b) differential reinforcement theory, suggests that behavior is reinforced through reward and punishment (c) Becker’s learning theory, which argues that the user who experiments with marijuana does not automatically experience the effects of the drug, rather, the user must engage in a learning process to experience the positive effects of the drug (d) social control theory, which suggests that human beings are inherently hedonistic and do not need to learn the motives and predispositions to engage in drug use and criminal behavior and finally (e) strain and general strain theories which argues societal strain may create deviance and

norm violations. While these theories have been beneficial in explaining aggregate drug use behaviors, many of them are only conducted on juvenile populations (Alarid, Burton, and Cullen 2000). What is more important new frameworks, for example, Critical Race theory, have also contributed to the body of research explaining social context factors, such as culture, history, and oppression among black women (Crenshaw 1995). The black feminist lens brings attention to social justice and equality. It is a perspective which argues that knowledge is power and power can produce agents of social change which are fundamental in the recovery of addiction. The role of black women in their communities encourages active advocacy through leadership and interpersonal relationships. Reinstating their beliefs in public and organizational structures should reduce their incidence and prevalence of drug addiction. Strategies for resistance and survival are collaborative and necessary for black women (Collins 2000). Thus, researchers interested in developing therapeutic models to recruit, retain, and decrease drug use and abuse among blacks should focus on developing theoretical frameworks which address the cultural differences among racial and ethnic groups, particularly when they are in treatment for drug addiction.

Recent research conducted by Valandra (2007) on prostitution suggested that race, gender, and class constitute the “Prism” of oppression which impedes one’s ability to get help. Furthermore, Vlandra notes in (2007):

Being in America is racist and sexist. Both dark- and light-skinned black women catch hell because of their skin color. Growing up, my peers taunted me with racial slurs, such as “Black burned biscuits,” referring to my dark skin. Family members told me, “You’re too dark to have children, so don’t bring home no little monkeys. A seventh-grade teacher told me I could be a playboy bunny, and other teachers, both African American and Caucasian, told me I wouldn’t amount to anything. Past boyfriends have told me, “Dark women are good only for cooking and having sex. These attitudes have made it more difficult for me to get much needed from other “sisters” and black mentors. (P. 203)

Arguably, more than any other theoretical framework on drug issues among black women, a black feminist perspective can bring to the forefront black women’s experiences with drug treatment to identify and understand the characteristics which lead to successful drug treatment completion. This perspective assumes that there is a lack of sensitivity to the range of drug abuse experiences among black women and considers that the factors which have contributed to the increased patterns of drug offenses among black women may be attributed to welfare reform, single-parenting, lack of employment, lack of educational opportunities, and poverty (Carvalho and Lewis 2003; Wilson 1987). For example, an extensive review of the literature has revealed that one’s socioeconomic status is a primary

factor in drug use and a reason why black women commit drug offenses (Richie [1996] 2001). Some of these discussions have centered on internal and external barriers to treatment. Other studies discuss them as individual or structural factors.

Many addiction studies on treatment completion have analyzed treatment barriers as a significant predictor of drug treatment success (Vlandra 2007). In 2007, Vlandra conducted a study on women and drug addiction. According to Vlandra (2007), barriers of treatment included lack of economic resources as well as lack of community cohesiveness. Many of the women in Vlandra's study claimed that they sold their bodies for drugs because they lacked economic resources (Vlandra 2007). While there have been many explanations by women regarding their drug addiction pathway, drug use and addiction is complex. In fact, black women, who deal with a complexity of social issues, are forced to make decisions that are not often the best choice. The totality of issues, including their status as black women, makes it difficult to explain the multidimensional issues which they contend. However, black feminist ideology presents a clearer picture of the relationship between drug use and black women regarding their structural inequitable treatment, domestic violence, and histories of child maltreatment (Geiger 2002; Messina, Grella, Burdon, Prendergast 2007; Roberts 1999). Throughout the life course, drugs may pacify and even heal wounds experienced from such traumatic events. Several black feminist scholars have discussed the

gender, ethnic, political, economic, and sociocultural positions of black women. In fact, Longshore, Hsieh, and Anglin (1993) found in their study on ethnicity, gender, and substance abuse treatment that social structural factors may create barriers to treatment entry among blacks. In fact, according to hooks (1993), the severity of drug addiction and black women is not taken serious enough. hooks (1993) also argued that once the consequences of drug abuse are more critically analyzed, then we may create environments conducive to recovery. What is more important, according to hooks as early as 1975, Stanton Peele explained (1993):

Addiction is not a chemical reaction. Addiction is an experience, one which grows out of an individual's routinized subjective response to something that has special meaning for him-something, anything, that he finds so safe and reassuring that he cannot be without it... We still find that we learn habits of dependency by growing up in a culture which teaches a sense of personal inadequacy, a reliance on external bulwarks, and a preoccupation with the negative or painful rather than the positive or joyous. Addiction is not an abnormality in our society. It is not an aberration from the norm; it is itself the norm (P. 68).

hooks further explains that we live in a "Culture of domination which undermines individual's capacity to assert meaningful agency in their lives (hooks 1993: 63). At the same time, hooks (1993) also implied that blacks

have been socialized to believe that basic needs are supplied by the white power structure and that it is not a surprise that addiction has become so pervasive among blacks (hooks 1993) because they are overrepresented among those who live in poverty, highly segregated populations, underemployed, not educated, single parents, criminal justice relationships, and live in drug infested environments (Wilson 1987). Black feminist theory allows one to consider substance abuse among family members as a problem of the entire “village.” That is to say that, drug abuse is the collective experience of all family members so the recovery process must be a collective process. According to the literature on drug research, individuals with strong family support have higher positive drug treatment outcomes. Black feminist theory highlights the importance of the family as a unit to cause family cohesiveness and stability.

### ***Images of Black Women***

Images of black women have historically been stereotyped as caretaker Mammy, the loud talking Sapphire, the seductive Jezebel, and Aunt Jemima (Reynolds-Dobbs, Thomas, and Harrison 2008:130; Roberts, Jackson, and Carlton-LaNey 2000). Furthermore, black women have had to live with the reality of these images as these images are deliberately woven into their everyday experiences (Reynolds-Dobbs, Thomas, and Harrison 2008). These images have been maintained in social

structures, in the media, and at home, and have been used to diminish the positive character of black women (Collins 1991; West 1995; Roberts, Jackson, and Laney 2000). Thus, these images became the basis for envisioning and treating black women as “other.” In other words, black women have been viewed as deviant for their drug use, compared to their white counterparts (Roberts, Jackson, and Laney 2000). In fact, Gubrium (2008) has established more recently, that the media contributed to the negative images about crack addicted women (Windsor and Negi 2009), which portrayed the black woman as “The mother-as-monster” (Gubrium 2008:511) has further perpetuated earlier images of the Mammy. Some of the current labels, which have been attached to black women, including those who use and abuse drugs are, lazy, sex crazed, baby making, unfit caregivers, and irresponsible welfare queens. As a result, black women are either reluctant or unwilling to seek help for her addiction because of the negative images and stereotypes associated with addiction, which society has socially constructed. Specifically, the images and stigmatization of black women are part of the “Hegemonic influence on maternal identity” (Gubrium 2008:511). In effect, images of the black woman have been described in society as:

- (1). The mammy, who is the faithful, obedient, domestic servant. She is the symbol of warm, nurturing, and patient motherhood, as she nurtures the children of her white family. She is aware that her place is one of subservience (Collins 1991;



hooks 1991; Roberts, Jackson, and Carlton-LaNey 2000:904; Staples 1973).

- (2). The matriarch symbolizes the bad black mother who fails to fulfill her traditional “womanly” duties. She is portrayed as one who spends too much time away from home, does not properly supervise her children, and is domineering and emasculating of her husband or male companion. She is blamed for the deficiencies and lack of achievement in black children. She is loud, boisterous, and domineering (Collins 1991; hooks 1991; Roberts, Jackson, and Carlton-LaNey 2000:904; Staples 1973).
- (3). The welfare mother is the updated version of women who were considered breeders during the slave era. The welfare mother is viewed as having too many children and the focus on perinatal substance abuse is current justification for efforts to harness her fertility (Collins 991; Roberts, Jackson, and Carlton-LaNey 2000:904; West 1995).
- (4). The Jezebel is considered to be a sexually aggressive woman, portrayed as being ready and willing to respond to the master’s beck and call without any resistance (Collins 1991; hooks 1991; Roberts, Jackson, and Carlton-LaNey 2000:905; Staples 1973).

Accordingly, the widespread attack on black women propels many to internalize their oppressed, exploited, and marginalized social status. From this perspective there can be an argument that drug use and abuse is a “Socially defined

mechanism of escape” (hooks 1993:69). The lack of drug treatment completion can be viewed as a part of the system of domination which helps to maintain oppression. According to hooks (1993), alcohol and other drug use is described as a condition that a person has, when they have lost the ability to control his or her drinking. Rarely does a black family consider a family member or friend as an alcoholic or drug addict (hooks 1993). Historically, when problems do occur within a black family, counseling comes from within that family unit. This may explain the low percentage rates of enrollment in drug treatment programs among black women. Not only can black feminism help to understand the family dynamics of the black family, the black feminist theory would allow the explanation of drug abuse among black women understanding that life altering experiences may be the etiology of abuse. Some of these experiences, for example, are not limited to but may include, a spouse or family member incarcerated, a teenage son who has been the victim of homicide, a break up in a relationship, loss of employment and/or shelter, and a loss of a loved one (Siegel and Williams 2003). Black feminist theory is important to this research in multiple ways. According to the research literature on drug treatment completion outcomes, black women tend to have fewer resources both personal and social. In many cases, black women in these treatment programs have bottomed out and have been addicted for a long time which makes getting off drugs more complicated (Grella, Hser, and

Hsieh 2003). The lack of family support or the unwillingness of the black family as a unit to identify that a problem really exists, poses significant threats to drug treatment. For example, in 2000, hooks argued that black families have traditionally developed alternative means of handling difficult situations to deal with family social crises and are less likely to seek treatment or label their family member as “addicted.” Moreover, characteristics such as one’s level of education, age, marital status, family support, socialization, and income have a direct on treatment outcomes and the black feminist theory is can explain these characteristics by arguing that black women’s marginalized position (i.e., being black and female) in a white male dominated society has a negative treatment outcomes. Thus, the theoretical grounding of black feminist theory in drug treatment programs could yield more successful completion results.

While few empirical studies have examined the effects of black feminist theory in drug treatment programs, Goddard (1993) argues that when dealing with drug use in the black community:

- (1). There is a need for the development and utilization of a theoretical perspective for understanding alcohol and other drugs abuse issues in the black community.
- (2). There is a need to incorporate a broader understanding of the way in which cultural features influence the pattern of, and response to, use and abuse of

chemicals in the black community.

(3). There is a need to develop methodological consistency in the analysis of issues related to alcohol and other drugs in the black community.

Considering the above discussion as well as the dearth of literature on drug treatment outcomes among black women, this discussion generates three hypotheses for the study's analysis of the relationship between race, gender, and education on treatment completion. Specifically, the statistical model will include the following hypotheses:

Hypothesis 1: Race is associated with drug treatment completion.

Hypothesis 2: Gender is associated with drug treatment completion.

Hypothesis 3: Years of education is associated with positive drug treatment completion.

### ***CHAPTER THREE METHODOLOGY***

The data for this study are drawn from the only national client-level database on substance abuse treatment, "Treatment Episode Data Set-Discharges (TEDS-D)", which is a component of a national reporting system that was originally designed to provide annual information on the characteristics of individuals admitted to substance abuse treatment programs, (TEDS). The *Treatment Episode Data Set* is a compilation of data on substance abuse treatment events (admissions and discharges), that are routinely collected by states as they monitored their individual

substance abuse treatment admissions and discharges. The administrative component of (TEDS) began in 1992. However, in 2000, the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), coordinated the second component of TEDS, “Treatment Episode Data – Discharges (TEDS-D)” to assess discharges only. The TEDS-A is composed of a “Minimum Data Set” collected by all states, and a Supplemental Data Set collected by some states. The “Minimum Data Set” consists of 19 items that include: (a) demographic information, (b) primary, secondary, and tertiary substances and their route of administration, (c) frequency of use, (d) age at first use, (e) source of referral to treatment, (f) number of prior treatment episodes, and (g) service type. The “Supplemental Data Set of TEDS-A” include approximately 15 supplemental psychiatric, social, and economic measures. Likewise, the TEDS-D component includes the following: (a) type of service at discharge, (b) length of stay, and (c) reason for discharge or discontinuation of service.

Many of the variables contained in TEDS-A, are also available in TEDS-D. Some of the variables measured in the TEDS-A study are, number of prior treatments, primary source of referral, employment status, whether methadone was prescribed in treatment, diagnosis codes, presence of psychiatric problems, living arrangements, source of income, health insurance, expected source of payment, substance(s) abused, route of administration, frequency of use, age at first use,

pregnancy and veteran status, health insurance, and days waiting to enter treatment. The TEDS-D includes variables such as, the length of stay, reason for discharge, and service setting at time of discharge. The substances abused included in TEDS-D are alcohol, cocaine and crack, marijuana and hashish, heroin, nonprescription methadone, other opiates and synthetics, PCP, hallucinogens, methamphetamine, other amphetamines, other stimulants, benzodiazepines, other tranquilizers, barbiturates, other sedatives or hypnotics, inhalants, over-the-counter medications, and several others. Demographic variables cover age, race, gender, income, marital status, and education. Created variables include total number of substances reported, intravenous drug use (IDU), and flags for any mention of specific substances. The public-use files were created and made available for public use in of September 2008 (Office of Applied Studies, Substance Abuse and Mental Health Services Administration 2009). Participants in the study participated in eight types of treatment services, (1) outpatient treatment, (2) intensive outpatient treatment, (3) short-term treatment, (4) long-term treatment, (5) hospital residential treatment, (6) detoxification, (7) outpatient medication-assisted opioid therapy and (8) medication-assisted opioid detoxification. This may include transition living such as halfway houses (Office of Applied Studies, Substance Abuse and Mental Health Services Administration 2009). This study has been

approved by the Institutional Review Board (IRB) at Virginia Polytechnic Institute and State University.

A full list of variables for TEDS-D may be viewed in the appendices section of this study. There is no standardized TEDS or TEDS-D instrument. Treatment providers collect information from persons entering treatment using the forms/software and procedures required by their State substance abuse agencies. Each State uses its own intake and discharge forms and are required to meet the standards issued by the Substance Abuse and Mental Health Services Administration (SAMHSA). Each State collects the data from their providers, and then converts selected data items to a standardized format using the Crosswalk Management System, which is the database, used by all participating 42 State agencies. Once the data are complete, State facilities submit all discharge data to SAMHSA. These standardized data elements comprise TEDS. TEDS/TEDS-D does not employ sampling. All discharge records from 2006 are linked to admission records from 2000 to 2006. Any records that have missing or invalid data for a specific variable are excluded from tabulations (Office of Applied Studies, Substance Abuse and Mental Health Services Administration 2009).

### ***Sample Population***

In 2006, a total of 42 States reported data on the number of discharges for both public and private funded drug and alcohol treatment facilities. There were

approximately 1,283,102 discharges (cases) in the study for the year 2006 among black and white respondents only. Given the size and coverage of TEDS, evidence suggests it captures two-thirds of the treatment population and over 80 percent of participants in the programs it targets (Berk et al. 1995, Kieffer and Thompson 1999).

### ***Analysis of Data***

The treatment outcomes among black women (n= 104,471) in this study will be compared to the treatment outcomes among black men (n= 252,230), white women (n= 311,670), and white men (n= 614,546). To determine the best statistical predictors of treatment completion, the variables in this study will be analyzed using binominal logistic regression to predict treatment outcomes among black women. All analyses will be tested using the Statistical Package for Social Science (SPSS) version 18.0. A total of eight binary logistic regression models were used to predict drug treatment completion. The first model included an analysis of race, gender, and level of education. The second model controlled treatment program modality. The analysis measured, service setting at discharge, primary source of referral, length of stay, and the number of prior of treatment episodes. The third model analyzed the drug use characteristics. Model three analyzed, cocaine or crack use, age at first use, and frequency of use. The fourth model analyzed sociodemographic characteristics such as, marital status, pregnancy, age, and



employment status. Descriptive data will also be reported highlighting the characteristics of the TEDS-D population characteristics.

