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WOMEN'S INVOLVEMENT WITH 12-STEP GROUP
SUPPORT PROGRAMS: DOES ALCOHOL DIAGNOSIS
WITH AND WITHOUT COMORBID PSYCHOPATHOLOGY
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presented by

Deborah Jo Smith

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**WOMEN'S INVOLVMENT WITH 12-STEP GROUP SUPPORT PROGRAMS:
DOES ALCOHOL DIAGNOSIS WITH AND WITHOUT COMORBID
PSYCHOPATHOLOGY INFLUENCE REPORT OF PARTICIPATION**

By

Deborah Jo Smith

A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

DOCTOR OF PHILOSOPHY

Family Studies

2009

ABSTRACT

WOMEN'S INVOLVEMENT WITH 12-STEP GROUP SUPPORT PROGRAMS: DOES ALCOHOL DIAGNOSIS WITH AND WITHOUT COMORBID PSYCHOPATHOLOGY INFLUENCE REPORT OF PARTICIPATION

By

Deborah Jo Smith

This is an exploratory secondary data analysis of women who report having an alcohol diagnosis and attending 12-step group support from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). Twelve-step research literature has found that men who are white, over 35 years of age, with at least a high school education attend 12-step group support. They usually have severe drinking problems and commonly have comorbid psychopathologies like depression, anxiety and antisocial personality disorders. Whereas some women specific studies have suggested similar outcomes, an equally large body of 12-step literature is not available for women problem drinkers. A study of the women in the NESARC, who report having an alcohol diagnosis and going to 12-step group support, will add to the literature.

Methods: The research design included 575 women who responded yes or no to having attended 12-step group support at some time point. A series of binary logistic regressions were conducted. The first set of relationships explored was alcohol diagnoses and 12-step group support. Second, the psychopathologies of Major Depressive Disorder, Generalized Anxiety Disorder, Conduct Disorder and Antisocial Personality Disorder were added. Third, demographic variables were added.

Results: Women, like men who have more severe alcohol disorders attend 12-step group support more frequently than those women with less severe alcohol disorders.

Comorbid psychopathology did not mediate the relationship between alcohol diagnosis and 12-step group support. Women with antisocial personality disorders and severe alcohol disorders are more likely to attend 12-step group support than those without ASPD and less severe alcohol disorders. Race, age, education, income and number of children in the home did not moderate the relationship between alcohol diagnosis and 12-step group support. Relationship status did not moderate the relationship between alcohol diagnosis and 12-step group support, but there was an effect. Those women who were separated, divorced or widowed were more likely to attend 12-step group support than those who were married or never married.

DEDICATION

This Dissertation is dedicated to

My sons – Rob, Christian and Noah; the answers rest within you

Gary Christensen (posthumously), Brian Mullin and John Martin; true recovery warriors

Mary Sabaj and my students; your belief in me made this work possible

miigwetch

ACKNOWLEDGEMENTS

The Committee

Francisco A. Villarruel, Committee Chair

You lit a candle to guide me through this process and helped to find the answers from within.

Hiram E. Fitzgerald, Research Chair

I am deeply indebted to you for being willing to take me on as a student. I have learned what it means to be both a mentor and a scientist from you.

Ruben Parra Cardona, Anthony Nunez, Esther Onaga, Timothy Tansey, Committee

Over the years each one of you contributed greatly to my development as a teacher and scientist. Thank you, Dr. Parra Cardona for the independent study that helped me to operationalize my ideas. Thank you, Dr. Onaga for teaching me how to connect the structure of my ideas and to make clear the constructs of my design. Thank you, Dr. Nunez for providing insight into hard science perspectives. Thank you, Dr. Tansey for pushing me to build the skills I needed to grow as a teacher and mentor, bringing cutting edge science into the classroom.

The Family

Rob, Christian and Noah

Thank you for your patience with me as a mom over the past several years. You three sacrificed quite a bit in the name of your mom's schooling! I am hopeful to repay the debt now that it is done.

Grace

I am so glad that you picked me as your daughter. I think you worked as hard as I did through this process.

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CHAPTER I

INTRODUCTION TO THE STUDY

Statement of the Problem

Twelve step group support programs have played a significant role in alcohol and drug treatment in the US since it began with Alcoholics Anonymous (AA) in 1935. Over the years 12-step group support has been credited with assisting in the development of long-term sobriety trajectories for individuals who report 12-step affiliation (which means both attending meetings and engaging in 12-step related activities) (Humphreys et al., 2004; Laudet, Stanick, & Sands, 2007; Room, 1993; Tonigan, Connors, & Miller, 2003). There is a large body of research on 12-step group support and treatment programs that utilize 12-step group support. However, the majority of 12-step treatment studies conducted to date have used either predominantly or entirely male samples (Humphreys, 1999; Kaskutas, 2006; Mankowski, Humphreys, & Moos, 2001). The same holds true for 12-step studies. A meta-analysis of AA specific 12-step studies indicated that relatively few of the 74 articles had women participants (Tonigan, Toscova, & Miller, 1996). In 1993 Project Match tested the effectiveness of three treatment methods one of which was 12-step Facilitation Therapy (TSF). This was the largest alcohol treatment study to date and women made up less than 25% of the entire sample and made up less than 25% of the 12-step specific portion of the study (Project MATCH Research Group, 1997).

Characteristics of men who attend 12-step group support

Quite a bit is known about the characteristics of men who participate in 12-step group support in general and AA in particular (Humphreys, Kaskutas, & Weisner, 1998b;

Kaskutas et al., 2005; Kaskutas, Ye, Greenfield, Witbrodt, & Bond, 2008a; Mankowski, Humphreys, & Moos, 2001; Timko, DeBenedetti, & Billow, 2006; Tonigan, 2001; Tonigan, Toscova, & Miller, 1996). Male AA attendees have a high incidence of chronic alcoholism (Humphreys, Kaskutas, & Weisner, 1998b; Kaskutas, Ye, Greenfield, Witbrodt, & Bond, 2008a; Tonigan, Bogenschutz, & Miller, 2006). They have a high incidence of comorbid psychopathology (Bogenschutz, Geppert, & George, 2006; Humphreys, Mavis, & Stöffelmayr, 1991; McKay et al., 1998) and they tend to have a high incidence of socioeconomic problems (Caetano, 1997; Humphreys, Kaskutas, & Weisner, 1998b; Mankowski, Humphreys, & Moos, 2001; Timko, Billow, & DeBenedetti, 2006).

Women and 12-step group support

Similar bold statements about women and 12-step group were not supported by a comparably deep literature. There have been some important findings about women and AA. Women gain and maintain sobriety by affiliating with AA (Kaskutas et al., 2005; Laudet, Stanick, & Sands, 2007; Tonigan, 2001). In a small sample recruited partially from AA meetings, 72% of those with both an alcohol disorder and a comorbid psychiatric condition were sober at the one year follow up which was higher than the men in the sample (DisClafani, Finn, & Fein, 2007). Women with depression who attended AA were more likely than men to experience symptom relief within the first year of attendance (Moos, Moos, & Timko, 2006). Women who attended AA had greater economic resources than their male counterparts (Moos, Moos, & Timko, 2006) suggesting that for women a particular socioeconomic population may be attracted more frequently to meetings.

Women Problem drinkers

Despite the limited representation in the 12-step literature and Project Match, there have been significant findings regarding problem drinking women in the treatment and epidemiologic literature. Psychologically, mood and anxiety disorders were the two most frequently co-occurring disorders affecting problem drinking women (American Psychiatric Association, 1994; Beckman, 1994; Caetano, 2006; Grant et al., 2005; Kessler, Keller, & Wittchen, 2001; Kessler et al., 1994; Kessler et al., 1996; Moos, Moos, & Timko, 2006; Nolen-Hoeksema, 2002). Women with antisocial personality disorder (ASPD) are at greater risk than men for developing alcohol related disorders (Grant et al., 2004).

Knowledge about women problem drinkers has extended beyond the psychological findings. In one study women facing loneliness, loss of identity and financial hardship were at heightened risk of developing an alcohol disorder (Brennan, Schutte, & Moos, 1999). Older women were susceptible to stress relief drinking patterns; a phenomenon occurring after the loss of a relationship or a lifetime spent in unwanted singleness (Bowman & Gerber, 2006; Brennan, Schutte, & Moos, 1999; Epstein, Fischer-Elber, & Al-Otaiba, 2007; Gomberg, 1995; Gomberg, 1994). Women particularly those with children, tended to drink alone, to drink secretly and to avoid seeking help (Beckman, 1994; Gomberg & Nirenberg, 1993; McCrady & Miller, 1993). As important as the findings are there is no indication whether or not 12-step group support had an impact on the psychological symptoms or the demographic characteristics of these women.

Demographic Characteristics of 12-step Group Support

Alcoholics Anonymous Membership Survey showed that women and men over the last ten years have averaged between 33% and 35% for women and 67% to 65% for men. The survey data readily available to the public was aggregate level data and did not segregate by gender the characteristics of those who attended. Demographically, the majority of AA members were between the ages of 41 to 60 years (52.3%). They were 85% white, 16% retired with a full 20% in management, administration, professional or technology occupations. Most of those reporting membership in AA were married (35%) with the next largest group being those who reported being single (34%). Only 23% of the AA members were divorced and 8% made up a variety of 'other' relationships. Some who went to AA reported having comorbid emotional and or psychological problems as well as drinking problems. But the survey data did not specifically discuss alcohol diagnoses with or without comorbid psychopathology or how these may or may not have identified people in general and women in particular who attended AA (Alcoholics Anonymous World Services, 2008).

Limitations of Previous Research

In summary, there were significant findings about women problem drinkers in the treatment and epidemiologic literature. But, women are under-represented in the 12-step literature and 12-step specific findings about women are under-reported in the treatment and epidemiologic literature. These outcomes suggest that whereas women problem drinkers have been brought into the broader conversation about alcohol treatment, they are still quite absent from empirical studies of their involvement in 12-step programs with and without comorbid psychopathologies.

The Purposes of this study

This study will contribute to the women specific 12-step literature. Using data from the National Epidemiologic Survey of Alcohol and Related Conditions, Wave 1 (NESARC), the purposes of this study will be to first determine the strength and direction of the relationship between alcohol diagnosis and 12-step group support for women. The second purpose will be to determine if comorbid psychopathologies mediate the relationship between alcohol diagnosis and 12-step group support for women. The third purpose will be to determine if there are key demographic characteristics of women that moderate the relationship between alcohol diagnosis and 12-step group support. These purposes will be organized around the following questions.

Research Questions

1. Does alcohol diagnosis affect women's participation in 12-step group support?
2. Does comorbid psychopathology mediate the relationship between alcohol diagnosis and women's participation in 12-step group support programs?
3. Do key demographic variables moderate alcoholic women's participation in 12-step group support?

CHAPTER II

BACKGROUND OF THE STUDY

Introduction

Chapter II is divided into three sections: Definitions, Review of the Literature and The Present Study which presents the themes brought out by the literature review. The Definitions section will operationalize the major constructs that need interpretive clarification and will include 12-step group support, alcohol diagnosis, comorbid psychopathologies and socioeconomic status. The demographic characteristics of ethnoracial group, age, children in the home, personal income, education and relationship status are discussed in the methods section. The use of these terms will be consistent with the typical definitions used in U.S. based research. The Review of Literature will focus on what is known about the population that typically goes to 12-step group support; i.e. the level of alcohol severity, the presence of comorbid psychopathology and the demographic characteristics. The chapter will end with the themes brought out by this review of literature.

Definitions

12-step Group Support

Twelve-step group support is known under different names. The first of the 12-step group support programs was AA. AA was the consequence of two men, William Wilson and Dr. Robert Smith, whose fortuitous meeting in 1935 formed the foundation of the Alcoholics Anonymous support group (Alcoholics Anonymous World Services, 2001). They with other early adherents to this mutual support society drafted 12-steps that when followed in community with others, was professed to lead an individual to a

life of sobriety and abstinence from alcohol (Appendix A, The 12-steps of Alcoholics Anonymous). Narcotics Anonymous (NA) and Cocaine Anonymous (CA) followed. NA began with its first meetings in Los Angeles in the mid-1940's (Narcotics Anonymous World Services, 2004). It was patterned after the 12-steps of AA and some of its earliest members were those who had gone to AA initially but who wished to stay sober with others in recovery from narcotic addictions (Narcotics Anonymous World Services, 2004). CA started in Hollywood, California in 1982 and again owed its foundation to the 12-steps of AA (Cocaine Anonymous World Services, 2008). There were other 12-step group support programs like Marijuana Anonymous (Marijuana World Service, 2008) and most recently there has been an initiative to develop a 12-step support program for methamphetamine users (Donovan & Wells, 2007).

For the purposes of this study the all encompassing term 12-step group support will be used. The data were not split into separate group support programs but were lumped together under the heading of 12-step group support. Further, AA is by far "the most commonly sought form of help" with "a great deal of overlap between the (12-step support) groups (Miller & McCrady, 1993, p.4)."

Over the years, 12-step research has expanded the definition of 12-step affiliation. Early literature focused mainly on the number of meetings attended by the individual as a predictor of affiliation (Ogborne & Glaser, 1981; Tonigan, 2008). More recent research has found that there were other activities which define a person's affiliation with 12-step group support (Galanter & Kaskutas, 2008). The data available for this study did not allow the investigation of these more subtle conversations regarding people's specific investment in 12-step group support. There were no variables that measured adherence to

12-step principles, the acquisition of a sponsor in the program; nor were there any variables that measured the use of ancillary support materials or even provided the basic quantity of meetings attended.

Alcohol Diagnosis

The severity of peoples' drinking is determined by the behaviors manifested by the drinker over a given period of time. These behaviors are clustered together as symptoms that define either Alcohol Use Disorders or Alcohol Induced Disorders in a classification system known as the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association, 1994). For the purposes of this study only Alcohol Use Disorders and not the Alcohol Induced Disorders from the DSM-IV will be used. Alcohol Induced Disorders are reversible substance-specific syndromes which occur either by the recent ingestion of alcohol (intoxication) or the removal of alcohol (withdrawal). Alcohol Induced Disorders produce clinically significant maladaptive behavioral changes due to the effect of the alcohol on the body. Alcohol Use Disorders form maladaptive patterns of substance use that include and exceed the behaviors caused by the presence or removal of alcohol from the system. These patterns of behavior are evidenced over a 12-month period of time. DSM-IV Alcohol Abuse and Alcohol Dependence are the two levels and combined make up the entirety of Alcohol Use Disorders (American Psychiatric Association, 1994).

The DSM-IV base definition of alcohol abuse and alcohol dependence begins with the statement, "A maladaptive pattern of substance use leading to clinically significant impairment or distress (American Psychiatric Association, 1994, pp. 197, 199)." This maladaptive pattern of substance use must have been persistently present for

the 12 months preceding diagnosis. To be diagnosed with alcohol dependence the person must endorse at least three of the following behavioral symptoms including increased tolerance for alcohol, withdrawal symptoms when alcohol is no longer present, drinking in increasingly larger amounts or over a longer period of time, persistent desire to quit or cut back without success, spending a lot of time seeking out opportunities to drink, failure to meet important social, occupational or familial obligations or continued use of the substance despite knowledge that the use is problematic. To be diagnosed with alcohol abuse, the individual must endorse one of the following behavioral symptoms including recurrent use of alcohol resulting in failure to fulfill major role obligations at work, school, or home; recurrent use of alcohol in situations that could be dangerous; recurrent substance related legal problems or continued drinking regardless of persistent social or personal problems that are made worse by the use of alcohol.

Since the DSM-III (American Psychiatric Association, 1980) introduced the division of alcohol disorders into alcohol abuse and alcohol dependence, there have been multiple studies seeking to answer the question whether alcohol abuse was merely a milder form of alcohol dependence. For the most part the answer has been no (Grant & Dawson, 1997; Hasin, Van Rossem, McCloud, & Endicott, 1997; Hasin, Grant, & Endicott, 1990; Mojtabai & Singh, 2007; Schuckit et al., 1994; Schuckit, Smith, & Landi, 2000). While one small study reported that the absence of a lifetime alcohol abuse disorder was rare in cases of alcohol dependence diagnosed persons (Ridenour, Cottler, Compton, Spitznagel, & Cunningham-Williams, 2003), other larger population studies have been consistent in their reports that alcohol abuse and alcohol dependence were separate diagnoses, that alcohol abuse did not necessarily develop into alcohol

dependence and most importantly that alcohol dependence may exist without any presentation of alcohol abuse (Hasin & Grant, 2004).

An individual may manifest symptoms consistent with alcohol abuse during one time period and may also manifest symptoms consistent with alcohol dependence at another time period. These diagnoses are not lifetime, are not co-dependent, hierarchical or mutually exclusive. It is possible to be diagnosed alcohol dependent in an earlier time period and subsequently be diagnosed with alcohol abuse. Thus, the diagnoses are not hierarchical, i.e. a person does not need to first be diagnosed with alcohol abuse and then later in time be diagnosed with alcohol dependence (Smith, 2005).

In essence, to be diagnosed alcohol dependent the person must meet physical dependence, increased quantities to achieve the same effect and or withdrawal symptoms when the alcohol is removed. Alcohol abuse requires some form of social, occupational or emotional impairment without the physical addiction required for alcohol dependence (American Psychiatric Association, 1994). Having both alcohol abuse and dependence over the life span is more severe because it suggests that the drinker has experienced the negative physical consequences of alcohol use as well as the social, occupational or emotional negative consequences of alcohol use.

Comorbidity psychopathology

Comorbidity is the term used in epidemiology to describe the existence of more than one disorder occurring together. There are three sub-definitions to comorbidity; true comorbidity, artifactual comorbidity and spurious comorbidity (First, 2005). True comorbidity is the appearance together of more than one clinically distinct disorder (First, 2005). First defines artifactual comorbidity as a disorder that is split based on a

convention that amongst other options, divides a disorder into separate categories that by definition differ based on some element of the disorder. For example, alcohol abuse and alcohol dependence are part of the larger grouping of alcohol use disorders under the category label of Substance-Related disorders (American Psychiatric Association, 1994). Alcohol abuse and alcohol dependence are artifactually comorbid because, according to First, they may both appear together but are two separate disorders that are intrinsically related holding in common many of the same elements but differing in important ways (First, 2005). Spurious comorbidity is the appearance of a disorder that is actually a symptom of another disorder. For example, the appearances of symptoms consistent with Generalized Anxiety Disorder which actually are a byproduct of an alcohol use disorder and not authentically the symptoms of Generalized Anxiety Disorder. True comorbidity is also known as Independent Comorbidity (Grant et al., 2004). In this, two or more authentically different disorders co-occur, each having their own pattern of onset and course of development. An example of Independent Comorbidity would be the appearance of ASPD and alcohol dependence.

Psychopathologies are behaviors clustered together as symptoms that define a variety of disorders that are classified as a Mood Disorder, Anxiety Disorder, Disorders Diagnosed in Infancy, Childhood or Adolescence or Personality Disorder (American Psychiatric Association, 1994). Major Depressive Disorder is a Mood Disorder, Generalized Anxiety Disorder is under Anxiety Disorder, Conduct Disorder is a disorder diagnosed prior to the age of 18 years and ASPD is a lifelong personality disorder diagnosed in adulthood. These four disorders are often associated with the early onset of alcohol use or found co-occurring with alcohol use disorders (American Psychiatric

Association, 1994). Additional information about the onset and course these disorders may be found in Appendix B.

Socioeconomic Status

According to the National Center for Educational Statistics (2008), “Socioeconomic status is a measure of an individual or family’s relative economic and social ranking.” An individual’s or family’s social ranking is established in sociological literature through a combination of individual or family income, education, occupation and gender (American Psychological Association Task Force on Socioeconomic Status, 2007; Berns, 2007; Gilbert, 1998; Hollingshead, 1975; Kahl, 1957).

The most widely used socioeconomic construct is the Hollingshead “Four Factor Index of Social Status” which was the outgrowth of an earlier two factor model (Hollingshead, 1975). In the four factor model gender, marital status, occupation and education expanded the original model of paternal occupation and education only. In making decisions about socioeconomic status, Hollingshead recognized that his earlier construct was limiting in that it only focused on men as head of household and men’s income in determining socioeconomic status. The addition of gender and marital status allowed two income households and single women heads of households to be analyzed along with men heads of households and one income married households.

The four factor index measured education on a scale from 1 to 7 with 1 being equal to or less than a seventh-grade education and 7 being at least some graduate school training. Occupation was scored on a scale from 1 to 9 with 1 being equal to menial service workers and unskilled laborers and 9 being equal to executive or professional positions. Occupation and education were given factor weights which were calculated

according to Hollingshead, “by the use of multiple regression equations (Hollingshead, 1975, p. Reference 2).” Further definitions of the regression analysis process used by Hollingshead were not available. As a result of his regression analyses, occupation scores were multiplied by a weight of 5 and education scores were multiplied by a weight of 3. The resulting scores were added together making a composite score ranging from 8 to 66 points. A person with a high score was said to be in a higher socioeconomic class than a person with a low score.

Review of the Literature

Alcohol severity and 12-step group support

It was consistently reported in the treatment literature that higher alcohol severity predicts 12-step group attendance (Humphreys, Kaskutas, & Weisner, 1998b; Humphreys, Mavis, & Stöffelmayr, 1991; Zembre, Mulia, & Ye, 2008). Humphreys, Mavis and Stöffelmayr (1991) found that men and women alike who went to 12-step group support were significantly more likely to have severe alcohol problems. Humphreys, Kaskutas and Weisner (1998) reported that 82.8% of those entering treatment, who had a higher prior knowledge of 12-step group support, had more severe alcohol problems than those who had lower histories of prior 12-step group support. Zembre, Mulia and Ye (2008) reported that having more severe alcohol disorders was a strong predictor of 12-step participation. In summary, treatment research found that people in general and men in particular, who reported histories of 12-step affiliation, were more severe alcoholics.

Alcohol treatment modalities and 12-step group support

Alcoholics are a heterogeneous group; consequently there is no single form of

treatment that consistently works with everyone (Marlatt, 1999; McCrady & Miller, 1993; Project MATCH Research Group, 1996, 1997, 1998a, 1998b, 1998c). However, most treatment programs in the US (63% to 90% depending on the study) report a high correlation between alcohol treatment and 12-step group support participation. Patients come into treatment having some history of 12-step attendance or treatment facilities use 12-step group support as an aftercare plan (Emrick, Tonigan, Montgomery, & Little, 1993; Humphreys, Kaskutas, & Weisner, 1998b; Kaskutas, Bond, & Ammon, 2008; Tonigan, Toscova, & Miller, 1996; Weisner, Greenfield, & Room, 1995).

Comorbid psychopathologies, alcohol disorders and 12-step group support

There were only a few articles in the 12-step literature thoroughly discussing comorbid psychopathologies combined with alcohol disorders (Bogenschutz, Geppert, & George, 2006; Humphreys, 1997; Humphreys, Mavis, & Stöffelmayr, 1991; Kelly, McKellar, & Moos, 2003; McKay et al., 1998). Bogenschutz, Geppert and George (2006) reported that those who had non-psychotic mental health disorders along with alcohol disorders had improved days of abstinence if they were affiliated with 12-step group support. Humphreys, Mavis and Stöffelmayr (1991) found a significant correlation between psychological problems co-occurring with substance use problems. And those who attended 12-step group support had significantly more psychological problems than non-12-step group attendees. McKay, et al (1998) in a study of 138 people did not find significant correlations between comorbid psychopathologies and alcohol disorders in those who reported 12-step group support attendance. This study did find that Major Depressive Disorder was positively correlated with aftercare participation, but not specifically 12-step group support as the aftercare modality. Kelly,

McKellar and Moos (2003) found in a VA population that despite their exposure to AA that those with Major Depressive Disorder and an alcohol disorder reported less actual involvement with 12-step program components. Humphreys (1997) found in a VA sample that those with psychiatric problems may have been less successful in affiliating with 12-step group support because of the prejudice of the non-psychiatric 12-step affiliates. He cited the 'total abstinence' philosophy in 12-step groups as a barrier to the medication-taking psychiatric population's participation. It is for this reason that referral to 12-step group support was not included in the substance abuse guidelines for those with comorbid disorders (American Psychiatric Association, 1995). There were no studies found of individuals who had more than one comorbid psychopathology co-occurring with an alcohol use disorder in the treatment of 12-step literature.

Demographics of 12-step group support

Several studies discussed characteristics of people in general and men in particular who attended 12-step group support with only minimal report of women specific characteristics (Humphreys, Kaskutas, & Weisner, 1998b; Kaskutas, Ye, Greenfield, Witbrodt, & Bond, 2008a; Laudet, Stanick, & Sands, 2007; Mankowski, Humphreys, & Moos, 2001; Moos & Moos, 2006; Ogborne & Glaser, 1981; Timko, DeBenedetti, & Billow, 2006; Tonigan, Toscova, & Miller, 1996). Tonigan, Toscova and Miller's (1996) meta-analysis of 74 empirical AA studies found that of the 74 studies, 40 studies reported total sample age means of 42.5 years. Only two studies reported the age of women AA attendees and in those two reports the mean age was 40.5 years. In 59 studies the mean sample size for men was $N=262.53$ ($SD\ 467.96$), while in 57 studies the mean sample size for women was $N=34.67$ ($SD\ 63.66$). In three-quarters

of the studies no report of socioeconomic status was given for men, women or both. Humphreys, Kaskutas and Weisner (1998) found that 82.8% of the individuals seeking treatment had prior affiliation with 12-step group support. Further, two-thirds were male, the average age was 38.7 years, they were divorced or separated and had problems with stable employment leading to reports of low income. Kaskutas, Ye, Greenfield, Witbrodt and Bond (2008) reported that the Alcoholics Anonymous Membership Survey from 2004 reported that 90% of the AA membership was 31 years of age or older and was 89% white. There was a fairly even split of married, never married and previously married people attending meetings. The sample used in the Timko, DeBenedetti and Billow (1996) study was 98% male, 43% white and only 13% of these sample participants were married. They did report that the sample was older, averaging above 50 years and having at least 13 years of formal education. The Mankowski, Humphreys and Moos (2001) study reported similar demographics, i.e. predominately white, male and higher educational attainment. Moos and Moos (2006) in a 16 year follow up study reported that 80% of the sample participants were white and 55.7% were unemployed. This population entered the study in their mid-30s and had at least 13 years of formal education at baseline. An older review by Ogborne and Glaser (1981) found that the socioeconomic status of 12-step group support affiliates was more socially stable and fell within the middle- and upper socioeconomic classes.

Humphreys, Mavis and Stöffelmayr (1991) found that having predominately white male samples in 12-step studies is the result of selection bias. They found that women and blacks were equally likely as men to affiliate with 12-step group support in certain demographic areas. Having mostly white male study participants was due to

participant selection bias. On balance, their report did not say that there were more women and blacks than white males attending 12-step group support only that it was just as likely for these two populations to participate in certain geographic areas.

The relationship status of men and women combined who reported attendance in 12-step group support programs varied widely (Alcoholics Anonymous World Services, 2008 ; Groh, Jason, & Keys, 2008; Moos & Moos, 2006). Groh, Jason and Keys (2008) review of social networks in the AA specific 12-step literature found that in the few studies where women were the majority of the sample those women were predominately married. Whereas the studies with predominately male samples, there was an even split between married, like married or never married/single. Moos and Moos (2006) found that 76.4% of their sample at the 16 year follow up was unmarried and evenly divided between female and male respondents.

Limitations of Previous Research

Women were not strongly represented in empirical 12-step studies. Yet treatment and epidemiologic research has a large body of literature that has focused on the problems of women who drink. For example, the prevalence rate of alcohol diagnosed women with a comorbid psychopathology has been well documented. But, the presence of this topic is minimal in the 12-step literature. When women are discussed in 12-step literature, they tend to be white, age 35 years or older with at least a high school education; are in the upper socioeconomic classes and are fairly evenly split between married and not married. Treatment literature shows a more even balance of ethnoracial groups, age ranges, educational levels and socioeconomic categories. The makeup of the family including the children of women problem drinkers was discussed in the treatment

literature with emphasis on the barriers to seeking treatment for women with children.

Yet, this important topic was not mentioned in the 12-step literature reviewed.

The Present Study

Themes that emerged

There were three general themes suggested by this literature review that parallel the research questions presented at the end of Chapter 1. First, studies of problem drinkers found that 12-step group support programs attract and were successful with alcohol diagnosed individuals and individuals who go to 12-step group support have more severe alcohol problems. Second, even though people with comorbid psychopathologies were not routinely recommended to 12-step programs, those who did go, especially if they were women benefitted. The third theme that emerged from the literature was that even though alcohol disorders were heterogeneous by nature, there may be some homogeneity in the population of individuals who go to 12-step group support. But, the homogeneity could be the result of sample selection bias.

CHAPTER III

METHODS

Introduction

Chapter III begins with a restatement of the research questions from Chapter 1 and the themes presented after the literature review in Chapter II, followed by the hypotheses that organize the tests to be conducted. The research design comes next followed by a thorough discussion of the NESARC data set and the steps used to prepare the data. The chapter ends with a chart of the prepared data set for the analyses with cell sizes per category of participation provided.

Analysis Plan

Themes, questions and hypotheses

Question 1: Theme one stated that, studies of problem drinkers found that 12-step group support programs attracted and were successful with alcohol diagnosed individuals and individuals who go to 12-step group support have severe alcohol problems. Out of this, research question one asks, “Does alcohol diagnosis affect women’s participation in 12-step support group programs?” There are two hypotheses that will test this question.

H1o: Alcohol diagnosis will not be significantly related to 12-step group support.

H1a: Alcohol diagnosis will have a significant and positive relationship to 12-step group support (Figure 1).

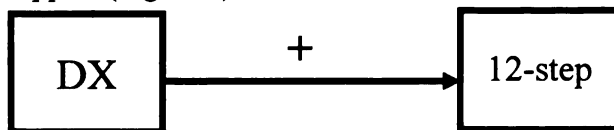


Figure 1. H1a Alcohol diagnosis (Dx) to 12-step group support (12-step)

H1b: Women who have a more severe history of both alcohol abuse and dependence will be significantly more likely to report attending 12-step group support than women without a severe alcohol disorder (Figure 2).

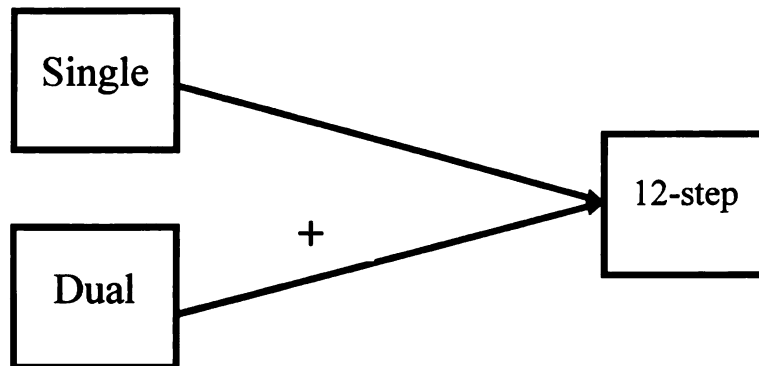


Figure 2 H1b Abuse or dependence (Single) and Abuse and Dependence (Dual) to 12-step Group Support (12-step)

Question 2: Theme two states that even though people with a comorbid psychopathology were not routinely recommended to 12-step programs, those who did go, especially if they were women benefitted. Out of this, research question two asks, “Does comorbid psychopathology mediate the relationship between alcoholism diagnosis and women’s participation in 12-step support group programs?” There are four hypotheses to be tested related to question two.

H2o: Having a comorbid psychopathology does not mediate women’s relationship between alcohol diagnosis and 12-step group support.

H2a: Having a comorbid psychopathology will mediate women’s relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 3).

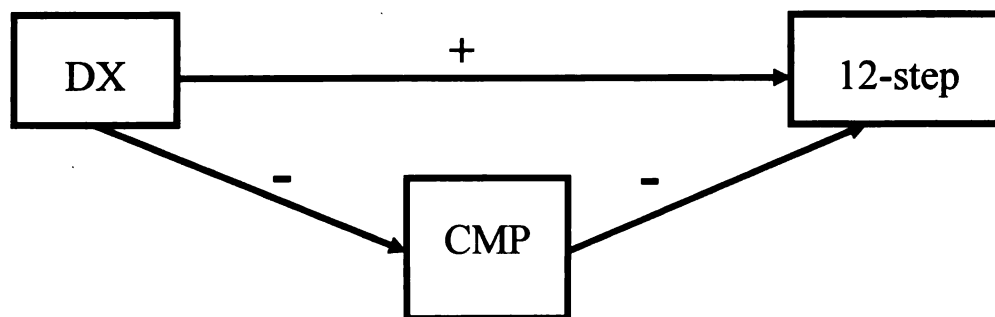


Figure 3 Comorbid psychopathology (CMP) mediating relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

H2b1: Having Major Depressive Disorder¹ will mediate the relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 4).

H2b2: Having both Major Depressive Disorder and Generalized Anxiety Disorder² will mediate the relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 4).

H2b3: Having ASPD³ will mediate the relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 4).

H2b4: Having ASPD and Major Depressive Disorder⁴ will mediate the relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 4).

H2fb5: Having ASPD with a history of Major Depressive Disorder and Generalized Anxiety Disorder⁵ will mediate the relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 4).

¹ MDD had sufficient N to make analysis meaningful, see Appendix C, Table C10 for specific cell count of all psychopathologies

² Ibid

³ Ibid

⁴ Ibid

⁵ Ibid

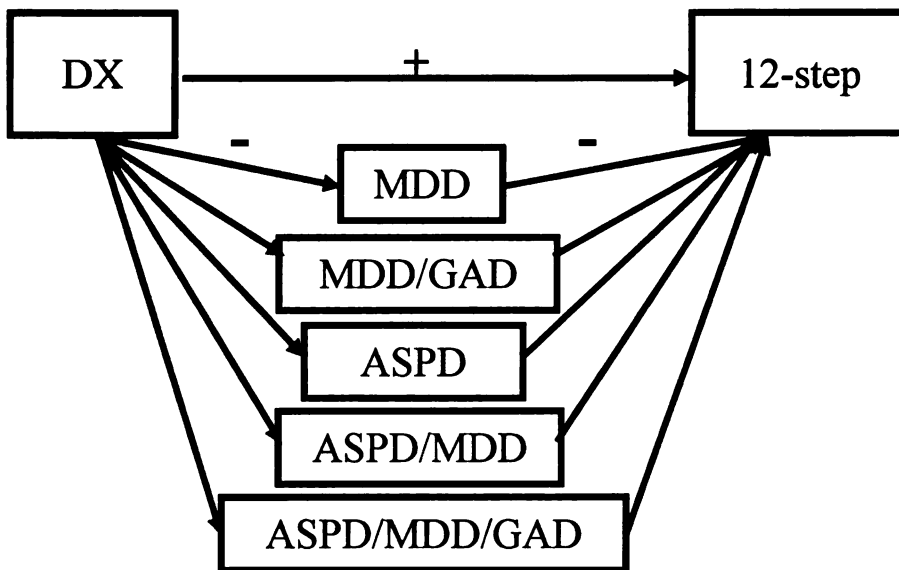


Figure 4 MDD, MDD/GAD, ASPD, ASPD/MDD and ASPD/MDD/GAD mediating the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)
 MDD= Major Depressive Disorder
 MDD/GAD= Major Depressive Disorder and Generalized Anxiety Disorder
 ASPD= Antisocial Personality Disorder
 ASPD/MDD= Antisocial Personality Disorder with Major Depressive Disorder
 ASPD/MDD/GAD= Antisocial Personality Disorder with Major Depressive Disorder and Generalized Anxiety Disorder

H2c: Having a comorbid psychopathology will mediate women's relationship between alcohol abuse and dependence and 12-step group support and the direction will be negative (Figure 5).

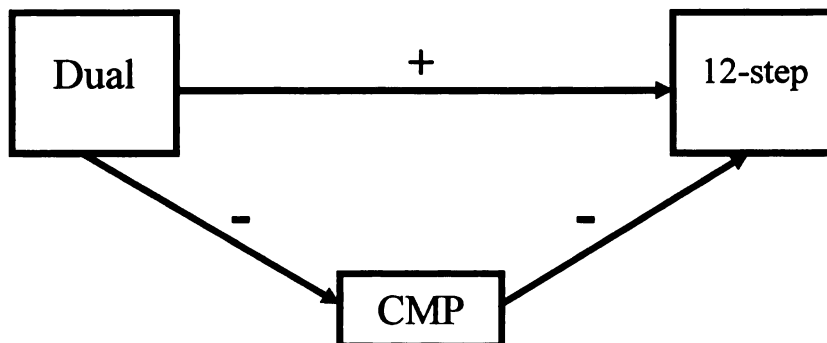


Figure 5 Comorbid psychopathology (CMP) mediating relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

H2d1: Having Major Depressive Disorder will mediate the relationship between alcohol abuse and dependence and 12-step group support and the direction will be negative (Figure 6).

H2d2: Having both Major Depressive Disorder and Generalized Anxiety Disorder will mediate the relationship between alcohol abuse and dependence and 12-step group support and the direction will be negative (Figure 6).

H2d3: Having ASPD will mediate the relationship between alcohol abuse and dependence and 12-step group support and the direction will be negative (Figure 6).

H2d4: Having ASPD and Major Depressive Disorder will mediate the relationship between alcohol abuse and dependence and 12-step group support and the direction will be negative (Figure 6).

H2d5: Having ASPD with Major Depressive Disorder and Generalized Anxiety Disorder will mediate the relationship between alcohol abuse and dependence and 12-step group support and the direction will be negative (Figure 6).

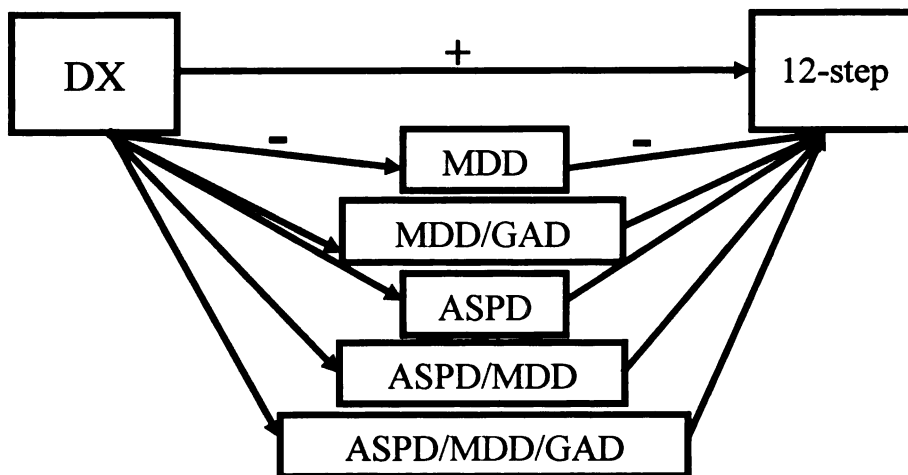


Figure 6 MDD, MDD/GAD, ASPD, ASPD/MDD and ASPD/MDD/GAD mediating the relationship between alcohol abuse & dependence (Dual) and 12-step group support (12-step)

MDD= Major Depressive Disorder

MDD/GAD= Major Depressive Disorder and Generalized Anxiety Disorder

ASPD= Antisocial Personality Disorder

ASPD/MDD= Antisocial Personality Disorder with Major Depressive Disorder

ASPD/MDD/GAD= Antisocial Personality Disorder with Major Depressive Disorder and Generalized Anxiety Disorder

Question 3: Theme three states that there may be some homogeneity in the population of individuals who go to 12-step group support. But, the apparent homogeneity could be the result of sample selection bias. Out of this, research question 3 asks, “Do key demographic variables moderate alcoholic women’s participation in 12-step support group programs?” There are four hypotheses that will test two demographic clusters; there are six hypotheses that will test socioeconomic status and four hypotheses that will test the presence or absence of children in the home.

The first demographic cluster to be analyzed will be women who are white, age 35 years of age or older, with at least a high school education who are married. The ethnoracial group white was chosen based on the results of the literature review which consistently reported that those who were white were more common 12-step attendees (Alcoholics Anonymous World Services, 2008; Humphreys, Kaskutas, & Weisner, 1998a; Mankowski, Humphreys, & Moos, 2001; Moos & Moos, 2006; Timko, Finney, Moos, & Moos, 1995) and 65.6% of the NESARC subset was white. The age of 35 years was set for the study. Most of the literature reviewed found the average age of those going to 12-step group support to be 40 and above. Timko (1995) was higher with the average age being 50 years in his study and the Alcoholics Anonymous Membership Survey had the average age set to 41 years. The NESARC subset had a higher mean age of 42.7 years. However, the lower number of 35 years was chosen to reflect the lower age reported by some in the literature. The educational level was set at high school completion, its equivalent or more schooling based on the literature review that showed most 12-step attendees have at least a high school education (Alcoholics Anonymous World Services, 2008; Mankowski, Humphreys, & Moos, 2001; Moos & Moos, 2006;

Timko, Finney, Moos, & Moos, 1995). The average education for these data was only slightly higher than high school completion or the equivalent. The relationship status was set to married. Groh (2008) reported that women were mostly married in his study. Most of the other studies have a fairly even split between married, previously married and never married. Also, women in these data that matched the characteristics of being white, being age 35 years or older with at least a high school education were mostly married (Appendix E, Table E1).

H30₁: Being white, 35 years of age or older, with at least a high school education or better and married will not moderate the relationship between alcohol diagnosis and 12-step group support.

H3a₁: Demographic Cluster 1 meaning being white, 35 years of age or older, with at least a high school education or better and married will moderate the relationship between alcohol diagnosis and 12-step group support in a positive direction (Figure 7).

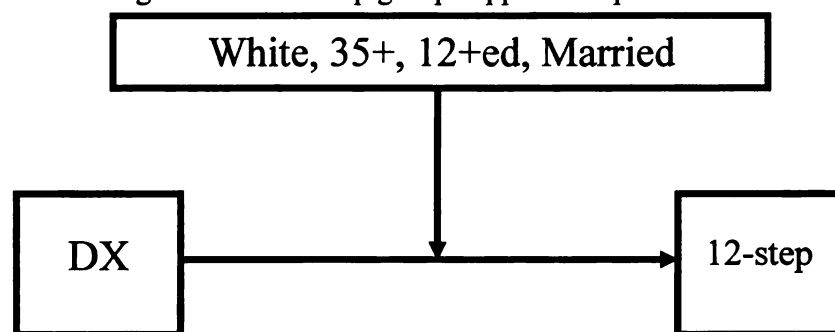


Figure 7 Demographic Cluster 1 moderating the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

White= ethnoracial group white

35+= Age 35 years or older

12+ed= High school completion, equivalent or greater education

The second demographic cluster to be tested included those women who were other- than-white, under the age of 35 years with less than a high school education who were previously married. These were the inverse of Demographic Cluster 1 and were

tested based on the concern raised by Humphreys (1997) regarding sample selection bias. The NESARC was a national survey with strict randomization protocols. It was not a treatment sample. If Humphrey's idea of sample selection bias prevailed, it would be just as likely for Demographic Cluster 2 to moderate the relationship between alcohol diagnosis and 12-step group support as it would be for Demographic Cluster 1 to moderate this relationship.

H3b₁: Demographic Cluster 2 meaning being other-than-white, under the age of 35 years with less than a high school education and previously married moderated the relationship between alcohol diagnosis and 12-step group support in a negative direction (Figure 8).

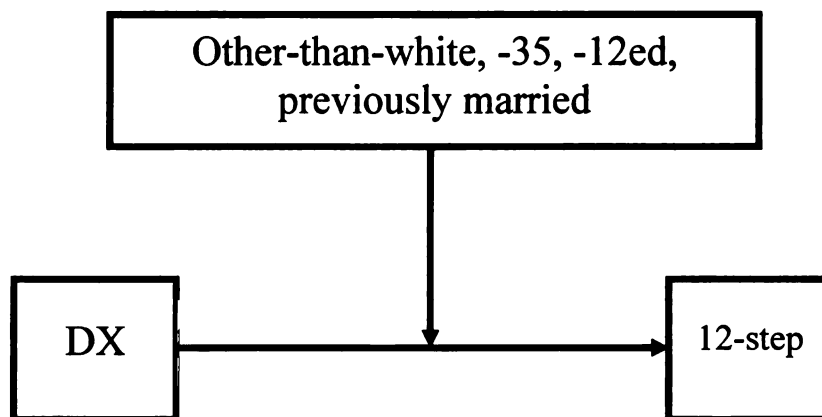


Figure 8 Demographic Cluster 2 moderating the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

Other-than-white= ethnoracial group that includes black, Hispanic, Native American Indian, Alaskan Inuit, Asian, Pacific Islander

-35= Age less than 35 years

-12ed= Less than high school completion or equivalent

A premise of this study is that the more severe alcohol abuse and dependent women will go to 12-step group support. Because of this, the Demographic Cluster 1 and 2 will be retested using the more severe alcohol abuse and dependence variable.

H3a₁: Demographic Cluster 1 meaning being white, 35 years of age or older, with at least a high school education or better and married will moderate the relationship between

alcohol abuse and dependence and 12-step group support in a positive direction (Figure 9).

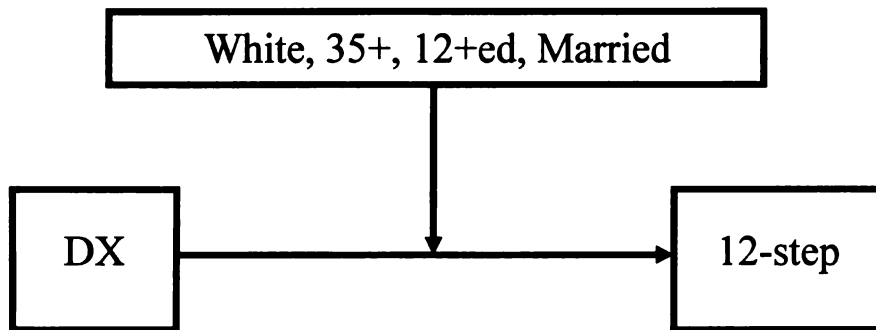


Figure 9 Demographic Cluster 1 moderating the relationship between alcohol abuse and dependence diagnosis (Dual) and 12-step group support (12-step)
White= ethnoracial group white 35+= Age 35 years or older
12+ed= High school completion, equivalent or greater education

For the same reason given previously, the more severe alcohol abuse and dependent women will be tested with Demographic Cluster 2 as moderator.

H3b₁: Demographic Cluster 2 meaning being other-than-white, under the age of 35 years with less than a high school education and not married moderated the relationship between alcohol abuse and dependence and 12-step group support in a negative direction (Figure 10).

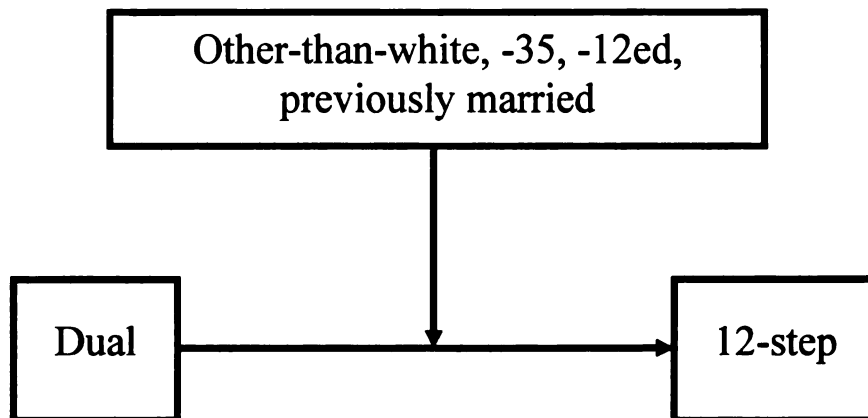


Figure 10 Demographic Cluster 2 moderating the relationship between alcohol abuse and dependence (Dual) and 12-step group support (12-step)
Other-than-white= ethnoracial group that includes black, Hispanic, Native American Indian, Alaskan Inuit, Asian, Pacific Islander
-35= Age less than 35 years -12ed= Less than high school completion or equivalent

Based on the outcomes of the literature, many of the women who go to 12-step group support have economic resources (Moos, Moos, & Timko, 2006). It would be expected that women in the upper socioeconomic categories would be more likely to attend 12-step group support compared to other socioeconomic classes. By the same measure, those in the mid and lower socioeconomic ranges would be less likely to go to 12-step group support.

H30₂: The socioeconomic status of women will not moderate the relationship between alcohol diagnosis and 12-step group support.

H3a₂: Women in the upper socioeconomic classes will moderate in a positive direction the relationship between alcohol diagnosis and 12-step group support and the direction will be positive (Figure 11).

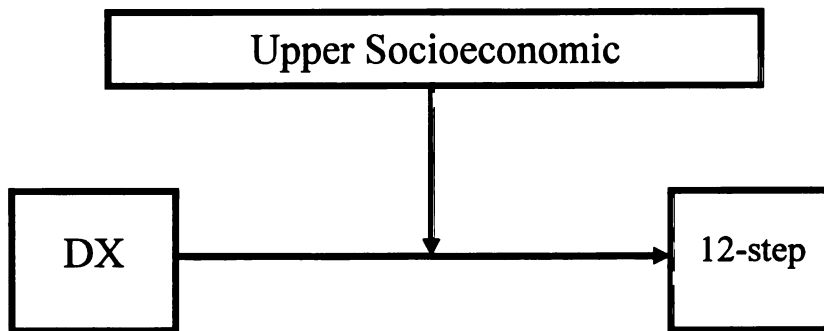


Figure 11 Upper socioeconomic classes (Upper socioeconomic) positively moderates the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

H3b₂: Women in the lower socioeconomic classes will moderate the relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 12).

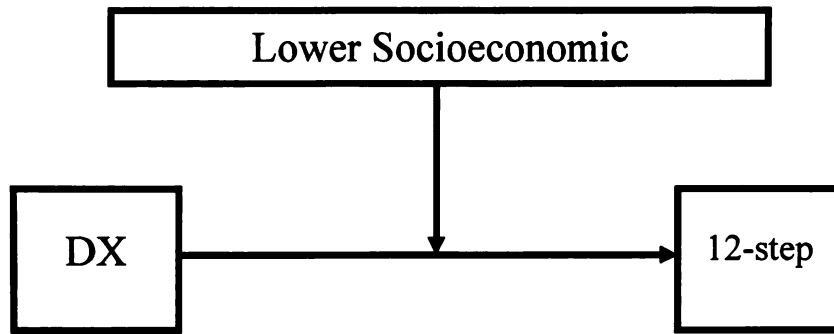


Figure 12 Lower socioeconomic classes (Lower socioeconomic) negatively moderate the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

H3c₂: Women in the middle socioeconomic class will moderate the relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 13).

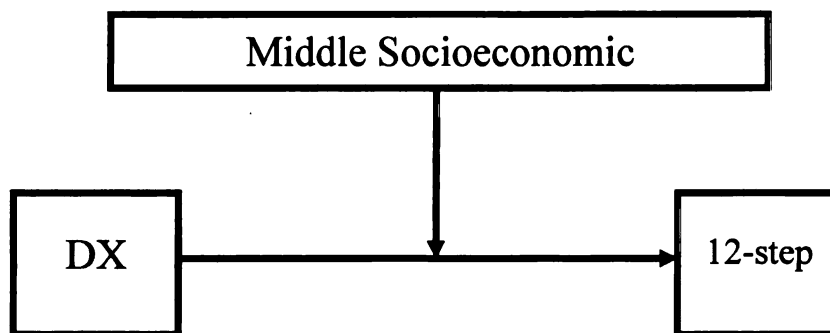


Figure 13 Middle socioeconomic class (Middle socioeconomic) moderating the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

Women with the more severe alcohol abuse and dependence disorder may have more socioeconomic problems. But, the literature reports that those with more severe alcohol problems go to 12-step group support and have more economic resources. The next three hypotheses will retest the moderating effect of socioeconomic status with the more severe alcohol abuse and dependence disorder.

H3d₂: Women in the upper socioeconomic classes will moderate in a positive direction the relationship between alcohol abuse and dependence diagnosis and 12-step group support and the direction will be positive (Figure 14).

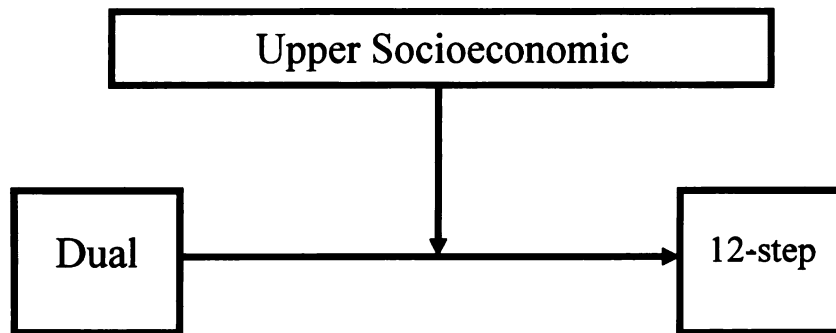


Figure 14 Upper socioeconomic classes (Upper socioeconomic) positively moderates the relationship between alcohol abuse and dependence (Dual) and 12-step group support (12-step)

H3e₂: Women in the lower socioeconomic classes will moderate the relationship between alcohol abuse and dependence and 12-step group support and the direction will be negative (Figure 15).

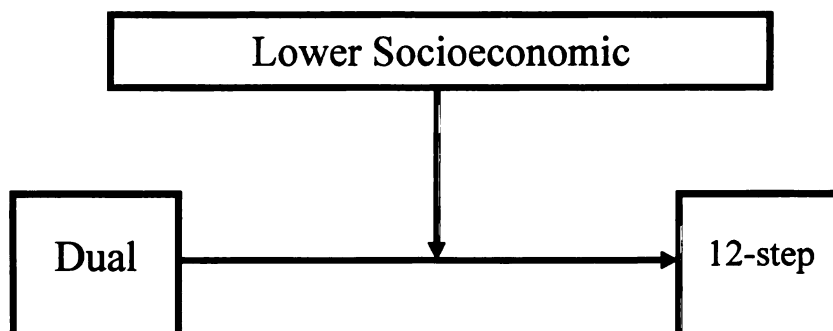


Figure 15 Lower socioeconomic classes (Lower socioeconomic) negatively moderate the relationship between alcohol abuse and dependence (Dual) and 12-step group support (12-step)

H3f₂: Women in the middle socioeconomic class will moderate the relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 16).

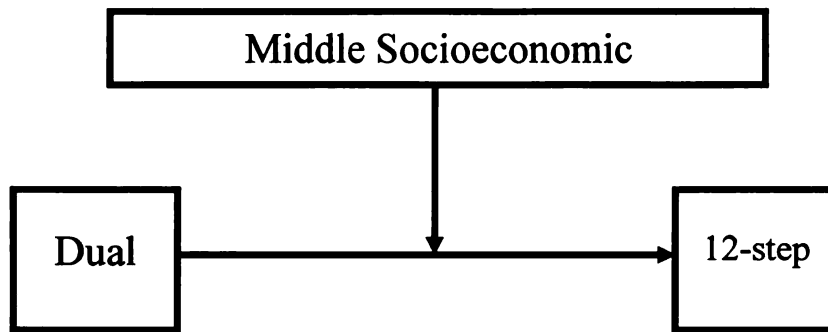


Figure 16 Middle socioeconomic class (Middle socioeconomic) moderating the relationship between alcohol abuse and dependence (Dual) and 12-step group support (12-step)

There was no information found regarding women with children who go to 12-step group support. For this reason, the last demographic characteristic to be tested will deal with women drinkers who have children in the home. Through a series of four tests, women with children absent who have an alcohol diagnosis, women with children present who have an alcohol diagnosis, women who have children absent who have the more severe alcohol abuse and dependence and women who have children present in the home who have the more severe alcohol abuse and dependence will be analyzed.

H30₃: Having children will not moderate the relationship between alcohol diagnosis and 12-step group support.

H3a₃: Having children will moderate the relationship between alcohol diagnosis and 12-step group support and the direction will be negative (Figure 17).

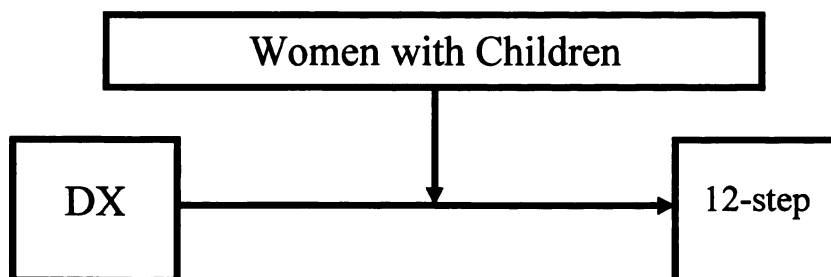


Figure 17 Women with children moderating relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

H3b₃: Women without children will moderate the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step) and the direction will be positive (Figure 18).

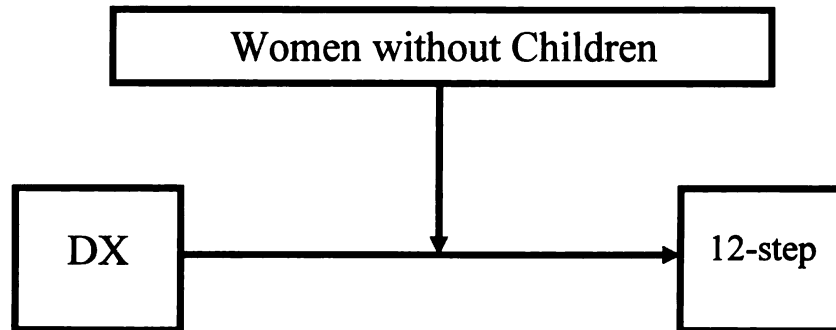


Figure 18 Women without children moderating relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

H3c₃: Having children will moderate the relationship between alcohol abuse and dependence (Dual) and 12-step group support (12-step) in a negative direction (Figure 19).

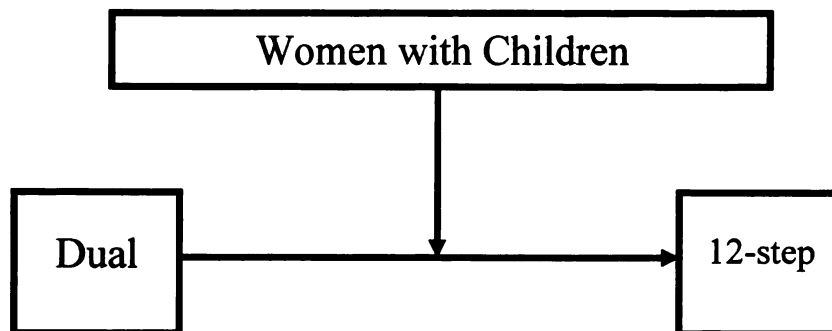


Figure 19 Women with children moderating relationship between alcohol abuse and dependence (Dual) and 12-step group support (12-step)

H3d₃: Women without children will moderate the relationship in a positive direction the relationship between alcohol diagnosis and 12-step group support (Figure 20).