### ***Reliability and Validity***

Substance Abuse and Mental Health Services Administration (SAMHSA) is the agency responsible for the validity and reliability of the TEDS – D data set.

### ***Reporting***

The admission data items on the discharge record (provider identifier at admission, client identifier at admission, co-dependency status at admission, client transaction type at admission, date of admission and type of service at admission), must match the comparable items in the associated TEDS admission record. During the processing of discharge data, these data items in the discharge record are used to find the matching admission record in the TEDS admission database. The discharge record will match an admission record only if the records match on all of these data items. It is expected that a very high percentage (90-100 percent) of discharge records will have a matching admission record in the TEDS database.

All discharge data items on the discharge record must reflect their values at discharge. Discharge items should not be retained from the admission record. Any discharge item that cannot be updated or confirmed as unchanged since admission should be coded as “unknown” (Office of Applied Studies, Substance Abuse and Mental Health Services Administration 2009).

### ***Reporting of a Discharge***

When a treatment episode ends and a “discharge” occurs, this event is to be reported to TEDS as a discharge record. For cases in which the client leaves treatment against facility advice (i.e., drops out) the client may not be formally discharged until considerable time has elapsed (sometimes these are called “administrative” discharges). It is important that each State use an operational definition to assign a discharge date for clients that drop out of treatment and that the definition be noted on the States TEDS crosswalk. For States that do not already have such rules, TEDS encourages use of the following: assume that a treatment episode has ended when an inpatient or residential client has not been seen for three days or an outpatient client has not been seen for 30 days. In such cases, the discharge date assigned should be as close to the actual end of treatment. Finally, States continually review the quality of their data collection notes. Please see TEDS procession report error messaging sample report (Office of Applied Studies, Substance Abuse and Mental Health Services Administration 2009:11).

### ***Dependent Variable***

The dependent variable for this study is “Reason for Discharge?” Reason for discharge will be recoded into a dichotomous dependent variable (0 = no; 1 = yes) to track treatment completion. As such, the recoded variable is now operationalized as “Treatment Outcome” (0 = did not complete; completed drug treatment = 1).

Please refer to the codebook for a detailed description of the dependent variable, which may be viewed in the appendices section of this study.

### ***Independent Variables***

The primary covariates of interest are race, education at the time of admission, and gender. Education will be used to measure social class. All the variables may be found in the TEDS-D dataset codebook. Please refer to the codebook for a detailed description of the independent variables which may be viewed in the appendix section of this study.

### ***Control Variables***

Control variables will be added to the logistic model, as mentioned above, to test the influence of age, pregnant at the time of admission, marital status, cocaine or crack mentioned, length of stay, service setting at discharge, number of prior treatment episodes, age at first use, frequency of use, and number of prior drug treatment episodes. Please refer to the codebook for a detailed description of the control variables, which may be viewed in the appendix section of this study.

## **CHAPTER FOUR**

### **RESULTS**

Descriptive statistics were reported for sample characteristics. Table 1 describes the treatment sample characteristics. The mean age of the sample range was 30-34 ( $\pm 2.48$ ), at the time of admission. Blacks represented 28 percent of the sample and whites represented approximately 72 percent of the sample. White males represented the majority of the sample 48 percent, followed by black males 20 percent, white females 24 percent, and black females at 8 percent. Nearly one half, 46 percent of respondents had never been married, 12 percent reported being married, 5 percent reported that they were separated and 14 percent were either divorced or widowed. The employment status of the respondents varied. However, the largest percentages of respondents in the sample were either not in the labor force at 42 percent, while 29 percent were unemployed. Only 20 percent of the respondents were employed full-time while 7 percent were employed part-time. Please see Figure 1 for a detailed explanation of level of education by race and gender.

**Table 1: Treatment Program Characteristics**  
*(By race and gender)*

	Frequencies ( <i>f</i> )	Percent Distributions (%)
Race		
Black	356,742	28
White	926,360	72
Race and Gender		

Black Male	252,230	20
Black Female	104,471	8
White Male	614,546	48
White Female	311,670	24
Level of Education (Highest grade completed)		
8 years or less	85,185	7
9 to 11 years	360,740	28
12 years	520,650	41
13 to 15 years	222,053	17
16 or more	67,959	5
Employment Status		
Full time	250,966	20
Part time	87,402	7
Unemployed	371,590	29
Not in labor force	542,010	42
Source of Income		
Wages/Salary	273,314	21
Public Assistance	62,652	5
Retirement/Pension/Disability	42,167	3
Other	188,640	15
None	250,478	20
Marital Status		
Never Married	592,572	46
Now Married	159,643	12
Separated	59,750	5
Divorced/Widowed	181,374	14

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Mean age: Blacks (35-39), Whites (30-34).

## Figure 1

*Percentages of level of education at the time of admission.*

As shown in Figure 1, the average level of education among all respondents was 12 years. Approximately 7 percent completed 8 years or less, 28 percent completed 9 to 11 years, 41 percent completed at least 12 years, 17 percent

completed 13 to 15 years, and approximately 5 percent completed 16 years or more of education.

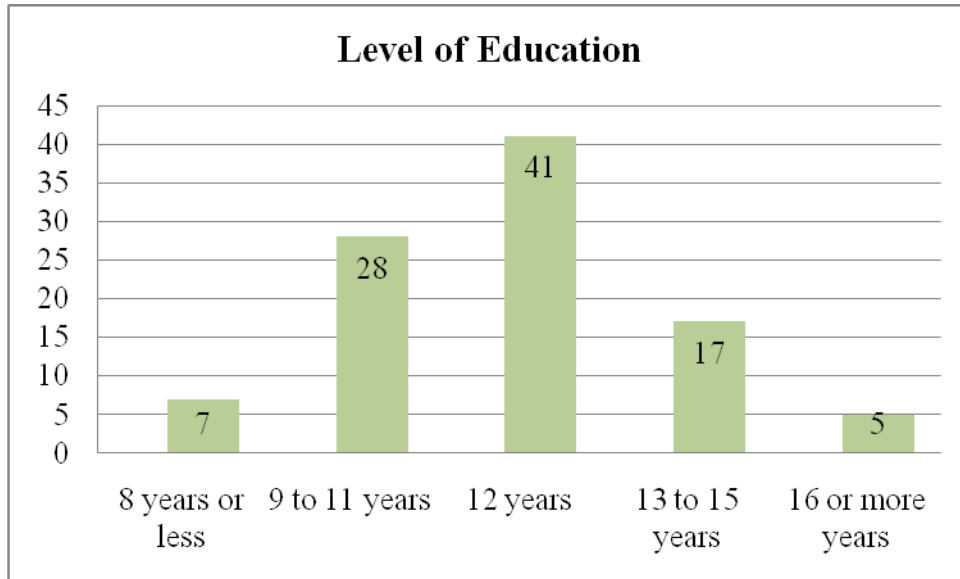
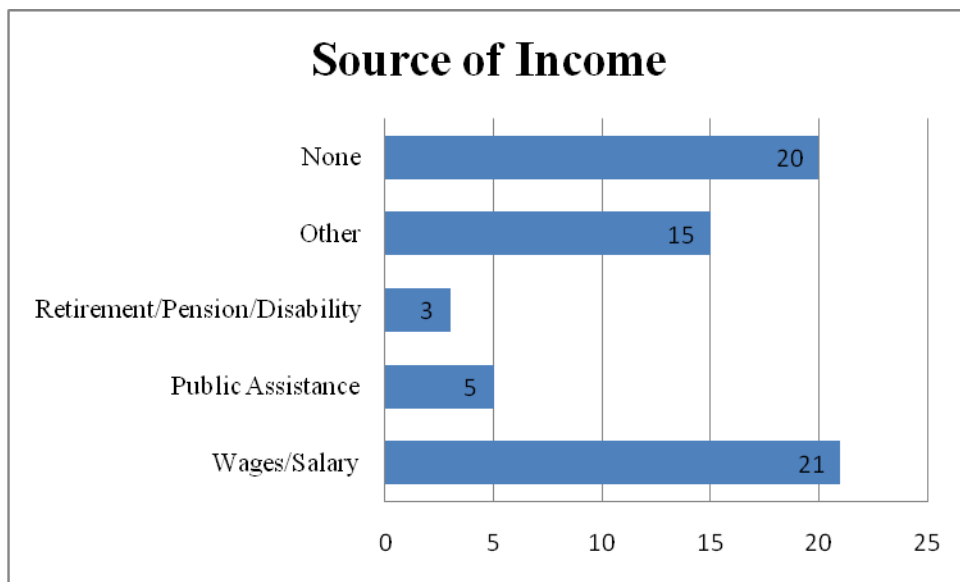


Figure 2

*Source of Income*



As shown in Figure 2, approximately 21 percent reported that their source of income was from wages/salaries, 5 percent from public assistance, 3 percent from retirement/pension/disability, 15 percent reported income from other sources, while 20 percent reported no source of income.

Below, Table 2 describes sample drug treatment characteristics by race and gender. The findings suggest that black men, approximately 41 percent, black women, 44 percent, white men approximately 46 percent, and white women, approximately 47 percent, were more likely to participate in non intensive outpatient drug therapy than any other drug treatment modality. Those participating in 24 hour free standing residential drug treatment were more likely to be male. Approximately 19 percent of black males and 19 percent of white males participated in the 24 hour free standing residential drug treatment. Those participating in intensive outpatient drug treatment programs were black women and white women. Approximately 15 percent of black women participated in intensive outpatient drug treatment and 14 percent of white women participated in intensive outpatient drug treatment. Approximately 13 percent of black women participated in 24 hour free standing residential drug treatment. White women who participated in 24 hour free standing residential drug treatment was 14 percent. The third treatment method that men were more likely to participate in than women was short term, less than 30 day drug treatment programs. Approximately 11

percent of black men and 11 percent of white men were more likely to participate in short term, less than 30 day treatment programs. Participation in other drug treatment modalities ranged between 10 percent and less than one percent.

**Table 2: Treatment Program Characteristics**  
*(Type of treatment modality by race and gender)*

	Frequencies ( <i>f</i> )	Percent Distributions (%)
Type of Treatment Modality		
Race and Gender		
Black Male		
24 hour hospital inpatient	22,919	9
24 hour free-standing residential	47,927	19
Rehabilitation (non detox)	692	.3
Short-term (< 30 days)	26,422	11
Long-term (30 + days)	22,918	9
Intensive outpatient	24,334	10
Non-intensive outpatient	104,533	41
Detoxification	2,456	1
Black Female		
24 hour hospital inpatient	6,367	6
24 hour free-standing residential	13,538	13
Rehabilitation (non detox)	334	.3
Short-term (< 30 days)	11,186	11
Long-term (30 + days)	10,237	10
Intensive outpatient	15,915	15
Non-intensive outpatient	45,415	44
Detoxification	1,449	1
White Male		
24 hour hospital inpatient	28,521	5
24 hour free-standing residential	113,994	19
Rehabilitation (non detox)	3,239	.5
Short-term (< 30 days)	66,510	11
Long-term (30 + days)	46,282	8
Intensive outpatient	63,603	10
Non-intensive outpatient	283,998	46
Detoxification	8,322	1
White Female		



24 hour hospital inpatient	10,515	3
24 hour free-standing residential	43,542	14
Rehabilitation (non detox)	1,718	.6
Short-term (< 30 days)	36,101	12
Long-term (30 + days)	27,227	9
Intensive outpatient	41,948	14
Non intensive outpatient	146,385	47
Detoxification	4,143	1

Table 3: The race and gender characteristics in Table 3 reveal that the majority of respondents regardless of race and gender have not had any prior drug treatment before this treatment episode. That is, approximately 45 percent of black males have not had any prior drug treatment, while 31 percent of black females have had no prior experience with drug treatment. The findings are similar among white males. Approximately 35 percent of white males in the study indicated that they have not had any prior drug treatment compared to white women with 39 percent of them indicating that they have never had any prior drug treatment.

**Table 3: Treatment Program Characteristics**  
(*Prior history of drug treatment*)

	Frequencies ( <i>f</i> )	Percent Distributions (%)
Race and Gender Characteristics		
Black Male		
No prior treatment episodes	73,138	45
1 prior treatment episode	37,769	15
2 prior treatment episodes	19,281	8
3 prior treatment episodes	10,527	4
4 prior treatment episodes	5912	2
5 or more prior treatment episodes	15,858	10
Black Female		
No prior treatment episodes	32,358	31

1 prior treatment episode	16,621	16
2 prior treatment episodes	10,015	10
3 prior treatment episodes	6,199	6
4 prior treatment episodes	3,582	3
5 or more prior treatment episodes	8,280	8
<b>White Male</b>		
No prior treatment episodes	217,056	35
1 prior treatment episode	109,688	18
2 prior treatment episodes	57,697	9
3 prior treatment episodes	32,022	5
4 prior treatment episodes	18,231	3
5 or more prior treatment episodes	55,262	9
<b>White Female</b>		
No prior treatment episodes	121,552	39
1 prior treatment episode	57,064	18
2 prior treatment episodes	30,885	10
3 prior treatment episodes	16,999	6
4 prior treatment episodes	9,824	4
5 or more prior treatment episodes	25,691	10

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Figure 3

*Prior History of Drug Treatment among Black Males*

As shown in Figure 3, among black males, approximately 45 percent had never been in drug treatment before TEDS, 15 percent had at least 1 prior treatment episode, 10 percent had 5 or more treatment episodes, 8 percent had 2 prior drug treatment episodes, 4 percent had 3 prior treatment episodes, and 2 percent had 4 prior drug treatment episodes.

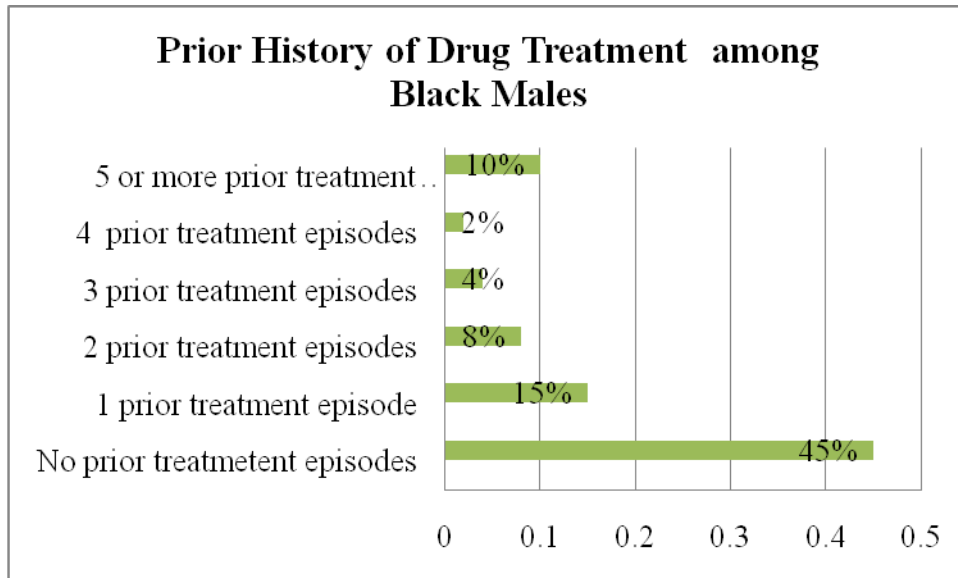


Figure 4

*Prior History of Drug Treatment among Black Females*

As shown in Figure 4, As shown in Figure 3, among black females, approximately 31 percent had never been in drug treatment before TEDS, 16 percent had at least 1 prior treatment episode, 10 percent had 2 prior drug treatment episodes, 3 percent had 4 prior treatment episodes, and 8 percent had 5 or more treatment episodes.