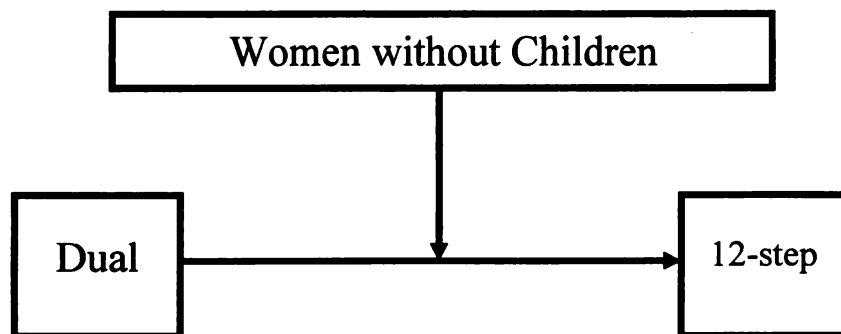


Figure 20 Women without children moderating relationship between alcohol abuse and dependence (Dual) and 12-step group support (12-step)

Research design

This is an exploratory secondary data analysis of a subset of women taken from the NESARC. Through a series of binary logistic regressions the analyses will investigate the research questions: 1. Does alcohol diagnosis affect women's participation in 12-step support group programs? 2. Does comorbid psychopathology mediate the relationship between alcoholism diagnosis and women's participation in 12-step support group programs? 3. Do key demographic variables moderate alcoholic women's participation in 12-step support group programs? Because this is an exploratory study the P value will be set to $p \leq .10$. Each analysis will include a report of the ratios with confidence intervals to determine if the results of the binary logistic regressions have meaning.

NESARC Wave 1 Data

Background

The subjects for this study are a subset of the larger NESARC Wave I. The NESARC was designed as a nationally representative longitudinal survey with its first wave of interviews occurring between 2001 and 2002. The NESARC Wave 1 is the first data set in a series of which two waves are currently available. Wave 1 collected

responses using computer assisted personal interviewing (CAPI) in the U.S. on questions about alcohol use, alcohol experiences, demographic characteristics, treatment utilization, other drug use and comorbid psychiatric conditions. Sponsored by the U.S. Department of Health and Human Services, National Institute of Health, National Institute of Alcohol Abuse and Alcoholism, the survey was designed to measure the “magnitude of alcohol use disorders and their associated disabilities in the general population and in subgroups of the population (Grant, Kaplan, Shepherd, & Moore, 2003, p. 1).”

Persons with at least five years of interviewing experience with the U.S. Census Bureau were recruited to conduct all interviews with participants. Each interviewer further completed a minimum required five days of training on the NESARC questionnaire, data collection and consenting protocols (Grant et al., 2004a).

The sampling frame consisted of Census 2000/2001 Supplementary Survey (C2SS) data collected from approximately 78,300 households per month in 2000 and 2001. The subjects were collected during the C2SS from the non-institutionalized population of 18 years and older adults who resided in the United States (including Hawaii and Alaska) and the District of Columbia. Individuals could have been living in single family homes (which included apartments and mobile homes), boarding houses, rooming houses, non-transient hotels and motels, shelters, facilities for housing workers, college quarters and group homes. The frame was adjusted using a variety of accepted procedures until the final individual was identified within the households of the defined C2SS population. The data set was a representative sample of the heterogeneous population in the U.S. and thus was consistent with what we know to be true about the

heterogeneity of the alcohol using population (Dawson, Grant, Stinson, & Chou, 2006; Grant et al., 2005; Grant et al., 2004a; Stinson et al., 2005).

Wave 1 of the NESARC oversampled non-Hispanic African Americans, Hispanics, and individuals younger than 25 years of age. Oversampling of non-Hispanic African Americans increased the number of households surveyed from 12.3% to 19.1% (equaling an additional 8,245 cases). Oversampling of Hispanics increased the number of households surveyed from 12.5% to 19.3% (equaling an additional 8,308 cases). More women than men were sampled reflecting data collection methods that attempt to limit gender bias and shows an underlying acknowledgement that women may exhibit drinking behaviors that need to be studied. Oversampling increased power in these groups and allowed for specific study of traditionally under represented populations in key interest areas including treatment related service programs and 12-step group support attendance (Grant, Kaplan, Shepard, & Moore, 2003).

The diagnostic variables in the NESARC were not based on respondent report. The data collectors did not ask, “Do you now or have you ever been diagnosed with alcohol dependence?” Instead, these diagnoses were based on respondent endorsement of operationalized symptom profiles from the DSM-IV (American Psychiatric Association, 1994) collected during the interview. Afterwards the responses were sorted into various diagnoses based on the symptom criteria (Grant et al., 2004a; National Institute for Alcoholism and Alcohol Abuse, 2004; Pulay et al., 2008).

Tables depicting the diagnosis, comorbid psychopathology and demographic distribution of the entire NESARC dataset (N=43,093) of women and men may be found in Appendix C.

Variables for the study

Dependent Variable: 12-step Group Support. The variable for 12-step group support attendance asked, “Have you ever went to Alcoholics/Narcotics/Cocaine Anonymous, or 12-step meeting (National Institute on Alcohol Abuse and Alcoholism, 2004, p. 67)?” It was dichotomized as attended 12-step or not (1, 0). There were nine missing data points that were coded as not (0) based on the prior work by Kaskutas (Kaskutas, Ye, Greenfield, Witbrodt, & Bond, 2008b). She determined that there were 432 women who validly reported attending a 12-step group at least once. This produced a variable with 575 women (432, yes; 143, no) answering the question regarding 12-step group attendance.

Independent Variables. There are three major categories of independent variables that will be used for this study. The first set of independent variables will be for alcohol diagnoses. During data collection individuals were asked a series of questions regarding their experiences with alcohol. There were three time points; during the current twelve months, prior to the current twelve months or in both time periods. After the interview the respondents experiences were cataloged by time period into DSM-IV alcohol abuse, alcohol dependence, both alcohol abuse and dependence or neither alcohol abuse nor dependence.

The second set of independent variables to be used will be comorbid psychopathologies and will include Major Depressive Disorder and Generalized Anxiety Disorder. These have three time points which are current twelve months, prior to current

twelve months or both. Recalling the discussion by First about True Comorbidity those individuals who experienced Major Depressive Disorder or Generalized Anxiety Disorder as a result of a substance abuse disorder will be removed from the disorder leaving only truly comorbid depression and anxiety. Whereas this will also remove those individuals whose drug of choice was not alcohol; by keeping substance disorders in with psychopathologies a confound in the data would be created. This study will also test Conduct Disorder and ASPD.

The third set of independent variables to be used will be a collection of key demographic characteristics including the age of the respondent, their relationship status, the number of children in the home, the ethnoracial group, the educational level and their personal income. Using the NESARC-defined variables for education and occupation a socioeconomic (SES) variable will be calculated. Discussion on the procedures used to calculate the SES variable follows later in the chapter.

Imputation of data in the national data set

The NESARC had two imputation methods used for the data by the original research team. The first was the allocation method and the second was the assignment method. The allocation method of imputation refers to imputation of missing data using characteristics of households believed to be similar to the household containing the missing data (Schafer, 1999). Although the use of allocation imputation saves data that would have otherwise been deleted, it does increase the chance of error. The assignment method used the respondent's own information to assign the level (i.e. first name to indicate sex of respondent) and was much more reliable (Grant, Kaplan, Shepard, &

Moore, 2003). The assignment method was preferred because of the reduction in error and the assumption that the data was missing at random.

There was a trivially low allocation rate in the missing data for most variables chosen which helped reduce potential for error. The allocation imputation method was used to impute gender (.14%), age (1.12%) and marital status (.59%). These numbers excluded those data points imputed using the assignment method. The variables Personal Income (11.11% imputed data) and Family Income (10.11% imputed data) had allocation rates higher than the other items. However, even with these higher percentages, the data were still almost 90% non-imputed (Grant, Kaplan, Shepard, & Moore, 2003).

Data preparation for this study

All data was prepared using SPSS 14 grad pack (SPSS Inc., 2005).

Alcohol diagnosis. The aggregate variable for alcohol diagnosis (Dx) was computed by combining current 12 months and prior to current 12 months alcohol diagnoses into a dichotomous variable with a diagnosis or without (1, 0).

Dichotomous variables for different levels of alcohol diagnoses were then constructed using the variables for current and prior alcohol diagnoses. These variables were dummy coded into a total of six dichotomous variables; current alcohol abuse, current alcohol dependence, both current alcohol abuse and dependence, prior to current alcohol abuse, prior alcohol dependence and both prior alcohol abuse and dependence. A crosstab revealed problems with using both the prior to current alcohol diagnoses with the current alcohol diagnoses. First, the sample sizes in the cells for alcohol dependence at both time points were low or empty. Second, there were disproportionate cell sizes across the matrix.

Table 1 Crosstab of current and prior alcohol diagnoses by level of abuse (abuse) dependence (depend), abuse and dependence together (Dual) or no alcohol diagnosis (none)

Prior Dx	Current Dx				Total
	None	Abuse	Depend	Dual	
None	27	5	1	1	34
Abuse	140	16	0	4	160
Depend	14	0	1	1	16
Dual	245	25	22	73	365
Total	426	46	24	79	575

None= no alcohol diagnosis, Abuse = Alcohol abuse, Depend= Alcohol dependence, Dual= Alcohol abuse and dependence diagnosis

Given these concerns, it was more meaningful to collapse the data into one time point. The resulting variable was a lifetime diagnosis with four levels: Women without an alcohol diagnosis (none) with an N=27, women diagnosed with alcohol abuse (abuse) with an N=161, women diagnosed with alcohol dependence (Depend) with an N=16 or women diagnosed with both alcohol abuse and alcohol dependence (Dual) with an N=371 at some time in their life.

One additional step was taken. The level for alcohol dependence had a small cell count (N=16) and the decision was made to collapse this cell into alcohol abuse and rename that level 'Single' with an N=177 and the cell for both alcohol abuse and dependence (Dual) maintained N=371 and the cell for no alcohol diagnosis (None) maintained N=27. A crosstab with 12-step group support and alcohol diagnosis is represented in the following matrix (Table 2).

Table 2 Crosstab of alcohol diagnosis by 12-step group support

	Attendance		
	Yes	No	Total
None	15	12	27
Single	123	54	177
Dual	294	77	371

None = No alcohol diagnosis

Single = Alcohol abuse or alcohol dependence

Dual= Both alcohol abuse and alcohol dependence

Comorbid psychopathology. Comorbid psychopathology was the second category of independent variables to be prepared for this study. The disorders used for this study were Major Depressive Disorder, Generalized Anxiety Disorder in two time points, Conduct Disorder and ASPD.

Note that like alcohol disorders, Major Depressive Disorder and Generalized Anxiety Disorder had two time points; current and prior to current. Conduct Disorder has only one time point because it is only diagnosed in adolescence and ASPD is a lifetime diagnosis thus no time period qualifier is needed. By definition this is the most severe form of disorder being studied because once diagnosed with ASPD the individual will have no periods of remission. The disorder persists and typically worsens with age (Hesselbrock & Hesselbrock, 1994).

The first procedure was to collapse the two time points for Major Depressive Disorder and Generalized Anxiety Disorder into two dichotomized lifetime variables of Lifetime Major Depressive Disorder and Lifetime Generalized Anxiety Disorder. Using the same procedure used to collapse the two time points of alcohol diagnoses earlier, the four variables, Lifetime Major Depressive Disorder, Lifetime Generalized Anxiety Disorder, Conduct Disorder and ASPD were placed in a single matrix. The result was a set of dichotomous variables either matching a diagnosis or not (1, 0). The matrix showed overlaps and empty/low cell counts (Table 3). Only the cells with sufficient N to make analysis meaningful were used. Those psychopathologies selected for use in the analyses were underlined in the New Variable column of Table 3.

Table 3 Crosstabs of Comorbid Psychopathologies with cell counts

ASPD	CD	GAD	MDD	Total	New Variable
0	0	0	0	230	<u>No CMP</u>
			1	180	<u>MDD</u>
		1	0	11	<u>GAD</u>
			1	51	<u>GAD/MDD</u>
	1	0	0	5	<u>CD</u>
			1	3	<u>CD/MDD</u>
1	0	0	0	23	<u>ASPD</u>
			1	45	<u>ASPD/MDD</u>
		1	0	3	<u>ASPD/GAD</u>
			1	24	<u>ASPD/GAD/MDD</u>
				575	

ASPD = Antisocial Personality Disorder

CD = Conduct Disorder

GAD = Lifetime Generalized Anxiety Disorder

MDD = Lifetime Major Depressive Disorder

No CMP = No Comorbid Psychopathology

0 = No

1 = Yes

In the second procedure the four variables Lifetime Major Depressive Disorder, Lifetime Generalized Anxiety Disorder, Conduct Disorder and ASPD were collapsed into one variable. The result was 345 women who had at least one psychopathology and 230 women who did not have any psychopathologies.

Demographics. There were three categorical demographic variables and two scale demographic variables. The categorical variables were ethnoracial group, education and relationship status. Age, personal income and number of children in the home were scale variables.

The categorical variables comprising the ethnoracial variable was dichotomized as white or not (1, 0), education was dichotomized as plus or minus high school (1, 0) and relationship status became three separate dichotomized variables; married or not (1, 0),

previously married (meaning divorced, widowed or separated) or not (1, 0) and never married or not (1, 0).

The scale variable age was dichotomized as plus or minus 35 years (1, 0) and the scale variable women with children present in the home or absent from the home was dichotomized (1, 0).

Socioeconomic status. Socioeconomic status was constructed following the Hollingshead (1975) formulation. In order to apply the Hollingshead “Four Factor Index for Social Status” all persons in the dataset needed to have an education and occupation code. First, the variable for occupation was recoded following the weighting system of Hollingshead using the occupation table found in the NESARC Technical Documents (10) (National Institute for Alcoholism and Alcohol Abuse, 2004). The definitions used in the NESARC for each occupation were carefully matched to the definitions given by Hollingshead even though the categories may not appear to match (Hollingshead, 1975) (Table 4).

Table 4 NESARC Occupational code converted to Hollingshead categories

NESARC Code	Heading	code	Hollingshead Heading
1	Executive, Administrative, & Managerial	8	Administrators, Lesser professionals, Proprietors of med-size business
2	Professional Specialty	9	Higher executives, Proprietors of large business, Major Professionals
3	Technical & related support	6	Technicians, Semiprofessionals, Small business owners

Table 4 (cont'd).

4	Sales	6	Technicians, Semiprofessionals, Small business owners
5	Administrative support, including clerical	5	Clerical and sales workers, small farm and business owners
6	Private household	4	Smaller business owners, skilled manual workers, craftsmen, and Tenant farmers
7	Protective services	4	Smaller business owners, skilled manual workers, craftsmen, and Tenant farmers
8	Other services	2	Unskilled workers
9	Farming, Forestry, Fishing	3	Machine operators and Semiskilled workers
10	Precision production, craft and repair	4	Smaller business owners, skilled manual workers, craftsmen, and Tenant farmers
11	Operators, fabricators, Laborers	3	Machine operators and Semiskilled workers
12	Transportation, material moving	3	Machine operators and Semiskilled workers
13	Handlers, Equipment cleaners, laborers	2	Unskilled workers
14	Military	4	Smaller business owners, skilled manual workers, craftsmen, and Tenant farmers

Next, the occupational codes were compared to personal income and matched to the government report from 2001 comparing occupations with expected incomes (Pearson Education Inc., 2007). Last, the variable for education was recoded following the coding system of Hollingshead using the education table in the NESARC Technical Documents (Hollingshead, 1975, p.10) (Table 5).

Table 5 NESARC Education codes converted to Hollingshead Categories

NESARC		Hollingshead	
Code	Heading	Code	Heading
1	No formal schooling	0	No formal education
2	Completed K, 1, 2	1	Less than 7 th grade
3	Completed 3,4	1	Less than 7 th grade
4	Completed 5, 6	1	Less than 7 th grade
5	Completed 7	2	Junior high school (9 th grade)
6	Completed 8	2	Junior high school (9 th grade)
7	Completed 9-11	3	Partial high school (10 th /11 th)
8	Completed 12	4	High school graduate
9	High school equivalence	4	High school graduate
10	Partial College Associates/ Tech	5	Partial college or special training
11	degree	5	Partial college or special training
12	College graduation	6	Standard college or University graduation
13	Graduate	7	Graduate professional training
14	Completed graduate	7	Graduate professional training

There was one case (IDNUM 854) that did not have an education level or an occupation indicated. For this data point, education level was assigned based on the income of \$19,000 which was the only income reported by the respondent. Her income was compared to the government report from 2001 which indicated that the income expectation for people who completed some high school was about \$19,000 annually (Pearson Education Inc., 2007). Further, she was assigned a service related occupational code based on her imputed level of education. The fact that she was a 38 year old mother with a history of alcohol abuse and dependence who had three children between the ages of 12 and 15 years added support to the decisions made. She was fitted into Hollingshead Code 2, Unskilled workers occupation category (Hollingshead, 1975) (Table 4).

There were 55 respondents who did not have an occupation listed in the NESARC. Personal or household incomes (for those women without personal income)

and education were used to determine the occupational code. Personal incomes and educational levels were compared to a 2001 government report of education and income expectations for various occupations and the corresponding Hollingshead occupational code was assigned (Appendix D) (Pearson Education Inc., 2007).

The final step was to calculate the socioeconomic status by multiplying the occupation by a weight of 5 and the education level by a weight of 3 then summing the result (See Chapter 2, p. 13 to review discussion on factor weighting) (Hollingshead, 1975, p.15). This score then was compared to the Hollingshead chart of socioeconomic status (Table 6). Each person was assigned a 1, 2, 3, 4, or 5 with 1 being the highest socioeconomic status and 5 being the lowest socioeconomic status.

Table 6 Hollingshead Socioeconomic coding system with range of scores

Social Strata Code Key	Range of computed scores
1. Major Business and professional	66-55
2. Medium business, minor professional, technical	54-40
3. Skilled craftsmen, clerical, sales workers	39-30
4. Machine operators, semiskilled workers	29-20
5. Unskilled laborers, menial service workers	19- 8

Final dataset

Table 7 is the final dataset with sample sizes per category of participation used for the analyses.

Table 7 Final dataset for analyses: Sample sizes per category of participation

Demographics	Participation in 12-step group support		
	Yes	No	Total
Sample	432	143	575
Age			
-35 (18-34)	124	50	174
+35 (35-49)	308	93	401
Ethnoracial			
White	283	94	377
Other than white	149	49	198

Table 7 (cont'd).

Non Hispanic Black	(67)	(16)	(83)
Hispanic	(50)	(25)	(75)
Native American Indian/Alaskan			
Inuit	(25)	(6)	(31)
Asian/Pacific Islander	(7)	(2)	(9)
Relationship			
Married/LTP	142	59	201
Previously marriage	183	43	226
Divorced	(114)	(35)	(149)
Widowed	(36)	(5)	(41)
Separated	(33)	(3)	(36)
Never	107	41	148
Children			
Children Absent	255	82	337
Children Present	177	61	238
Education			
Less high school	69	20	89
High school or equiv	120	44	164
Some college	124	43	167
2 yr degree	47	10	57
4 yr degree	34	14	48
Graduate school	38	12	50
Personal Income			
No personal income	19	5	24
\$1-\$24,999	286	76	362
\$25,000-\$54,999	127	62	189
Social strata			
Major business/Prof	122	39	161
Medium business, Minor professional, technical	87	35	122
Skilled crafts, clerical, sales worker	33	13	46
Machine operators, semi-skilled workers	74	20	94
Unskilled, laborer, menial service workers	116	36	152
Alcohol			
Diagnosis			
None	17	11	28
Yes	415	132	547
Abuse or Dependence	(121)	(55)	(176)

Table 7 (cont'd).

	Abuse/Dependence	(294)	(77)	(371)
Comorbid Psychopathology				
None		174	56	230
Major Depressive Disorder		126	54	180
Generalized Anxiety Disorder		9	2	11
Major Depressive Disorder & Generalized Anxiety Disorder		39	12	51
Conduct Disorder		3	2	5
Conduct Disorder with Major Depressive Disorder		1	2	3
Antisocial Personality Disorder		80	15	95
Antisocial Personality Disorder	(16)	(7)	(23)	
Antisocial Personality Disorder with Major Depressive Disorder	(40)	(5)	(45)	
Antisocial Personality Disorder with Generalized Anxiety Disorder	(3)	(0)	(3)	
Antisocial Personality Disorder with Major Depressive Disorder and Generalized Anxiety Disorder	(21)	(3)	(24)	
Numbers in parentheses () are related to the preceding aggregate level of that variable				

CHAPTER IV

PRESENTATION OF THE RESULTS OF THE ANALYSIS

Introduction

Chapter IV presents the outcomes of the analyses. These outcomes are presented in the same order as the research questions.

Research Question One

Does alcohol diagnosis affect women's participation in 12-step support group programs?

Women with an alcohol diagnosis when compared to those women without a diagnosis are 2.6 (CI 1.163, 5.578) times more likely to attend a 12-step group support when compared to those women without a diagnosis. The Wald χ^2 of 5.460 is significant ($p=.019$) meaning that having an alcohol diagnosis is an important factor in women's participation in 12-step group support (Table 8).

Table 8 Results of the analysis of alcohol diagnosis to 12-step group support

12-step	β	SE	Wald χ^2	P =	Exp (B)	CI
Dx	.935	.400	5.460	.019	2.547	1.163, 5.578
N=575	-2Log likelihood=639.878			Model χ^2 =5.154	P =.023	

Dx= alcohol diagnosis
12-step= 12-step group support

Women with a history of the more severe alcohol abuse and dependence diagnoses are 3.8 (CI 2.971, 4.907) times as likely to go to 12-step group meetings when compared to women without the more severe alcohol diagnosis. The Wald χ^2 of 109.539 is significant ($p=.000$) meaning that having the more severe alcohol abuse and dependence diagnosis is an important factor in women's participation in 12-step group support (Table 9).

Table 9 Results of the analysis alcohol abuse or dependence and abuse and dependence to 12-step group support

Relationship to 12 -step	12-step group support					
	β	SE	Wald χ^2	P=	Exp (β)	CI
Single	.788	.163	23.507	.000	2.200	1.600, 3.026
Dual	1.340	.128	109.529	0.000	3.818	2.971, 4.907
-2 Log Likelihood 636.370 Model $\chi^2=160.750$ P= 0.000						
Single= Alcohol abuse or dependence Dual= Abuse and dependence						

Research Question Two

Does comorbid psychopathology mediate the relationship between alcoholism diagnosis and women's participation in 12-step support group programs?

In these data, the presence of a comorbid psychopathology did not mediate the relationship between having an alcohol disorder and going to 12-step group support. In fact it had no impact at all. Without the comorbid psychopathology in the model, women are 2.6 times (CI 1.163, 5.578) more likely to attend 12-step group support when compared to those women without a diagnosis (Table 8, p. 48). With comorbid psychopathology in the model, women are still 2.6 times (CI 1.179, 5.708) more likely to attend 12-step group support when compared to those women without a diagnosis. Further, adding comorbid psychopathology did not change the model. The -2log likelihood went from 639.878 (Model χ^2 5.154) without comorbid psychopathology to 639.674 (Model χ^2 5.358) with comorbid psychopathology (Table 10).

Table 10 Direct effects of alcohol diagnosis and 12-step mediated by Comorbid Psychopathology

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	0.953	.402	5.614	0.018	2.594	1.179, 5.708
CMP	-0.09	.200	0.203	0.652	0.914	.618, 1.352
-2 Log Likelihood 639.674 Model χ^2 5.358 P= 0.069						
Dx= Alcohol diagnosis CMP= Comorbid psychopathology						

The next step analyzed the mediating relationships between each psychopathology of interest as it related to alcohol diagnosis and 12-step group support. None of the psychopathologies mediated the relationship between alcohol diagnosis and 12-step group support. Women with an alcohol diagnosis when considering comorbid psychopathologies in the model are 2.7 times (CI 2.028, 3.488) more likely to attend 12-step group support (Table 11). Women with an alcohol diagnosis when not considering comorbid psychopathology in the model are 2.6 times (CI 1.163, 5.578) more likely to go to 12-step group support (Table 8, p.48). Women diagnosed with Major Depressive Disorder were 1.5 times more likely to attend 12-step group support when considering alcohol diagnosis and other comorbid psychopathologies (Table 11). No other psychopathologies in this model were significant. The moderating impact of Major Depressive Disorder was non-existent. Women with an alcohol diagnosis with or without comorbid psychopathology considered were 2.6 times more likely to go to 12-step group support.

Table 11 Direct effects of alcohol diagnosis and 12-step group support mediated MDD, MDD/GAD, ASPD, ASPD/MDD and ASPD/GAD/MDD

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	.978	.138	49.961	.000	2.659	2.028, 3.488
MDD	.381	.222	2.958	.085	1.464	.948, 2.260
MDD/GAD	.384	.365	1.106	.293	1.469	.718, 3.005
ASPD	.636	.568	1.254	.263	1.888	.621, 5.742
ASPD/MDD	.463	.396	1.367	.242	1.589	.731, 2.455
ASPD/GAD/MDD	-.424	.444	.914	.339	.654	.274, 1.561

-2 Log Likelihood 633.366 Model χ^2 163.753 P= 0.000

Dx= Alcohol Diagnosis 12-step=12-step Group Support

MDD = Major Depressive Disorder

MDD/GAD = Major Depressive Disorder and Generalized Anxiety Disorder

ASPD= Antisocial Personality Disorder

ASPD/MDD= Antisocial Personality Disorder with Major Depressive Disorder

ASPD/MDD/GAD= Antisocial Personality Disorder with Major Depressive Disorder and Generalized Anxiety Disorder

The mediating relationship between each psychopathology of interest as it related to a diagnosis of both alcohol abuse and dependence and 12-step group support was analyzed. In these data, the presence of a comorbid psychopathology did not mediate the relationship between having the more severe alcohol abuse and dependence and going to 12-step group support. As with the aggregate alcohol diagnosis, comorbid psychopathology had no impact at all. Without the comorbid psychopathology in the model, women with the more severe alcohol abuse and dependence are 3.8 times (CI 2.971, 4.907) more likely to attend 12-step group support when compared to those women without the more severe diagnosis. The Wald χ^2 of 109.529 was significant (P=.000) making this relationship important to the model (Table 9, p.49). With comorbid psychopathology in the model, women are 4.3 times (CI 2.925, 6.207) more likely to attend 12-step group support when compared to those women without the more severe alcohol diagnosis. Adding comorbid psychopathology did not change the relationship between the more severe alcohol diagnosis and 12-step group support. The Wald χ^2 of 57.024 was significant (P=.000) but was not appreciably changed from the model without comorbid psychopathology (Table 12).

Table 12 Direct effects of Alcohol Abuse and Dependence and 12-step mediated by Comorbid Psychopathology

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Single	.847	.186	21.287	.000	2.256	1.637, 3.391
Dual	1.449	.192	57.024	.000	4.261	2.925, 6.207
CMP	-.156	.201	.605	.437	.855	.577, 1.268
-2 Log Likelihood			635.761	Model χ^2	161.358	P= 0.000

Single= Alcohol abuse or dependence

Table 12 (cont'd).

Dual= Alcohol abuse and dependence

CMP= Comorbid psychopathology

None of the psychopathologies mediated the relationship between the more severe alcohol abuse and dependence and 12-step group support. However, women with Major Depressive Disorder were 1.5 times (CI .993, 2.356) more likely to participate in 12-step group support when considering alcohol diagnoses and comorbid psychopathologies (Table 13). Women with the more severe alcohol abuse and alcohol dependence were 3.4 times (CI 2.498, 4.669) more likely to attend 12-step group support when considering comorbid psychopathologies. The outcome of comorbid psychopathology does not mediate the relationship between alcohol disorders and 12-step group support. The change in the relationship between the two levels of diagnosis and 12-step group support has more to do with the disaggregation of the disorder and not the impact of the psychopathologies.

Table 13 Direct effects of alcohol abuse or dependence, alcohol abuse and dependence and 12-step group support mediated by first MDD, then MDD/GAD, ASPD, ASPD/MDD and ASPD/GAD/MDD

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Single	.628	.193	10.631	.001	1.875	1.285, 2.735
Dual	1.228	.159	59.308	.000	3.415	2.498, 4.669
MDD	.425	.220	3.716	.054	1.530	.993, 2.356
MDD/GAD	.396	.366	1.169	.280	1.486	.725, 3.045
ASPD	-.282	.289	.947	.331	.755	.428, 1.331
ASPD/MDD	.444	.399	1.238	.266	1.558	.713, 3.404
ASPD/GAD/MDD	-.483	.447	1.168	.280	.617	.257, 1.481
-2 Log Likelihood			628.618	Model χ^2	168.502	P= 0.000

Single= Alcohol abuse or dependence

Dual= Both alcohol abuse and alcohol dependence

12-step= 12-step Group Support MDD = Major Depressive Disorder

MDD/GAD = Major Depressive Disorder and Generalized Anxiety Disorder

ASPD= Antisocial Personality Disorder

ASPD/MDD= Antisocial Personality Disorder with Major Depressive Disorder,

ASPD/MDD/GAD= Antisocial Personality Disorder with Major Depressive Disorder and Generalized Anxiety Disorder

Research Question Three

Do key demographic variables moderate alcoholic women's participation in 12-step support group programs?

The first hypothesis tested under question three stated that women who were married, age 35 years or older, who were white with at least a high school or better education would moderate the relationship between alcohol diagnosis and 12-step group support.

This cluster of demographic variables did not moderate the relationship between alcohol diagnosis and 12-step group support. Without the demographic variables in the model, women are 2.6 times (CI 1.163, 5.578) more likely to go to 12-step group support than those without a diagnosis (Table 8, p. 48). With this demographic cluster women are 2.7 times (CI 1.386, 5.241) more likely to go to 12-step group support than those without a diagnosis (Table 12). Further, only women who were married were 40% less likely to report attending 12-step group support (Table 14).

Table 14 Demographic Cluster 1 moderating the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	.991	.404	6.009	.014	2.695	1.386, 5.241
White	.055	.210	.070	7.92	1.057	.749, 1.492
Age 35+	.303	.208	2.121	.145	1.353	.962, 1.905
HS or better	-.141	.282	.248	.618	.869	.546, 1.382
Married	-.361	.201	3.225	.073	.697	.501, .970

-2 Log Likelihood 634.036 Model χ^2 10.996 P= 0.051

White= Ethnoracial group white, Age35+= at least age 35 years or older, HS or higher = High school education, its equivalent or more education, Married= the relationship status is married or like married

The second hypothesis tested under question three stated that being other-than-white, under the age of 35 years with less than a high school education and being

previously married would moderate the relationship between alcohol diagnosis and 12-step group support. The only characteristic in Demographic Cluster 2 that significantly moderated the relationship between alcohol diagnosis and 12-step group support are those women who are previously married who are 1.7 times (CI 1.195, 2.464) more likely to go to 12-step group support than women not previously married (Table 15).

Table 15 Demographic Cluster 2 moderating the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	1.056	.408	6.714	.010	2.876	1.471, 5.623
Previously married	.540	.220	6.015	.014	1.716	1.195, 2.464
Under Age 35	.146	.218	.449	.503	1.157	.808, 1.657
Other-than-white	.008	.210	.001	.969	1.008	.714, 1.424
Less than HS	-.158	.283	.311	.577	.854	.536, 1.361
-2 Log Likelihood 631.031			Model χ^2 14.001		P= 0.016	

Previously married= could be separated, widowed or divorced,

Under age 35 years= could be ages 18 to 34 years of age,

Other-than-white= Black, Hispanic, Native American Indian, Alaskan Inuit, Pacific Islander, Asian

Less than HS= Did not complete high school or high school equivalent

The third hypothesis tested under question three stated that women who are married, age 35 years or older, who are white with at least a high school or better education will moderate the relationship between the more severe alcohol abuse and dependence diagnosis and 12-step group support. Women who were 35 years of age or older are 1.5 times (CI 1.012, 2.196) more likely to go to 12-step group support than younger women. Women who are married were 40% less likely to go to 12-step group support when compared to those women who are not married. In this demographic cluster, women with severe alcohol abuse and dependence are 3.4 times (CI 2.014, 5.631) more likely to go to 12-step group support than those without the more severe alcohol disorder (Table 16).

Table 16 Demographic Cluster 1 moderating the relationship between alcohol diagnosis (Dx) and 12-step group support (12-step)

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Single	.616	.284	4.695	.030	1.852	1.061, 3.234
Dual	1.214	.262	21.431	.000	3.368	2.014, 5.631
White	.071	.205	.121	.728	1.074	.719, 1.603
Age 35+	.399	.198	4.083	.043	1.491	1.012, 2.196
HS or better	-.047	.252	.034	.854	.955	.582, 1.565
Married	-.361	.202	3.193	.074	.697	.469, 1.036
-2 Log Likelihood 629.065			Model χ^2 168.054		P= 0.000	

Single= Having one alcohol diagnosis, either abuse or dependence

Dual = Having both alcohol abuse and alcohol dependence over the life span

White= Ethnoracial group white

Age35+= at least age 35 years or older

HS or higher = High school education, its equivalent or more education

Married= the relationship status is married or like married

The fourth hypothesis tested under question three stated that being other-than-white, under the age of 35 years with less than a high school education and being previously married will moderate the relationship between the more severe alcohol abuse and dependence diagnosis and 12-step group support. Women who are previously married are 1.7 times (CI 1.203, 2.497) more likely to go 12-step group support and women with the more severe alcohol abuse and dependence disorder are 3.5 times (CI 1.773, 6.982) more likely to attend 12-step group support than those with lesser alcohol problems (Table 17).

Table 17 Demographic Cluster 2 moderating the relationship between more severe alcohol diagnosis (Dual) and 12-step group support (12-step)

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Single	.580	.211	7.565	.006	1.787	1.182, 2.702
Dual	1.175	.185	40.230	.000	3.238	2.252, 4.655
Other-than-white	.028	.208	.018	.893	1.028	.684, 1.546
Under Age 35	-.162	.215	.570	.450	.850	.558, 1.296
Less than HS	.162	.284	.327	.568	1.176	.674, 2.051
Previously married	.567	.210	7.295	.007	1.762	1.168, 2.658
-2 Log Likelihood 625.938			Model χ^2 171.182		P= 0.000	

Single= Having one alcohol diagnosis, either abuse or dependence

Table 17 (cont'd).

Dual = Having both alcohol abuse and alcohol dependence over the life span

Previously married= could be separated, widowed or divorced

Under age 35 years= could be ages 18 to 34 years of age

Other-than-white= Black, Hispanic, Native American Indian, Alaskan Inuit, Pacific Islander, Asian

Less than HS= Did not complete high school or high school equivalent

The fifth set of hypotheses tested under question three focus on the socioeconomic status of the women in the data. Table 18 recalls the socioeconomic coding system used based on the Hollingshead scale discussed in Chapter III. In the data there are 161 women in the 1. Major Business or Professional category. There are 122 women in the 2. Medium Business, Minor Professional and Technical category. There are 46 women in the 3. Skilled Craftsmen, Clerical, Sales Workers category and 94 women in the 4. Machine Operators, Semiskilled Workers category. There are 152 women in the 5. Unskilled Laborers, Menial Service Workers category.

Table 18 Hollingshead Socioeconomic categories (SES categories) with range of scores

Social Strata Category	Range of computed scores
------------------------	--------------------------

1. Major Business and professional	66-55
2. Medium business, minor professional, technical	54-40
3. Skilled craftsmen, clerical, sales workers	39-30
4. Machine operators, semiskilled workers	29-20
5. Unskilled laborers, menial service workers	19- 8

Women in the upper socioeconomic categories, (1) Major Business and Professional and (2) Medium Business, Minor Professional, Technical Workers did not moderate the relationship between alcohol diagnosis and 12-step group support. Further, being in the upper two socioeconomic categories did not influence whether or not women went to 12-step group support at all (Table 19). Women with an alcohol diagnosis, when not considering socioeconomic status are 2.6 times (CI 1.163, 5.578) more likely to go to 12-step group support (Table 8, p.48). This is the same results when socioeconomic

status is added to the model; i.e. women are 2.6 times (CI 1.330, 4.971) more likely to go to 12-step group support.

Table 19 Alcohol diagnosis with Hollingshead SES Categories 1 and 2

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	.945	.401	5.556	.018	2.572	1.330, 4.971
SES Category 1	-.031	.231	.018	.893	.969	.663, 1.418
SES Category 2	-.273	.244	1.248	.264	.761	.509, 1.138
-2 Log Likelihood			638.587	Model χ^2	6.445	P= 0.092

Dx=Alcohol Diagnosis

SES Category1= Major Business and Professional

SES Category2= Medium Business, Minor Professional, Technical Workers

Women in the lower socioeconomic categories, (4) Machine operators, semiskilled workers and (5) Unskilled laborers, menial service workers did not moderate the relationship between alcohol diagnosis and 12-step group support. Further, being in the lower socioeconomic categories did not influence whether or not women went to 12-step group support (Table 20).

Table 20 Alcohol diagnosis with Hollingshead SES Categories 4 and 5

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	.945	.401	5.551	.018	2.572	1.330, 4.975
SES Category 1	.288	.283	1.038	.308	1.334	.838, 2.123
SES Category 2	.167	.230	.531	.466	1.182	.810, 1.725
-2 Log Likelihood			638.574	Model χ^2	6.458	P= 0.091

Dx=Alcohol Diagnosis

SES Category4= Machine operators, semiskilled workers

SES Category5= Unskilled laborers, menial service workers

Women in the middle socioeconomic category, (3) Skilled craftsmen, clerical, sales workers did not moderate the relationship between alcohol diagnosis and 12-step group support. Further, being in the middle socioeconomic category did not influence whether or not women went to 12-step group support (Table 21).

Table 21 Alcohol diagnosis with Hollingshead SES Category 3

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	.946	.401	5.574	.018	2.574	1.332, 4.975
SES Category 3	-.222	.344	.416	.519	1.334	.455, 1.411
-2 Log Likelihood			639.473	Model χ^2	5.559	P= 0.062

Dx=Alcohol Diagnosis

SES Category3= Skilled craftsmen, clerical, sales workers

Now, looking at the more severe alcohol abuse and dependence disorder, women in the upper socioeconomic categories did not moderate the relationship between the more severe alcohol abuse and dependence and 12-step group support. Further, being in the upper two socioeconomic categories did not influence whether or not women went to 12-step group support (Table 22). Women with alcohol abuse and dependence, when considering the two upper socioeconomic categories, are 3.8 times (CI 2.971, 4.907) more likely to go to 12-step group support. However, when not considering the upper two socioeconomic categories, women with severe alcohol abuse and dependence disorders are still 3.1 times (CI 1.562, 5.975) more likely to go to 12-step group support (Table 9, p.49).

Table 22 Two levels of alcohol diagnosis with Hollingshead SES Categories 1 and 2

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Single	.614	.421	2.130	.144	1.849	.925, 3.695
Dual	1.123	.408	7.558	.006	3.074	1.570, 6.018
SES Category 1	-.011	.232	.002	.963	.989	.675, 1.450
SES Category 2	-.246	.246	.998	.318	.782	.522, 1.172
-2 Log Likelihood			632.701	Model χ^2	12.332	P= .015

Single=Alcohol abuse or dependence

Dual=Alcohol abuse and dependence

SES Category1= Major Business and Professional

SES Category2= Medium Business, Minor Professional, Technical Workers

Women in the lower socioeconomic categories did not moderate the relationship between alcohol abuse and dependence and 12-step group support. Further, being in the

lower socioeconomic categories did not influence whether or not women went to 12-step group support. Women with both an alcohol abuse and dependence disorder were 3.1 (CI 1.569, 6.020) times more likely to go to 12-step group support when considering the two lowest socioeconomic categories (Table 23), but this is no different than the outcome when not considering socioeconomic status.

Table 23 Two levels of alcohol diagnosis with Hollingshead SES Categories 4 and 5

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Single	.608	.422	2.077	.140	1.837	.918, 3.676
Dual	1.123	.409	7.551	.006	3.074	1.569, 6.020
SES Category 4	.297	.284	1.096	.295	1.346	.844, 2.148
SES Category 5	.127	.231	.300	.584	1.135	.776, 1.661
-2 Log Likelihood			632.561	Model χ^2	12.471	P= .014

Single= Alcohol abuse or dependence

Dual= Alcohol abuse and dependence

SES Category4= Machine operators, semiskilled workers

SES Category5= Unskilled laborers, menial service workers

Women in the middle socioeconomic category, (3) Skilled craftsmen, clerical, sales workers did not moderate the relationship between alcohol diagnosis and 12-step group support. Further, being in the middle socioeconomic category did not influence whether or not women went to 12-step group support (Table 24).

Table 24 Two levels of alcohol diagnosis with Hollingshead SES Category 3

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Single	.610	.421	2.105	.147	1.841	.922, 3.678
Dual	1.129	.408	7.633	.006	3.091	1.579, 6.052
SES Category 3	-.231	.346	.446	.504	.794	.449, 1.402
-2 Log Likelihood			633.342	Model χ^2	11.690	P= 0.009

Single=Alcohol abuse or dependence

Dual= Alcohol abuse and dependence

SES Category3= Skilled craftsmen, clerical, sales workers

The sixth set of hypotheses tested under question three focus on women with children 17 years or under present or absent in the home. Women with children under 17

years in the home did not moderate the relationship between alcohol diagnosis and 12-step group support (Table 25). The inverse was also true. Women with children absent from the home are were not significantly more likely to attend 12-step group support (Table 25).

Table 25 Alcohol diagnosis and women with one, two or three children compared to 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	.939	.400	5.500	.019	2.557	1.324, 4.938
Women w/children	-.079	.196	.163	.686	.924	.669, 1.276
-2 Log Likelihood 638.929 Model χ^2 6.103 P= 0..192						
Dx	.939	.400	5.500	.019	2.557	1.324, 4.938
Women w/o child	-.079	.196	.163	.686	.924	.669, 1.276

Dx=Alcohol Diagnosis

Women w/children= women with one or more 17 or under children in the home

Women w/child= women without any children 17 or under in the home

Posthoc analyses

There were additional analyses that were conducted as a result of the outcomes of the analyses corresponding to research questions two and three that were not anticipated by the original design.

Posthoc comorbid psychopathology analyses

The original hypotheses expected that comorbid psychopathologies would mediate the relationship between alcohol diagnosis and 12-step group support. However, the outcome of the analyses found that at the aggregate level, comorbid psychopathology had no mediating influence on the relationship between alcohol diagnosis and 12-step group support. When comorbid psychopathology was disaggregated the main effects of having a Major Depressive Disorder moderated the relationship between alcohol diagnosis and 12-step group support was the only disorder that was significant (Table 11, p. 50).

In retrospect, the decision to disaggregate ASPD into ASPD with one of the other mood or anxiety disorders or both was not reasonable. ASPD is a lifetime diagnosis and by definition the most severe of the disorders studied. Looking at ASPD by itself regardless of the co-occurrence of other pathologies was more appropriate. Women with ASPD were 1.8 times (CI 1.118, 3.013) more likely to attend 12-step group support when considering alcohol diagnosis (Table 26). Further, there is a significant interaction between alcohol diagnosis and ASPD in women. The result is that women with both an alcohol diagnosis and ASPD are 1.9 times (CI 1.185, 3.175) more likely to report going to 12-step group support than those without an alcohol diagnosis or ASPD together (Table 26).

Table 26 Posthoc analysis of alcohol diagnosis, antisocial personality and 12-step group support main effects and interaction effects

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	.843	.402	4.896	.036	2.324	1.200, 4.502
ASPD	.607	.301	4.066	.044	1.836	1.118, 3.013
-2 Log Likelihood			635.396	Model χ^2	9.636	P= 0.008
Dx*ASPD	.662	.300	4.885	.027	1.939	1.185, 3.175
-2 Log Likelihood			639.589	Model χ^2	5.443	P= 0.020

Dx= Alcohol Diagnosis ASPD= Antisocial Personality Disorder

Dx*ASPD = interaction between alcohol diagnosis and Antisocial Personality Disorder

In a model with the more severe alcohol abuse and dependence disorders, women with ASPD are 2.065 times (CI 1.138, 3.745) more likely to report going to 12-step group support than those without this disorder. There is also a significant interaction between alcohol abuse and dependence diagnosis and ASPD in women. They are 6.273 times (CI 3.320, 11.852) more likely to report going to 12-step group support than those without an alcohol diagnosis or ASPD together (Table 27).

Table 27 Posthoc analysis of levels of alcohol diagnosis, antisocial personality and 12-step group support with main effects and interaction effects

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dual	1.209	.136	78.810	.000	3.350	2.565, 4.375
ASPD	.725	.304	5.694	.017	2.065	1.138, 3.745
-2 Log Likelihood			655.421	Model χ^2	141.698	P= 0.000
Dual*ASPD	1.836	.325	31.989	.000	6.273	3.320, 11.852
-2 Log Likelihood			750.280	Model χ^2	446.840	P= 0.000

Dual= Alcohol abuse and dependence, ASPD= Antisocial Personality Disorder, Dual*ASPD = interaction between alcohol diagnosis and Antisocial Personality Disorder

Posthoc demographic analyses

Relationship Status. The original hypothesis expected that a collection of demographic variables (Ethnoracial group, Age, Education and Relationship status) would moderate the relationship between alcohol diagnosis and 12-step group support. The results of the main of effects of Demographic Cluster 2 showed that only one that the variable for previously married is significant which included widowed, divorced and separated (Table 14, P. 54).

Women who are previously married and who had an alcohol diagnosis are 4.7 times (CI 3.298, 6.706) more likely to go to 12-step group support than those who are not previously married and who do not have an alcohol diagnosis (Table 28).

Table 28 Posthoc analysis of alcohol diagnosis, previously married and 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx*Previously Married	1.548	.181	73.129	.000	4.703	3.298, 6.706
-2 Log Likelihood			700.536	Model χ^2	96.583	P= 0.000

Dx*Previously = interaction between alcohol diagnosis and previously married

Previously married could mean that the women are divorced, separated or widowed. Women with an alcohol diagnosis and who are separated are 11 times (CI 3.374, 35.866) more likely to go to 12-step group support than those who are not

previously married. Women who are widowed are 8 times (CI 2.829, 22.621) more likely to go to 12-step group support and women who are divorced are 3.6 times (CI 2.426, 5.443) more likely to go to 12-step group support. By far, women who are separated who have an alcohol diagnosis are more likely to go to 12-step group support (Table 29).

Table 29 Posthoc analysis of alcohol diagnosis, by levels of previously married and 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx*Div	1.290	.206	39.157	.000	3.633	2.426, 5.443
Dx*Sep	2.398	.603	15.812	.000	11.000	3.374, 35.866
Dx*Wid	2.079	.530	15.374	.000	8.00	2.829, 22.621
-2 Log Likelihood			700.536	Model χ^2	96.583	P= 0.000

Dx*Div = interaction between alcohol diagnosis and divorced

Dx*Sep = interaction between alcohol diagnosis and separated

Dx*Wid =interaction between alcohol diagnosis and widowed

Women who have the more severe alcohol abuse and dependence disorder who are previously married are 6.7 times (CI 4.097, 11.029) more likely than those without a diagnosis or who have only a single diagnosis to go to 12-step group support (Table 30). Further, women who have both an alcohol abuse and dependence diagnosis who are separated are 25 times (CI 3.388, 1.84.501) more likely to go to 12-step group support than any other relationship group with or without a diagnosis (Table 31). However, women who have only a single diagnosis of either abuse or dependence and who are divorced, separated or widowed still have a high probability of going to a 12-step group (Table 32).

Table 30 Posthoc analysis of alcohol abuse and dependence, previously married and 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dual*Previously Married	1.905	.253	56.888	.000	6.722	4.097, 11.029
-2 Log Likelihood			711.573	Model χ^2	85.546	P= 0.000

Table 30 (cont'd).

Dual*Previously = interaction between alcohol abuse and dependence and previously married

Table 31 Posthoc analysis of alcohol abuse and dependence, by levels of previously married and 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dual*Div	1.484	.269	30.532	.000	4.412	2.606, 7.469
Dual*Sep	3.219	1.020	9.963	.002	25.000	3.388, 184.501
Dual*Wid	21.203	8770.825	.00	.998	.00	.00
-2 Log Likelihood			700.958	Model χ^2	96.161	P= 0.000

Dual*Div = interaction between alcohol abuse and dependence and divorced

Dual*Sep = interaction between alcohol abuse and dependence and separated

Dual*Wid = interaction between alcohol abuse and dependence and widowed

Table 32 Posthoc analysis of alcohol abuse or dependence, by levels of previously married and 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Single*Div	.961	.326	8.692	.003	3.615	1.380, 4.956
Single*Sep	1.386	.791	3.075	.080	4.000	.849, 18.836
Single*Wid	1.012	.584	3.002	.083	2.750	.876, 8.636
-2 Log Likelihood			780.144	Model χ^2	16.975	P= 0.001

Single*Div = interaction between alcohol abuse or dependence and divorced

Single*Sep = interaction between alcohol abuse or dependence and separated

Single*Wid = interaction between alcohol abuse or dependence and widowed

Because of the impact of ASPD on the relationship between alcohol diagnosis and 12-step group support and the impact of being separated on this same relationship, ASPD and being separated were included in the same model with more severe alcohol disorders. Women with both alcohol abuse and dependence who have ASPD were 5.7 times (2.990, 10.770) more likely to go to 12-step group support in comparison to women with the more severe diagnosis who do not have ASPD when considering the interaction between being separated and having a severe alcohol disorder (Table 33). When considering the interaction between severe alcohol disorder and ASPD, women who have an alcohol

disorder and are separated are 19.3 times (CI 2.590, 143.632) more likely to go to 12-step group support.

Table 33 Posthoc analysis of alcohol abuse and dependence, being separated or having ASPD and 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dual*ASPD	1.736	.327	28.200	.000	5.675	2.990, 10.770
Dual*Sep	2.959	1.024	8.345	.004	19.286	2.590, 43.632
2 Log Likelihood 729.732 Model χ^2 67.387 P= 0.000						

Dual*ASPD = interaction between alcohol abuse and dependence and Antisocial Personality Disorder

Dual*Sep = interaction between alcohol abuse and dependence and separated

Socioeconomic Status. A posthoc analysis of the interaction between alcohol diagnosis and socioeconomic status was conducted. Women with an alcohol diagnosis in every socioeconomic category with the exception of those women who were in category 3) Skilled craftsmen, clerical and sales workers were significantly more likely to attend 12-step group support than those without a diagnosis. However, Category 3 has a very small cell count of 46 women which contributed to its low Wald χ^2 . Category 4) Machine operators, semiskilled workers are the second smallest cell with 94 women. The women in Category 4 who have an alcohol disorder are 3.2 times (CI 1.481, 6.915) more likely to attend a 12-step group in a model with all levels of socioeconomic status (Table 34). This is higher than women with an alcohol diagnosis when not considering socioeconomic status (Table 8, p.48).

Table 34 Interactions between different SES categories and alcohol diagnosis compared to 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx* SES Category 1	.920	.431	4.555	.033	2.508	1.235, 5.095
Dx* SES Category 2	.797	.440	3.278	.070	2.219	1.076, 4.579
Dx* SES Category 3	.788	.513	2.358	.125	2.200	.945, 5.119
Dx* SES Category 4	1.163	.468	6.165	.013	3.200	1.481, 6.915
Dx* SES Category 5	.981	.435	5.079	.024	2.667	1.303, 5.456
-2 Log Likelihood			638.426	Model χ^2	6.606	P= 0.252

Dx=Alcohol Diagnosis

SES Category1= Major Business and Professional

SES Category2= Medium Business, Minor Professional, Technical Workers

SES Category3= Skilled craftsmen, clerical, sales workers

SES Category4= Machine operators, semiskilled workers

SES Category5= Unskilled laborers, menial service workers

The interaction between having the more severe alcohol abuse and dependence with socioeconomic status was conducted. Women with both alcohol abuse and dependence are significantly more likely to go to 12-step group support in every socioeconomic category again with the exception of those women who were in category 3) Skilled craftsmen, clerical and sales workers were significantly more likely to attend 12-step group support than those without a diagnosis (Table 35). In Category 4 the women with more severe alcohol abuse and dependence are 3 times (CI 1.525, 5.859) more likely to attend a 12-step group support when considering socioeconomic status. This outcome is slightly less than women with the more serious diagnosis only (Table 9, p. 49).

Table 35 Interactions between different SES categories and alcohol abuse and dependence compared to 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dual* SES Category 1	.600	.287	4.361	.037	1.822	1.136, 2.922
Dual* SES Category 2	.490	.314	2.435	.119	1.632	.974, 2.734
Dual* SES Category 3	.318	.437	.531	.466	1.375	.670, 2.821
Dual* SES Category 4	1.095	.409	7.162	.007	2.989	1.525, 5.859
Dual* SES Category 5	.546	.279	3.822	.051	1.726	1.090, 2.732

Table 35 (cont'd).

-2 Log Likelihood 638.426 Model χ^2 6.606 P= 0.252

Dual=Alcohol abuse and dependence diagnosis

SES Category1= Major Business and Professional

SES Category2= Medium Business, Minor Professional, Technical Workers

SES Category3= Skilled craftsmen, clerical, sales workers

SES Category4= Machine operators, semiskilled workers

SES Category5= Unskilled laborers, menial service workers

Personal and household income analyses

The personal incomes reported in the sample were compared to the report of household income. There were N=255 women who reported a household income between \$1 and \$24,999. There were N=192 women who reported having a total household income of \$25,000 to \$54,999. There were N=74 women who reported having total household income of \$55,000 to \$84,999 and N=54 with household income \$85,000 or above (Table 36).

Table 36 Personal Income compared to household income

N	Personal Income	Household Income
245	\$1-\$24,999	\$1-\$24,999
10	\$0	\$1-\$24,999
70	\$1-\$24,999	\$25,000-\$54,999
7	\$0	\$25,000-\$54,999
115	\$25,000-\$54,999	\$25,000-\$54,999
30	\$1-\$24,999	\$55,000-\$84,999
2	\$0	\$55,000-\$84,999
25	\$25,000-\$54,999	\$55,000-\$84,999
14	\$55,000-\$84,999	\$0
3	\$55,000-\$84,999	\$0
17	\$1-\$24,999	\$85,000+
5	\$0	\$85,000+
22	\$25,000-\$54,999	\$85,000+
10	\$85,000+	\$0

Women with an alcohol diagnosis were unaffected in a model including the household income. Women without considering household income were 2.6 times (CI 1.163, 5.578) more likely to participate in 12-step group support than those without a

diagnosis (Table 8, p 48). In this model, women were 2.6 times (CI 1.171, 5.692) (Table 37). There were no other significant relationships.

Table 37 Main Effects of Alcohol Diagnosis and household income in relationship to 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Dx	.949	.403	5.533	.019	2.582	1.171, 5.692
HS1	.445	.406	1.199	.273	1.561	.704, 3.461
HS2	.169	.416	.166	.684	1.184	.524, 2.2676
HS3	-.296	.459	.416	.519	.744	.303, 1.828
HS4	.069	.473	.021	.884	1.072	.424, 2.707
-2 Log Likelihood			633.325	Model χ^2	163.794	P= 0.000

Dx= Alcohol Diagnosis

HS1=Household income equal to \$1-\$24,999

HS2=Household income equal to \$25,000-\$54,999

HS3=Household income equal to \$55,000-\$84,999

HS4=Household income equal to \$85,0000+

When considering only those women with the more severe alcohol abuse and dependence diagnosis, they are 1.8 times (CI .998, 3.057) more likely to go to 12-step group support when considering their household income. Those women in the lower economic brackets (HS1 and HS2) who have more severe alcohol disorders are 2.2 to 2.8 times (CI 1.180, 4.189 and 1.504, 5.115) more likely to go to 12-step group support.

Table 38 Main Effects of alcohol abuse and dependence diagnosis and household income in relationship to 12-step group support

Relationship to 12-step	β	SE	Wald χ^2	P	Exp (β)	CI
Single	-.078	.284	.076	.783	.925	.530, 1.615
Dual	.557	.286	3.808	.051	1.746	.998, 3.057
HS1	1.020	.312	10.673	.001	2.774	1.504, 5.115
HS2	.799	.323	6.112	.013	2.223	1.180, 4.189
HS3	.274	.375	.534	.465	1.315	.631, 2.742
HS4	.600	.394	2.322	.128	1.822	.842, 3.843
-2 Log Likelihood			633.325	Model χ^2	163.794	P= 0.000

Dx= Alcohol Diagnosis

HS1=Household income equal to \$1-\$24,999

HS2=Household income equal to \$25,000-\$54,999

HS3=Household income equal to \$55,000-\$84,999

HS4=Household income equal to \$85,0000+

CHAPTER V

DISCUSSION

Introduction

There were three primary questions examined in this study.

1. Does alcohol diagnosis affect women's participation in 12-step support group programs?
2. Does comorbid psychopathology mediate the relationship between alcoholism diagnosis and women's participation in 12-step support group programs?
3. Do key demographic variables moderate alcoholic women's participation in 12-step support group programs?

In this chapter, an overview of the findings related to each of the key questions is provided, consider reasonable interpretations of the findings, discuss several limitations of the data, and consider policy implications. The key take home answer to the questions raised is that women with more severe alcoholism are more likely to attend 12-step programs. Moreover, evidence for mediating effects of co-morbid psychopathology was not obtained and evidence for moderating effects was mixed.

Research question 1 Does alcohol diagnosis affect women's participation in 12-step group support?

The central question raised in this study was whether women with more severe alcohol disorders would go to 12-step group support. They do! Women with more severe alcoholism went to 12-step group support on average 3.8 times more often than those without a more severe disorder. In these data those with any type of alcohol disorder were 2.6 times more likely to go to 12-step group than those without any

diagnosis. This outcome is consistent with the broader alcohol treatment and 12-step literatures (Humphreys, Kaskutas, & Weisner, 1998b; Kaskutas, Ye, Greenfield, Witbrodt, & Bond, 2008a; Tonigan, Bogenschutz, & Miller, 2006).

Research question 2 Does comorbid psychopathology mediate the relationship between alcohol diagnosis and women's participation in 12-step group support programs?

Comorbid psychopathologies were not significant mediators of the relationship between alcohol diagnosis and 12-step group support. Major Depressive Disorder was the only psychopathology that was significant in the model. This finding was surprising given the extensive literature indicting the high degree of comorbid psychopathology among samples of predominately males with alcohol disorders who are in treatment (Bogenschutz, Geppert, & George, 2006; Humphreys, 1997; Humphreys, Mavis, & Stöffelmayr, 1991; Kelly, McKellar, & Moos, 2003; McKay et al., 1998). This finding did not hold for women. The presence of psychopathologies did increase the strength of the alcohol diagnosis coefficient, but it did not differentiate between women with and without comorbidity apropos of their likelihood of attending 12-step programs.

ASPD was a strong predictor of 12-step group support attendance. Women who have ASPD go to 12-step group support and its presence in the model did increase the strength of the alcohol diagnosis coefficient. But, it did not mediate or moderate the relationship between alcohol disorders and 12-step group support. There was a significant interaction between severe alcoholic and ASPD diagnosed women. This outcome was not expected. Group support is fundamentally a social support group. One would expect antisocial personality disordered individuals to be less likely to seek out such groups. The literature on ASPD and alcoholism provided little insight into the

phenomenon in these data. There is literature on the co-occurrence of severe alcohol disorders with ASPD (Hesselbrock, 1991; Hesselbrock & Hesselbrock, 1994); however, this literature provides little information about ASPD and treatment effects for women.