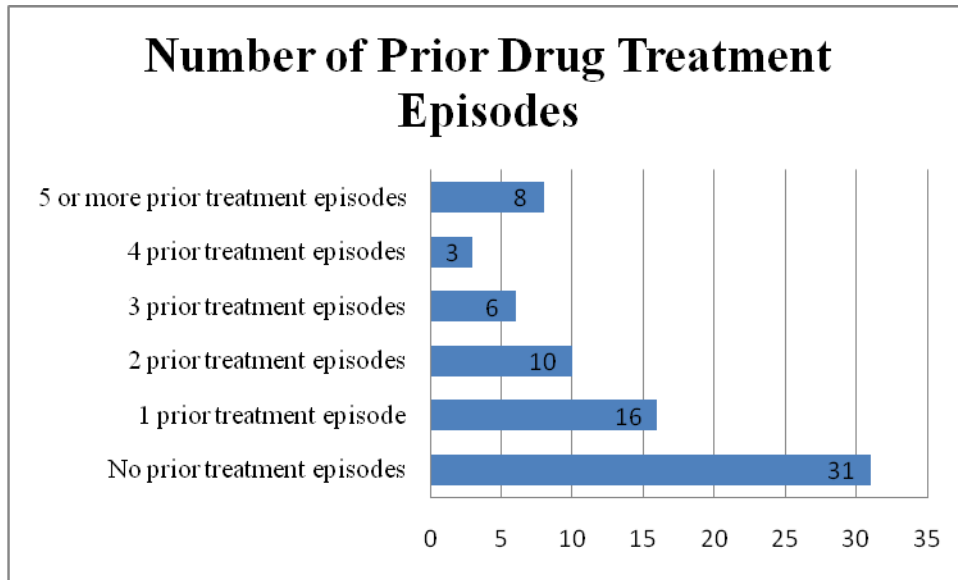


Table 4: The two primary sources of referral among this sample according to race and gender characteristics were individual/self referrals. Among black males, 35 percent, black females, 37 percent, white males, 34 percent, and white females, 34 percent. The second primary source of referral among respondents was court/criminal justice. Approximately 35 percent of black males received treatment referrals by the court or criminal justice system compared to 23 percent of black females. Among white males, approximately 39 percent of drug treatment referrals were from the court or criminal justice system, while approximately 29 percent of white females received treatment referrals from the court or criminal justice system. The third primary source of referral by race and gender varied. Among black men and white men, referrals by an alcohol/drug abuse care provider were the third method of drug treatment referral. Approximately 12 percent of the referrals were for black males, while 10 percent of the treatment referrals from

alcohol/drug treatment referrals were for white males. Among women, community referrals were their third source of referral. Approximately 18 percent of the referrals for drug treatment were from other community referrals were for black women while 15 percent of drug treatment referrals were for white women.

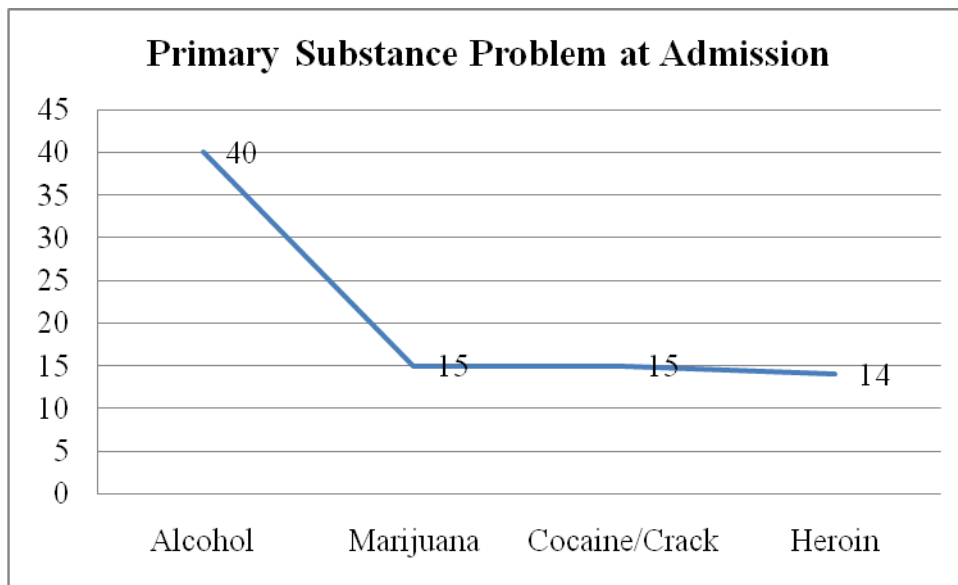
**Table 4: Treatment Program Characteristics**  
(Principle source of referral)

	Frequencies (f)	Percent Distributions (%)
Race and Gender Characteristics		
Black Male		
Individual/self	87,788	35
Alcohol/drug abuse provider	30,506	12
Other health care provider	13,317	5
School (educational)	1,967	.8
Employer/EAP	1,968	.8
Other Community Referral	23,180	9
Court/Criminal Justice	88,224	35
Black Female		
Individual/self	38,070	37
Alcohol/drug abuse provider	13,413	13
Other health care provider	7,756	8
School (educational)	796	.8
Employer/EAP	467	.4
Other Community Referral	18,269	18
Court/Criminal Justice	23,378	23
White Male		
Individual/self	205,092	34
Alcohol/drug abuse provider	63,552	10
Other health care provider	36,822	6
School (educational)	4,918	.8
Employer/EAP	5,702	1
Other Community Referral	48,882	8
Court/Criminal Justice	234,770	39
White Female		
Individual/self	105,021	34

Alcohol/drug abuse provider	36,778	12
Other health care provider	23,244	8
School (educational)	2,755	.9
Employer/EAP	1,436	.5
Other Community Referral	44,210	15
Court/Criminal Justice	89,250	29

Figure 5

*Primary Substance Problem at Admission (all respondents)*



As shown in Figure 5, when analyzing the primary substance of abuse among this sample and using the top four problem drugs reported, alcohol was the most frequent primary drug problem reported. Approximately 40 percent of respondents reported that alcohol was their primary substance of abuse. Among this sample, both marijuana and cocaine or crack addiction were equally frequent (15 percent of respondents in this study reported marijuana as their primary problem drug while 15 percent of respondents reported cocaine or rack as their

primary problem drug). Approximately 14 percent of the respondents in this study indicated that heroin was their primary problem drug.

Table 5 describes the detailed criminal justice referral source by race and gender. Among black males, approximately 6 percent received referrals from State/federal agencies, 14 percent from probation/parole, and .8 percent from DUI/DWI, while 4 percent received referrals from diversionary programs/other. Among black females, approximately 5 percent received referrals from State/federal agencies, 8 percent from probation/parole, and .4 percent from DUI/DWI, while 18 percent received referrals from diversionary programs/other. Among white males, approximately 8 percent received referrals from State/federal agencies, 11 percent from probation/parole, and 3 percent from DUI/DWI, while 5 percent received referrals from diversionary programs/other. Among white females, approximately 7 percent received referrals from State/federal agencies, 8 percent from probation/parole, and 1 percent from DUI/DWI, while 4 percent received referrals from diversionary programs/other.

**Table 5: Detailed Criminal Justice Referral by Race and Gender**

	Frequencies ( <i>f</i> )	Percent Distributions (%)
Race and Gender Characteristics		
Black Male		
State/Federal Court	17,557	6
Probation/Parole	35,108	14
DUI/DWI	2,417	.8

Diversions Program/Other	10,270	4
Black Female		
State/Federal Court	5,438	5
Probation/Parole	7,928	8
DUI/DWI	435	.4
Diversions Program/Other	3,090	18
White Male		
State/Federal Court	49,512	8
Probation/Parole	65,111	11
DUI/DWI	16,297	3
Diversions Program/Other	30,457	5
White Female		
State/Federal Court	21,673	7
Probation/Parole	23,799	8
DUI/DWI	4,371	1
Diversions Program/Other	11,929	4

Table 6: The primary reason for discharge in this study was treatment completion. Table 7 below describes the detailed reason for discharge by race and gender characteristics. Approximately 45 percent of black male respondents completed drug treatment followed by 37 percent of black females, 51 percent of white males, and 45 percent for white females. Approximately 24 percent of black males left the treatment program against professional advice, 27 percent of black females left treatment against the professional advice. Among white males, approximately 22 percent left the treatment program against professional advice and approximately 24 percent of white females left the treatment program against professional advice.



**Table 6: Detailed Reason for Discharge**

	Frequencies ( <i>f</i> )	Percent Distributions (%)
Race and Gender Characteristics		
Black Male		
Treatment Completed	112,473	45
Left against professional advice	61,482	24
Terminated by facility	22,657	9
Transferred	31,793	13
Incarcerated	6,288	3
Death	449	.2
Other	11,364	5
Black Female		
Treatment Completed	39,272	37
Left against professional advice	28,169	27
Terminated by facility	9,264	9
Transferred	16,616	16
Incarcerated	1,307	1
Death	222	.2
Other	5,965	6
White Male		
Treatment Completed	311,014	51
Left against professional advice	134,528	22
Terminated by facility	41,905	7
Transferred	70,887	12
Incarcerated	12,448	2
Death	1,187	.2
Other	33,069	5
White Female		
Treatment Completed	138,987	45
Left against professional advice	75,097	24
Terminated by facility	22,189	7
Transferred	44,744	15
Incarcerated	4,348	1
Death	631	.2
Other	19,475	6

*\*The unknown category for discharge category was not reported in this table.*

Table 7: The number of substance reported at admission by gender and race reveal that among black males, 35 percent report using 1 substance, 44 percent report using 2 substances, and 19 percent report using 3 substances. Among black females, 35 percent report using 1 substance, 44 percent report using 2 substances, and 20 percent report using 3 substances. Among white males, 43 percent report using 1 substance, 35 percent report using 2 substances, and 21 percent report using 3 substances. Among white females, 41 percent report using 1 substance, 35 percent report using 2 substances, and 22 percent report using 3 substances.

**Table 7: Number of Substances Reported at Admission by Gender and Race**

	Frequencies ( <i>f</i> )	Percent Distributions (%)
<i>Race and Gender</i>		
Black Male		
1 Substance	89,087	35
2 Substances	111,469	44
3 Substances	47,974	19
Black Female		
1 Substance	36,630	35
2 Substances	45,638	44
3 Substances	20,352	20
White Male		
1 Substance	263,066	43
2 Substances	212,266	35
3 Substances	127,173	21
White Female		
1 Substance	126,481	41
2 Substances	109,367	35
3 Substances	68,773	22

Table 8, shows detailed treatment program characteristics among black women. Approximately 7 percent had 8 years or less of education, 39 percent completed 9 to 11 years, 35 percent 12 years, 15 percent of black women had 13 to 15 years, and 3 percent had 16 years or more. Approximately 7 percent of black females worked full time, 4 percent worked part time, 34 percent were unemployed, and 52 percent were not in the labor force. Approximately 9 percent of black women earned income from wages/salaries, 14 percent from public assistance, 5 percent from retirement/pension/disability, 17 percent from other sources, and 21 percent reported no income source. Approximately 53 percent of black women in the study were not married, only 8 percent were currently married, 6 percent separated, and 13 percent were divorced. Results from the living arrangements indicate that 16 percent of black women were homeless, 24 percent lived with others, and 57 percent lived independently.

**Table 8: Detailed Treatment Program Characteristics among Black Women**

	Frequencies ( <i>f</i> )	Percent Distributions (%)
Level of Education (Highest grade completed)		
8 years or less	7,568	7
9 to 11 years	40,961	39
12 years	36,364	35
13 to 15 years	15,402	15
16 or more	2,846	3
Employment Status		
Full time	7,540	7
Part time	4,401	4
Unemployed	35,683	34
Not in labor force	54,349	52

Source of Income		
Wages/Salary	9,828	9
Public Assistance	14,437	14
Retirement/Pension/Disability	5,589	5
Other	17,705	17
None	21,678	21
Marital Status		
Never Married	55,586	53
Now Married	8,306	8
Separated	6,249	6
Divorced/Widowed	10,266	10
Living Arrangement		
Homeless	16,453	16
Dependent Living	25,077	24
Independent Living	59,909	57

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### ***LOGISTIC REGRESSIONS ON TREATMENT OUTCOMES***

Logit models were used to predict drug treatment completions among respondents in this study. As suggested by Peng, Lee, and Ingersoll (2002) the Wald  $\chi^2$  statistic will be used to assess the fit of the logistic model. Examinations of four binominal logistic regression models were developed to analyze the predictors of treatment completion. There is also a discussion of the percent change in odds of the dependent variable, recommended by the Center for Family and Demographic Research (2006). Furthermore, because race, gender, and level of education (social class indicator) were the primary covariates of interest, their association to treatment completion will be analyzed first. Finally, four additional logistic models were analyzed to explore the intersection of race, gender, and social class.

***LOGISTIC REGRESSION: MODEL 1  
RACE, GENDER, AND LEVEL OF EDUCATION***

*Demographic Characteristics.* Race, gender, and education were associated with treatment completion. The results of Model 1, Table 9, indicated that race is significantly associated with drug treatment completion ( $b = -.220$ ;  $p < .001$ ; *C.I.* - .796 - .809). Being black decreases the likelihood of drug treatment completion by approximately 20 percent. Respondents gender was also significantly associated with drug treatment completion ( $b = -.254$ ;  $p < .001$ ; *C.I.* - .770- .782). Being a woman decreases the likelihood of drug treatment by approximately 22 percent. The results in Model 3 also suggest that the respondent's level of education is a significant indicator of drug treatment completion. When controlling for the level of education, individuals with lower levels of education were significantly less likely to complete drug treatment than were white males with 16 or more years of education. Those with 8 years or less of education are significantly less likely to complete drug treatment ( $b = -.607$ ;  $p < .001$ ; *C.I.* - .534-.556). Completing 8 years of education or less decreases the likelihood of drug treatment completion by approximately 46 percent. Individuals who have completed at least 9 to 11 years of education were also significantly less likely to complete drug treatment than educated white males ( $b = -.568$ ;  $p < .001$ ; *C.I.* - .557-.576). Completing 9 to 11 years of education decreases the likelihood of drug treatment completion by

approximately 43 percent. Completing 12 years of education is negatively associated with drug treatment completion ( $b = -.348$ ;  $p < .001$ ;  $C.I. = -.694-.717$ ). Completing 12 years of education decreases the likelihood of drug treatment completion by approximately 29 percent. Completing 13 to 15 years of education is inversely associated with drug treatment completion ( $b = -.248$ ;  $p < .001$ ;  $C.I. = -.767-.794$ ). Completing 13 to 15 years of education decreases the likelihood of drug treatment completion by approximately 22 percent. Finally, race, gender and level of education predicts treatment completions ( $\chi^2 = 15692.938$ ,  $df = 6$ ,  $p = .000$ ).

**Table 9: Race, Gender, and Level of Education**  
(Model 1)

Predictor	$\beta$	S.E.	Wald $\chi^2$	Exp ( $\beta$ )
Race (white=reference)	-.220***	.004	2950	.802
Gender (male=reference)	-.254***	.004	4310	.776
Level of Education				
16 years or more (reference)				
8 years or less	-.607***	.010	3367	.545
9 to 11 years	-.568***	.009	4460	.567
12 years	-.348***	.008	1777	.706
13 to 15 years	-.248***	.009	784	.780
Constant	.409	.008	2670	1.505
Model $\chi^2$	15692.938 ( $df = 6$ ; $p < .001$ )			
Nagelkerke	.017			

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**MODEL 2: LOGISTIC REGRESSION**  
**TREATMENT SERVICES: SERVICE SETTING AT DISCHARGE**

*Treatment Service Characteristics.* Service setting at discharge, primary referral source, length of stay, and the number of prior treatment episodes were significantly associated with treatment completion. Model 2, Table 10 reveals that the race of the respondent remained a significant predictor of drug treatment completion. Again, there remained a statistically significant negative association between the race of the respondent and drug treatment completion in Model 2 ( $b = -.336$ ;  $p < .001$ ;  $C.I. -.708-.722$ ); therefore, being black decreases the likelihood of drug treatment completion by approximately 29 percent. Furthermore, when controlling for gender, results indicated that gender was still a statistically significant measure of drug treatment completion. ( $b = -.179$ ;  $p < .001$ ;  $C.I. -.829-.844$ ). The results indicated that being a woman decreases the likelihood of drug treatment by approximately 16 percent. When controlling for the level of education, individuals with lower levels of education were significantly less likely to complete drug treatment than were white males with 16 or more years of education. Those with 8 years or less of education are significantly less likely to complete drug treatment ( $b = -.537$ ;  $p < .001$ ;  $C.I. -.570-.599$ ). Completing 8 years of education or less decreases the likelihood of drug treatment completion by approximately 42 percent. Individuals who have completed at least 9 to 11 years of

education were also significantly less likely to complete drug treatment than educated white males ( $b = -.589$ ;  $p < .001$ ;  $C.I. = -.544-.567$ ). The findings also showed that completing 9 to 11 years of education decreases the likelihood of drug treatment completion by approximately 45 percent. Completing 12 years of education is negatively associated with drug treatment completion ( $b = -.371$ ;  $p < .001$ ;  $C.I. = -.677-.704$ ). Completing 12 years of education decreases the likelihood of drug treatment completion by approximately 31 percent. Completing 13 to 15 years of education is inversely associated with drug treatment completion ( $b = -.255$ ;  $p < .001$ ;  $C.I. = -.759-.792$ ). Completing 13 to 15 years of education decreases the likelihood of drug treatment completion by approximately 23 percent.