In lieu of any explanation of this outcome in the 12-step or treatment literatures a logical argument was found in court mandated treatment literature. As with men, women with ASPD tend to come in frequent contact with the law. For example, the first criteria stated for DSM-IV 301.7 ASPD is, “failure to conform to social norms with respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest (American Psychiatric Association, 1994).” Women express ASPD differently than men, with more antisociality focused inward than in outward expressions (Cadoret, O’Gorman, Troughton & Heywood, 1985; Cloninger, Christiansen, Reich & Gottesman, 1978; Kendler, Prescott, Myers & Neale, 2003; Lex, Goldberg, Mendelson, Lawler & Bower, 1994; Windle, 1990). Women do have more internalizing symptoms in contrast to men, and men are more likely to have more externalizing symptoms than women (Kendler, Prescott, Myers & Neale, 2003; Windle, 1990). For women this could mean engagement in prostitution, retail fraud or drug dealing behaviors which would bring them in front of the court. Prostitution, retail fraud and similar behaviors are not the violent, externalizing behaviors of men, but none-the-less, they are illegal behaviors that can get one arrested. Continuing to follow this logic, severe alcoholic women with ASPD who are prosecuted for their behaviors would typically be referred to some type of remediation through treatment (Daughters, Stipelman, Sargent, Schuster, Bornovalova & Lejuez, 2008; Young, 2002). In one study, women with ASPD and severe alcohol disorders were court mandated to treatment with significant benefit in regards to treatment completion and

maintenance of abstinence from alcohol (Daughters, Stipelman, Sargent, Schuster, Bornovalova & Lejuez, 2008). In another study, while not a specifically ASPD study, the one and five year outcomes relative to abstinence rates for those arrested showed that court ordered treatment worked for those with substance abuse with and without co-occurring disorders (Kelly, 2005). Research shows the practice of mandating people with ASPD and severe alcoholism is successful reducing the use of alcohol and developing better coping mechanisms. Further, outcomes reinforcing court mandated treatment for substance abusers would naturally increase the likelihood that other courts would mandate to treatment. Thus, even though no specific reference to 12-step group support participation was found for women with comorbid severe alcoholism and ASPD in the literature, a case could be made that a) these women went to treatment because it was court mandated rather than voluntary and b) 12-step group support was a common treatment component. This is a plausible speculation that is not proved by this study, but provides the foundation for future research.

Research question 3 Do key demographic variables moderate alcoholic women's participation in 12-step group support?

Demographic Clusters. The first demographic cluster of women who were white, married, age 35 years or older, with at least a high school education was the most common demographic cluster in the NESARC. The presence of these characteristics in the 12-step literature is well documented. However, the presence of these variables in a model with alcoholic women did not moderate the relationship between alcohol diagnosis and 12-step group support.

Women who were married were less likely to go to 12-step group support than other relationship groups. This outcome was not expected. Married alcoholic women are not specifically represented in the 12-step literature. One possible explanation for this outcome was found in intimate partner violence (IPV) literature. The presence of alcohol in family settings where violence occurs is well documented (Steinglass & Moyer, 1977; Straus, 1974; Straus, 1990). Alcoholic women seeking to prevent future abuse go to treatment to improve her behaviors but do not stay (Hattery, 2009; Shannon, Logan, Cole & Medley, 2006). Women who seek outside responses to home abuse may have husbands or partners who become jealous and increase the risk of being hurt again (Hattery, 2009). Further, fear of losing access to her children creates a barrier to help seeking (Beckman, 1994). Women were more likely to seek help through doctors or mental health professionals and were less likely to seek traditional substance abuse treatment (Beckman, 1975 Schober & Annis, 1996). All of these possibilities do not speak directly to the low numbers of married alcoholic women attending 12-step group support. But, it does provide a plausible reason for not attending that could form the basis for future study.

Demographic Cluster 2 included those women who were other-than-white, were under the age of 35 years with less than a high school education who were previously married. These characteristics were the inverse of Demographic Cluster 1 and were tested based on the concern raised by Humphreys (1997) about sample selection bias. This cluster did not moderate the relationship between alcohol diagnosis and 12-step group support. The 12-step literature did not specifically discuss why alcoholic women who were separated went to 12-step group support. A possible explanation is found in the

treatment literature. Alcoholic women who were separated entered treatment when they had experienced the more adverse consequences of their drinking like relationship disruption and financial instability (Finney & Moos, 1995; Lipsky, Caetano, Field & Larkin, 2006).

Separated women. Women who were previously married; meaning separated, widowed or divorced were significant in the model. It was expected that women who were divorced would go to 12-step group support based on the literature. This was supported by the outcomes. That women who were separated or widowed would go to 12-step group support in significant numbers was a surprise. The 12-step literature did not specifically discuss why alcoholic women who were separated went to 12-step group support. A possible explanation is found in the treatment literature. Alcoholic women who were separated entered treatment when they had experienced the more adverse consequences of their drinking like relationship disruption and financial instability (Finney & Moos, 1995; Lipsky, Caetano, Field & Larkin, 2006). This makes sense then that since 12-step participation is a very common element of treatment, if separated women went to treatment, they would most probably go to 12-step group support.

Widowed women. Even though it was not expected, widowed women with severe alcohol problems were significantly more likely to go to 12-step group support. One study reported that self-help support groups in general were successful in helping widows cope with identity loss and aloneness (Epstein, Fischer-Elber, K. & Al-Otaiba, 2007). Widowed women were at increased risk of problem drinking due to limited social supports brought about by the loss of relationship after the death of a partner (Gomberg & Nirenberg, 1993; Stewart, Craig, MacPherson & Alexander, 2001). Therefore, it

makes sense that drinking women would seek out the social support of a 12-step support group that could help with the alcohol problems.

Demographic characteristics not found significant.

Children. The influence of children being present or absent in the home played no significant role in a woman's decision to go to 12-step group support. From the onset there was no research found in the 12-step literature that spoke of women in 12-step with or without children. In the epidemiologic literature there were significant findings regarding treatment barriers and one of those barriers was the presence of children in the home (Gomberg & Nirenberg, 1993). In the family studies literature the presence of children in the home added a layer of severity to the problems within the system which included problem drinking (Steinglass & Robertson, 1993). Future research could help to determine if children pose the same barriers to seeking group support as it has posed to seeking treatment.

Ethnoracial Group Ethnoracial group played no significant role in these data. The minority ethnoracial makeup of women in treatment has been studied (Kaskutas & Weisner, 1996; Rouse, Carter & Rodriguez-Andrew, 1995; Zemore, 2008, #17499). However, the majority of treatment data, the NESARC data and the 12-step data available all were consistently made up of white participants. Ethnoracial studies of women who attend 12-step group support are an important topic for future research. The prevalence of meetings, the person to person model of helping and the low cost associated with self-help make 12-step group support are an attractive program for a wide range of recovering communities.

Socioeconomic Status. The presence or absence of socioeconomic status did not moderate the relationship between alcohol disorders and 12-step group support. Women in the upper socioeconomic brackets were expected to be more likely to attend 12-step group support and they were. Alcoholic women who worked as skilled craftsmen, clerical and sales workers (Category 3 workers) were not significantly more likely to attend 12-step group support. All other categories of workers were significantly more likely to go to 12-step group support. But, the literature was only consistent in that women with more economic resources go to 12-step group support (Moos, Moos, & Timko, 2006; Ogborne & Glaser, 1981).

Women in lower socioeconomic groups went to 12-step group support and this was not expected. But, searching for the cause of this phenomenon may need to begin with the process of analysis first. The way that the socioeconomic variable was constructed in this study may have skewed the results. It was discovered after the analysis had been completed that the 1975 unpublished work of Hollingshead was not the actual rubric known in the socioeconomic literature as the Hollingshead scale of Socioeconomic Status. After the original unpublished work, the construct was expanded. Second, there were two factors (occupation and education) with weights used to calculate what was thought to be the Hollingshead scale of Socioeconomic Status. The more accurate Census Occupation Codes were not used in the NESARC and even though education was a stable variable in these data, given the instability of the occupation variable the outcomes of the calculations were suspect. The fault then in these findings must be traced back to the writer and not the absence of literature on the subject. In the end, there needs to be research done on the socioeconomic status of women who go to

12-step group support. It must be grounded in better methodology than the one incorporated here.

Limitations of the Data set chosen

These data represent the largest randomly sampled, non-treatment data set to date. It is a well prepared collection of responses that have brought significant findings to the field of alcohol research. However, there were some limitations to its use as secondary data in a 12-step study.

Meeting attendance

These data only asked if a person had ever participated in a 12-step group and then only asked if their participation was within the current 12 months, prior to the current 12 months or in both time periods. A person who had gone to one 12-step meeting would be weighted the same as a person who had gone to 100 12-step meetings. Meeting attendance is not the most important factor in determining the potential for abstinence from alcohol. However, the number of meetings attended is one factor that does impact abstinence from alcohol (Gossop, Stewart & Marsden, 2008; Kaskutas, Ammon, Delucchi, Room, Bond & Weisner, 2009; McKeller, Harris & Moos, 2009; Witbrodt & Kaskutas, 2005).

Affiliation with 12-step group support

Elements of 12-step affiliation are important predictors of abstinence patterns (Humphreys, Kaskutas & Weisner, 1998; Laudet, White & Storey, 2006). This dataset did not ask questions about the types of activities in which a person engaged who was going to 12-step group support (ie did they read 12-step literature, did they do service

work, were they sponsored and do they have a sponsor). The lack of depth in questioning 12-step affiliation limits the conclusions that may be drawn from this subset.

Alcoholics Anonymous specific information

These data limit the AA specific conclusions that may be drawn. There were no AA-specific variables. Even though alcohol is still the most frequently reported primary drug at treatment admission and even though 63% of all persons going into treatment have a history of AA involvement this national alcohol data set did not explore AA specific information.

Diagnosis of individuals with DSM-IV disorders

The designers of the NESARC operationalized the symptom criteria for a number of DSM-IV pathologies into a series of questions. After the survey data were collected, a posthoc analysis of the responses to the operationalized criteria was completed. The result was that individuals were given a diagnosis or not based on their responses to the symptoms and not based on their self report (Grant et al., 2004a; National Institute for Alcoholism and Alcohol Abuse, 2004; Pulay et al., 2008).

There was a shifting of the time frames established for diagnosis by the DSM-IV in the NESARC. Major Depressive Disorder and Generalized Anxiety Disorder have a much shorter window than the 12 months required to make a diagnosis of alcohol abuse or dependence. However, these two disorders were assigned posthoc based on this 12-month time frame. These procedures create potential for ‘false positive’ and ‘false negative’ endorsements of the psychopathologies in that women may have had symptoms of depression over the course of 12-months that would never have met the two week requirement for symptoms to occur.

Lack of Census Occupational Codes

The NESARC did not use the census occupational codes when assigning occupations to the participants in their study. Instead they used a more descriptive approach to assign an occupation. Unfortunately, this made it impossible to have portability between their occupational coding system and other systems. The Hollingshead Scale which was reliant on the Census Occupational Codes which did not smoothly relate to the NESARC codes.

Policy Implications

There has been a growing body of literature since the 1970's focusing research on women specific health consequences and treatment options for alcoholic women. There have been several treatment studies and epidemiologic studies sited that have either been gender specific or gender balanced. The 12-step literature is still limited because of the small amount of women-specific research outcomes available.

Two policy directions were implied by this; 1) Government funded research on women specific 12-step group support needs to expand and 2) More education needs to be done to build capacity for women to go to and continue to be successful in 12-step group support.

Government funded research

Study has to be done relative to women alcoholics and AA specific 12-step group support. Recent research has shown that 12-step group support in general and AA in particular transcends the criticism so frequently levied that 12-step group support is only for white, middle aged men (White, 2008). Women in certain conditions benefit from AA (Kelly, Stout, Zywiak & Schneider, 2006). People of color benefit from participation

in AA (Humphreys, Mavis & Stoffelmayr, 1994; Kaskutas, 1996). People with co-occurring mental health problems benefit from AA (Chi, Satre & Weisner, 2006; Laudet, Magura, Vogel & Knight, 2000). Yet, these studies are few. And despite the outcomes, even the NESARC, the largest population study of alcohol to date did not differentiate between AA and other 12-step programs. Conclusions had to be couched in the more universal 12-step group support language. Further, given the current economic crisis, the increased use of alcohol by women and the shrinking resources to address this problem, it seems that government funded research of AA specific group support could be a beneficial priority. Group support is free and it works. It is a people-centered movement that does not rely on expert opinion to function, but rather on a set of supportive relationships built on one person helping another person to stay sober one day at a time. The 12-steps when followed provide a mechanism whereby a person once segregated from society by alcoholism is now reunited with their community as a productive and contributing member. This makes economic sense to expand the body of government funded research to incorporate female specific study of alcoholism and Alcoholics Anonymous.

Education of Professionals

A second policy concern rests in the education of society regarding the hope that AA provides to women with this debilitating disease. Women who go to AA get sober and stay sober. By following the 12-steps women like men are restored to community. The misperceptions, through education, need to be dispelled that AA is only for middle aged, white men. Women seek help for alcoholism at their private physicians' and therapists' office and family support centers including government and non-profit

agencies. These locations could be better equipped to provide referrals to AA for their female clients. Professionals need to avail themselves of the opportunity to attend open meetings of AA and to learn about 12-step facilitation programming that builds a foundation for AA for newcomers to the program. Increasing knowledge capacity regarding the benefits of group support furthers the goals of alcohol treatment research which promotes recovery oriented systems of care.

Group support is a program of attraction, not promotion. Because of this court jurisdictions need to be more thoroughly trained to work with committees within the AA community to provide appropriate linkages to local meetings in general and to women friendly meetings in particular. The misconceptions that all meetings are the same must be dispelled. It is not appropriate to mandate anyone to a closed meeting of AA. Court mandated women should only be steered to open meetings and leave it to the women being referred to decide when and if they are ready for closed meetings. Court professionals who will make it mandatory for women to attend AA need to know what meetings will be the most effective given the level or readiness to change expressed by the client (White, 1998). Further, sending women to appropriate meetings for her level of readiness increases the likelihood that women will stay in the program.

Recap of future study

The outcomes of this study point towards three general areas for future study. First, more needs to be known about the relationship between alcohol severity and ASPD in relationship to 12-step group support.

Second, the impact of family relations on women's participation in 12-step group support needs to be studied in greater depth. This dataset offers more information regarding family histories of alcohol use.

Third, these data offer extensive information about treatment participation. Future study should compare women who go to 12-step group support to the kinds of treatment they are attending. It is of interest to know if a particular type or types of treatment mediate or moderate the relationship between alcohol diagnosis and 12-step group support.

In conclusion the outcomes of this study confirmed the fundamental premise that women with severe alcohol problems with and without comorbid psychopathologies attend 12-step group support. Future studies will be assisted by these findings.

APPENDIX A

THE TWELVE STEPS OF ALCOHOLICS ANONYMOUS

1. We admitted we were powerless over alcohol, that our lives had become unmanageable.
2. Came to believe that a Power greater than ourselves could restore us to sanity.
3. Made a decision to turn our will and our lives over to the care of God *as we understood Him*.
4. Made a searching and fearless moral inventory of ourselves.
5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. Were entirely ready to have God remove all these defects of character.
7. Humbly asked Him to remove our shortcomings.
8. Made a list of all persons we had harmed, and became willing to make amends to them all.
9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take personal inventory and when we were wrong promptly admitted it.
11. Sought through prayer and meditation to improve our conscious contact with God, *as we understood Him*, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as the result of these Steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.

(Alcoholics Anonymous World Services, 1991)

APPENDIX B

PSYCHOPATHOLOGIES

Major Depressive Disorder

Major Depressive Disorder is a Mood Disorder. It is an episodic disorder characterized by having one or more time periods where at least five behaviors are present for the same two week period⁶. These behaviors include persistent depressed mood, markedly diminished interest or loss of pleasure in activities, significant weight loss or gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue, feelings of worthlessness or inappropriate guilt, diminished ability to concentrate or recurrent thoughts of death. These symptoms must not be combined with any periods of manic behaviors, must cause clinically significant distress or impairment in functioning and may or may not be due to physical illness or from the effects of psychoactive substances (an important point to consider during the analysis of the data) (American Psychiatric Association, 1994).

Generalized Anxiety Disorder

Generalized Anxiety Disorder is characterized by having excessive anxiety or worry occurring more days than not for a period of six months.⁷ The person must possess at least three behaviors which include feelings of restlessness, fatigue, difficulty

⁶ Note the two week time period required for determination of this disorder. For an alcohol use disorder the time period is broader. The person has up to a year to manifest symptoms. Major Depressive Disorder must manifest in a concentrated two week period. Refer to page 35 of Chapter III, Methods for a complete discussion of how these diagnoses were determined in the NESARC.

⁷ Compare now Generalized Anxiety Disorder to Major Depressive Disorder and alcohol use disorders. Generalized Anxiety Disorder needs a period of six months of symptom presentation for diagnosis.

concentrating, irritability, muscle tension and sleep disturbance. The focus of the anxiety or worry is not fixated on an event but is generally present in all areas of life. The symptoms cause clinically significant distress or impairment in functioning and the disturbance may or may not be due to a physical illness or brought on by the use of psychoactive substances (American Psychiatric Association, 1994).

Conduct Disorder

The defining characteristic of Conduct Disorder is an ongoing pattern of behavior that disregards the rights of others or fails to comply with social norms and rules. This disorder is age dependent and must be diagnosed before the age of 18 years. Three or more behaviors must be met for this disorder to be diagnosed including bullying, instigating physical fights, use of weapons or objects as weapons, physical cruelty to people or animals, forcing sexual contact with others, fire starting, theft or robbery, repetitive curfew violations, truancy from school or work. The behaviors must occur within a consistent 12 month period and with at least one of these behaviors present within the most recent six month period (American Psychiatric Association, 1994).

Antisocial Personality Disorder

ASPD is a lifetime diagnosis. The symptoms of this disorder do not abate, but may be managed through therapy. There must be a consistent disregard for the rights of others. These behaviors often appear during middle adolescence as Conduct Disorder and persist throughout the person's lifetime. However, there is support for adult onset of ASPD without Conduct Disorder (Goldstein et al., 2007). Three or more of the following criteria must be present including complete failure to conform to social norms, lying,

impulsivity, aggressiveness, and reckless disregard for others safety, irresponsibility and total lack of remorse for anything done to harm others.

APPENDIX C

GENERAL DEMOGRAPHIC CHARACTERISTICS OF THE NESARC

General demographics. There were a total of 43,093 participants in the survey; N=24,575 Women and N=18,518 Men.

Age. Women were slightly older than men. The average age was about 47 years for women and 45.5 years for men. There were more people over the age of 35 years. There were 70.3% of women over the age 35 years and 69.5% of men (Table 39).

Table 39 Comparison of ages between women and men

Age	Females (mean 47.12, sd 18.64)		Males (mean 45.45, sd 17.51)		Total	
18-24	2,789	6.47%	2,410	5.59%	5,199	12.06%
25-29	2,060	4.78%	1,407	3.27%	3,467	8.05%
30-34	2,458	5.70%	1,834	4.26%	4,292	9.96%
35-39	2,661	6.18%	1,989	4.62%	4,650	10.79%
40-44	2,406	5.58%	2,034	4.72%	4,440	10.30%
45-49	2,142	4.97%	1,876	4.35%	4,018	9.32%
50-54	2,004	4.65%	1,603	3.72%	3,607	8.37%
55-59	1,611	3.74%	1,236	2.87%	2,847	6.61%
60-64	1,343	3.12%	1,025	2.38%	2,368	5.50%
65+	5,101	11.84%	3,104	7.20%	8,205	19.04%

Ethnoracial group. White females and males represented the largest group in the data (Table 40). The order of the distribution was the same between females and males (i.e. the order of most to least was white, black, Hispanic, Asian/Pacific Islander and Native American Indian/Alaskan Inuit⁸). The percent in each category was weighted to females which is consistent with the oversampling of females reported by the researchers.

⁸ The writer acknowledges that there are more appropriate terms used in the literature to describe individuals' ethnoracial group. The terminology used by the authors of the study was the terminology adopted for this study.

Table 40 Comparison of ethnoracial group for women and men

Ethnorace	Females (n=24,575)		Males (N=18,518)		Total (N=43,093)	
White	13,662	55.6%	10,845	31.7%	24,507	56.9%
Black	5,204	21.2%	3,041	12.1%	8,245	19.1%
Hispanic	4,586	18.7%	3,722	10.6%	8,308	19.3%
Asian/ Pacific Islander	736	3.0%	596	1.7%	1,332	3.1%
Native American Indian/ Alaskan Inuit	387	1.6%	314	0.9%	701	1.6%

Relationship status. In these data 48.2% of the respondents were married. Those who were living together as married (LTP's) are separated in this chart and make up 3.04% of the population. In the dataset used for analysis, LTP's were included with those who were married. Note, also in this sample, there were several more women who reported being widowed in comparison to widowers which is consistent with national trends (Table 41).

Table 41 Comparison of relationship status for women and men

Relationship	Females (n=24,575)		Males (N=18,518)		Total (N=43,093)	
Married	10,969	25.45%	9,800	22.74%	20,769	48.20%
LTP	714	1.66%	598	1.39%	1,312	3.04%
Widowed	3,488	8.09%	783	1.82%	4,271	9.91%
Divorced	3,306	7.67%	2,095	4.86%	5,401	12.53%
Separated	960	2.23%	485	1.13%	1,445	3.35%
Never Married	5,138	11.92%	4,757	11.04%	9,895	22.96%

Children. The percentage of women without children in these data was greater than the percentage of men without children and together, about 62.5% of the entire dataset did not have children. Those who had one to two children made up 29% of the dataset and only a little less than 8.5% of these data had three or more children (Table 42).

Table 42 Children in the home for women and men

# of Children under 17	Females (N=24,575)		Males (N=18,518)		Total (N=43,093)	
	33.97					
0	14,638	%	12,302	28.55%	26,940	62.52%
1	4,061	9.42%	2,498	5.80%	6,559	15.22%
2	3,557	8.25%	2,382	5.53%	5,939	13.78%
3	1,581	3.67%	935	2.17%	2,516	5.84%
4	520	1.21%	266	0.62%	786	1.82%
5	150	0.35%	87	0.20%	237	0.55%
6	48	0.11%	32	0.07%	80	0.19%
7 or more	20	0.05%	16	0.04%	36	0.08%

Education. Slightly less than 82% of the entire dataset completed at least high school or its equivalent. There were 32% of these data that completed a two-year associates or more post-secondary education (Table 43).

Table 43 Highest grade attained for women and men

# of Children under 17	Females (N=24,575)		Males (N=18,518)		Total (N=43,093)	
No formal schooling	127	0.29%	91	0.21%	218	0.51%
completed grad K, 1 or 2	74	0.17%	63	0.15%	137	0.32%
completed grade 3 or 4	236	0.55%	185	0.43%	421	0.98%
Completed grade 5 or 6	516	1.20%	415	0.96%	931	2.16%
Completed grade 7	247	0.57%	167	0.39%	414	0.96%
Completed grade 8	690	1.60%	520	1.21%	1210	2.81%
Some high school 9-11	2590	6.01%	1928	4.47%	4518	10.48%
Completed high school	6394	14.84%	4541	10.54%	10935	25.38%
Graduate equivalency	889	2.06%	723	1.68%	1612	3.74%
Some college no degree	5170	12.00%	3721	8.63%	8891	20.63%
Completed associate	2243	5.21%	1529	3.55%	3772	8.75%
Completed college						
bachelor's degree	2810	6.52%	2441	5.66%	5251	12.19%
Some graduate or						
professional	897	2.08%	629	1.46%	1526	3.54%
Completed graduate/ professional degree	1692	3.93%	1565	3.63%	3257	7.56%

Drinking Status. Over half of the women in the sample (13,879/24,575) reported that they were current drinkers. A little less than one-quarter of the women were lifetime alcohol abstainers (6,022/24,575). Almost three-quarters of the men reported that they were current drinkers (13,076/18,518), while only one-eighth (2,244/18,518) of them were lifetime alcohol abstainers. A greater percentage of the women compared to the men reported that they were former drinkers (10.85% and 7.44%, respectively) (Table 44).

Table 44 Percentage of women and men by drinking status

Drinking Status	Females (N=24,575)	Males (N=18,518)	Total (N=43,093)
Current Drinker	13,879 32.21%	13,067 30.32%	26,946 62.53%
Former Drinker	4,674 10.85%	3,207 7.44%	7,881 18.29%
Lifetime Abstainer	6,022 13.97%	2,244 5.21%	8,266 19.18%

Table 45 shows the demographic characteristics by the drinking status of both men and women in these data.

Table 45 Demographic characteristics by drinking status

Ethnoracial Group	Consumer							
	Women				Men			
	Current	Former	Abstainer	Total	Current	Former	Abstainer	Total
White	8,735	2,506	2,421	13,662	7,997	1,855	993	10,845
Black	2,330	1,307	1,567	5,204	1,855	703	483	3,041
American Indian								
Alaska Native	208	100	79	387	208	71	35	314
Asian/Native								
Hawaiian/ Pacific	294	99	343	736	370	68	158	596
Islander								

Table 45 (cont'd).

Hispanic		2,312	662	1,612	4,586	2,637	510	575	3,722
# Children									
Age	No Children	7,845	3,044	3,749	14,638	8,466	2,307	1,529	12,302
	1 Child	2,471	661	929	4,061	1,831	378	289	2,498
	2 Children	2,241	572	744	3,557	1,802	329	251	2,382
	3 Children	931	254	396	1,581	701	124	110	935
	4 Children	282	105	133	520	182	39	45	266
	5 Children	69	27	54	150	62	17	8	87
	6 Children	28	7	13	48	13	11	8	32
	7 Children	8	3	2	13	7	2	1	10
	8 Children	3	1	2	6	2	0	3	5
	15 Children	1	0	0	1	1	0	0	1
Relationship	Age 18-24	1,787	242	760	2,789	1,764	172	474	2,410
	Age 25-34	3,091	573	854	4,518	2,609	306	326	3,241
	Age 35-44	3,285	831	951	5,067	3,063	563	397	4,023
	Age 45-54	2,485	850	811	4,146	2,504	641	334	3,479
	Age 55-64	1,487	762	705	2,954	1,483	532	246	2,261
	Age 65-74	1,003	675	864	2,542	1,021	512	226	1,759
	Age 75+	741	741	1,077	2,559	623	481	241	1,345
	Married	6,392	2,025	2,552	10,969	6,894	1,813	1,093	9,800
	LTP	493	86	135	714	483	79	36	598
	Widowed	1,172	1,007	1,309	3,488	381	276	126	783
Relationship	Divorced	2,000	734	572	3,306	1,547	396	152	2,095
	Separated	542	183	235	960	350	95	40	485

Table 45 (cont'd).

Never married Education	3,280	639	1,219	5,138	3,412	548	797	4,757
No formal schooling completed grade K, 1, 2	16	19	92	127	31	29	31	91
completed grade 3	11	15	48	74	31	19	13	63
or 4	44	44	148	236	83	64	38	185
completed grade 5	103	103	310	516	237	106	72	415
or 6	53	62	132	247	85	54	28	167
Completed grade 7	167	198	325	690	257	174	89	520
Completed grade 8								
Some high school								
9-11	1,072	680	838	2,590	1,191	438	299	1,928
High school	3,343	1,303	1,748	6,394	3,078	865	598	4,541
GED	465	237	187	889	473	175	75	723
Some college	3,344	869	957	5,170	2,774	546	401	3,721
Completed								
associate or Other								
tech degree - 2 yr	1,443	408	392	2,243	1,150	234	145	1,529
Completed 4 yr								
college	1,962	386	462	2,810	1,957	257	227	2,441
Some graduate	633	138	126	897	492	78	59	629
Completed								
graduate/								
professional	1,223	212	257	1,692	1,228	168	169	1,565

12-step group support meeting attendance by category of drinking status. Both women and men were more likely to be current drinkers (Table 46).

Table 46 12-step participation by drinking status for women and men

12-step	Women			Men		
	Current	Former	Total	Current	Former	Total
Yes	256	176	432	619	393	1012
No	110	33	143	256	67	323
Total	366	209	575	875	460	1335

Current alcohol diagnosis. More women (N=12,766) than men (N=10,853) reported being current drinkers with no current 12-month alcohol diagnosis (Table 47). Fewer currently drinking women (N=594) than men (N=1,249) reported having a diagnosis of alcohol abuse in the past 12 months and the same was true for having an alcohol dependence diagnosis in the past 12 months. Overall, women were less likely to have a current alcohol diagnosis than men.

Table 47 Current diagnosis by drinking status for women and men

Alcohol Diagnosis	Women			Men		
	Current	Former Drinker	Lifetime Abstainer	Current	Former Drinker	Lifetime Abstainer
None	12,766	4,674	6,022	10,853	3,207	2,244
Abuse	594			1,249		
Dependence	243			310		
Both	276			655		
Total	13,879			13,067		

Prior to current alcohol diagnosis. The same held true for individuals receiving a diagnosis prior to the last 12 months with the exception of current drinking women who were diagnosed with past alcohol dependence. There were slightly more women than men who had a prior alcohol dependence diagnosis than were currently drinking women. In the group of former drinking women, slightly more had a past alcohol dependence diagnosis than former drinking males (Table 48).

Table 48 Prior to current alcohol diagnosis by drinking status for women and men

Prior Diagnosis	Women			Men		
	Current	Former Drinker	Lifetime Abstainer	Current	Former Drinker	Lifetime Abstainer
None	10,477	3,894	6,022	7,289	1,751	2,244
Abuse	2,061	481	0	3,552	900	0
Dependence	273	39	0	227	24	0
Both	1068	260	0	1,999	532	0
Total	13,879	4,674	6,022	13,067	3,207	2,244

Comorbid psychopathology. Using the criteria established in the DSM-IV as the basis for interview questions, the survey questionnaire operationalized amongst other disorders the symptoms for Major Depressive Disorder, Generalized Anxiety, Conduct Disorder and ASPD. Individuals meeting the appropriate criteria for a disorder based on their responses to the survey questions were assigned to the named disorder. In other words, the respondent was not asked to endorse the disorder per se but instead was asked to endorse behaviors that were consistent with the operationalized definitions of the disorders (Grant et al., 2004a; National Institute for Alcoholism and Alcohol Abuse, 2004; Pulay et al., 2008). The time period when the symptoms were manifested was only reported for Major Depressive and Generalized Anxiety Disorders. For both of these disorders the current 12 months and the time period prior to the current 12 months was used. Conduct Personality Disorder is diagnosed in adolescence and ASPD is a lifetime diagnosis.