When analyzing drug treatment variables (i.e., service setting at discharge, which included 24 hour inpatient detoxification, 24 hour outpatient detoxification, rehabilitation/residential hospital nondetoxification, short-term less than 30 day treatment, long-term greater than 30 days, intensive outpatient, nonintensive outpatient, and outpatient detoxification), the results of this model indicate that the type of treatment service clients participate in varies considering the treatment modality in which they participate. In fact, individuals who participated in the 24 hour detoxification treatment program were more likely to complete drug treatment. There was a positive and statistically significant association ( $b = 2.573$ ,  $p < .001$ ;  $C.I. = .12.41-.13.82$ ). Furthermore, when compared to outpatient



detoxification programs respondents participating in this treatment modality are 13 times more likely to complete drug treatment. Clients who completed 24 hour outpatient drug treatment also had positive and statistically significant results ( $b = 1.910, p < .001; C.I. - 6.50-.7.01$ ). The findings for 24 hour outpatient reveals that individuals who participate in 24 hour outpatient drug therapy are approximately 7 times more likely to complete drug treatment compared to individuals who participated in the outpatient detoxification program. Rehabilitation/residential hospital nondetoxification also had positive statistically significant results ( $b = 1.298, p < .001; C.I. - 3.41-.3.92$ ). The findings for these results reveal that respondents participating in the rehabilitation/residential hospital nondetoxification are approximately 4 times more likely to complete drug treatment than individuals who participated in the outpatient detoxification program.

Participating in less than 30 days of drug treatment was positively related to drug treatment completion ( $b=.531, p < .001; C.I. - 1.63-.1.76$ ). Participating in this program increased the likelihood of treatment completion by approximately 70 percent. Participation in a drug treatment program that lasted for more than 30 days revealed negative but statistically significant findings ( $b=-.268, p < .001; C.I. - .736-.795$ ). Thus, participating in this program decreased the likelihood of completing drug treatment by approximately 24 percent compared to individuals who participated in the outpatient detoxification program. Both intensive

outpatient as well as nonintensive treatment modalities yielded negative but statistically significant findings ( $b = -.651, p < .001; C.I. = -.502-.542$ ) and ( $b = -.813, p < .001; C.I. = -.427-.460$ ) respectively. Furthermore, participating in intensive outpatient drug treatment decreased the likelihood of completion by approximately 48 percent while participation in the nonintensive outpatient drug treatment program decreased the likelihood of drug treatment completion by approximately 56 percent.

Self referrals or referrals by a family member or a friend (s) yield an inverse but statistically significant finding ( $b = -.504, p < .001; C.I. = -.597-.611$ ) when compared to respondents ordered by the court or other criminal justice agency. Self or individual referrals decrease the likelihood of drug treatment completion by 40 percent when compared to individuals referred by the court or other criminal justice agency. Having referrals by an alcohol/drug abuse care provider was inversely related to drug treatment completion ( $b = -.319, p < .001; C.I. = -.716 - .739$ ). Therefore, likelihood of drug treatment completion among individuals with a referral from an alcohol/drug abuse care provider decreases by approximately 27 percent when compared to those who were ordered by the court or other criminal justice agency. Referrals by other health care provider was negatively associated with drug treatment completion ( $b = -.334, p < .001; C.I. = -.702-.730$ ). Referrals by other healthcare provider decreased the likelihood of drug treatment completion by

28 percent. Referrals by a school (educational) institution was positively associated with drug treatment completion ( $b = .193, p < .001; C.I. - 1.160 - 1.268$ ).

Drug treatment referrals by a school (educational) increased the likelihood of drug treatment completion by approximately 21 percent. Employer/EAP referral was positively associated with drug treatment completion ( $b = .295, p < .001; C.I. - 1.272 - 1.418$ ). An employer /EAP referral increased the likelihood of drug treatment completion by 34 percent. Other community referrals was inversely associated with drug treatment completion ( $b = -.194, p < .001; C.I. -.812 - .837$ ). In fact, referrals by other community organizations decrease the likelihood of drug treatment completion by approximately 18 percent. Length of stay in a drug treatment program (in days) yields positive and statistically significant results ( $b = .056, p < .001; C.I. - 1.057 - 1.059$ ). Every one unit increase in the amount of time spent in drug treatment increases the likelihood of drug treatment completion by approximately 6 percent. The number of prior treatment episodes a client receives is negatively associated with drug treatment completion ( $b = -.064, p < .001; C.I. -.936 - .941$ ). For each one unit increase in the number of prior drug treatments decreased the chances of drug treatment completion by 6 percent.

**Table 10: Service Setting at Discharge: Treatment Modality and Treatment Characteristics (Model 2)**

<i>Predictor</i>	$\beta$	<i>S.E.</i>	Wald $\chi^2$	<i>Exp</i> ( $\beta$ )
Race (white=reference)	-.336***	.005	4175	.715
Gender (male=reference)	-.179***	.005	1439	.836
Level of Education				
16 years or more (reference)				
8 years or less	-.537***	.013	1790	.585
9 to 11 years	-.589***	.010	3165	.555
12 years	-.371***	.010	1336	.690
13 to 15 years	-.255***	.011	546	.775
Service Setting				
24 hour	2.573***	.027	8812	13.100
24 hour	1.910***	.019	9768	6.752
Residential/rehab	1.298***	.035	1370	3.662
30 days or less	.531***	.019	748	1.700
31 + days	-.268***	.020	183	.765
Nonintensive detox	-.651***	.019	1117	.522
Intensive detox	-.813***	.019	1837	.444
Primary Referral Source				
Court/Criminal Justice (reference)				
Individual/Self	-.504***	.006	7745	.604
Alcohol/drug abuse provider	-.319***	.008	1569	.727
Other health care provider	-.334***	.010	1140	.716
School (Educational)	.193***	.023	72	1.212
Employer (EAP)	.295***	.028	113	1.343
Other community referral	-.194***	.008	637	.824
Length of Stay	.056***	.000	36443	1.058
Number of prior treatment episodes	-.064***	.001	2157	.938
Constant	-.586	.002	6793	.844
Model $\chi^2$	111601.113 ( <i>df</i> = 21; <i>p</i> < .001)			
Nagelkerke	.148			

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001.

***MODEL 3: LOGISTIC REGRESSIONS  
DRUG USE TREATMENT CHARACTERISTICS***

*Drug Use Characteristics.* Cocaine or crack use, age at first use, and frequency of use were significantly associated with drug treatment completion. The results of model 3, Table 11 indicated that the race of the respondent was a significant predictor of drug treatment completion ( $b = -.247$ ;  $p < .001$ ;  $C.I. -.776-.793$ ); therefore, being black decreases the likelihood of drug treatment completion by approximately 22 percent. This finding did not change from the previous model. The significance of gender was also unchanged. When compared to men, women are significantly less likely to complete drug treatment ( $b = -.169$ ;  $p < .001$ ;  $C.I. -.837-.853$ ). The results indicated that being a woman decreases the likelihood of drug treatment by approximately 16 percent. When controlling for the level of education, the results indicated that individuals with lower educational attainment were significantly less likely to complete drug treatment than were white males with 16 or more years of education. Respondents with 8 years or less of education were still significantly less likely to complete drug treatment ( $b = -.582$ ;  $p < .001$ ;  $C.I. -.545-.573$ ). Thus, completing 8 years of education or less decreases the likelihood of drug treatment completion by approximately 44 percent. Individuals who have completed at least 9 to 11 years of education remained significantly less likely to complete drug treatment than educated white males ( $b = -.601$ ;  $p < .001$ ;  $C.I. -.537-.560$ ). Therefore, completing 9 to 11 years of education decreases the

chances of completing drug treatment by approximately 45 percent. Completing at least 12 years of education was negatively associated with completing drug treatment ( $b = -.363$ ;  $p < .001$ ;  $C.I. = -.681-.710$ ). There was a 31 percent decrease in drug treatment completion for respondents with at least 12 years of education. Completing 13 to 15 years of education is inversely associated with drug treatment completion ( $b = -.247$ ;  $p < .001$ ;  $C.I. = -.764-.798$ ). Completing 13 to 15 years of education decreased the chances of completing drug treatment by approximately 22 percent. This relationship was unchanged regarding statistical significance.

When analyzing drug treatment variables (i.e., service setting at discharge, which included 24 hour inpatient detoxification, 24 hour outpatient detoxification, rehabilitation/residential hospital nondetoxification, short-term less than 30 day treatment, long-term greater than 30 days, intensive outpatient, nonintensive outpatient, and outpatient detoxification), the results indicated that the type of treatment service clients participate in varies considering the treatment modality in which they participate. In fact, individuals who participated in the 24 hour detoxification treatment program were more likely to complete drug treatment. This relationship was positive and statistically significant ( $b = 2.622$ ,  $p < .001$ ;  $C.I. = 12.03-.14.54$ ). Furthermore, when compared to outpatient detoxification programs respondents participating in this treatment modality are 13 times more likely to complete drug treatment. Clients who completed 24 hour outpatient drug

treatment also had positive and statistically significant results ( $b = 1.948, p < .001$ ;  $C.I. - 6.75-.7.28$ ).

The findings for 24 hour outpatient revealed that individuals who participate in 24 hour outpatient drug therapy are approximately 7 times more likely to complete drug treatment compared to individuals who participated in the outpatient detoxification program. Rehabilitation/residential hospital nondetoxification also had positive statistically significant results ( $b = 1.265, p < .001$ ;  $C.I. - 3.29-.3.80$ ).

The findings for these results reveal that respondents participating in the rehabilitation/residential hospital nondetoxification are approximately 3 times more likely to complete drug treatment than individuals who participated in the outpatient detoxification program. Participating in less than 30 days of drug treatment was positively related to drug treatment completion ( $b=.521, p < .001$ ;  $C.I. - 1.62-.1.75$ ). Participating in this program increased the likelihood of treatment completion by approximately 69 percent.

Participation in a drug treatment program that lasted for more than 30 days revealed negative but statistically significant findings ( $b=-.363, p < .001$ ;  $C.I. - .669-.724$ ). Thus, participating in this program decreased the likelihood of completing drug treatment by approximately 30 percent compared to individuals who participated in the outpatient detoxification program. Both intensive outpatient as well as nonintensive treatment modalities yielded negative but

statistically significant findings ( $b = -.809, p < .001; C.I. = -.428-.463$  /  $b = -.1011, p < .001; C.I. = .351-.378$ ) respectively. Furthermore, participating in intensive outpatient drug treatment decreased the likelihood of completion by approximately 56 percent while participation in the intensive outpatient drug treatment program decreased the likelihood of drug treatment completion by approximately 66 percent. Self referrals or referrals by a family member or a friend (s) yield an inverse but statistically significant finding ( $b = -.405, p < .001; C.I. = .667-.659$ ) when compared to respondents ordered by the court or other criminal justice agency. Self or individual referrals decrease the likelihood of drug treatment completion by 33 percent when compared to individuals referred by the court or other criminal justice agency. Having referrals by an alcohol/drug abuse care provider was inversely related to drug treatment completion ( $b = -.243, p < .001; C.I. = .772-.797$ ). Therefore, likelihood of drug treatment completion among individuals with a referral from an alcohol/drug abuse care provider decreases by approximately 22 percent when compared to those who were ordered by the court or other criminal justice agency. Referrals by other health care provider was negatively associated with drug treatment completion ( $b = -.246, p < .001; C.I. = .766-.798$ ).

Referrals by other healthcare provider decreased the likelihood of drug treatment completion by 22 percent. Referrals by a school (educational) institution



was positively associated with drug treatment completion ( $b = .160, p < .001; C.I. - 1.119 - 1.230$ ). Drug treatment referrals by a school (educational) increased the likelihood of drug treatment completion by approximately 17 percent.

Employer/EAP referral was positively associated with drug treatment completion ( $b = .357, p < .001; C.I. - 1.351 - 1.512$ ). An employer /EAP referral increased the likelihood of drug treatment completion by 43 percent. Other community referrals

was inversely associated with drug treatment completion ( $b = -.188, p < .001; C.I. - .816 - .842$ ). In fact, referrals by other community organizations decrease the

likelihood of drug treatment completion by approximately 17 percent. Length of stay in a drug treatment program (in days) yields positive and statistically

significant results ( $b = .056, p < .001; C.I. - 1.057 - 1.059$ ). Every one unit increase

in the amount of time spent in drug treatment increased the likelihood of drug

treatment completion by approximately 6 percent. The number of prior treatment episodes a client receives is negatively associated with drug treatment completion

( $b = -.056, p < .001; C.I. - .943 - .948$ ). For each one unit increase in the number of

prior drug treatments decreased the chances of drug treatment completion by 6

percent. Cocaine or crack use was significantly and positively associated with

drug treatment completion ( $b = .262, p < .001; C.I. - 1.286 - 1.313$ ). Respondents

who reported using cocaine or crack at admission increased the likelihood of drug

treatment completion by 30 percent. Age at first use was negatively associated with

drug treatment completion ( $b = -.008, p < .001; C.I. = .943-.948$ ). For each one unit increase in the number of prior drug treatments decreased the chances of drug treatment completion by 8 percent. Frequency of use was negatively associated with drug treatment completion ( $b = -.119, p < .001; C.I. = .885-.890$ ). For each one unit increase in the number of prior drug treatments decreased the chances of drug treatment completion by 11 percent. Adding treatment characteristics improves the overall model ( $\chi^2 = 111601.113, df = 21, p < .001$ ).

**Table 11: Drug Use Treatment Characteristics**  
(Model 3)

Predictor	$\beta$	S.E.	Wald $\chi^2$	Exp ( $\beta$ )
Race (white=reference)	-.247***	.006	2000	.781
Gender (male=reference)	-.169***	.005	1202	.845
Level of Education				
16 years or more (reference)				
8 years or less	-.582***	.013	1948	.559
9 to 11 years	-.601***	.011	3105	.548
12 years	-.363***	.010	1213	.695
13 to 15 years	-.247***	.011	486	.781
Service Setting				
24 hour	2.622***	.028	8825	13.767
24 hour	1.948***	.019	10005	6.752
Residential/rehab	1.265***	.036	1207	3.298
30 days or less	.521***	.020	708	1.621
31 + days	-.363***	.020	327	.669
Nonintensive detox	-.809***	.020	1676	.428
Intensive detox	-1.011***	.019	2753	.351
Primary Referral Source				
Court/Criminal Justice (reference)				
Individual/Self	-.405***	.006	4357	.667
Alcohol/drug abuse provider	-.243***	.008	853	.784
Other health care provider	-.246***	.010	571	.782

School (Educational)	.160***	.024	43	1.173
Employer (EAP)	.357***	.029	155	1.429
Other community referral	-.188***	.008	562	.829
Length of Stay	.056***	.000	34032	1.058
Number of prior treatment episodes	-.056***	.001	1577	.945
Cocaine/Crack Use	.262***	.005	2489	1.300
Age at first Use	-.008***	.001	46	.992
Frequency of Use	-.119***	.002	5794	.888
Constant	-.311	.002	6214	.847
Model $\chi^2$	120781.284 ( $df = 24$ ; $p < .001$ )			
Nagelkerke	.165			

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

#### ***MODEL 4 LOGISTIC REGRESSIONS SOCIOECONOMIC CHARACTERISTICS***

*Socioeconomic Characteristics.* Marital status, age at time of admission, and employment status were significantly associated with drug treatment. The results from model 4, Table 12, revealed that the respondent's race remained a significant predictor of the likelihood that a respondent would complete drug treatment. Blacks are still less likely to complete drug treatment than are white respondents in the study. Although the findings are statistically significant the association is negative ( $b = -.244$ ;  $p < .001$ ;  $C.I. -.773 - .793$ ); therefore, being black decreased the odds of drug treatment completion by approximately 22 percent. Furthermore, when controlling for the findings also remained statistically significant. Women remained significantly less likely to complete drug treatment when than men ( $b = -$

.114;  $p < .001$ ; C.I. - .882- .902). This decrease is approximately 11 percent. Respondents with higher levels of education still had the greatest success with drug treatment completions. Respondents with lower educational attainment were significantly less likely to complete the drug treatment program when compared to white males with 16 or more years of education. Those with 8 years or less of education are significantly less likely to complete drug treatment ( $b = -.450$ ;  $p < .001$ ; C.I. - .619-.657). Therefore, completing 8 years of education or less decreases the likelihood of drug treatment completion by approximately 36 percent. Completing 9 to 11 years of education did not change significantly ( $b = -.431$ ;  $p < .001$ ; C.I. - .634-.665). Respondents with 9 to 11 years of education had a 35 percent decrease in treatment completions. Completing 12 years of education is negatively associated with drug treatment completion ( $b = -.263$ ;  $p < .001$ ; C.I. - .751-.786). The findings indicated that for respondents who completed 12 years of education the change of completing drug treatment decreases by approximately 23 percent. Completing 13 to 15 years of education is inversely associated with drug treatment completion ( $b = -.177$ ;  $p < .001$ ; C.I. - .817-.858) and decreased the odds of treatment drug treatment by approximately 16 percent.