Major Depressive Disorder and Generalized Anxiety Disorder. More women were diagnosed with lifetime Major Depressive Disorder than men (Table 49). A higher percentage of women than men were diagnosed with Generalized Anxiety Disorder and about 4% of the dataset was diagnosed with lifetime Generalized Anxiety Disorder

(Table 50). Major Depressive Disorder and Generalized Anxiety Disorder had an aggregate variable (Table 49 and Table 50). They both had a variable where substance abuse was ruled out of the diagnosis. The substance abuse ruled out variable was chosen over the aggregate level data to avoid confounding the alcohol diagnosis with Major Depressive Disorder and Generalized Anxiety Disorder (Table 46 and Table 47).

Table 49 Lifetime Major Depressive Disorder for women and men

Major Depressive Disorder Lifetime	Females		Males	
	Frequency	Substance Abuse Ruled out	Frequency	Substance Abuse Ruled out
No	19,161	19,216	16,093	16,135
Yes	5,414	5,359	2,425	2,383

Table 50 Lifetime Generalized Anxiety Disorder for women and men

Generalized Anxiety Disorder Lifetime	Females		Males	
	Frequency	Substance Abuse Ruled out	Frequency	Substance Abuse Ruled out
No	23,203	23,207	17,952	17,959
Yes	1,372	1,368	566	559

According to the DSM-IV, the period of time needed to sustain a diagnosis of Major Depressive Disorder or Generalized Anxiety Disorder vary from the time period needed for a diagnosis of alcohol abuse or alcohol dependence and vary in time between one another. For a diagnosis of a major depressive episode the symptoms must only be present for a two week period of time. Further, Major Depressive Disorder may be diagnosed for either a single episode or as recurrent when multiple major depressive episodes are present. For Generalized Anxiety Disorder to be diagnosed, symptoms must be present for duration of six months (pp.356, 375-376, and 472-473) (American Psychiatric Association, 1994).

In the NESARC dataset, these time frames are not observed. A standard 12-month time frame for the appearance of behavioral symptoms is used which allows for comparison between alcohol abuse, alcohol dependence, Major Depressive Disorder and Generalized Anxiety Disorder.

Conduct Disorder and Antisocial Personality Disorder. Fewer females reported histories of Conduct Disorder than males (Table 51). Generally, about 3% of the U.S. population and 3.3% of the NESARC sample are diagnosed with ASPD and fewer women are diagnosed with ASPD than men (Table 52).

Table 51 Conduct disorder for women and men

Conduct Disorder	Females	Males
No	24,418	18,260
Yes	157	258

Table 52 Antisocial personality disorder for women and men

Antisocial Personality Disorder	Females Frequency	Males Frequency
No	24,102	17,569
Yes	473	949

Appendix D

Table 53 Hollingshead (Code) Imputed Occupation codes with one imputed education code

IDNum	Difference	Personal	Education	Occupation	Code
854	0	19000	3 ⁹	service	2
20883	30,000	500	1	sales office	6
6646	0	10,800	1	forestry, farm	3
6008	125,714	286	1	professional	9
6131	23,000	10,000	1	sales office	6
1551	37,000	18,000	1	service	2
28103	38,000	12,000	1	service	2
42985	19,400	2,500	2	forestry, farm	3
23409	49,000	16,000	2	professional	9
16655	62,000	22,000	2	professional	9
23812	46,000	39,000	2	professional	9
6959	15,000	0	3	service	2
12490	15,000	17,500	3	service	2
5662	7,000	49,000	3	professional	9
30255	98,000	32,500	3	professional	9
21857	0	24,000	3	sales office	6
2900	27,197	8,803	3	service	2
2399	27,500	17,500	3	service	2
7036	23,184	5,040	3	far	3
16256	28,000	12,000	3	service	2
45	9,000	16,000 ¹⁰	3	service	2
5576	8,200	6,800	4	forestry, farm	3
29272	0	35,000	4	professional	9
41354	45,000	25,000	4	professional	9
19649	55,000	30,000	4	professional	9
35808	21,000	13,000	4	production	3
39017	31,000	24,000	4	production	3
32401	23,000	22,000	4	forestry, farm	3
33874	33,500	38,500	4	sales office	6
10776	10,500	8,500	4	service	2
18600	0	140,000	4	professional	9

⁹ (Pearson Education Inc., 2007).

¹⁰ The household and family income were different a and the household was higher

Table 53 (cont'd).

28058	45,000	10,000	4	professional	9
11015	43,000	27,000	4	professional	9
12999	1,200	1,200	4	other service	2
24363	9,514	22,486	4	sales office	6
26479	10,000	27,000	4	construction	2
11445	0	9,000	4	other service	2
14722	20,000	15,000	4	production	3
20207	0	4,750	4	other service	2
20840	0	52,000	4	professional	9
21863	50,000	25,000	5	professional	9
1213	9,900	2,600	5	other service	2
40981	113,000	37,000	5	professional	9
27317	75,000	0	5	professional	9
2668	46,000	9,000	5	professional	9
14620	7,000	30,000	5	construction	2
20915	18,500	9,000	5	service	2
40326	119,000	6,000	5	professional	9
32371	98,000	22,000	5	professional	9
5811	0	2,500	5	forestry, farm	3
25043	17,500	5,000	5	service	2
39842	0	25,000	5	construction	2
21997	125,000	5,000	6	professional	9
41448	6,000	39,000	6	professional	9
31534	95,000	0	7	professional	9
1595	32,000	0	7	construction	2

Table 54 Hollingshead scale

Social Strata	Range of computed scores
1. Major Business and professional	66-55
2. Medium business, minor professional, technical	54-40
3. Skilled craftsmen, clerical, sales workers	39-30
4. Machine operators, semiskilled workers	29-20
5. Unskilled laborers, menial service workers	19- 8

APPENDIX E
DEMOGRAPHIC CLUSTERS

Table 55 Six demographic variables matching

Children	Education	Ethnoracial group	Relationship Status	Age	Income	Cell Content
No Children	HS, equiv or more	White	Prior marriage	35+	<\$25k	49
No Children	HS, equiv or more	White	Prior marriage	35+	>=25K	36
No Children	HS, equiv or more	White	Never	18-34	<\$25k	23
No Children	HS, equiv or more	White	Married	35+	<\$25k	23
No Children	HS, equiv or more	Other-than-white	Prior marriage	35+	<\$25k	18
No Children	HS, equiv or more	White	Never	35+	>=25K	16
1 Child	HS, equiv or more	White	Prior marriage	35+	<\$25k	14
No Children	Less than HS	Other-than-white	Prior marriage	35+	<\$25k	13
No Children	HS, equiv or more	Other-than-white	Married	35+	<\$25k	12
No Children	HS, equiv or more	White	Married	35+	>=25K	12
No Children	HS, equiv or more	Other-than-white	Prior marriage	35+	>=25K	12
2 Children	HS, equiv or more	White	Married	35+	<\$25k	11
1 Child	HS, equiv or more	White	Married	35+	>=25K	11
1 Child	HS, equiv or more	White	Married	18-34	<\$25k	9
No Children	HS, equiv or more	White	Married	18-34	<\$25k	9
1 Child	HS, equiv or more	White	Married	35+	<\$25k	9
No Children	Less than HS	White	Prior marriage	35+	<\$25k	9
No Children	HS, equiv or more	Other-than-white	Married	35+	>=25K	9
2 Children	HS, equiv or more	White	Married	18-34	<\$25k	8
No Children	HS, equiv or more	White	Never	18-34	>=25K	8
No Children	HS, equiv or more	Other-than-white	Never	35+	>=25K	8
No Children	HS, equiv or more	Other-than-white	Never	18-34	<\$25k	7
1 Child	HS, equiv or more	White	Never	18-34	<\$25k	7

Table 55 (cont'd).

No Children	HS, equiv or more	Other-than-white	Never	35+	<\$25k	7
No Children	HS, equiv or more	White	Never	35+	<\$25k	7
No Children	HS, equiv or more	White	Prior marriage	18-34	<\$25k	6
2 Children	HS, equiv or more	Other-than-white	Married	35+	<\$25k	6
No Children	Less than HS	Other-than-white	Never	35+	<\$25k	6
2 Children	HS, equiv or more	Other-than-white	Prior marriage	35+	<\$25k	6
2 Children	HS, equiv or more	White	Married	35+	>=25K	6
2 Children	HS, equiv or more	White	Prior marriage	35+	>=25K	6
2 Children	HS, equiv or more	White	Prior marriage	35+	<\$25k	5
No Children	HS, equiv or more	White	Married	18-34	>=25K	5
1 Child	HS, equiv or more	White	Prior marriage	35+	>=25K	5
No Children	HS, equiv or more	White	Married	35+	No income	5
3 Children+	HS, equiv or more	White	Married	35+	<\$25k	4
1 Child	HS, equiv or more	Other-than-white	Never	35+	<\$25k	4
1 Child	HS, equiv or more	White	Never	35+	<\$25k	4
1 Child	HS, equiv or more	Other-than-white	Prior marriage	35+	<\$25k	4
2 Children	HS, equiv or more	White	Married	18-34	>=25K	4
No Children	HS, equiv or more	Other-than-white	Never	18-34	>=25K	4
1 Child	HS, equiv or more	White	Prior marriage	18-34	>=25K	4
3 Children+	HS, equiv or more	White	Prior marriage	35+	>=25K	4
2 Children	HS, equiv or more	White	Married	18-34	No income	4
2 Children	HS, equiv or more	Other-than-white	Married	18-34	<\$25k	3
1 Child	HS, equiv or more	Other-than-white	Never	18-34	<\$25k	3
2 Children	HS, equiv or more	White	Never	18-34	<\$25k	3
No Children	Less than HS	White	Never	18-34	<\$25k	3
3 Children+	Less than HS	Other-than-white	Married	35+	<\$25k	3

Table 55 (cont'd).

No Children	Less than HS	Other-than-white	Married	35+	<\$25k	3
No Children	Less than HS	White	Married	35+	<\$25k	3
No Children	HS, equiv or more	Other-than-white	Married	18-34	>=25K	3
2 Children	HS, equiv or more	Other-than-white	Prior marriage	18-34	>=25K	3
1 Child	HS, equiv or more	Other-than-white	Married	35+	>=25K	3
1 Child	HS, equiv or more	Other-than-white	Prior marriage	35+	>=25K	3
No Children	HS, equiv or more	Other-than-white	Married	18-34	<\$25k	2
3 Children+	HS, equiv or more	White	Married	18-34	<\$25k	2
2 Children	HS, equiv or more	Other-than-white	Never	18-34	<\$25k	2
3 Children+	HS, equiv or more	Other-than-white	Never	18-34	<\$25k	2
1 Child	Less than HS	Other-than-white	Never	18-34	<\$25k	2
2 Children	Less than HS	Other-than-white	Never	18-34	<\$25k	2
3 Children+	Less than HS	Other-than-white	Never	18-34	<\$25k	2
1 Child	Less than HS	White	Never	18-34	<\$25k	2
3 Children+	Less than HS	White	Never	18-34	<\$25k	2
1 Child	HS, equiv or more	White	Prior marriage	18-34	<\$25k	2
1 Child	Less than HS	White	Prior marriage	18-34	<\$25k	2
1 Child	HS, equiv or more	Other-than-white	Married	35+	<\$25k	2
1 Child	Less than HS	White	Married	35+	<\$25k	2
2 Children	HS, equiv or more	Other-than-white	Never	35+	<\$25k	2
3 Children+	HS, equiv or more	Other-than-white	Never	35+	<\$25k	2
1 Child	Less than HS	Other-than-white	Never	35+	<\$25k	2
3 Children+	Less than HS	Other-than-white	Prior marriage	35+	<\$25k	2
3 Children+	HS, equiv or more	White	Married	18-34	>=25K	2
3 Children+	HS, equiv or more	White	Prior marriage	18-34	>=25K	2
No Children	HS, equiv or more	White	Prior marriage	18-34	>=25K	2

Table 55 (cont'd).

2 Children	HS, equiv or more	Other-than-white	Prior marriage	35+	>=25K	2
No Children	Less than HS	White	Married	35+	No income	2
No Children	HS, equiv or more	Other-than-white	Prior marriage	35+	No income	2
3 Children+	HS, equiv or more	Other-than-white	Married	18-34	<\$25k	1
2 Children	Less than HS	Other-than-white	Married	18-34	<\$25k	1
No Children	Less than HS	Other-than-white	Married	18-34	<\$25k	1
1 Child	Less than HS	White	Married	18-34	<\$25k	1
3 Children+	Less than HS	White	Married	18-34	<\$25k	1
No Children	Less than HS	White	Married	18-34	<\$25k	1
No Children	Less than HS	Other-than-white	Never	18-34	<\$25k	1
2 Children	Less than HS	White	Never	18-34	<\$25k	1
1 Child	HS, equiv or more	Other-than-white	Prior marriage	18-34	<\$25k	1
2 Children	HS, equiv or more	Other-than-white	Prior marriage	18-34	<\$25k	1
3 Children+	HS, equiv or more	Other-than-white	Prior marriage	18-34	<\$25k	1
No Children	Less than HS	Other-than-white	Prior marriage	18-34	<\$25k	1
3 Children+	HS, equiv or more	White	Prior marriage	18-34	<\$25k	1
3 Children+	Less than HS	White	Prior marriage	18-34	<\$25k	1
1 Child	Less than HS	Other-than-white	Married	35+	<\$25k	1
2 Children	Less than HS	Other-than-white	Married	35+	<\$25k	1
2 Children	Less than HS	Other-than-white	Never	35+	<\$25k	1
3 Children+	Less than HS	Other-than-white	Never	35+	<\$25k	1
2 Children	HS, equiv or more	White	Never	35+	<\$25k	1
No Children	Less than HS	White	Never	35+	<\$25k	1
1 Child	Less than HS	Other-than-white	Prior marriage	35+	<\$25k	1
2 Children	Less than HS	Other-than-white	Prior marriage	35+	<\$25k	1
1 Child	Less than HS	White	Prior marriage	35+	<\$25k	1

Table 55 (cont'd).

3 Children+	Less than HS	White	Prior marriage	35+	<\$25k	1
1 Child	HS, equiv or more	Other-than-white	Married	18-34	>=25K	1
2 Children	HS, equiv or more	Other-than-white	Married	18-34	>=25K	1
3 Children+	HS, equiv or more	Other-than-white	Married	18-34	>=25K	1
2 Children	Less than HS	White	Married	18-34	>=25K	1
1 Child	HS, equiv or more	Other-than-white	Never	18-34	>=25K	1
1 Child	Less than HS	Other-than-white	Never	18-34	>=25K	1
No Children	Less than HS	Other-than-white	Never	18-34	>=25K	1
3 Children+	HS, equiv or more	White	Never	18-34	>=25K	1
1 Child	Less than HS	White	Never	18-34	>=25K	1
No Children	HS, equiv or more	Other-than-white	Prior marriage	18-34	>=25K	1
2 Children	HS, equiv or more	Other-than-white	Married	35+	>=25K	1
3 Children+	HS, equiv or more	Other-than-white	Married	35+	>=25K	1
3 Children+	HS, equiv or more	White	Married	35+	>=25K	1
No Children	Less than HS	White	Married	35+	>=25K	1
1 Child	HS, equiv or more	Other-than-white	Never	35+	>=25K	1
2 Children	HS, equiv or more	Other-than-white	Never	35+	>=25K	1
3 Children+	HS, equiv or more	Other-than-white	Never	35+	>=25K	1
1 Child	HS, equiv or more	White	Never	35+	>=25K	1
3 Children+	HS, equiv or more	White	Never	35+	>=25K	1
2 Children	Less than HS	Other-than-white	Prior marriage	35+	>=25K	1
No Children	Less than HS	Other-than-white	Prior marriage	35+	>=25K	1
No Children	Less than HS	White	Prior marriage	35+	>=25K	1
1 Child	HS, equiv or more	Other-than-white	Married	18-34	No income	1
2 Children	HS, equiv or more	Other-than-white	Married	18-34	No income	1
3 Children+	Less than HS	Other-than-white	Married	18-34	No income	1

Table 55 (cont'd).

1 Child	HS, equiv or more	White	Married	18-34	No income	1
3 Children+	HS, equiv or more	White	Married	18-34	No income	1
No Children	HS, equiv or more	White	Never	18-34	No income	1
3 Children+	HS, equiv or more	Other-than-white	Married	35+	No income	1
3 Children+	HS, equiv or more	White	Married	35+	No income	1
3 Children+	Less than HS	White	Married	35+	No income	1
No Children	HS, equiv or more	White	Never	35+	No income	1
No Children	Less than HS	White	Prior marriage	35+	No income	1
1 Child	HS, equiv or more	Other-than-white	Married	18-34	<\$25k	0
1 Child	Less than HS	Other-than-white	Married	18-34	<\$25k	0
3 Children+	Less than HS	Other-than-white	Married	18-34	<\$25k	0
2 Children	Less than HS	White	Married	18-34	<\$25k	0
3 Children+	HS, equiv or more	White	Never	18-34	<\$25k	0
No Children	HS, equiv or more	Other-than-white	Prior marriage	18-34	<\$25k	0
1 Child	Less than HS	Other-than-white	Prior marriage	18-34	<\$25k	0
2 Children	Less than HS	Other-than-white	Prior marriage	18-34	<\$25k	0
3 Children+	Less than HS	Other-than-white	Prior marriage	18-34	<\$25k	0
2 Children	HS, equiv or more	White	Prior marriage	18-34	<\$25k	0
2 Children	Less than HS	White	Prior marriage	18-34	<\$25k	0
No Children	Less than HS	White	Prior marriage	18-34	<\$25k	0
3 Children+	HS, equiv or more	Other-than-white	Married	35+	<\$25k	0
2 Children	Less than HS	White	Married	35+	<\$25k	0
3 Children+	Less than HS	White	Married	35+	<\$25k	0
3 Children+	HS, equiv or more	White	Never	35+	<\$25k	0
1 Child	Less than HS	White	Never	35+	<\$25k	0
2 Children	Less than HS	White	Never	35+	<\$25k	0

Table 55 (cont'd).

3 Children+	Less than HS	White	Never	35+	<\$25k	0
3 Children+	HS, equiv or more	Other-than-white	Prior marriage	35+	<\$25k	0
3 Children+	HS, equiv or more	White	Prior marriage	35+	<\$25k	0
2 Children	Less than HS	White	Prior marriage	35+	<\$25k	0
1 Child	Less than HS	Other-than-white	Married	18-34	>=25K	0
2 Children	Less than HS	Other-than-white	Married	18-34	>=25K	0
3 Children+	Less than HS	Other-than-white	Married	18-34	>=25K	0
No Children	Less than HS	Other-than-white	Married	18-34	>=25K	0
1 Child	HS, equiv or more	White	Married	18-34	>=25K	0
1 Child	Less than HS	White	Married	18-34	>=25K	0
3 Children+	Less than HS	White	Married	18-34	>=25K	0
No Children	Less than HS	White	Married	18-34	>=25K	0
2 Children	HS, equiv or more	Other-than-white	Never	18-34	>=25K	0
3 Children+	HS, equiv or more	Other-than-white	Never	18-34	>=25K	0
2 Children	Less than HS	Other-than-white	Never	18-34	>=25K	0
3 Children+	Less than HS	Other-than-white	Never	18-34	>=25K	0
1 Child	HS, equiv or more	White	Never	18-34	>=25K	0
2 Children	HS, equiv or more	White	Never	18-34	>=25K	0
2 Children	Less than HS	White	Never	18-34	>=25K	0
3 Children+	Less than HS	White	Never	18-34	>=25K	0
No Children	Less than HS	White	Never	18-34	>=25K	0
1 Child	HS, equiv or more	Other-than-white	Prior marriage	18-34	>=25K	0
3 Children+	HS, equiv or more	Other-than-white	Prior marriage	18-34	>=25K	0
1 Child	Less than HS	Other-than-white	Prior marriage	18-34	>=25K	0
2 Children	Less than HS	Other-than-white	Prior marriage	18-34	>=25K	0
3 Children+	Less than HS	Other-than-white	Prior marriage	18-34	>=25K	0

Table 55 (cont'd).

No Children	Less than HS	Other-than-white	Prior marriage	18-34	>=25K	0
2 Children	HS, equiv or more	White	Prior marriage	18-34	>=25K	0
1 Child	Less than HS	White	Prior marriage	18-34	>=25K	0
2 Children	Less than HS	White	Prior marriage	18-34	>=25K	0
3 Children+	Less than HS	White	Prior marriage	18-34	>=25K	0
No Children	Less than HS	White	Prior marriage	18-34	>=25K	0
1 Child	Less than HS	Other-than-white	Married	35+	>=25K	0
2 Children	Less than HS	Other-than-white	Married	35+	>=25K	0
3 Children+	Less than HS	Other-than-white	Married	35+	>=25K	0
No Children	Less than HS	Other-than-white	Married	35+	>=25K	0
1 Child	Less than HS	White	Married	35+	>=25K	0
2 Children	Less than HS	White	Married	35+	>=25K	0
3 Children+	Less than HS	White	Married	35+	>=25K	0
1 Child	Less than HS	Other-than-white	Never	35+	>=25K	0
2 Children	Less than HS	Other-than-white	Never	35+	>=25K	0
3 Children+	Less than HS	Other-than-white	Never	35+	>=25K	0
No Children	Less than HS	Other-than-white	Never	35+	>=25K	0
2 Children	HS, equiv or more	White	Never	35+	>=25K	0
1 Child	Less than HS	White	Never	35+	>=25K	0
2 Children	Less than HS	White	Never	35+	>=25K	0
3 Children+	Less than HS	White	Never	35+	>=25K	0
No Children	Less than HS	White	Never	35+	>=25K	0
3 Children+	HS, equiv or more	Other-than-white	Prior marriage	35+	>=25K	0
1 Child	Less than HS	Other-than-white	Prior marriage	35+	>=25K	0
3 Children+	Less than HS	Other-than-white	Prior marriage	35+	>=25K	0
1 Child	Less than HS	White	Prior marriage	35+	>=25K	0

Table 55 (cont'd).

2 Children	Less than HS	White	Prior marriage	35+	>=25K	0
3 Children+	Less than HS	White	Prior marriage	35+	>=25K	0
3 Children+	HS, equiv or more	Other-than-white	Married	18-34	No income	0
No Children	HS, equiv or more	Other-than-white	Married	18-34	No income	0
1 Child	Less than HS	Other-than-white	Married	18-34	No income	0
2 Children	Less than HS	Other-than-white	Married	18-34	No income	0
No Children	Less than HS	Other-than-white	Married	18-34	No income	0
No Children	HS, equiv or more	White	Married	18-34	No income	0
1 Child	Less than HS	White	Married	18-34	No income	0
2 Children	Less than HS	White	Married	18-34	No income	0
3 Children+	Less than HS	White	Married	18-34	No income	0
No Children	Less than HS	White	Married	18-34	No income	0
1 Child	HS, equiv or more	Other-than-white	Never	18-34	No income	0
2 Children	HS, equiv or more	Other-than-white	Never	18-34	No income	0
3 Children+	HS, equiv or more	Other-than-white	Never	18-34	No income	0
No Children	HS, equiv or more	Other-than-white	Never	18-34	No income	0
1 Child	Less than HS	Other-than-white	Never	18-34	No income	0
2 Children	Less than HS	Other-than-white	Never	18-34	No income	0
3 Children+	Less than HS	Other-than-white	Never	18-34	No income	0
No Children	Less than HS	Other-than-white	Never	18-34	No income	0
1 Child	HS, equiv or more	White	Never	18-34	No income	0
2 Children	HS, equiv or more	White	Never	18-34	No income	0
3 Children+	HS, equiv or more	White	Never	18-34	No income	0
1 Child	Less than HS	White	Never	18-34	No income	0
2 Children	Less than HS	White	Never	18-34	No income	0
3 Children+	Less than HS	White	Never	18-34	No income	0
No Children	Less than HS	White	Never	18-34	No income	0
1 Child	HS, equiv or more	White	Never	18-34	No income	0
2 Children	HS, equiv or more	White	Never	18-34	No income	0
3 Children+	HS, equiv or more	White	Never	18-34	No income	0
1 Child	Less than HS	White	Never	18-34	No income	0
2 Children	Less than HS	White	Never	18-34	No income	0
3 Children+	Less than HS	White	Never	18-34	No income	0

Table 55 (cont'd).

No Children	Less than HS	White	Never	18-34	No income	0
1 Child	HS, equiv or more	Other-than-white	Prior marriage	18-34	No income	0
2 Children	HS, equiv or more	Other-than-white	Prior marriage	18-34	No income	0
3 Children+	HS, equiv or more	Other-than-white	Prior marriage	18-34	No income	0
No Children	HS, equiv or more	Other-than-white	Prior marriage	18-34	No income	0
1 Child	Less than HS	Other-than-white	Prior marriage	18-34	No income	0
2 Children	Less than HS	Other-than-white	Prior marriage	18-34	No income	0
3 Children+	Less than HS	Other-than-white	Prior marriage	18-34	No income	0
No Children	Less than HS	Other-than-white	Prior marriage	18-34	No income	0
1 Child	HS, equiv or more	White	Prior marriage	18-34	No income	0
2 Children	HS, equiv or more	White	Prior marriage	18-34	No income	0
3 Children+	HS, equiv or more	White	Prior marriage	18-34	No income	0
No Children	HS, equiv or more	White	Prior marriage	18-34	No income	0
1 Child	Less than HS	White	Prior marriage	18-34	No income	0
2 Children	Less than HS	White	Prior marriage	18-34	No income	0
3 Children+	Less than HS	White	Prior marriage	18-34	No income	0
No Children	Less than HS	White	Prior marriage	18-34	No income	0
1 Child	HS, equiv or more	Other-than-white	Married	35+	No income	0
2 Children	HS, equiv or more	Other-than-white	Married	35+	No income	0
No Children	HS, equiv or more	Other-than-white	Married	35+	No income	0
1 Child	Less than HS	Other-than-white	Married	35+	No income	0
2 Children	Less than HS	Other-than-white	Married	35+	No income	0
3 Children+	Less than HS	Other-than-white	Married	35+	No income	0
No Children	Less than HS	Other-than-white	Married	35+	No income	0
1 Child	HS, equiv or more	White	Married	35+	No income	0
2 Children	HS, equiv or more	White	Married	35+	No income	0

Table 55 (cont'd).

1 Child	Less than HS	White	Married	35+	No income	0
2 Children	Less than HS	White	Married	35+	No income	0
1 Child	HS, equiv or more	Other-than-white	Never	35+	No income	0
2 Children	HS, equiv or more	Other-than-white	Never	35+	No income	0
3 Children+	HS, equiv or more	Other-than-white	Never	35+	No income	0
No Children	HS, equiv or more	Other-than-white	Never	35+	No income	0
1 Child	Less than HS	Other-than-white	Never	35+	No income	0
2 Children	Less than HS	Other-than-white	Never	35+	No income	0
3 Children+	Less than HS	Other-than-white	Never	35+	No income	0
No Children	Less than HS	Other-than-white	Never	35+	No income	0
1 Child	HS, equiv or more	White	Never	35+	No income	0
2 Children	HS, equiv or more	White	Never	35+	No income	0
3 Children+	HS, equiv or more	White	Never	35+	No income	0
1 Child	Less than HS	White	Never	35+	No income	0
2 Children	Less than HS	White	Never	35+	No income	0
3 Children+	Less than HS	White	Never	35+	No income	0
No Children	Less than HS	White	Never	35+	No income	0
1 Child	HS, equiv or more	Other-than-white	Prior marriage	35+	No income	0
2 Children	HS, equiv or more	Other-than-white	Prior marriage	35+	No income	0
3 Children+	HS, equiv or more	Other-than-white	Prior marriage	35+	No income	0
1 Child	Less than HS	Other-than-white	Prior marriage	35+	No income	0
2 Children	Less than HS	Other-than-white	Prior marriage	35+	No income	0
3 Children+	Less than HS	Other-than-white	Prior marriage	35+	No income	0
No Children	Less than HS	Other-than-white	Prior marriage	35+	No income	0
1 Child	HS, equiv or more	White	Prior marriage	35+	No income	0
2 Children	HS, equiv or more	White	Prior marriage	35+	No income	0

Table 55 (cont'd).

3 Children+	HS, equiv or more	White	Prior marriage	35+	No income	0
No Children	HS, equiv or more	White	Prior marriage	35+	No income	0
1 Child	Less than HS	White	Prior marriage	35+	No income	0
2 Children	Less than HS	White	Prior marriage	35+	No income	0
3 Children+	Less than HS	White	Prior marriage	35+	No income	0

Table 56 5 Match: Income, Age, Relationship Status, Ethnoracial group, Education

Income	Relationship		Ethnoracial group	Education	Cell Content
	Age	Status			
<\$25k	35+	Prior marriage	White	HS, equiv or more	68
>=25K	35+	Prior marriage	White	HS, equiv or more	51
<\$25k	35+	Never	White	HS, equiv or more	47
<\$25k	18-34	Never	White	HS, equiv or more	33
>=25K	35+	Married	White	HS, equiv or more	30
<\$25k	35+	Prior marriage	Other-than-white	HS, equiv or more	28
<\$25k	18-34	Married	White	HS, equiv or more	28
<\$25k	35+	Never	Other-than-white	HS, equiv or more	20
>=25K	35+	Never	White	HS, equiv or more	18
>=25K	35+	Prior marriage	Other-than-white	HS, equiv or more	17
<\$25k	35+	Prior marriage	Other-than-white	Less than HS	17
<\$25k	35+	Married	Other-than-white	HS, equiv or more	15
>=25K	35+	Married	Other-than-white	HS, equiv or more	14
<\$25k	18-34	Never	Other-than-white	HS, equiv or more	14
<\$25k	35+	Married	White	HS, equiv or more	12
>=25K	35+	Never	Other-than-white	HS, equiv or more	11
>=25K	18-34	Married	White	HS, equiv or more	11

Table 56 (cont'd).