When controlling for drug treatment variables (i.e., service setting at discharge, which included 24 hour inpatient detoxification, 24 hour outpatient detoxification, rehabilitation/residential hospital nondetoxification, short-term less

than 30 day treatment, long-term greater than 30 days, intensive outpatient, nonintensive outpatient, and outpatient detoxification), the results indicate that the type of treatment service clients participate in varies considering the treatment modality in which respondents participated in. All the coefficients were significant. That is, there were no statistically significant changes among respondents who participated in the 24 hour detoxification treatment program and respondents who participated in this type of treatment modality more likely to complete drug treatment. This relationship was positive ( $b = 2.295, p <.001; C.I. - 9.274-.10.613$ ). Furthermore, when compared to outpatient detoxification programs respondents participating in this treatment modality are 9 times more likely to complete drug treatment. Clients who completed 24 hour outpatient drug treatment also had positive and statistically significant results ( $b = 1.511, p <.001; C.I. - 4.304-.4.769$ ).

Respondents who participated in 24 hour outpatient drug therapy revealed that those participants were approximately 4 times more likely to complete drug treatment compared to individuals who participated in the outpatient detoxification program. Rehabilitation/residential hospital nondetoxification also had positive statistically significant results ( $b = .859, p <.001; C.I. - 2.177-2.560$ ). The results suggested that respondents who participated in rehabilitation/residential hospital nondetoxification were approximately 2 times more likely to complete drug

treatment than individuals who participated in the outpatient detoxification program. Participating in less than 30 days of drug treatment was positively related to drug treatment completion ( $b=.135, p <.001; C.I. - 1.087-.1.206$ ). Participating in this program increased the likelihood of treatment completion by approximately 15 percent. Participation in a drug treatment program that lasted for more than 30 days revealed negative but statistically significant findings ( $b=-.597, p <.001; C.I. - .522-.581$ ). Moreover, participating in this treatment modality decreased the likelihood of completing drug treatment by approximately 45 percent compared to individuals who participated in the outpatient detoxification program. Both intensive outpatient as well as nonintensive treatment modalities yielded negative but statistically significant findings. Intensive outpatient findings were ( $b = -1.172, p <.001; C.I. - .294-.326$ ) and nonintensive treatment modalities ( $b = .1.337, p <.001; C.I. - .249-.277$ ).

Furthermore, participating in intensive outpatient drug treatment decreased the likelihood of completion by approximately 69 percent while participation in the intensive outpatient drug treatment program decreased the likelihood of drug treatment completion by approximately 74 percent. Self referrals or referrals by a family member or a friend (s) yielded an inverse but statistically significant finding ( $b = -.411, p <.001; C.I. - .654-.672$ ) when compared to respondents ordered by the court or other criminal justice agency. Participants who had self or individual

referrals decreased the odds of drug treatment completion by 34 percent when compared to individuals referred by the court or other criminal justice agency.

Among respondents who had referrals by an alcohol/drug abuse care provider was inversely related to drug treatment completion ( $b = -.309, p < .001; C.I. - .721-.747$ ). Therefore, the likelihood of drug treatment completion among individuals with a referral from an alcohol/drug abuse care provider decreases by approximately 27 percent when compared to those who were ordered by the court or other criminal justice agency. There was a negative association when a respondent received referrals by other health care providers. This relationship was negatively associated with treatment outcomes ( $b = -.267, p < .001; C.I. - .749-.783$ ). When respondents received referrals by other healthcare providers, the chances of completing drug treatment decreased by approximately 23 percent. Referrals by a school (educational) institution was positively associated with drug treatment completion ( $b = .353, p < .001; C.I. - 1.347 - 1.505$ ). Drug treatment referrals by a school (educational) increased the likelihood of drug treatment completion by approximately 42 percent. Employer/EAP referral was positively associated with drug treatment completion ( $b = .067, p < .001; C.I. - 1.007- 1.137$ ). An employer /EAP referral increased the likelihood of drug treatment completion by 7 percent. Referral from other community agencies negatively have an effect on drug treatment outcomes ( $b = -.176, p < .001; C.I. - .825-.854$ ). In fact, referrals by

other community organizations decrease the likelihood of drug treatment completion by approximately 16 percent.

Length of stay in a drug treatment program (in days) yields positive and statistically significant results ( $b = .053, p < .001; C.I. -1.054- 1.055$ ). The significance of that relationship was unchanged. Every one unit increase in the amount of time spent in drug treatment increases the likelihood of drug treatment completion by approximately 6 percent. The number of prior treatment episodes a client receives remained negatively associated with drug treatment completion ( $b = -.063, p < .001; C.I. - .936-.942$ ). For each one unit increase in the number of prior drug treatments decreased the chances of drug treatment completion by 6 percent. Using cocaine or crack had a positive impact on drug treatment outcomes ( $b = .285, p < .001; C.I. - 1.314- 1.344$ ). Using cocaine or crack at admission increased the likelihood of drug treatment completion by 33 percent. Age at first use was negatively associated with drug treatment completion ( $b = -.020, p < .001; C.I. - .977-.983$ ). For each one unit increase in the number of prior drug treatments decreased the chances of drug treatment completion by 2 percent.

How often respondent used drugs had a negative effect on the likelihood of treatment completion. Frequency of use was negatively associated with drug treatment completion ( $b = -.117, p < .001; C.I. - .887-.893$ ). For each one unit increase in the number of prior drug treatments decreased the chances of drug



treatment completion by 11 percent. Not being married was positively associated with drug treatment completion ( $b=.039, p <.001; C.I. - 1.025- 1.056$ ). Not being married increased drug treatment completion by approximately 4 percent when compared to divorced or widowed respondents. Being married was positively associated with drug treatment completion ( $b=.067, p <.001; C.I. - 1.051- 1.087$ ). Marriage increased the likelihood of completing drug treatment by approximately 7 percent. Being separated had a negative impact on drug treatment completion ( $b=.058, p <.001; C.I. - .922- .966$ ). Being separated decreased the likelihood of drug treatment completion by approximately 6 percent. While only a small percentage of women reported being pregnant at the time of admission, being pregnant was negatively associated with completing drug treatment ( $b=-.019, p <.001; C.I. -.937- 1.026$ ). However, this relationship was not statistically significant. As expected, age was positively associated with drug treatment completion ( $b=.058, p <.001; C.I. - 1.057- 1.062$ ). This relationship was also statistically significant and the relationship was unchanged when compared to the earlier model. For every unit increase in age, the likelihood of drug treatment completion increases by approximately 6 percent. Being employed full time had a positive and statistically significant association with drug treatment completion ( $b=.339, p <.001; C.I. - 1.383- 1.424$ ).

Full time employment increased the likelihood of completion by approximately 40 percent compared to individuals who were not in the work force. Likewise, working part-time was positively associated with drug treatment completion ( $b=.126, p <.001; C.I. - 1.112- 1.157$ ). Part time employment increased the likelihood of completing drug treatment by approximately 13 percent compared to respondents who were not in the workforce, while being unemployed was negatively associated with drug treatment ( $b=-.229, p <.001; C.I. - .786- .805$ ). Unemployment decreased the likelihood of completing drug treatment by approximately 21 percent. The overall fit of the final model is acceptable ( $\chi^2 = 102960.669, df = 32, p <.001$ ).

**Table 12: Socioeconomic Characteristics**  
(Model 4)

<i>Predictor</i>	$\beta$	<i>S.E.</i>	Wald $\chi^2$	<i>Exp (<math>\beta</math>)</i>
Race (white=reference)	-.244***	.006	1470	.783
Gender (male=reference)	-.114***	.006	409	.892
Level of Education				
16 years or more (reference)				
8 years or less	-.450***	.015	898	.638
9 to 11 years	-.431***	.012	1248	.650
12 years	-.263***	.012	513	.768
13 to 15 years	-.177***	.012	203	.837
Service Setting				
24 hour	2.295***	.034	4450	9.921
24 hour	1.511***	.026	3333	4.531
Residential/rehab	.859***	.041	432	2.361
30 days or less	.135***	.026	26	1.145

31 + days	-.597***	.027	473	.551
Nonintensive detox	-1.172***	.027	1915	.310
Intensive detox	1.337***	.026	2553	.263
Primary Referral Source				
Court/Criminal Justice (reference)				
Individual/Self	-.411***	.007	3462	.663
Alcohol/drug abuse provider	-.309***	.009	1117	.734
Other health care provider	-.267***	.011	548	.766
School (Educational)	.353***	.028	154	1.424
Employer (EAP)	.067**	.031	4.7	1.070
Other community referral	-.176***	.009	394	.839
Length of Stay	.053***	.000	24280	1.055
Number of prior treatment episodes	-.063***	.002	1548	.939
Cocaine/Crack Use	.285***	.006	2395	1.329
Age at first Use	-.020***	.001	196	.980
Frequency of Use	-.117***	.002	4423	.890
Marital Status				
Divorced/Widowed (reference)				
Never Married	.039***	.008	27	1.040
Now Married	.067***	.009	60	1.069
Separated	.058***	.012	23	.944
Pregnant at time of Admission	-.019	.023	.701	.981
Age at time of Admission	.058***	.001	1905	1.060
Employment Status				
Not in labor force (reference)				
Full time	.339***	.007	2112	1.403
Part time	.126***	.010	155	1.134
Unemployed	-.229***	.006	1406	.795
Constant	-.403	.002	3208	.876
Model $\chi^2$	102960.669 ( $df = 32$ ; $p < .001$ )			
Nagelkerke	.175			

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

## ***MODEL 5 LOGISTIC REGRESSIONS RACE AND GENDER INTERACTIONS***

*Black Women.* Being black and female was significantly associated with drug treatment. To assess the interaction of race and gender on drug treatment completion, multiple categorical covariates were measured (i.e., level of education, length of stay, number of prior treatment episodes, cocaine or crack use, age at first use, frequency of use, marital status, age at admission, and employment status). The results in Table 13, Model 6 indicate that black females with less than a high school education were significantly less likely to complete drug treatment. Black women with 8 years or less of education ( $b = -.547, p < .001$ ) were significantly less likely to complete drug treatment than were black women with a college education. These findings remained consistent at other levels of education, 9 to 11 years ( $b = -.500, p < .001$ ), high school education ( $b = -.291, p < .001$ ), and 13 to 15 years ( $b = -.227, p < .001$ ).

The length of stay in this model had a positive and statistically significant impact treatment completion ( $b = -.002, p < .001$ ). However, the number of times black women have participated in drug treatment had a negative but statistically significant impact on treatment completion ( $b = -.033, p < .001$ ). Previous drug treatment episodes among black women decreased the likelihood of treatment completion by approximately 3 percent. Using cocaine or crack was positively and

significantly associated with drug treatment completion among black women ( $b = .313, p < .001$ ). Using cocaine or crack increased treatment completion by approximately 37 percent. Furthermore, age at first use was negatively but significantly associated with drug treatment completion ( $b = -.023, p < .001$ ). Using drugs at an earlier age decreased the likelihood of treatment completion by 2 percent. Frequent drug use has a negative but statistically significant treatment completion. Frequent drug use decreases the odds of drug treatment completion by approximately 4 percent. There was a negative and statistically significant relationship among black women who were separated from their spouses ( $b = -.093, p < .001$ ). That is, being separated decreased the likelihood of treatment completion by approximately 9 percent. Being single and currently married was not significant. The age of the respondent at the time of admission was positive and significantly associated with drug treatment completion ( $b = .063, p < .001$ ). Older black women were 7 percent more likely to complete drug treatment than younger black women. Finally, working full time was positively associated with drug treatment completion among black women. Black women who were employed full time were more likely to complete drug treatment ( $b = .192, p < .001$ ). Working full time increased the likelihood of drug treatment completion by approximately 21 percent. Black women who worked part time ( $b = -.060, p < .001$ ) and who were unemployed ( $b = -.313, p < .001$ ) were significantly less likely to complete

drug treatment than black women who worked full time. Working part time decreased the odds of completing drug treatment by approximately 6 percent, while being unemployed decreased the odds of treatment completion by approximately 3 percent.

**Table 13: Blackfemale**  
(Model 5)

<i>Predictor</i>	$\beta$	<i>S.E.</i>	Wald $\chi^2$	<i>Exp</i> ( $\beta$ )
Blackfemale	.323***	.009	1195	1.381
Level of Education				
16 years or more (reference)				
8 years or less	-.547***	.014	1572	.579
9 to 11 years	-.500***	.011	1987	.606
12 years	-.291***	.011	742	.747
13 to 15 years	-.227***	.011	388	.797
Length of Stay	-.002***	.000	155	.998
Number of prior treatment episodes	-.033***	.001	514	.967
Cocaine/Crack Use	.313***	.005	3570	1.367
Age at first Use	-.023***	.001	306	.977
Frequency of Use	-.038***	.002	626	.963
Marital Status				
Divorced/Widowed (reference)				
Never Married	-.022	.007	10.06	1.022
Now Married	-.007	.008	.703	.993
Separated	-.093***	.011	70.17	.911
Age at time of Admission	.063***	.001	2771	1.065
Employment Status				
Not in labor force (reference)				
Full time	.192***	.007	838	1.211
Part time	-.060***	.009	40.18	.942

Unemployed	-.313	.006	3106	.731
Constant	-.377	.021	309	.686
Model $\chi^2$	24649.136 ( $df = 17$ ; $p < .001$ )			
Nagelkerke	.042			

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

### ***MODEL 6 LOGISTIC REGRESSIONS RACE AND GENDER INTERACTIONS***

*Black Males.* Being a black male was significantly associated with drug treatment completion. Below, the results in Table 14, Model 6 indicate that the level of education was a significant predictor of drug treatment completion among black males. Although black men with less education were less likely to complete drug treatment, those with at least a high school diploma and some college were more likely to complete drug treatment than black men with 8 years or less and 9 to 11 years of education. Black men with 9 to 11 years ( $b = -.501, p < .001$ ), high school education ( $b = -.289, p < .001$ ), and 13 to 15 years ( $b = -.228, p < .001$ ). Consequently, black men with 8 years or less of education ( $b = -.543, p < .001$ ) were significantly less likely to complete drug treatment than were black men with a college education.

Time spent in drug treatment had a positive and statistically significant impact on drug treatment completion among black men ( $b = .003, p < .001$ ). Prior history of drug treatment had a negative but statistically significant impact on drug treatment completion among black men ( $b = -.036, p < .001$ ). Previous

participation in drug treatment decreased the likelihood of drug treatment among black males by approximately 3 percent. Black men who used cocaine or crack were positive and significantly more likely to complete drug treatment ( $b = .319, p < .001$ ). Cocaine or crack use increased the chances of completing drug treatment by approximately 38 percent.

Black men with an early history of drug use were negatively and significantly less likely to complete drug treatment than black men who deferred drug use later in life ( $b = -.027, p < .001$ ). Black men who used drugs at an early age were 3 percent less likely to complete drug treatment than black men who used drugs at a later age. Frequent drug use had a negative but statistically significant effect on drug treatment completion among black men ( $b = -.038, p < .001$ ). Frequent drug use decreased drug treatment completion among black men decreased by 4 percent.

There was a positive and statistically significant association between being single and drug treatment completion ( $b = .028, p < .001$ ). Single black men were 3 percent more likely to complete drug treatment compared to men who were married, separated, or divorced. Furthermore, there was a negative but statistically significant association among black men who were separated ( $b = -.093, p < .001$ ). That is, being separated decreased the likelihood of treatment completion by approximately 9 percent. Age at the time of admission was positively and



significantly associated with drug treatment completion ( $b = .064, p < .001$ ). That is, older black males were 7 percent more likely to complete drug treatment than black men who were younger. Being employed had a positive association with drug treatment completion. Full time employment was positive and significantly associated with completing treatment ( $b = .199, p < .001$ ). Moreover, working full time increased the likelihood of drug treatment completion by approximately 22 percent. Part time employment was negative and significantly decreased the chances of completing drug treatment ( $b = -.059, p < .001$ ). The odds of completing drug treatment among black men who were employed part time decreased the likelihood of completion by approximately 6 percent. Black men who were and who were unemployed ( $b = -.312, p < .001$ ) were significantly less likely to complete drug treatment than black men who worked full time. Being unemployed decreased the odds of drug treatment completion by approximately 27 percent.

**Table 14: Blackmale**  
(Model 6)

<i>Predictor</i>	$\beta$	<i>S.E.</i>	Wald $\chi^2$	<i>Exp</i> ( $\beta$ )
Blackmale	.190***	.007	851	1.209
Level of Education				
16 years or more (reference)				
8 years or less	-.538***	.013	1591	.584
9 to 11 years	-.502***	.011	2047	.605
12 years	-.291***	.011	753	.747

13 to 15 years	-.233***	.011	418	.792
Length of Stay	.002***	.000	152	.998
Number of prior treatment episodes	-.036***	.001	618	.965
Cocaine/Crack Use	.308***	.005	3619	1.360
Age at first Use	-.027***	.001	453	.973
Frequency of Use	-.038***	.001	642	.963
<b>Marital Status</b>				
Divorced/Widowed (reference)				
Never Married	.020***	.007	8.4	1.020
Now Married	-.003	.008	.147	.997
Separated	-.109***	.011	100	.897
Age at time of Admission	.062***	.001	2792	1.064
<b>Employment Status</b>				
Not in labor force (reference)				
Full time	.198***	.007	929	1.219
Part time	-.057***	.009	38	.945
Unemployed	-.313***	.005	3250	.731
Constant	-.217	.020	118	.805
Model $\chi^2$	24061. ( $df = 17$ ; $p < .000$ )			
Nagelkerke	.041			

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

### ***MODEL 7 LOGISTIC REGRESSIONS RACE AND GENDER INTERACTIONS***

*White Women.* Being white and female was significantly associated with drug treatment completion. The results in Table 15, Model 7 suggests education was negative and was a statistically significant predictor of drug treatment completion among white females. Lower levels of education, 8 years or less ( $b = -.572$ ,  $p < .001$ ) and 9 to 11 ( $b = -.531$ ,  $p < .001$ ), among white women decreased the

likelihood of drug treatment completion by 44 percent for 8 years or less of education and 41 percent for 9 to 11 years of education. Furthermore, high school education (12 years) ( $b = -.306, p < .001$ ), and 13 to 15 years ( $b = -.235, p < .001$ ) were also negative and statistically significant. Respondents with 12 years of education were significantly less likely to complete drug treatment. Completing 12 years of education decreased the odds of completing drug treatment by approximately 26 percent. Completing between 13 and 15 years of education decreases the likelihood of completing by approximately 21 percent.

Length of stay had a negative and statistically significant impact on drug treatment completion ( $b = -.003, p < .001$ ) as well as prior history of drug treatment. Among white women, the number of prior treatment experiences had a negative but statistically significant impact on drug treatment completion among white women ( $b = -.032, p < .001$ ). Previous participation in drug treatment decreased the likelihood of drug treatment among white females by approximately 3 percent. Cocaine or crack use had a positive and statistically significant relationship with drug treatment completion ( $b = .340, p < .001$ ). Cocaine or crack use increased the chances of completing drug treatment by approximately 41 percent. Also, using drugs at an earlier age had a negative but statistically significant association with drug treatment completion ( $b = -.024, p < .001$ ). Using drugs at an earlier age decreased the likelihood of completing drug treatment by

approximately 2 percent. How frequently drugs are used had a positive and significant correlation with drug treatment completion ( $b = -.039, p < .001$ ).

Frequent drug use decreased drug treatment completion among by approximately 4 percent.

The association between never been married and drug treatment completion was negative and statistically significantly ( $b = -.017, p < .001$ ). Not being married decreased treatment completion by approximately 2 percent. Being separated had a negative but statistically significant association with treatment completion ( $b = -.108, p < .001$ ). That is, being separated decreased the likelihood of treatment completion by approximately 10 percent. Age at the time of admission was positive and significantly associated with drug treatment completion ( $b = .058, p < .001$ ). Older white females were 6 percent more likely to complete drug treatment than black men who were younger. Full time employment had a positive association with drug treatment completion. Full time employment was positive and significantly associated drug treatment outcomes ( $b = .194, p < .001$ ) and increased the likelihood of completing treatment by approximately 21 percent. Working part time employment had a negative but statistically significantly completing drug treatment ( $b = -.051, p < .001$ ). Working part time decreased the chances of completing drug treatment by approximately 5 percent. Unemployment was negatively associated with treatment completion. Although there was a

statistically significant relationship ( $b = -.318, p < .001$ ), being unemployed decreased treatment completion by approximately 27 percent.

**Table 15: Whitefemale**  
(Model 7)

Predictor	$\beta$	S.E.	Wald $\chi^2$	Exp ( $\beta$ )
Whitefemale	-.090***	.005	266	1.094
Level of Education				
16 years or more (reference)				
8 years or less	-.572***	.014	1718	.565
9 to 11 years	-.531***	.011	2240	.588
12 years	-.306***	.011	817	.736
13 to 15 years	-.235***	.011	417	.791
Length of Stay	-.003***	.000	188	.997
Number of prior treatment episodes	-.032***	.001	470	.969
Cocaine/Crack Use	.340***	.005	4286	1.405
Age at first Use	-.024***	.001	336	.976
Frequency of Use	-.039***	.001	682	.961
Marital Status				
Divorced/Widowed (reference)				
Never Married	-.017***	.007	6.287	.983
Now Married	-.015	.008	3.521	.985
Separated	-.107***	.011	94.42	.898
Age at time of Admission	.058***	.001	2127	1.057
Employment Status				
Not in labor force (reference)				
Full time	.194***	.007	847	1.214
Part time	-.051***	.009	29.52	.951
Unemployed	-.318***	.006	3209	.728
Constant	-.053	.019	7.711	.949

Model $\chi^2$	26801.442 ( $df = 17; p < .000$ )
Nagelkerke	.046

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\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

***MODEL 8 LOGISTIC REGRESSIONS  
RACE AND GENDER INTERACTIONS***

*White Males.* Being white and male was significantly associated with treatment completion. The results in Table 16, Model 8 suggest that education was negative but was a statistically significant predictor of drug treatment completion among white males. White males with 8 years of education or less ( $b = -.550, p < .001$ ) and 9 to 11 ( $b = -.506, p < .001$ ) were less likely to complete drug treatment. Completing only 8 years or less education decreased the chances of completing drug treatment by approximately 42 percent, while completing only 9 to 11 years decreased the likelihood of drug treatment completion by 40 percent. Completing high school (12 years) ( $b = -.298, p < .001$ ) and 13 to 15 years ( $b = -.221, p < .001$ ) were also negative and statistically significant. Respondents with a high school education decreased the chances of completion by approximately 25 percent while completing 13 to 15 years decreased the chances of completing drug treatment by approximately 20 percent. Shorter participation in drug treatment programs has a negative but statistically significant association with completing drug treatment among white males ( $b = -.002, p < .001$ ). Less time in drug treatment programs decreases the odds of drug treatment completion.

Previous drug treatment also had an effect on treatment outcomes. White males with a prior drug treatment experience had a negative but statistically significant impact on drug treatment completion ( $b = -.037, p < .001$ ). Previous participation in drug treatment decreased the likelihood of drug treatment among white males by approximately 4 percent. Using cocaine or crack use had a positive and statistically significant relationship with drug treatment completion ( $b = .298, p < .001$ ). Using cocaine or crack increased the odds of completing drug treatment by approximately 35 percent. Early drug use had a negative and statistically significant impact on drug treatment completion ( $b = -.019, p < .001$ ). Using drugs at an early age decreased the chances of completing drug treatment by approximately 2 percent while frequency of drug use was negatively associated with drug treatment outcomes. White males who frequently used drugs were significantly less likely to complete drug treatment ( $b = -.038, p < .001$ ). Frequent drug use decreased drug treatment completion among by approximately 4 percent.

Being separated had a negative but statistically significant association with drug treatment completion ( $b = -.080, p < .001$ ). Being separated decreased the likelihood of completing drug treatment by approximately 8 percent. Never being married and currently married were not statistically significant.

The age of the respondent was positive and significantly associated with drug treatment completion ( $b = .060, p < .001$ ). Older white males were

approximately 6 percent more likely to complete drug treatment than younger white males. White males who were employed were more likely to complete drug treatment. Employment full time had a positive association with drug treatment completion. In fact, full time employment was positive and significantly associated drug treatment outcomes ( $b = .148, p < .001$ ) and increased the odds of drug treatment completion by approximately 16 percent. Working part time had a negative but statistically significantly completing drug treatment ( $b = -.066, p < .001$ ); therefore, there was a 6 percent increased in treatment completion among white males who worked part time. Unemployment was negatively associated with treatment completion ( $b = -.317, p < .001$ ), being unemployed decreased treatment completion by approximately 27 percent.

**Table 16: Whitemale**  
(Model 8)

<i>Predictor</i>	$\beta$	<i>S.E.</i>	Wald $\chi^2$	<i>Exp</i> ( $\beta$ )
Whitemale	-.267***	.005	3006	.766
Level of Education				
16 years or more (reference)				
8 years or less	-.550***	.014	1586	.577
9 to 11 years	-.506***	.011	2030	.603
12 years	-.298***	.011	774	.742
13 to 15 years	-.221***	.012	368	.802
Length of Stay	-.002***	.000	120	.998
Number of prior treatment episodes	-.037***	.001	631	.964
Cocaine/Crack Use	.298***	.005	3231	1.347



Age at first Use	-.019***	.001	200	.981
Frequency of Use	-.038***	.002	644	.962
Marital Status				
Divorced/Widowed (reference)				
Never Married	-.005	.007	.452	1.005
Now Married	-.005	.008	.401	.995
Separated	-.080***	.011	52.08	.923
Age at time of Admission	.060***	.001	2580	1.062
Employment Status				
Not in labor force (reference)				
Full time	.148***	.007	487	1.159
Part time	-.066***	.009	49.69	.936
Unemployed	-.317***	.006	3183	.728
Constant	-.090	.019	22.54	1.094
Model $\chi^2$	25010.492 ( $df = 17$ ; $p < .000$ )			
Nagelkerke	.043			

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

## ***CHAPTER FIVE***

### ***DISCUSSION AND CONCLUSION***

The purpose of this research was to examine the predictors of drug treatment outcomes using a sample of black women who participated in a national community based administrative substance abuse treatment study that provides descriptive information about discharges from drug treatment facilities (Treatment Episode Data Set- Discharges 2006). This study assessed the factors associated with drug treatment completion using a secondary data set obtained from the Inter-University Consortium for Political and Social Science Research (ICPSR), the Treatment Episode Data Set - Discharges (TEDS-D) on the characteristics of

individuals admitted to both public and private drug treatment programs (Substance Abuse and Mental Health Services Administration (SAMSHA), Office of Applied Studies 2009). A primary goal of this study was to analyze if race, gender, and social class (using the level of education as the socioeconomic indicator) was associated with treatment completions among respondents in this study. Because little research has been conducted to test if there are associations between race, gender, and the level of education on drug treatment completion focusing on black women, this study advanced our understanding of black women's successful drug treatment completions without fundamentally focusing on comparative analyses and ending with an understanding of gender or race differences in drug treatment outcomes.

Although comparing groups have provided tremendous advancement in the intervention and prevention of drug use and addiction in general, limited information is known about the significant predictors of drug treatment completion among black women specifically. That is, many of the available studies, which have included addicted black women in the sample, have tended to report significant differences between the groups under study and less on the specific drug treatment characteristics. Reporting these specific results may help us understand more about the significant predictors of drug treatment completion and long term abstinence for black females. Furthermore, it has been well documented

that there has been a lack of sensitivity to the range of drug abuse experiences beyond the white male perspective. As such, this study is committed to making a contribution to the existing body of work on drug use, addiction, and prevention among black women, with the intention of providing not only a quantitative assessment of these outcomes but infer implications on how to achieve more positive success rates among black women who are participating in drug treatment therapy. As such, to predict the likelihood of drug treatment completion, this study used logistic regression to test the predictors of drug treatment completion specifically among black women.

Although this study compared black women's drug use behaviors to other respondents in the study namely black men, white women, and white males, a major theoretical goal of this study was to place black women's drug addiction and drug treatment issues at the center of analysis to gain a better understanding of black women's experiences in drug treatment programs. The idea of placing black women's issues first is fundamentally one of the major tenets of black feminist theory, which was the theoretical framework in this study. Few studies have assessed the impact of race, gender, and level of education (social class) and its predictive power on drug treatment completion particularly among black females. Surprisingly, when compared to race and gender, the level of education was a stronger predictor of drug treatment completion than gender or race. This finding

suggests that the strong correlation between drug treatment completion and education highlights the ongoing argument of disparities which exist in black communities, including the high levels of low educational attainment and substandard educational practices within those communities. Those with higher educational attainment are more likely to make more positive decisions about life choices and have a better understanding of the consequences associated with drug use and addiction. These findings have been supported and reported in national studies on health outcomes, particularly the Healthy People 2010 studies as well as in Western, Schiraldi and Ziedenberg's (2003) criminological study. In fact, high achieving individuals are more likely to have closer family and community social bonds, live in better neighborhoods, which reduce the likelihood of becoming involved in drug use and criminality. Individuals with higher levels of education also have access to better educational resources, which may mediate aberrant behaviors. The finding in this study suggests that researchers should consider the level of education more critically in future studies. Moreover, perhaps future research could test, as suggested by Collins (1993:26) when she argued that race, gender, and class are "Distinctive yet interlocking structures of oppression" since race, gender, and level of education intersect and create the particular context in which women of color (black women) experience" (Crenshaw 1995:364) their life

experiences, the intersection of race, gender, and level of education, in future drug research outcome studies.

Although previous studies have argued that drug treatment completion is significantly related to one's race, gender, or level of education (Barr, Farrell, Barnes, and Welte (1993), there was not an abundance of literature that empirically tested the impact of all three variables on drug treatment completion. For example, in Zanis, Coviello, Lloyd et al. (2009), only analyzed the effect of education and gender but not race in their study on predictors of drug treatment completion among parole violators while Pelissier's (2004) and Petry and Bickel's study only analyzed race and level of education but not gender. In Pelissier's (2004) study, the level of education did not appear to have the most significant drug treatment entry. That is, the authors did not construct interaction terms and test it in the model. The point is that, very few studies have included measures of all three variables and have they analyzed the additive impact of all three variables. There is an abundance of literature which has measured race and gender, gender and level of education, as mentioned earlier in this study, but again, not many have assessed the intersection of all three variables. It is possible that the limited availability of studies which have measured of all three variables, race, gender, and class, is because one or more of these variables may have lacked statistical significance and were essentially dropped from the model as a result.