<\$25k	35+	Prior marriage	White	Less than HS	11
<\$25k	35+	Married	Other-than-white	Less than HS	10
>=25K	18-34	Never	White	HS, equiv or more	9
<\$25k	18-34	Prior marriage	White	HS, equiv or more	9
>=25K	18-34	Prior marriage	White	HS, equiv or more	8
<\$25k	35+	Never	Other-than-white	Less than HS	8
<\$25k	18-34	Never	White	Less than HS	8
<\$25k	18-34	Never	Other-than-white	Less than HS	7
<\$25k	18-34	Married	Other-than-white	HS, equiv or more	6
>=25K	18-34	Married	Other-than-white	HS, equiv or more	6
No income	18-34	Married	White	HS, equiv or more	6
No income	35+	Married	White	HS, equiv or more	6
>=25K	18-34	Never	Other-than-white	HS, equiv or more	5
<\$25k	35+	Never	White	Less than HS	5
>=25K	18-34	Prior marriage	Other-than-white	HS, equiv or more	4
<\$25k	18-34	Prior marriage	Other-than-white	HS, equiv or more	3
<\$25k	18-34	Married	White	Less than HS	3
No income	35+	Married	White	Less than HS	3
<\$25k	18-34	Prior marriage	White	Less than HS	3
No income	18-34	Married	Other-than-white	HS, equiv or more	2
No income	35+	Prior marriage	Other-than-white	HS, equiv or more	2
<\$25k	18-34	Married	Other-than-white	Less than HS	2
>=25K	18-34	Never	Other-than-white	Less than HS	2
>=25K	35+	Prior marriage	Other-than-white	Less than HS	2
No income	35+	Married	Other-than-white	HS, equiv or more	1

Table 56 (cont'd).

No income	18-34	Never	White	HS, equiv or more	1
No income	35+	Never	White	HS, equiv or more	1
No income	18-34	Married	Other-than-white	Less than HS	1
<\$25k	18-34	Prior marriage	Other-than-white	Less than HS	1
>=25K	18-34	Married	White	Less than HS	1
<\$25k	35+	Married	White	Less than HS	1
>=25K	35+	Married	White	Less than HS	1
>=25K	18-34	Never	White	Less than HS	1
>=25K	35+	Prior marriage	White	Less than HS	1
No income	35+	Prior marriage	White	Less than HS	1
No income	18-34	Never	Other-than-white	HS, equiv or more	0
No income	35+	Never	Other-than-white	HS, equiv or more	0
No income	18-34	Prior marriage	Other-than-white	HS, equiv or more	0
No income	18-34	Prior marriage	White	HS, equiv or more	0
No income	35+	Prior marriage	White	HS, equiv or more	0
>=25K	18-34	Married	Other-than-white	Less than HS	0
>=25K	35+	Married	Other-than-white	Less than HS	0
No income	35+	Married	Other-than-white	Less than HS	0
No income	18-34	Never	Other-than-white	Less than HS	0
>=25K	35+	Never	Other-than-white	Less than HS	0
No income	35+	Never	Other-than-white	Less than HS	0
>=25K	18-34	Prior marriage	Other-than-white	Less than HS	0
No income	18-34	Prior marriage	Other-than-white	Less than HS	0
No income	35+	Prior marriage	Other-than-white	Less than HS	0
No income	18-34	Married	White	Less than HS	0
No income	18-34	Never	White	Less than HS	0

Table 56 (cont'd).

>=25K	35+	Never	White	Less than HS	0
No income	35+	Never	White	Less than HS	0
>=25K	18-34	Prior marriage	White	Less than HS	0
No income	18-34	Prior marriage	White	Less than HS	0

Table 57 5 Match: Income, Relationship Status, Ethnoracial group, Education and Children

Income	Relationship		Ethnoracial group	Education	Children	Cell	
	Status					Content	Content
<25K	Prior marriage	White	White	HS, equiv or more	No Children		55
<\$25k	Never	White	White	HS, equiv or more	No Children		38
>=25K	Married	White	White	HS, equiv or more	No Children		32
>=25K	Never	White	White	HS, equiv or more	No Children		30
>=\$25k	Prior marriage	White	White	HS, equiv or more	No Children		24
>=25K	Married	White	White	HS, equiv or more	2 Children		19
>=25K	Married	White	White	HS, equiv or more	1 Child		18
>=25K	Prior marriage	Other-than-white	Other-than-white	HS, equiv or more	No Children		18
<\$25k	Married	White	White	HS, equiv or more	No Children		17
>=25K	Prior marriage	White	White	HS, equiv or more	1 Child		16
>=25K	Married	Other-than-white	Other-than-white	HS, equiv or more	No Children		14
>=25K	Never	Other-than-white	Other-than-white	HS, equiv or more	No Children		14
>=25K	Prior marriage	Other-than-white	Other-than-white	Less than HS	No Children		14
<\$25k	Never	Other-than-white	Other-than-white	HS, equiv or more	No Children		13
<\$25k	Married	Other-than-white	Other-than-white	HS, equiv or more	No Children		12
<\$25k	Prior marriage	Other-than-white	Other-than-white	HS, equiv or more	No Children		12
<\$25k	Married	White	White	HS, equiv or more	1 Child		11
>=25K	Never	White	White	HS, equiv or more	1 Child		11
<\$25k	Married	White	White	HS, equiv or more	2 Children		10

Table 57 (cont'd).

<\$25k	Never	White	HS, equiv or more	1 Child	9
>=25K	Married	Other-than-white	HS, equiv or more	2 Children	9
>=25K	Prior marriage	White	Less than HS	No Children	9
>=25K	Never	Other-than-white	HS, equiv or more	1 Child	7
>=25K	Never	Other-than-white	Less than HS	No Children	7
>=25K	Prior marriage	Other-than-white	HS, equiv or more	2 Children	7
<\$25k	Never	White	HS, equiv or more	2 Children	6
<\$25k	Never	White	HS, equiv or more	3 Children+	6
>=25K	Married	White	HS, equiv or more	3 Children+	6
<\$25k	Never	Other-than-white	HS, equiv or more	2 Children	5
>=25K	Prior marriage	Other-than-white	HS, equiv or more	1 Child	5
>=25K	Prior marriage	White	HS, equiv or more	2 Children	5
No income	Married	White	HS, equiv or more	No Children	5
<\$25k	Married	Other-than-white	HS, equiv or more	1 Child	4
>=25K	Married	Other-than-white	Less than HS	No Children	4
>=25K	Married	White	Less than HS	No Children	4
>=25K	Never	Other-than-white	HS, equiv or more	2 Children	4
>=25K	Never	Other-than-white	HS, equiv or more	3 Children+	4
>=25K	Never	Other-than-white	Less than HS	1 Child	4
>=25K	Never	White	HS, equiv or more	2 Children	4
>=25K	Never	White	Less than HS	No Children	4
No income	Married	White	HS, equiv or more	2 Children	4
<\$25k	Married	White	HS, equiv or more	3 Children+	3
<\$25k	Never	Other-than-white	HS, equiv or more	1 Child	3
>=25K	Married	Other-than-white	Less than HS	3 Children+	3
>=25K	Married	White	Less than HS	1 Child	3

Table 57 (cont'd).

>=25K	Never	Other-than-white	Less than HS	2 Children	3
>=25K	Never	Other-than-white	Less than HS	3 Children+	3
>=25K	Prior marriage	White	Less than HS	1 Child	3
<\$25k	Married	Other-than-white	HS, equiv or more	2 Children	2
<\$25k	Married	Other-than-white	HS, equiv or more	3 Children+	2
<\$25k	Prior marriage	Other-than-white	HS, equiv or more	1 Child	2
<\$25k	Prior marriage	White	HS, equiv or more	3 Children+	2
>=25K	Married	Other-than-white	HS, equiv or more	1 Child	2
>=25K	Married	Other-than-white	Less than HS	2 Children	2
>=25K	Never	White	Less than HS	1 Child	2
>=25K	Never	White	Less than HS	3 Children+	2
>=25K	Prior marriage	Other-than-white	Less than HS	3 Children+	2
>=25K	Prior marriage	White	Less than HS	3 Children+	2
No income	Married	White	HS, equiv or more	3 Children+	2
No income	Married	White	Less than HS	No Children	2
No income	Never	Other-than-white	HS, equiv or more	No Children	2
No income	Never	White	Less than HS	No Children	2
No income	Prior marriage	White	HS, equiv or more	No Children	2
<\$25k	Married	White	Less than HS	2 Children	1
<\$25k	Married	White	Less than HS	No Children	1
<\$25k	Never	Other-than-white	Less than HS	2 Children	1
<\$25k	Never	Other-than-white	Less than HS	No Children	1
<\$25k	Never	White	Less than HS	No Children	1
<\$25k	Prior marriage	Other-than-white	HS, equiv or more	2 Children	1
<\$25k	Prior marriage	Other-than-white	HS, equiv or more	3 Children+	1
<\$25k	Prior marriage	Other-than-white	Less than HS	1 Child	1

Table 57 (cont'd).

<\$25k	Prior marriage	Other-than-white	Less than HS	No Children	1
<\$25k	Prior marriage	White	HS, equiv or more	1 Child	1
<\$25k	Prior marriage	White	Less than HS	1 Child	1
>=25K	Married	Other-than-white	HS, equiv or more	3 Children+	1
>=25K	Married	Other-than-white	Less than HS	1 Child	1
>=25K	Married	White	Less than HS	3 Children+	1
>=25K	Never	White	Less than HS	2 Children	1
>=25K	Prior marriage	Other-than-white	HS, equiv or more	3 Children+	1
>=25K	Prior marriage	Other-than-white	Less than HS	1 Child	1
>=25K	Prior marriage	Other-than-white	Less than HS	2 Children	1
>=25K	Prior marriage	White	HS, equiv or more	3 Children+	1
No income	Married	Other-than-white	HS, equiv or more	1 Child	1
No income	Married	Other-than-white	HS, equiv or more	2 Children	1
No income	Married	Other-than-white	Less than HS	3 Children+	1
No income	Married	White	HS, equiv or more	1 Child	1
No income	Married	White	Less than HS	3 Children+	1
<\$25k	Married	Other-than-white	Less than HS	1 Child	0
<\$25k	Married	Other-than-white	Less than HS	2 Children	0
<\$25k	Married	Other-than-white	Less than HS	3 Children+	0
<\$25k	Married	Other-than-white	Less than HS	No Children	0
<\$25k	Married	White	Less than HS	1 Child	0
<\$25k	Married	White	Less than HS	3 Children+	0
<\$25k	Never	Other-than-white	HS, equiv or more	3 Children+	0
<\$25k	Never	Other-than-white	Less than HS	1 Child	0
<\$25k	Never	Other-than-white	Less than HS	3 Children+	0
<\$25k	Never	White	Less than HS	1 Child	0

Table 57 (cont'd).

<\$25k	Never	White	Less than HS	2 Children	0
<\$25k	Never	White	Less than HS	3 Children+	0
<\$25k	Prior marriage	Other-than-white	Less than HS	2 Children	0
<\$25k	Prior marriage	Other-than-white	Less than HS	3 Children+	0
<\$25k	Prior marriage	White	HS, equiv or more	2 Children	0
<\$25k	Prior marriage	White	Less than HS	2 Children	0
<\$25k	Prior marriage	White	Less than HS	3 Children+	0
<\$25k	Prior marriage	White	Less than HS	No Children	0
>=25K	Married	White	Less than HS	2 Children	0
>=25K	Never	White	HS, equiv or more	3 Children+	0
>=25K	Prior marriage	White	Less than HS	2 Children	0
No income	Married	Other-than-white	HS, equiv or more	3 Children+	0
No income	Married	Other-than-white	HS, equiv or more	No Children	0
No income	Married	Other-than-white	Less than HS	1 Child	0
No income	Married	Other-than-white	Less than HS	2 Children	0
No income	Married	Other-than-white	Less than HS	No Children	0
No income	Married	White	Less than HS	1 Child	0
No income	Married	White	Less than HS	2 Children	0
No income	Never	Other-than-white	HS, equiv or more	1 Child	0
No income	Never	Other-than-white	HS, equiv or more	2 Children	0
No income	Never	Other-than-white	HS, equiv or more	3 Children+	0
No income	Never	Other-than-white	Less than HS	1 Child	0
No income	Never	Other-than-white	Less than HS	2 Children	0
No income	Never	Other-than-white	Less than HS	3 Children+	0
No income	Never	Other-than-white	Less than HS	No Children	0
No income	Never	White	HS, equiv or more	1 Child	0

Table 57 (cont'd).

No income	Never	White	HS, equiv or more	2 Children	0
No income	Never	White	HS, equiv or more	3 Children+	0
No income	Never	White	HS, equiv or more	No Children	0
No income	Never	White	Less than HS	1 Child	0
No income	Never	White	Less than HS	2 Children	0
No income	Never	White	Less than HS	3 Children+	0
No income	Prior marriage	Other-than-white	HS, equiv or more	1 Child	0
No income	Prior marriage	Other-than-white	HS, equiv or more	2 Children	0
No income	Prior marriage	Other-than-white	HS, equiv or more	3 Children+	0
No income	Prior marriage	Other-than-white	HS, equiv or more	No Children	0
No income	Prior marriage	Other-than-white	Less than HS	1 Child	0
No income	Prior marriage	Other-than-white	Less than HS	2 Children	0
No income	Prior marriage	Other-than-white	Less than HS	3 Children+	0
No income	Prior marriage	Other-than-white	Less than HS	No Children	0
No income	Prior marriage	White	HS, equiv or more	1 Child	0
No income	Prior marriage	White	HS, equiv or more	2 Children	0
No income	Prior marriage	White	HS, equiv or more	3 Children+	0
No income	Prior marriage	White	Less than HS	1 Child	0
No income	Prior marriage	White	Less than HS	2 Children	0
No income	Prior marriage	White	Less than HS	3 Children+	0
No income	Prior marriage	White	Less than HS	No Children	0

Table 58 5 Match: Age, Relationship Status, Ethnoracial group, Education and Children

Age	Relationship		Education	Cell	
	Status	Ethnoracial group		Children	Content
35+	Prior marriage	White	HS, equiv or more	No Children	85

Table 58 (cont'd).

35+	Married	White	HS, equiv or more	No Children	40
18-34	Never	White	HS, equiv or more	No Children	32
35+	Prior marriage	Other-than-white	HS, equiv or more	No Children	32
35+	Never	Other-than-white	HS, equiv or more	No Children	24
35+	Married	Other-than-white	HS, equiv or more	No Children	21
35+	Married	White	HS, equiv or more	1 Child	20
35+	Prior marriage	White	HS, equiv or more	1 Child	19
35+	Married	White	HS, equiv or more	2 Children	17
18-34	Married	White	HS, equiv or more	2 Children	16
35+	Never	White	HS, equiv or more	No Children	15
18-34	Married	White	HS, equiv or more	No Children	14
35+	Prior marriage	Other-than-white	Less than HS	No Children	14
18-34	Never	Other-than-white	HS, equiv or more	No Children	11
35+	Prior marriage	White	HS, equiv or more	2 Children	11
35+	Prior marriage	White	Less than HS	No Children	11
18-34	Married	White	HS, equiv or more	1 Child	10
18-34	Prior marriage	White	HS, equiv or more	No Children	8
35+	Prior marriage	Other-than-white	HS, equiv or more	2 Children	8
18-34	Never	White	HS, equiv or more	1 Child	7
35+	Married	Other-than-white	HS, equiv or more	2 Children	7
35+	Prior marriage	Other-than-white	HS, equiv or more	1 Child	7
18-34	Prior marriage	White	HS, equiv or more	1 Child	6
35+	Married	White	HS, equiv or more	3 Children+	6
35+	Married	White	Less than HS	No Children	6
35+	Never	White	Less than HS	No Children	6
18-34	Married	Other-than-white	HS, equiv or more	2 Children	5

Table 58 (cont'd).

18-34	Married	Other-than-white	HS, equiv or more	No Children	5
18-34	Married	White	HS, equiv or more	3 Children+	5
35+	Married	Other-than-white	HS, equiv or more	1 Child	5
35+	Never	Other-than-white	HS, equiv or more	1 Child	5
35+	Never	White	HS, equiv or more	1 Child	5
18-34	Never	Other-than-white	HS, equiv or more	1 Child	4
18-34	Prior marriage	Other-than-white	HS, equiv or more	2 Children	4
35+	Prior marriage	White	HS, equiv or more	3 Children+	4
18-34	Never	Other-than-white	Less than HS	1 Child	3
18-34	Never	White	HS, equiv or more	2 Children	3
18-34	Never	White	Less than HS	1 Child	3
18-34	Never	White	Less than HS	No Children	3
18-34	Prior marriage	White	HS, equiv or more	3 Children+	3
35+	Married	Other-than-white	Less than HS	3 Children+	3
35+	Married	Other-than-white	Less than HS	No Children	3
35+	Never	White	HS, equiv or more	2 Children	3
35+	Never	White	HS, equiv or more	3 Children+	3
18-34	Married	Other-than-white	HS, equiv or more	1 Child	2
18-34	Married	Other-than-white	HS, equiv or more	3 Children+	2
18-34	Never	Other-than-white	HS, equiv or more	2 Children	2
18-34	Never	Other-than-white	HS, equiv or more	3 Children+	2
18-34	Never	Other-than-white	Less than HS	2 Children	2
18-34	Never	Other-than-white	Less than HS	3 Children+	2
18-34	Never	Other-than-white	Less than HS	No Children	2
18-34	Never	White	Less than HS	3 Children+	2
18-34	Prior marriage	White	Less than HS	1 Child	2

Table 58 (cont'd).

35+	Married	Other-than-white	HS, equiv or more	3 Children+	2
35+	Married	White	Less than HS	1 Child	2
35+	Never	White	Less than HS	1 Child	2
35+	Prior marriage	Other-than-white	Less than HS	3 Children+	2
18-34	Married	Other-than-white	Less than HS	2 Children	1
18-34	Married	Other-than-white	Less than HS	3 Children+	1
18-34	Married	Other-than-white	Less than HS	No Children	1
18-34	Married	White	Less than HS	1 Child	1
18-34	Married	White	Less than HS	2 Children	1
18-34	Married	White	Less than HS	3 Children+	1
18-34	Married	White	Less than HS	No Children	1
18-34	Never	White	HS, equiv or more	3 Children+	1
18-34	Never	White	Less than HS	2 Children	1
18-34	Prior marriage	Other-than-white	HS, equiv or more	1 Child	1
18-34	Prior marriage	Other-than-white	HS, equiv or more	3 Children+	1
18-34	Prior marriage	Other-than-white	HS, equiv or more	No Children	1
18-34	Prior marriage	Other-than-white	Less than HS	2 Children	1
18-34	Prior marriage	Other-than-white	Less than HS	3 Children+	1
18-34	Prior marriage	Other-than-white	Less than HS	No Children	1
18-34	Prior marriage	White	Less than HS	3 Children+	1
35+	Married	Other-than-white	Less than HS	1 Child	1
35+	Married	Other-than-white	Less than HS	2 Children	1
35+	Married	White	Less than HS	3 Children+	1
35+	Never	Other-than-white	HS, equiv or more	2 Children	1
35+	Never	Other-than-white	HS, equiv or more	3 Children+	1
35+	Never	Other-than-white	Less than HS	No Children	1

Table 58 (cont'd).

35+	Never	White	Less than HS	2 Children	1
35+	Never	White	Less than HS	3 Children+	1
35+	Prior marriage	Other-than-white	Less than HS	1 Child	1
35+	Prior marriage	Other-than-white	Less than HS	2 Children	1
35+	Prior marriage	White	Less than HS	1 Child	1
35+	Prior marriage	White	Less than HS	3 Children+	0
18-34	Married	Other-than-white	Less than HS	1 Child	0
18-34	Prior marriage	Other-than-white	Less than HS	1 Child	0
18-34	Prior marriage	White	HS, equiv or more	2 Children	0
18-34	Prior marriage	White	Less than HS	2 Children	0
18-34	Prior marriage	White	Less than HS	No Children	0
35+	Married	White	Less than HS	2 Children	0
35+	Never	Other-than-white	Less than HS	1 Child	0
35+	Never	Other-than-white	Less than HS	2 Children	0
35+	Never	Other-than-white	Less than HS	3 Children+	0
35+	Prior marriage	Other-than-white	HS, equiv or more	3 Children+	0
35+	Prior marriage	White	Less than HS	2 Children	0

Table 59 5 Match: Income, Age, Relationship Status, Ethnoracial group, Children

Income	Age	Relationship		Ethnoracial group	Children	Cell	
		Status				Content	
<\$25k	35+	Prior marriage	White	No Children	58		
>=25K	35+	Prior marriage	White	No Children	37		
<\$25k	35+	Prior marriage	Other-than-white	No Children	31		
<\$25k	18-34	Never	White	No Children	26		
<\$25k	35+	Married	White	No Children	26		

Table 59 (cont'd).

>=25K	35+	Never	White	No Children	16
<\$25k	35+	Married	Other-than-white	No Children	15
<\$25k	35+	Prior marriage	White	1 Child	15
<\$25k	35+	Never	Other-than-white	No Children	13
>=25K	35+	Married	White	No Children	13
>=25K	35+	Prior marriage	Other-than-white	No Children	13
<\$25k	35+	Married	White	1 Child	11
<\$25k	35+	Married	White	2 Children	11
>=25K	35+	Married	White	1 Child	11
<\$25k	18-34	Married	White	1 Child	10
<\$25k	18-34	Married	White	No Children	10
<\$25k	18-34	Never	White	1 Child	9
>=25K	35+	Married	Other-than-white	No Children	9
<\$25k	18-34	Married	White	2 Children	8
<\$25k	18-34	Never	Other-than-white	No Children	8
<\$25k	35+	Never	White	No Children	8
>=25K	18-34	Never	White	No Children	8
>=25K	35+	Never	Other-than-white	No Children	8
<\$25k	35+	Married	Other-than-white	2 Children	7
<\$25k	35+	Prior marriage	Other-than-white	2 Children	7
No income	35+	Married	White	No Children	7
<\$25k	18-34	Prior marriage	White	No Children	6
<\$25k	35+	Never	Other-than-white	1 Child	6
>=25K	35+	Married	White	2 Children	6
>=25K	35+	Prior marriage	White	2 Children	6

Table 59 (cont'd).

<\$25k	18-34	Never	Other-than-white	1 Child	5
<\$25k	35+	Prior marriage	Other-than-white	1 Child	5
<\$25k	35+	Prior marriage	White	2 Children	5
>=25K	18-34	Married	White	2 Children	5
>=25K	18-34	Married	White	No Children	5
>=25K	18-34	Never	Other-than-white	No Children	5
>=25K	35+	Prior marriage	White	1 Child	5
<\$25k	18-34	Married	Other-than-white	2 Children	4
<\$25k	18-34	Never	Other-than-white	2 Children	4
<\$25k	18-34	Never	Other-than-white	3 Children+	4
<\$25k	18-34	Never	White	2 Children	4
<\$25k	18-34	Prior marriage	White	1 Child	4
<\$25k	35+	Married	White	3 Children+	4
<\$25k	35+	Never	White	1 Child	4
>=25K	18-34	Prior marriage	White	1 Child	4
>=25K	35+	Prior marriage	White	3 Children+	4
No income	18-34	Married	White	2 Children	4
<\$25k	18-34	Married	Other-than-white	No Children	3
<\$25k	18-34	Married	White	3 Children+	3
<\$25k	35+	Married	Other-than-white	1 Child	3
<\$25k	35+	Married	Other-than-white	3 Children+	3
<\$25k	35+	Never	Other-than-white	2 Children	3
<\$25k	35+	Never	Other-than-white	3 Children+	3
>=25K	18-34	Married	Other-than-white	No Children	3
>=25K	18-34	Prior marriage	Other-than-white	2 Children	3
>=25K	35+	Married	Other-than-white	1 Child	3

Table 59 (cont'd).

>=25K	35+	Prior marriage	Other-than-white	1 Child	3
>=25K	35+	Prior marriage	Other-than-white	2 Children	3
<\$25k	18-34	Never	White	3 Children+	2
<\$25k	18-34	Prior marriage	White	3 Children+	2
<\$25k	35+	Prior marriage	Other-than-white	3 Children+	2
>=25K	18-34	Married	White	3 Children+	2
>=25K	18-34	Never	Other-than-white	1 Child	2
>=25K	18-34	Prior marriage	White	3 Children+	2
>=25K	18-34	Prior marriage	White	No Children	2
No income	35+	Married	White	3 Children+	2
No income	35+	Prior marriage	Other-than-white	No Children	2
<\$25k	18-34	Married	Other-than-white	3 Children+	1
<\$25k	18-34	Prior marriage	Other-than-white	1 Child	1
<\$25k	18-34	Prior marriage	Other-than-white	2 Children	1
<\$25k	18-34	Prior marriage	Other-than-white	3 Children+	1
<\$25k	35+	Never	White	2 Children	1
<\$25k	35+	Prior marriage	White	3 Children+	1
>=25K	18-34	Married	Other-than-white	1 Child	1
>=25K	18-34	Married	Other-than-white	2 Children	1
>=25K	18-34	Married	Other-than-white	3 Children+	1
>=25K	18-34	Never	White	1 Child	1
>=25K	18-34	Never	White	3 Children+	1
>=25K	18-34	Prior marriage	Other-than-white	No Children	1
>=25K	35+	Married	Other-than-white	2 Children	1
>=25K	35+	Married	Other-than-white	3 Children+	1
>=25K	35+	Married	White	3 Children+	1

Table 59 (cont'd).

>=25K	35+	Never	Other-than-white	1 Child	1
>=25K	35+	Never	Other-than-white	2 Children	1
>=25K	35+	Never	Other-than-white	3 Children+	1
>=25K	35+	Never	White	1 Child	1
>=25K	35+	Never	White	3 Children+	1
No income	18-34	Married	Other-than-white	1 Child	1
No income	18-34	Married	Other-than-white	2 Children	1
No income	18-34	Married	Other-than-white	3 Children+	1
No income	18-34	Married	White	1 Child	1
No income	18-34	Married	White	3 Children+	1
No income	18-34	Never	White	No Children	1
No income	35+	Married	Other-than-white	3 Children+	1
No income	35+	Never	Other-than-white	No Children	1
No income	35+	Never	White	No Children	1
No income	35+	Prior marriage	White	No Children	1
<\$25k	18-34	Married	Other-than-white	1 Child	0
<\$25k	18-34	Prior marriage	Other-than-white	No Children	0
<\$25k	18-34	Prior marriage	White	2 Children	0
<\$25k	35+	Never	White	3 Children+	0
>=25K	18-34	Married	White	1 Child	0
>=25K	18-34	Never	Other-than-white	2 Children	0
>=25K	18-34	Never	Other-than-white	3 Children+	0
>=25K	18-34	Never	White	2 Children	0
>=25K	18-34	Prior marriage	Other-than-white	1 Child	0
>=25K	18-34	Prior marriage	Other-than-white	3 Children+	0
>=25K	18-34	Prior marriage	White	2 Children	0

Table 59 (cont'd).

>=25K	35+	Never	White	2 Children	0
>=25K	35+	Prior marriage	Other-than-white	3 Children+	0
No income	18-34	Married	Other-than-white	No Children	0
No income	18-34	Married	White	No Children	0
No income	18-34	Never	Other-than-white	1 Child	0
No income	18-34	Never	Other-than-white	2 Children	0
No income	18-34	Never	Other-than-white	3 Children+	0
No income	18-34	Never	Other-than-white	No Children	0
No income	18-34	Never	White	1 Child	0
No income	18-34	Never	White	2 Children	0
No income	18-34	Never	White	3 Children+	0
No income	18-34	Prior marriage	Other-than-white	1 Child	0
No income	18-34	Prior marriage	Other-than-white	2 Children	0
No income	18-34	Prior marriage	Other-than-white	3 Children+	0
No income	18-34	Prior marriage	Other-than-white	No Children	0
No income	18-34	Prior marriage	White	1 Child	0
No income	18-34	Prior marriage	White	2 Children	0
No income	18-34	Prior marriage	White	3 Children+	0
No income	18-34	Prior marriage	White	No Children	0
No income	35+	Married	Other-than-white	1 Child	0
No income	35+	Married	Other-than-white	2 Children	0
No income	35+	Married	Other-than-white	No Children	0
No income	35+	Married	White	1 Child	0
No income	35+	Married	White	2 Children	0
No income	35+	Never	Other-than-white	1 Child	0
No income	35+	Never	Other-than-white	2 Children	0

Table 59 (cont'd).

No income	35+	Never	Other-than-white	3 Children+	0
No income	35+	Never	White	1 Child	0
No income	35+	Never	White	2 Children	0
No income	35+	Never	White	3 Children+	0
No income	35+	Prior marriage	Other-than-white	1 Child	0
No income	35+	Prior marriage	Other-than-white	2 Children	0
No income	35+	Prior marriage	Other-than-white	3 Children+	0
No income	35+	Prior marriage	White	1 Child	0
No income	35+	Prior marriage	White	2 Children	0
No income	35+	Prior marriage	White	3 Children+	0

Table 60 5 Match: Income, age Relationship Status, Education, Children

Income	Age	Relationship Status	Education	Children	Cell Content
<\$25k	35+	Prior marriage	HS, equiv or more	No Children	67
>=25K	35+	Never	HS, equiv or more	No Children	48
<\$25k	35+	Married	HS, equiv or more	No Children	35
<\$25k	18-34	Never	HS, equiv or more	No Children	30
>=25K	35+	Prior marriage	HS, equiv or more	No Children	24
<\$25k	35+	Prior marriage	Less than HS	No Children	22
>=25K	35+	Married	HS, equiv or more	No Children	21
<\$25k	35+	Prior marriage	HS, equiv or more	1 Child	18
<\$25k	35+	Married	HS, equiv or more	2 Children	17
>=25K	35+	Married	HS, equiv or more	1 Child	14
<\$25k	35+	Never	HS, equiv or more	No Children	14
>=25K	18-34	Never	HS, equiv or more	No Children	12
<\$25k	18-34	Married	HS, equiv or more	2 Children	11

Table 60 (cont'd).