In 2004, King and Canada measured dropout rates in drug treatment programs and found that race and gender were significant predictors of drug treatment completion. However, the level of education in this study was not a significant predictor of early dropout rates. Miech and Chilcoat (2007:6) found that “Cocaine or marijuana use after 1990, onset was more likely among those with lower education.” In particular, these researchers argued that disparities exist among disadvantaged populations. What this suggests is that those with access to better educational resources are more likely to have access to and have an awareness of the harm that drug use and addiction may cause. Regarding drug treatment completion, individuals with higher educational attainment may have a better understanding of the program dynamics, the importance of the treatment program, and may stay in the program long enough for it to work. In a study conducted by Scott-Lennox, Rose, Bohlig, and Lennox (2000), having children, being pregnant, under the age of 21, and being a black woman, significantly reduced the likelihood to drug treatment completion. However, this study did not measure the impact of social class or level of education. Other studies<sup>3</sup>, have tested the impact of education, or race, or gender, but did not find that education was the most significant predictor in their research. What is more important, very few studies have analyzed the impact of race, gender, and level of education, which

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<sup>3</sup> See Kelly, Blacksin, and Mason (2001); Knight, Logan, and Simpson (2001); Butzin, Saum, and Scarpitti (2002); and the Substance Abuse and Mental Health Services Administration, Office of Applied Studies (2009).

makes this study serve as an original contribution to the research on drug treatment completion, since this study found in the baseline model that education was the strongest predictor of drug treatment completion as compared to gender and race. However, Wickizer, Maynard, Atherly et al., (1994) found, when controlling for factors such as primary substance, secondary drug use, and ethnicity, the level of education was the strongest predictor of substance abuse treatment completion.

As mentioned earlier, the primary goal of this study was to assess the main effects of race, gender, and social class, as predictors of drug treatment completion. Because conditions created by race, class and gender oppression have had powerful effects on the perceptions of black women it was important to use the *Black Feminist theory* to derive hypotheses that would test such assumptions. To lend further support for the necessity of using a black feminist theory, several key researchers in the field, particularly Knight, Logan, and Simpson (2001); Hser, Polinski, Maglione, and Anglin (1999); Simpson, Joe, Fletcher, Hubbard, and Anglin (1999), have all argued that even when a treatment program meets all the unique and the often challenging social problems women bring with them, women still fail to complete drug treatment. Specifically, these key drug abuse researchers in the field of addiction and recovery have argued for the necessity to assess the psychosocial problems associated with drug users. For example, among clients discharged from outpatient service settings in 2005, client characteristics were a

significant determinant of successful treatment completions. Others, for example, Veach, Remley et al. (2000), purport that the type of treatment program makes a significant difference.

Another significant and interesting finding in this study was the impact that treatment modality had on the likelihood of drug treatment completion.

Specifically, this study found that the type of drug treatment black women participate in makes a significant difference in the likelihood that they would complete drug treatment. When controlling for service setting at discharge in the logistic regression models, the type of treatment individuals engage becomes a fundamental factor of treatment success (i.e., completion) since longer time in drug treatment increases the likelihood of long term abstinence. This finding deserves a more elaborate discussion and analyses in future research.

Furthermore, all the research hypotheses tested in this study were supported. This study hypothesized that (1) race is associated with drug treatment completion, (2) gender is associated with drug treatment completion and (3) years of education is associated with positive drug treatment completion. The findings revealed that race, gender, and level of education (social class variable) all had statistically significant associations on drug treatment completion. That is, when compared to all of the other respondents in the study, (i.e., black men, white women, and white males) black women were less likely to complete drug treatment, which in turn



supports the theory used in this study, that the race, gender, and social class of the respondent are significant predictors of drug treatment completion. These findings are not surprising and are consistent with the other literature on drug treatment outcomes (McCaul, Svikis, and Moore 2001). Moreover, this study addressed gaps in the literature in two ways. First, this study was grounded in a nontraditional theoretical framework, which has only minimally been discussed and tested in the drug abuse literature (Jackson 1995; Roberts, Jackson, and Carlton-Laney 2000). Second, this study examined the association of race, gender, and level of education and specifically highlighted treatment outcomes of black women only, which is rarely found. It is fair to mention that much of literature, which has assessed the impact of race, gender, and social class as well as their interaction effects, have come from sociological and criminological studies and only rarely has interplay of race, gender, and social class been available in the mental health or drug addiction literature (Kelly, Blacksin, and Mason 2001). In fact, Steffensmeier, Ulmer, and Kramer (1998) as well as Brennan and Spohn (2008) have analyzed the effect of race and ethnicity on sentencing. Moreover, Steffensmeier, Ulmer, and Kramer (1998) found in their study on the interaction of race, gender, and age in criminal sentencing on young black males, that race, gender, and age in criminal sentencing were significant predictors of harsher sentencing among black males. In their study, they found that the gender effects were the largest, followed by age, and

then race. In fact, the findings in this study revealed that blacks were underrepresented in drug treatment programs when compared to whites and the disparity is even more prevalent among black women. Specifically this study found that both blacks and whites had similar drug treatment program characteristics. That is, the majority of black and white respondents participated in non intensive outpatient drug treatment than any of the other treatment modalities available. The majority of the respondents had never participated in drug treatment before this treatment episode. There were differences, however, in the principle referral source to treatment between black and white groups. As it relates to the race of the respondent did make a difference in treatment referrals issued by the court or criminal justice system. The results suggest that black men and black women were more overrepresented in court or criminal justice referrals than were white men and women but black women were more likely to receive specific court/criminal justice referrals from diversion programs more often than the other respondents in the study. Both black and white respondents were more likely to seek drug treatment on their own. Unfortunately, respondents who sought treatment on their own were less likely to complete drug treatment. This finding warrants further investigation and could be addressed in a future research project. Another noticeable trend which was identified in this study was that when compared to men, women were more likely to receive referrals from organizations within the

community, suggesting the closer bond women have within their communities compared to men. It is also fair to mention that other researchers have documented the effectiveness of community outreach programs as an efficacious tool of drug prevention and drug treatment referrals (Barnett 1999; D'Aunno and Pollack 2002). No differences were found in the number of days spent in treatment. That is, there was not a race or gender difference in length of stay in drug treatment programs, since both groups spent approximately the same number of days in treatment (i.e., 23 days). As such, an assumption can be made about the length of stay in drug treatment completion. Although time spent in drug treatment promotes retention, completion and abstinence, if all respondents in this study are staying in approximately the same length of time, something more significant is impacting treatment completion among black women, particularly since they are less likely to complete drug treatment. In fact, in a recently published article on substance abuse treatment barriers, the authors found that service providers "Found it difficult to address the intensive needs of patients with complex medical and social problems" if they leave drug treatment less than 30 days (Raven, Carrier, Lee et al. 2010:28). Their study found that individuals who report to treatment with other social issues, such as lack of support from family members and friends as well as issues with housing, complicate the treatment process, particularly if respondents are not staying in treatment long enough to work (Raven, Carrier, Lee et al. 2010). The

majority of respondents only reported using one substance at the time of admission. Overall, analyzing group differences in treatment outcomes and sociodemographic characteristics, black women appeared to be socioeconomically worse off than black men, white women, and white men. In fact, black women had significantly lower rates of employment and were almost twice as likely to report that their income source was from public assistance. Black women were less likely to be married, employed full time, and were significantly more likely to report using cocaine or crack at the time of admission and indicate that cocaine or crack was their problem drug. Finally, black women had lower treatment completion rates than black men, white women, and white men. Again, these findings are not surprising and are consistent with a multitude of literature on treatment outcomes.

Although this study found that race, gender, and the level of education were statistically significant predictors of drug treatment completion and that all the research hypotheses in this study were supported and the null hypotheses rejected, there are still questions that need to be considered when studying drug treatment completion among black women particularly since, traditionally, theorists and practitioners in the field of alcohol and drug abuse research virtually ignored the experiences unique to women, ethnic groups, and other marginalized groups until the 1970s.

To provide insight about the intersection theory used in this study, four logistic regression models were created to test whether an individual's race and gender have interactive effects, when controlling for level of education, length of stay, number of prior treatment episodes, cocaine or crack use, age at first use, frequency of use, marital status, age at the time of admission, and employment status. The four models analyzed included data on black women, black men, white women, and white men. In the model on black women, race, gender, and the level of education were all found to significantly impact drug treatment completion. Specifically, the model found that the level of education was the most significant predictor of drug treatment and that the higher the level of education, the more successful women are at completing drug treatment. That is, having at least a high school diploma revealed significant changes in treatment success. This finding did not differ from the first logistic regression model analyzed earlier in this study.<sup>4</sup> In fact, all the findings were found to significantly contribute to drug treatment completion except for marital status. Marital status in *Model 4* was found to significantly contribute to treatment outcomes, however, in *Model 5*, this relationship was not significant among black women who were single and currently married. In *Models 6, 7, and 8*, the findings were similar. In the *Model 6* on black males, being married was not significant. However, all the other findings

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<sup>4</sup> See Model 1 for details.

were significant. In fact, the above finding was also the same among white women, in *Model 7*. All the other findings were statistically significant. The findings in *Model 8* for white men, being married and now married were not significant. However, all the other factors were statistically significant. Finally, in all four models, the level of education of the respondent was the strongest predictor of drug treatment completion. The higher the level of education, the more likely respondents were to successfully complete the treatment modality.

In the extensive review of the literature on drug use and addiction mentioned earlier in this study, an argument was made for the necessity for drug treatment programs to consider the race and ethnicity of the population under study. In fact, it was argued and theoretically tested in this research using “*Black Feminist Theory*,” that the negative experiences that black women have endured, have placed black women in a uniquely situated position that cannot be experienced by any other group, not even white females. The underrepresentation of black women in this study as well as their low drug treatment completion rates suggests the usefulness of black feminist theory. Earlier in this study it was suggested that the “*Black Feminist*” perspective supports the ideology that institutionalized racism, for example, severely restricts opportunities for black women to enter into drug treatment programs and drug treatment completion. Fundamental also, is to understand the nature of the program methods being employed within these

programs. A major argument is that once black women gain access into treatment programs, these programs are not designed to meet their specific social, psychological, and cultural needs. What is more important using a black feminist perspective will help researchers to place into context the historic stereotypes and personal experiences that black women have had to endure and understand how these experiences, which have been socially ingrained in the American society generation after generation impacts others (i.e., clinicians, staff, and other clinical personnel) perceptions and images of black women. As such, some black women in the program may internalize their oppression which may interact how they feel about themselves. To address these issues, measures of identity and perspectives about personal experiences throughout the life course could be addressed during admission intake. To address if women have internalized that they are viewed negatively by other members in society could also be measured as well, particularly since it has been hypothesized that black women may drop out but if their oppression is recognized then they may be empowered to complete the treatment.

Fundamentally, this is the argument in black feminist theory. If the treatment program is theoretically grounded in a framework that is culturally conducive, then that particular program may produce more positive results among black women. As such, there is the argument for a culturally sensitive drug treatment program,

which addresses the uniquely situated position of black women which is theoretically grounded.<sup>1</sup> Furthermore, the black feminist perspective uses a framework, which allows black women to develop a positive and empowering self image whereby her strength (i.e., the black woman) is not interpreted as being controlling, manipulative, or aggressive, as suggested in a multitude of other studies, but rather a quality of success which may prevent her from becoming frustrated and abandoning the treatment process. However, without addressing these issues methodologically, little advancement is gained because new research questions are not being asked.

It was mentioned earlier in this study that Knight, Logan, and Simpson (2001) argued that even when a treatment program meets all the unique and the often challenging social problems women bring with them, women still fail to complete drug treatment. Specifically, key drug abuse researchers in the field of addiction and recovery (i.e., Hser, Polinski, Maglione, and Anglin 1999; Simpson, Joe, Fletcher, Hubbard, and Anglin 1999) have argued for the necessity to assess the psychosocial problems associated with drug users. Others, Veach, Remley et al. (2000), however, purport that type of treatment program makes a significant difference. Considering the findings of this study, it appears that the type of treatment individuals engage in becomes the most significant factor of treatment recovery, treatment success (i.e., completion), and long term abstinence. Since



black females had the lowest treatment completion rates, there is the need for drug treatment programs to go beyond the traditional treatment protocols, for example, traditional treatment programs such as Alcoholics Anonymous (AA) and the 12 step program matrix, cognitive behavior therapy (CBT), and/or the Transtheoretical Model (TTM), which are the dominant models, and use more culturally appropriate drug treatment models especially when blacks or other people of color are participating in those programs. It is suggested in this research that future studies move in this direction, particularly since the research literature consistently reveals that blacks in drug treatment programs have low rates of retention and completion than whites. In fact, as mentioned earlier in this study, there is a growing body of literature on the effectiveness of Afrocentric/Africentric and/or cultural specific treatment approaches (Belgrave et al. 2000; Cherry 1998; Harvey and Hill 2004; King, Henderson and Latessa 2001; Moore, Madison-Colmore et al. 2003; Whaley and McQueen 2004). According to Turner (1997), the Africentric perspective is an essentialist perspective which stresses the importance of contextualizing the historical experiences and worldviews of African Americans to guide Africentric treatment programs which is quite different from the traditional “Eurocentric” model of drug treatment that is so popular in drug treatment programs today. While there is some empirical support for this methodology, this perspective does not escape review. However, there is enough

evidence to support using “nontraditional” treatment therapy, particularly when the sample is non white. To substantiate this claim, many have argued, Aktan (1999:227), Nobles (1984), Akbar (1985), and Asante (1987), that there is a great need for an approach that is centered on the social, historical, and cultural reality of blacks. Aktan’s (1999:228) study suggested that “Treatment programs must appeal to the behaviors, values, attitudes, beliefs, policies, practices, and procedures of the group under study and be congruent within the cultural orientation and precepts of a particular target group.”

Although there is a lack of empirical studies that have applied Afrocentric methodologies and theoretical frameworks in treatment programs for blacks, several studies have supported that Afrocentric or African-centered treatment modalities are effective treatment models (Belgrave et al. 1994; Cherry et al, 1998; Roberts, Jackson, and Carlton-LaNey 2000). What is more important, Goddard and his colleagues have continued to develop new theoretical frameworks for culturally diverse populations (Nobles, Goddard, and Gilbert 2009), namely, culturecology. Although studies report mixed results regarding the utilization of Afrocentric or culturally sensitive drug treatment programs among black women, as mentioned above, there is some empirical research to support that Afrocentric or African-centered treatment modalities are effective treatment models (Belgrave et al. 1994; Cherry et al, 1998; Roberts, Jackson, and Carlton-LaNey 2000). Several authors

have used an Afrocentric methodology to predict if participants who participated in Afrocentric treatment have higher odds of success (Belgrave, Brome, and Hampton 2000; King, Holmes, Henderson et al. 2001; Nobles, Goddard, and Gilbert 2009). In their 2001 study on youth participation in an Afrocentric diversion program, King, Holmes, Henderson et al. (2001) found that youths assigned to the Afrocentric treatment program performed slightly better than the youths who did not participate in the Afrocentric program. The study began with a group of facilitators contacting individuals considered Afrocentric scholars who provided advice on delivering an Afrocentric treatment modality. The authors used words and artifacts which represented Africa as a way to represent “African culture.” The staff members wore dashikis and were taught to greet participants in Swahili. The program also incorporated prayer, libations, and when a participant graduated from the program, they were issued a mudcloth scarf and a communal meal. The argument among some scholars, regarding Afrocentric drug treatment is that Afrocentric drug treatment is a useful treatment model for blacks (McNair 1992; Belgrave, Brome, and Hampton 2000). Ideologically, the Afrocentric model challenges Eurocentric models and view them as oppressive and ineffective for people of color (McNair 1992). Of equal importance is to note that there are differences in interpretation of cultural and historical experiences between Africa

and African American's. Many African Americans view their history in America, while an African world view may consider the diaspora.

Goddard (1993) has also recommended that participants be taught African traditions and folkways once they enter into treatment. This, according to several Africana scholars, would expose people to their "African" heritage in hopes to increase their sense of who they are and a sense of community with the goal of promoting social change (Belgrave, Brome, and Hampton 2000; Longshore and Grills 2000; Kershaw 1992; McNair 1992; Valandra 2007) or in this case, change in drug behaviors. This idea of community which is rooted in the history of African tradition is revisited. According to Goddard (1993:76) "Children in the traditional community belonged to the community, and any adult member of the traditional community could, and did, discipline any child who violated, in whatever form, the values and mores of the community." What is more important Goddard and his colleagues have continued to develop new theoretical frameworks for culturally diverse populations (Nobles, Goddard, and Gilbert 2009). In fact, Nobles, Goddard, and Gilbert (2009) have recently developed a conceptual framework called "Culturecology" and an African-Centered Behavioral Change Model (ACBCM). In 1986, Caution emphasized the importance of a "culturally sensitive" approach to treatment intervention, which focused on worldview and oppression. In fact, Caution (1986), alluded to an "Afrocentric/Africentric" approach, arguing

for cultural sensitivity, which is having consideration for the cultural background of the population under study, and treatment modalities that correlate with the black community. Caution (1986) also added that it is critical for counselors to operate from an “African American Worldview.” This “Worldview,” according to Kershaw (1992) means placing the life experiences first and emphasizing their historical reality. Furthermore, according to Belgrave, Brome, and Hampton (2000:387), “Scholars characterize the Afrocentric world view as a set of beliefs, values, and assumptions that reflect fundamental values found among persons of African descent and African religion, as well as the study of the structure of self-concept.”

Finally, as evidenced above, black scholars and other researchers continue to see the validity of employing approaches centered on the population being served as they engage in the development of new theoretical frameworks and evaluate a range of alternatives to drug treatment to advance the discourse of the Afrocentric/African-Centered paradigm and improve treatment programs for blacks. Accordingly, new theoretical developments are important. Moreover, the development of new ideas and theoretical frameworks outside of the tradition ones has important clinical implications. Apparent in this study, as well as others, is the difficult time black women have in traditional drug treatment models. Because there have been multiple empirical studies to suggest that “traditional” treatment

methods are less effective among black since they are more likely to drop out.

While there is no simple treatment plan for drug dependent black women because of the complex social, historical and cultural issues associated with being black and a woman, as well as the continued addiction to cocaine or crack, it is time to ask new questions and seek new answers to improve drug treatment completion rates among black women. Finally, the overall findings in this study suggest that the black feminist theory is a valid frame of reference and capable of explaining black women's addiction and drug treatment completion outcomes.

### ***Limitations***

The analysis presented in this study is limited in several ways. For example, the Treatment Episode Dataset Discharges (TEDS-D) 2006 did not provide information on the number of treatment episodes per individual. As such, there was no way of determining exactly how many times a respondent had been in drug treatment. Thus, TEDS admissions and discharges do not represent individuals. For example, an individual admitted to and discharged from treatment twice within a calendar year, that treatment episode would be counted as two admissions and two discharges. Although this study controlled for the number of prior drug treatments, there was still no way to measure this phenomena. Victimization, which is an important predictor of drug use, abuse, and completion was not assessed, which is a major weakness in this dataset. Future TEDS-D questionnaires could assess

victimization among respondents. Questions which measure intimate partner violence, sexual abuse, and child maltreatment are not new in research on substance abuse and modeling questions from a best practice models would be a start, since understanding victimization, including intimate partner violence (IVP), is an important risk factor that may severely impact drug treatment completion (Lipsky, Krupski, Roy-Byrne et al. 2010). That is, self reports of victimization have been found to interfere with the drug treatment process, particularly among women since they report higher rates of childhood sexual and physical victimization and violence (Messina, Grella, Cartier et al. 2010). The TEDS-D 2006 study did not differentiate the difference between public and privately funded treatment programs. This information would be useful and perhaps answer other questions regarding treatment modality and co-occurring disorders for patients that present in treatment programs with multiple issues not necessarily related to their drug addiction but may interact with their ongoing drug use. Understanding these dynamics would be of benefit because it would provide more insight on the type of additional treatment programs and services that may be of benefit to treatment participants and contribute to more positive treatment completion rates. Consequently, a significant finding in this research was the overutilization of 24 hour detoxification programs. Of course, these programs produced more significant results regarding treatment completion but those types of programs are programs,

which provide immediate help for people in a crisis and should be identified and categorized in a separate drug treatment modality model. Furthermore, since there was no assessment of what happened to respondents after such treatment there was no way to determine if patients who participated in the 24 hour treatment programs went to one of the other treatment programs, this service setting was not useful. Also, this study did not assess how many children if any, respondents had, which has also been found to be a significant predictor of drug treatment completion.

### ***Policy and Future Research Implications***

The present study extends our knowledge of the significant predictors of race, gender, and level of education on black women's drug treatment completion. Considering the findings in this study, future research is needed to explore why black women had the lowest percentages of unemployment, reported the highest rates of income from public assistance and test if these findings are related to drug addiction, or an inherent part of life experiences with inequality (i.e., being a black woman in America). Furthermore, the largest percentage of cocaine or crack use, the most drug treatment referrals from criminal justice diversion programs and the lowest drug treatment completion rates than black men, white women, and white men. When assessing the primary variables of interest in this study, the findings suggested that education is a key indicator of treatment completion. Policymakers as well as clinicians need to focus on programs that appeal to populations that have



lower levels of educational attainment to increase drug treatment success rates. In this way, we may prevent drug use before it starts and use drug treatment programs to treat addicted persons as opposed to criminalizing them and incarcerating them for their addiction. On the other hand, as a society, we need to provide underprivileged populations with the resources necessary to reduce the incidence and prevalence of drug use during the adolescent years. That is, create programs that appeal culturally to black youths. While several programs already exist, (Belgrave and Allison 2006; Whaley and McQueen 2004), they have not reached the level of popularity necessary to impact the communities in which they are intended to serve.

The results in this study also provide evidence for the benefit of analyzing the impact of race, gender, and class in drug treatment literature. Due to the strong support of the importance of educational attainment, early intervention and prevention programs should be created to target socioeconomically disadvantaged individuals who reside in high risk communities. Using this approach may be a positive step in reducing the risk factors of drug use and addiction among underprivileged populations. Also, in the future, researchers could measure the treatment program dynamics as well as test the interactive effects of race, gender, and class as well as the program efficacy among black female respondents. Studies

could also benefit from a mixed methodological approach using both inductive and deductive research methodologies.

Finally, there is a pressing need to assess the type of drug treatment modality black women are participating in. An abundance of literature on culturally sensitive drug therapy has found that people of color are more likely respond more positive when the treatment program is designed for or has components of their culture intertwined in the treatment modality. More empirical studies are needed to support culturally sensitive drug treatment therapy to help funding agencies see the validity in funding alternative treatment methods, which appeal to the cultural and historical experiences of the respondent. That is, fund programs that are more culturally sensitive. The lack of funding has a direct the advancement of future research in this area.

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## **Appendix A. TEDS-D Variable Information (Alphabetical Order)**

Variable	Label
AGE	AGE RECODE
ALCDRUG	SUBSTANCE ABUSE TYPE
ALCFLG	ALCOHOL MENTIONED
AMPHFLG	OTHER AMPHETAMINES MENTIONED
BARBFLG	BARBITURATES MENTIONED
BENZFLG	BENZODIAZEPINES MENTIONED
CASEID	CASE IDENTIFICATION NUMBER
CBSA	CBSA CODE
COKEFLG	COCAINE/CRACK MENTIONED
DAYWAIT	DAYS WAITING TO ENTER TREATMENT
DETCRIM	DETAILED CRIMINAL JUSTICE REFERRAL
DETNLF	DETAILED 'NOT IN LABOR FORCE' CATEGORY
DISYR DIS	YEAR OF DISCHARGE
DIVISION	CENSUS DIVISION
DSMCRIT	DSM DIAGNOSIS
EDUC MDS	EDUCATION
EMPLOY MDS	EMPLOYMENT STATUS
ETHNIC MDS	ETHNICITY (HISPANIC ORIGIN)

FREQ1 MDS	FREQUENCY OF USE (PRIMARY)
FREQ2 MDS	FREQUENCY OF USE (SECONDARY)
FREQ3 MDS	FREQUENCY OF USE (TERTIARY)
FRSTUSE1 MDS	AGE AT FIRST USE (PRIMARY)
FRSTUSE2 MDS	AGE AT FIRST USE (SECONDARY)
FRSTUSE3 MDS	AGE AT FIRST USE (TERTIARY)
GENDER MDS	GENDER
HALLFLG	HALLUCINOGENS MENTIONED
HERFLG	HEROIN MENTIONED
HLTHINS	HEALTH INSURANCE
IDU Added	CURRENT IV DRUG USE REPORTED AT ADM.
INHFLG	INHALANTS MENTIONED
LIVARAG	LIVING ARRANGEMENT
LOS DIS	LENGTH OF STAY
MARFLG	MARIJUANA/HASHISH MENTIONED
MARSTAT	MARITAL STATUS
METHFLG	NON-RX METHADONE MENTIONED
METHUSE MDS	USE OF METHADONE PLANNED
MTHAMFLG	METHAMPHETAMINE MENTIONED
NOPRIOR MDS	NUMBER OF PRIOR TREATMENT EPISODES

NUMSUBS	NUMBER OF SUBSTANCES MENTIONED
OPSYNFLG	OTHER OPIATES/SYNTHETICS MENTIONED
OTCFLG	OVER-THE-COUNTER MED MENTIONED
OTHERFLG	OTHER DRUG MENTIONED
PCPFLG	PCP MENTIONED
PMSA	MSA CODE
PREG SuDS	PREGNANT AT TIME OF ADMISSION
PRIMINC SuDS	SOURCE OF INCOME/SUPPORT
PRIMPAY SuDS	EXPECTED/ACTUAL SOURCE OF PAYMENT
PSOURCE MDS	PRINCIPAL SOURCE OF REFERRAL
PSYPROB SuDS	PSYCHIATRIC PROBLEM IN ADDITION TO ALCOHOL
RACE MDS	RACE
REASON DIS	REASON FOR DISCHARGE
REGION	CENSUS REGION
ROUTE1 MDS	USUAL ROUTE OF ADMINISTRATION (PRIMARY)
ROUTE2 MDS	USUAL ROUTE OF ADMINISTRATION (SECONDARY)
ROUTE3 MDS	USUAL ROUTE OF ADMINISTRATION (TERTIARY)
SEDHPFLG	OTHER SEDATIVES/HYPNOTICS MENTIONED
SERVSET DIS	SERVICE SETTING
STATE	TEDS STATE CODE

STFIPS	CENSUS STATE FIPS CODE
STIMFLG	OTHER STIMULANTS MENTIONED
SUB1 MDS	PRIMARY SUBSTANCE PROBLEM CODE
SUB2 MDS	SECONDARY SUBSTANCE PROBLEM CODE
SUB3 MDS	TERTIARY SUBSTANCE PROBLEM CODE
TRNQFLG	OTHER TRANQUILIZERS MENTIONED
VET SuDS	VETERAN STATUS

**Appendix B. States that Participated in TEDS-D**

Alaska	Louisiana	Oklahoma
Alabama	Massachusetts	Oregon
Arkansas	Maryland	Pennsylvania
Arizona	Maine	Puerto Rico
California	Michigan	Rhode Island
Colorado	Minnesota	South Carolina
Connecticut	Missouri	South Dakota
DC	Mississippi	Tennessee
Delaware	Montana	Texas
Florida	North Carolina	Utah
Georgia	North Dakota	Virginia
Hawaii	Nebraska	Vermont
Iowa	New Hampshire	Washington
Idaho	New Jersey	Wisconsin
Illinois	New Mexico	West Virginia
Indiana	Nevada	Wyoming
Kansas	New York	
Kentucky	Ohio	

## **Appendix C. Some of the Effects of Specific Drugs**

**Nicotine** is an addictive stimulant in cigarettes and other forms of tobacco.

Tobacco smoke increases a user's risk of cancer, emphysema, bronchial disorders and cardiovascular disease. The mortality rate associated with tobacco addiction is staggering. Tobacco use killed approximately 100 million people during the 20<sup>th</sup> century and, if current smoking trends continue, cumulative death toll for this century has been projected to reach one billion.

**Alcohol** consumption can damage the brain and most body organs. Areas of the brain that are especially vulnerable to alcohol-related damage are the cerebral cortex (largely responsible for our higher brain functions, including problem solving and decision-making), the hippocampus (important for memory and learning), and the cerebellum (important for movement coordination).

**Marijuana** is the most commonly abused illicit substance. This drug impairs short-term memory and learning, the ability to focus attention, and coordination. It also increases heart rate, can harm the lungs, and can cause psychosis in those at risk.

Inhalants are volatile substances in many household products, such as oven cleaners, gasoline, spray paints, and other aerosols, that induce mind-altering effects. Inhalants are extremely toxic and can damage the heart, kidneys, lungs, and brain within minutes of a single session of prolonged sniffing of an inhalant.

**Cocaine** is a short-acting stimulant, which can lead abusers to “binge” (to take the drug many times in a single session). Cocaine abuse can lead to severe medical consequences related to the heart, and the respiratory, nervous, and digestive systems.

Amphetamines, including methamphetamine, are powerful stimulants that can produce feelings of euphoria and alertness. Methamphetamines’ effects are particularly long lasting and harmful to the brain. Amphetamines can cause high body temperature and can lead to serious heart problems and seizures.

**Ecstasy (MDMA)** produces both stimulant and mind-altering effects. It can increase body temperature, heart rate, blood pressure, and heart wall stress. Ecstasy may also be toxic to nerve cells.

**LSD** is one of the most potent hallucinogenic, perception altering drugs. Its effects are unpredictable, and abuser may see vivid colors and images, hear sounds, and feel sensations that seem real but do not exist. Abusers also may have traumatic experiences and emotions that can last for many hours. Some short-term effects can include increased body temperature, heart rate, and blood pressure; sweating; loss of appetite; sleeplessness; dry mouth; and tremors.

Heroin is a powerful opiate drug that produces euphoria and feelings of relaxation. It slows respiration and can increase risk of serious infectious diseases, especially when taken intravenously. Other opioid drugs include morphine, OxyContin,



Vicodin, and Percodan, which have legitimate medical uses; however, their nonmedical use or abuse can result in the same harmful consequences as abusing heroin.

## Appendix D

### Data Definitions

#### *Type of Service*

Data are presented for each of eight different types of service (listed below). The first six service types exclude records where medication-assisted (i.e., with methadone or buprenorphine) opioid therapy or detoxification was planned as part of treatment; the other two service types include only medication-assisted opioid therapy or detoxification records:

- **Outpatient treatment**—Includes individual, family, and/or group services  
Intensive outpatient treatment—A minimum of 2 or more hours per day for 3 or more days per week.
- **Short-term residential treatment**—Typically, 30 days or fewer of non-acute care in a setting with treatment services for substance abuse and dependency.
- **Long-term residential treatment**—Typically, more than 30 days of non-acute care in a setting with treatment services for substance abuse and dependence; may include transitional living arrangements such as halfway houses.

- **Hospital residential treatment**—24-hour per day medical care in a hospital facility in conjunction with treatment services for substance abuse and dependence; excludes detoxification.
- **Detoxification**— Includes free-standing residential detoxification, hospital detoxification, and outpatient detoxification.
  - Free-standing residential detoxification—24-hour per day services in a non-hospital setting providing for safe withdrawal and transition to ongoing treatment.
  - **Hospital detoxification**—24-hour per day acute medical care services in a hospital setting for persons with severe medical complications associated with withdrawal.
  - **Outpatient detoxification**—Outpatient treatment services providing for safe withdrawal in an outpatient setting.
- **Outpatient medication-assisted opioid therapy**—Outpatient or intensive outpatient treatment services where medication-assisted therapy with methadone or buprenorphine was planned.
- **Medication-assisted opioid detoxification**—Detoxification services where medication-assisted therapy with methadone or buprenorphine was planned; includes outpatient detoxification, free-standing residential detoxification, and hospital detoxification , Medication-assisted opioid therapy discharges

from short- and long-term residential treatment and hospital residential treatment.

## Appendix E

### *Reason for Discharge*

The reasons for discharge from substance abuse treatment tabulated in this report include:

- Completed treatment—All parts of the treatment plan or program were completed.
- Transferred to another substance abuse program or facility, i.e., client was transferred to another service type within an episode of treatment; the client may or may not have reported to that program.
- Dropped out—Client chose not to complete the treatment program, with or without specific advice to continue treatment; includes clients who dropped out for unknown reason.
- Terminated by facility—Treatment was terminated by the action of the facility.
- Incarcerated—Treatment was terminated because the client was incarcerated (jail, prison, house confinement).
- Death.
- Other—Client left treatment for other specified reasons (e.g., changed residence or was hospitalized).

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<sup>i</sup> By unique experiences, many researchers have conceptualized “unique” by assessing the inequalities in society that have differentially had an effect on black women when compared to white women, black men, and white men.