<\$25k	18-34	Married	HS, equiv or more	No Children	11
<\$25k	35+	Married	HS, equiv or more	1 Child	11
<\$25k	35+	Prior marriage	HS, equiv or more	2 Children	11
<\$25k	18-34	Never	HS, equiv or more	1 Child	10
<\$25k	18-34	Married	HS, equiv or more	1 Child	9
>=25K	18-34	Married	HS, equiv or more	No Children	8
<\$25k	35+	Never	HS, equiv or more	1 Child	8
>=25K	35+	Never	HS, equiv or more	1 Child	8
>=25K	35+	Never	HS, equiv or more	2 Children	8
>=25K	35+	Married	HS, equiv or more	2 Children	7
<\$25k	35+	Never	Less than HS	No Children	7
<\$25k	18-34	Prior marriage	HS, equiv or more	No Children	6
<\$25k	35+	Married	Less than HS	No Children	6
>=25K	18-34	Married	HS, equiv or more	2 Children	5
No income	18-34	Married	HS, equiv or more	2 Children	5
<\$25k	18-34	Never	HS, equiv or more	2 Children	5
No income	35+	Married	HS, equiv or more	No Children	5
<\$25k	18-34	Never	Less than HS	1 Child	4
<\$25k	18-34	Never	Less than HS	3 Children+	4
<\$25k	18-34	Never	Less than HS	No Children	4
>=25K	18-34	Prior marriage	HS, equiv or more	1 Child	4
<\$25k	35+	Married	HS, equiv or more	3 Children+	4
>=25K	35+	Never	HS, equiv or more	3 Children+	4
<\$25k	18-34	Married	HS, equiv or more	3 Children+	3
>=25K	18-34	Married	HS, equiv or more	3 Children+	3
<\$25k	18-34	Never	Less than HS	2 Children	3

Table 60 (cont'd).

<\$25k	18-34	Prior marriage	HS, equiv or more	1 Child	3
>=25K	18-34	Prior marriage	HS, equiv or more	2 Children	3
>=25K	18-34	Prior marriage	HS, equiv or more	No Children	3
<\$25k	35+	Married	Less than HS	1 Child	3
<\$25k	35+	Married	Less than HS	3 Children+	3
<\$25k	35+	Never	HS, equiv or more	2 Children	3
<\$25k	35+	Prior marriage	Less than HS	3 Children+	3
No income	18-34	Married	HS, equiv or more	1 Child	2
<\$25k	18-34	Married	Less than HS	No Children	2
<\$25k	18-34	Never	HS, equiv or more	3 Children+	2
>=25K	18-34	Never	Less than HS	1 Child	2
<\$25k	18-34	Prior marriage	HS, equiv or more	3 Children+	2
>=25K	18-34	Prior marriage	HS, equiv or more	3 Children+	2
<\$25k	18-34	Prior marriage	Less than HS	1 Child	2
>=25K	35+	Married	HS, equiv or more	3 Children+	2
No income	35+	Married	HS, equiv or more	3 Children+	2
No income	35+	Married	Less than HS	No Children	2
<\$25k	35+	Never	HS, equiv or more	3 Children+	2
<\$25k	35+	Never	Less than HS	1 Child	2
>=25K	35+	Never	Less than HS	No Children	2
>=25K	35+	Prior marriage	HS, equiv or more	1 Child	2
>=25K	35+	Prior marriage	HS, equiv or more	3 Children+	2
>=25K	35+	Prior marriage	HS, equiv or more	No Children	2
No income	35+	Prior marriage	Less than HS	1 Child	2
<\$25k	35+	Prior marriage	HS, equiv or more	1 Child	1
>=25K	18-34	Married	HS, equiv or more	1 Child	1
No income	18-34	Married	HS, equiv or more	3 Children+	1

Table 60 (cont'd).

<\$25k	18-34	Married	Less than HS	1 Child	1
<\$25k	18-34	Married	Less than HS	2 Children	1
>=25K	18-34	Married	Less than HS	2 Children	1
<\$25k	18-34	Married	Less than HS	3 Children+	1
No income	18-34	Married	Less than HS	3 Children+	1
>=25K	18-34	Never	HS, equiv or more	1 Child	1
>=25K	18-34	Never	HS, equiv or more	3 Children+	1
No income	18-34	Never	HS, equiv or more	No Children	1
>=25K	18-34	Never	Less than HS	No Children	1
<\$25k	18-34	Prior marriage	HS, equiv or more	2 Children	1
<\$25k	18-34	Prior marriage	Less than HS	3 Children+	1
<\$25k	18-34	Prior marriage	Less than HS	No Children	1
<\$25k	35+	Married	Less than HS	2 Children	1
No income	35+	Married	Less than HS	3 Children+	1
>=25K	35+	Married	Less than HS	No Children	1
No income	35+	Never	HS, equiv or more	No Children	1
<\$25k	35+	Never	Less than HS	2 Children	1
>=25K	35+	Never	Less than HS	2 Children	1
\$25k	35+	Never	Less than HS	3 Children+	1
>=25K	35+	Prior marriage	HS, equiv or more	2 Children	1
<\$25k	35+	Prior marriage	Less than HS	2 Children	1
No income	35+	Prior marriage	Less than HS	No Children	1
No income	18-34	Married	HS, equiv or more	No Children	0
>=25K	18-34	Married	Less than HS	1 Child	0
No income	18-34	Married	Less than HS	1 Child	0
No income	18-34	Married	Less than HS	2 Children	0

Table 60 (cont'd).

>=25K	18-34	Married	Less than HS	3 Children+	0
>=25K	18-34	Married	Less than HS	No Children	0
No income	18-34	Married	Less than HS	No Children	0
No income	18-34	Never	HS, equiv or more	1 Child	0
>=25K	18-34	Never	HS, equiv or more	2 Children	0
No income	18-34	Never	HS, equiv or more	2 Children	0
No income	18-34	Never	HS, equiv or more	3 Children+	0
No income	18-34	Never	Less than HS	1 Child	0
>=25K	18-34	Never	Less than HS	2 Children	0
No income	18-34	Never	Less than HS	2 Children	0
>=25K	18-34	Never	Less than HS	3 Children+	0
No income	18-34	Never	Less than HS	3 Children+	0
No income	18-34	Never	Less than HS	No Children	0
No income	18-34	Prior marriage	HS, equiv or more	1 Child	0
No income	18-34	Prior marriage	HS, equiv or more	2 Children	0
No income	18-34	Prior marriage	HS, equiv or more	3 Children+	0
No income	18-34	Prior marriage	HS, equiv or more	No Children	0
>=25K	18-34	Prior marriage	Less than HS	1 Child	0
No income	18-34	Prior marriage	Less than HS	1 Child	0
<\$25k	18-34	Prior marriage	Less than HS	2 Children	0
>=25K	18-34	Prior marriage	Less than HS	2 Children	0
No income	18-34	Prior marriage	Less than HS	2 Children	0
>=25K	18-34	Prior marriage	Less than HS	3 Children+	0
No income	18-34	Prior marriage	Less than HS	3 Children+	0
>=25K	18-34	Prior marriage	Less than HS	No Children	0
No income	18-34	Prior marriage	Less than HS	No Children	0

Table 60 (cont'd).

No income	35+	Married	HS, equiv or more	1 Child	0
No income	35+	Married	HS, equiv or more	2 Children	0
>=25K	35+	Married	Less than HS	1 Child	0
No income	35+	Married	Less than HS	1 Child	0
>=25K	35+	Married	Less than HS	2 Children	0
No income	35+	Married	Less than HS	2 Children	0
>=25K	35+	Married	Less than HS	3 Children+	0
No income	35+	Never	HS, equiv or more	1 Child	0
No income	35+	Never	HS, equiv or more	2 Children	0
No income	35+	Never	HS, equiv or more	3 Children+	0
>=25K	35+	Never	Less than HS	1 Child	0
No income	35+	Never	Less than HS	1 Child	0
No income	35+	Never	Less than HS	2 Children	0
>=25K	35+	Never	Less than HS	3 Children+	0
No income	35+	Never	Less than HS	3 Children+	0
No income	35+	Never	Less than HS	No Children	0
No income	35+	Prior marriage	HS, equiv or more	1 Child	0
No income	35+	Prior marriage	HS, equiv or more	2 Children	0
<\$25k	35+	Prior marriage	HS, equiv or more	3 Children+	0
No income	35+	Prior marriage	HS, equiv or more	3 Children+	0
>=25K	35+	Prior marriage	Less than HS	1 Child	0
No income	35+	Prior marriage	Less than HS	1 Child	0
>=25K	35+	Prior marriage	Less than HS	2 Children	0
No income	35+	Prior marriage	Less than HS	2 Children	0
>=25K	35+	Prior marriage	Less than HS	3 Children+	0
No income	35+	Prior marriage	Less than HS	3 Children+	0

Table 60 (cont'd).

>=25K	35+	Prior marriage	Less than HS	No Children	0
Table 61 Match 5: Income, Age, Ethnoracial group, Education, Children					
Income	Age	Ethnoracial group	Education	Children	Cell Content
>=25K	35+	White	HS, equiv or more	No Children	79
<\$25k	35+	White	HS, equiv or more	No Children	64
>=25K	18-34	White	HS, equiv or more	No Children	38
>=25K	35+	Other-than-white	HS, equiv or more	No Children	37
<\$25k	35+	Other-than-white	HS, equiv or more	No Children	29
>=25K	35+	White	HS, equiv or more	1 Child	27
>=25K	35+	Other-than-white	Less than HS	No Children	22
>=25K	18-34	White	HS, equiv or more	1 Child	18
<\$25k	35+	White	HS, equiv or more	1 Child	17
>=25K	35+	White	HS, equiv or more	2 Children	17
<\$25k	18-34	White	HS, equiv or more	No Children	15
>=25K	35+	Other-than-white	HS, equiv or more	2 Children	14
>=25K	35+	White	Less than HS	No Children	13
<\$25k	35+	White	HS, equiv or more	2 Children	12
>=25K	18-34	White	HS, equiv or more	2 Children	11
>=25K	35+	Other-than-white	HS, equiv or more	1 Child	10
>=25K	18-34	Other-than-white	HS, equiv or more	No Children	9
<\$25k	18-34	Other-than-white	HS, equiv or more	No Children	8
<\$25k	35+	Other-than-white	HS, equiv or more	1 Child	7
>=25K	18-34	Other-than-white	HS, equiv or more	2 Children	6
>=25K	35+	Other-than-white	Less than HS	3 Children+	6
<\$25k	35+	White	HS, equiv or more	3 Children+	6
No income	35+	White	HS, equiv or more	No Children	6

Table 61 (cont'd).

<\$25k	18-34	White	HS, equiv or more	3 Children+	5
>=25K	18-34	White	Less than HS	1 Child	5
>=25K	18-34	Other-than-white	HS, equiv or more	1 Child	4
>=25K	18-34	Other-than-white	HS, equiv or more	3 Children+	4
<\$25k	18-34	White	HS, equiv or more	1 Child	4
No income	18-34	White	HS, equiv or more	2 Children	4
<\$25k	18-34	White	HS, equiv or more	2 Children	4
>=25K	18-34	White	Less than HS	3 Children+	4
>=25K	18-34	White	Less than HS	No Children	4
<\$25k	35+	Other-than-white	HS, equiv or more	2 Children	4
>=25K	35+	Other-than-white	Less than HS	1 Child	4
>=25K	35+	White	HS, equiv or more	3 Children+	4
<\$25k	18-34	Other-than-white	HS, equiv or more	2 Children	3
>=25K	18-34	Other-than-white	Less than HS	2 Children	3
>=25K	18-34	Other-than-white	Less than HS	No Children	3
>=25K	18-34	White	HS, equiv or more	3 Children+	3
>=25K	35+	Other-than-white	Less than HS	2 Children	3
>=25K	35+	White	Less than HS	1 Child	3
No income	35+	White	Less than HS	No Children	3
<\$25k	18-34	Other-than-white	HS, equiv or more	1 Child	2
>=25K	18-34	Other-than-white	Less than HS	1 Child	2
>=25K	18-34	Other-than-white	Less than HS	3 Children+	2
>=25K	35+	Other-than-white	HS, equiv or more	3 Children+	2
<\$25k	35+	Other-than-white	HS, equiv or more	3 Children+	2
No income	35+	Other-than-white	HS, equiv or more	No Children	2
<\$25k	35+	Other-than-white	Less than HS	2 Children	2

Table 61 (cont'd).

<\$25k	35+	White	Less than HS	No Children	2
No income	18-34	Other-than-white	HS, equiv or more	1 Child	1
No income	18-34	Other-than-white	HS, equiv or more	2 Children	1
<\$25k	18-34	Other-than-white	HS, equiv or more	3 Children+	1
<\$25k	18-34	Other-than-white	Less than HS	1 Child	1
No income	18-34	Other-than-white	Less than HS	3 Children+	1
<\$25k	18-34	Other-than-white	Less than HS	No Children	1
No income	18-34	White	HS, equiv or more	1 Child	1
No income	18-34	White	HS, equiv or more	3 Children+	1
No income	18-34	White	HS, equiv or more	No Children	1
<\$25k	18-34	White	Less than HS	1 Child	1
>=25K	18-34	White	Less than HS	2 Children	1
<\$25k	18-34	White	Less than HS	2 Children	1
No income	35+	Other-than-white	HS, equiv or more	3 Children+	1
<\$25k	35+	Other-than-white	Less than HS	No Children	1
No income	35+	White	HS, equiv or more	3 Children+	1
No income	35+	White	Less than HS	3 Children+	1
>=25K	35+	White	Less than HS	3 Children+	1
No income	18-34	Other-than-white	HS, equiv or more	3 Children+	0
No income	18-34	Other-than-white	HS, equiv or more	No Children	0
No income	18-34	Other-than-white	Less than HS	1 Child	0
No income	18-34	Other-than-white	Less than HS	2 Children	0
<\$25k	18-34	Other-than-white	Less than HS	2 Children	0
<\$25k	18-34	Other-than-white	Less than HS	3 Children+	0
No income	18-34	Other-than-white	Less than HS	No Children	0
No income	18-34	White	Less than HS	1 Child	0

Table 61 (cont'd).

No income	18-34	White	Less than HS	2 Children	0
No income	18-34	White	Less than HS	3 Children+	0
<\$25k	18-34	White	Less than HS	3 Children+	0
No income	18-34	White	Less than HS	No Children	0
<\$25k	18-34	White	Less than HS	No Children	0
No income	35+	Other-than-white	HS, equiv or more	1 Child	0
No income	35+	Other-than-white	HS, equiv or more	2 Children	0
No income	35+	Other-than-white	Less than HS	1 Child	0
<\$25k	35+	Other-than-white	Less than HS	1 Child	0
No income	35+	Other-than-white	Less than HS	2 Children	0
No income	35+	Other-than-white	Less than HS	3 Children+	0
<\$25k	35+	Other-than-white	Less than HS	3 Children+	0
No income	35+	Other-than-white	Less than HS	No Children	0
No income	35+	White	HS, equiv or more	1 Child	0
No income	35+	White	HS, equiv or more	2 Children	0
No income	35+	White	Less than HS	1 Child	0
<\$25k	35+	White	Less than HS	1 Child	0
No income	35+	White	Less than HS	2 Children	0
>=\$25K	35+	White	Less than HS	2 Children	0
<\$25k	35+	White	Less than HS	2 Children	0
<\$25k	35+	White	Less than HS	3 Children+	0

Table 62 4 Match: Income, age, Relationship Status, Ethnoracial group

Income	Age	Relationship Status	Ethnoracial group	Cell Content
<\$25k	35+	Prior marriage	White	79
<\$25k	35+	Married	White	52
>=\$25K	35+	Prior marriage	White	52

Table 62 (cont'd).

<\$25k	35+	Prior marriage	Other-than-white	45
<\$25k	18-34	Never	White	41
<\$25k	18-34	Married	White	31
>=25K	35+	Married	White	31
<\$25k	35+	Married	Other-than-white	28
<\$25k	35+	Never	Other-than-white	25
<\$25k	18-34	Never	Other-than-white	21
>=25K	35+	Prior marriage	Other-than-white	19
>=25K	35+	Never	White	18
>=25K	35+	Married	Other-than-white	15
<\$25k	35+	Never	White	13
>=25K	18-34	Married	White	12
<\$25k	18-34	Prior marriage	White	12
>=25K	35+	Never	Other-than-white	11
>=25K	18-34	Never	White	10
No income	35+	Married	White	9
<\$25k	18-34	Married	Other-than-white	8
>=25K	18-34	Prior marriage	White	8
>=25K	18-34	Never	Other-than-white	7
>=25K	18-34	Married	Other-than-white	6
No income	18-34	Married	White	6
>=25K	18-34	Prior marriage	Other-than-white	4
<\$25k	18-34	Prior marriage	Other-than-white	4
No income	18-34	Married	Other-than-white	3
No income	35+	Prior marriage	Other-than-white	2
No income	18-34	Never	White	1

Table 62 (cont'd).

No income	35+	Never	White	1
No income	35+	Prior marriage	White	1
No income	18-34	Never	Other-than-white	0
No income	18-34	Prior marriage	Other-than-white	0
No income	18-34	Prior marriage	White	0
No income	35+	Married	Other-than-white	0
No income	35+	Never	Other-than-white	0

Table 63 4 Match: Income, Relationship Status, Ethnoracial group, Education

Income	Relationship Status	Ethnoracial group	Education	Cell Content
<\$25k	Prior marriage	White	HS, equiv or more	77
<\$25k	Married	White	HS, equiv or more	75
>=25K	Prior marriage	White	HS, equiv or more	59
<\$25k	Never	White	HS, equiv or more	45
>=25K	Married	White	HS, equiv or more	41
<\$25k	Prior marriage	Other-than-white	HS, equiv or more	31
<\$25k	Never	Other-than-white	HS, equiv or more	29
>=25K	Never	White	HS, equiv or more	27
<\$25k	Married	Other-than-white	HS, equiv or more	26
>=25K	Prior marriage	Other-than-white	HS, equiv or more	21
>=25K	Married	Other-than-white	HS, equiv or more	20
<\$25k	Prior marriage	Other-than-white	Less than HS	18
<\$25k	Never	Other-than-white	Less than HS	17
>=25K	Never	Other-than-white	HS, equiv or more	16
<\$25k	Prior marriage	White	Less than HS	14
No income	Married	White	HS, equiv or more	12
<\$25k	Married	Other-than-white	Less than HS	10

Table 63 (cont'd).

<\$25k	Never	White	Less than HS	9
<\$25k	Married	White	Less than HS	8
No income	Married	Other-than-white	HS, equiv or more	3
No income	Married	White	Less than HS	3
>=25K	Married	White	Less than HS	2
No income	Never	Other-than-white	HS, equiv or more	2
>=25K	Never	Other-than-white	Less than HS	2
>=25K	Prior marriage	Other-than-white	Less than HS	2
No income	Prior marriage	White	HS, equiv or more	2
No income	Married	Other-than-white	Less than HS	1
No income	Never	White	Less than HS	1
>=25K	Never	White	Less than HS	1
>=25K	Prior marriage	White	Less than HS	1
>=25K	Married	Other-than-white	Less than HS	0
No income	Never	Other-than-white	Less than HS	0
No income	Never	White	HS, equiv or more	0
No income	Prior marriage	Other-than-white	HS, equiv or more	0
No income	Prior marriage	Other-than-white	Less than HS	0
No income	Prior marriage	White	Less than HS	0

Table 64 4 Match: Income, Ethnoracial group, Education, Children

Income	Ethnoracial group	Education	Children	Cell Content
<\$25k	White	HS, equiv or more	No Children	117
>=25K	White	HS, equiv or more	No Children	79
<\$25k	Other-than-white	HS, equiv or more	No Children	46
<\$25k	White	HS, equiv or more	1 Child	45

Table 64 (cont'd).

>=25K	Other-than-white	HS, equiv or more	No Children	37
<\$25k	White	HS, equiv or more	2 Children	28
<\$25k	Other-than-white	Less than HS	No Children	25
>=25K	White	HS, equiv or more	1 Child	21
<\$25k	Other-than-white	HS, equiv or more	2 Children	20
<\$25k	White	Less than HS	No Children	17
>=25K	White	HS, equiv or more	2 Children	16
<\$25k	Other-than-white	HS, equiv or more	1 Child	14
>=25K	White	HS, equiv or more	3 Children+	11
>=25K	Other-than-white	HS, equiv or more	1 Child	9
>=25K	Other-than-white	HS, equiv or more	2 Children	8
<\$25k	Other-than-white	Less than HS	3 Children+	8
<\$25k	White	Less than HS	1 Child	8
<\$25k	White	HS, equiv or more	3 Children+	7
No income	White	HS, equiv or more	No Children	7
<\$25k	Other-than-white	HS, equiv or more	3 Children+	6
<\$25k	Other-than-white	Less than HS	1 Child	6
<\$25k	Other-than-white	Less than HS	2 Children	6
<\$25k	White	Less than HS	3 Children+	5
No income	White	HS, equiv or more	2 Children	4
>=25K	Other-than-white	HS, equiv or more	3 Children+	3
No income	White	Less than HS	No Children	3
No income	Other-than-white	HS, equiv or more	No Children	2
>=25K	Other-than-white	Less than HS	No Children	2
No income	White	HS, equiv or more	3 Children+	2
>=25K	White	Less than HS	No Children	2

Table 64 (cont'd).

No income	Other-than-white	HS, equiv or more	1 Child	1
No income	Other-than-white	HS, equiv or more	2 Children	1
No income	Other-than-white	HS, equiv or more	3 Children+	1
>=25K	Other-than-white	Less than HS	1 Child	1
>=25K	Other-than-white	Less than HS	2 Children	1
No income	Other-than-white	Less than HS	3 Children+	1
No income	White	HS, equiv or more	1 Child	1
>=25K	White	Less than HS	1 Child	1
<\$25k	White	Less than HS	2 Children	1
>=25K	White	Less than HS	2 Children	1
No income	White	Less than HS	3 Children+	1
No income	Other-than-white	Less than HS	1 Child	0
No income	Other-than-white	Less than HS	2 Children	0
>=25K	Other-than-white	Less than HS	3 Children+	0
No income	Other-than-white	Less than HS	No Children	0
No income	White	Less than HS	1 Child	0
No income	White	Less than HS	2 Children	0
>=25K	White	Less than HS	3 Children+	0

Table 65 4 Match: Income, age, Ethnoracial group and Education

Income	Age	Ethnoracial group	Education	Cell Content
<25K	35+	White	HS, equiv or more	128
>=\$25k	35+	White	HS, equiv or more	98
>=25K	18-34	White	HS, equiv or more	70
>=25K	35+	Other-than-white	HS, equiv or more	63
<\$25k	35+	Other-than-white	HS, equiv or more	42

Table 65 (cont'd).

>=25K	35+	Other-than-white	Less than HS	35
<\$25k	18-34	White	HS, equiv or more	28
>=25K	18-34	Other-than-white	HS, equiv or more	23
>=25K	35+	White	Less than HS	17
<\$25k	18-34	Other-than-white	HS, equiv or more	15
>=25K	18-34	White	Less than HS	14
>=25K	18-34	Other-than-white	Less than HS	10
No income	18-34	White	HS, equiv or more	7
No income	35+	White	HS, equiv or more	7
No income	35+	White	Less than HS	4
No income	35+	Other-than-white	HS, equiv or more	3
No income	18-34	Other-than-white	HS, equiv or more	2
<\$25k	18-34	Other-than-white	Less than HS	2
<\$25k	18-34	White	Less than HS	2
<\$25k	35+	Other-than-white	Less than HS	2
<\$25k	35+	White	Less than HS	2
No income	18-34	Other-than-white	Less than HS	0
No income	18-34	White	Less than HS	0
No income	35+	Other-than-white	Less than HS	0

Table 66 4 Match: Income, age, Education, Children

Income	Age	Education	Children	Cell Content
<\$25k	35+	HS, equiv or more	No Children	116
>=25K	35+	HS, equiv or more	No Children	93
<\$25k	18-34	HS, equiv or more	No Children	47
<\$25k	35+	HS, equiv or more	1 Child	37
<\$25k	35+	Less than HS	No Children	35

Table 66 (cont'd).

<\$25k	35+	HS, equiv or more	2 Children	31
>=25K	35+	HS, equiv or more	1 Child	24
>=25K	18-34	HS, equiv or more	No Children	23
<\$25k	18-34	HS, equiv or more	1 Child	22
<\$25k	18-34	HS, equiv or more	2 Children	17
>=25K	35+	HS, equiv or more	2 Children	16
>=25K	18-34	HS, equiv or more	2 Children	8
>=25K	35+	HS, equiv or more	3 Children+	8
No income	35+	HS, equiv or more	No Children	8
<\$25k	18-34	HS, equiv or more	3 Children+	7
<\$25k	18-34	Less than HS	1 Child	7
<\$25k	18-34	Less than HS	No Children	7
<\$25k	35+	Less than HS	1 Child	7
<\$25k	35+	Less than HS	3 Children+	7
>=25K	18-34	HS, equiv or more	1 Child	6
>=25K	18-34	HS, equiv or more	3 Children+	6
<\$25k	18-34	Less than HS	3 Children+	6
<\$25k	35+	HS, equiv or more	3 Children+	6
No income	18-34	HS, equiv or more	2 Children	5
<\$25k	18-34	Less than HS	2 Children	4
<\$25k	35+	Less than HS	2 Children	3
>=25K	35+	Less than HS	No Children	3
No income	35+	Less than HS	No Children	3
No income	18-34	HS, equiv or more	1 Child	2
>=25K	18-34	Less than HS	1 Child	2
No income	35+	HS, equiv or more	3 Children+	2

Table 66 (cont'd).

No income	18-34	HS, equiv or more	3 Children+	1
No income	18-34	HS, equiv or more	No Children	1
>=25K	18-34	Less than HS	2 Children	1
No income	18-34	Less than HS	3 Children+	1
>=25K	18-34	Less than HS	No Children	1
>=25K	35+	Less than HS	2 Children	1
No income	35+	Less than HS	3 Children+	1
No income	18-34	Less than HS	1 Child	0
No income	18-34	Less than HS	2 Children	0
>=25K	18-34	Less than HS	3 Children+	0
No income	18-34	Less than HS	No Children	0
No income	35+	HS, equiv or more	1 Child	0
No income	35+	HS, equiv or more	2 Children	0
>=25K	35+	Less than HS	1 Child	0
No income	35+	Less than HS	1 Child	0
No income	35+	Less than HS	2 Children	0
>=25K	35+	Less than HS	3 Children+	0

Table 67 4 Match: Income, age, Relationship Status and Education

Income	Age	Relationship Status	Education	Cell Content
<\$25k	35+	Prior marriage	HS, equiv or more	96
>=25K	35+	Prior marriage	HS, equiv or more	68
<\$25k	35+	Married	HS, equiv or more	67
<\$25k	18-34	Never	HS, equiv or more	47
>=25K	35+	Married	HS, equiv or more	44
<\$25k	18-34	Married	HS, equiv or more	34
>=25K	35+	Never	HS, equiv or more	29

Table 67 (cont'd).

<\$25k	35+	Prior marriage	Less than HS	28
<\$25k	35+	Never	HS, equiv or more	27
>=25K	18-34	Married	HS, equiv or more	17
<\$25k	18-34	Never	Less than HS	15
>=25K	18-34	Never	Less than HS	14
<\$25k	35+	Married	Less than HS	13
>=25K	18-34	Prior marriage	HS, equiv or more	12
<\$25k	18-34	Prior marriage	HS, equiv or more	12
<\$25k	35+	Never	Less than HS	11
No income	18-34	Married	HS, equiv or more	8
No income	35+	Married	HS, equiv or more	7
<\$25k	18-34	Married	Less than HS	5
<\$25k	18-34	Prior marriage	Less than HS	4
>=25K	18-34	Never	HS, equiv or more	3
No income	35+	Married	Less than HS	3
>=25K	35+	Prior marriage	Less than HS	3
No income	35+	Prior marriage	HS, equiv or more	2
No income	18-34	Married	Less than HS	1
>=25K	18-34	Married	Less than HS	1
No income	18-34	Never	HS, equiv or more	1
>=25K	35+	Married	Less than HS	1
No income	35+	Never	HS, equiv or more	1
No income	35+	Prior marriage	Less than HS	1
No income	18-34	Never	Less than HS	0
No income	18-34	Prior marriage	HS, equiv or more	0
No income	18-34	Prior marriage	Less than HS	0

Table 67 (cont'd).

>=25K	18-34	Prior marriage	Less than HS	0
No income	35+	Never	Less than HS	0
>=25K	35+	Never	Less than HS	0

Table 68 4 Match: Income, age, Relationship Status and Children

Income	Age	Relationship Status	Children	Cell Content
<\$25k	35+	Prior marriage	No Children	89
>=25K	35+	Prior marriage	No Children	50
<\$25k	35+	Married	No Children	41
<\$25k	18-34	Never	No Children	34
>=25K	35+	Never	No Children	24
>=25K	35+	Married	No Children	22
<\$25k	35+	Never	No Children	21
<\$25k	35+	Prior marriage	1 Child	20
<\$25k	35+	Married	2 Children	18
<\$25k	18-34	Never	1 Child	14
>=25K	35+	Married	1 Child	14
<\$25k	35+	Married	1 Child	14
<\$25k	18-34	Married	No Children	13
>=25K	18-34	Never	No Children	13
<\$25k	18-34	Married	2 Children	12
<\$25k	35+	Prior marriage	2 Children	12
<\$25k	18-34	Married	1 Child	10
<\$25k	35+	Never	1 Child	10
>=25K	35+	Prior marriage	2 Children	9
>=25K	18-34	Married	No Children	8
<\$25k	18-34	Never	2 Children	8

Table 68 (cont'd).

>=25K	35+	Prior marriage	1 Child	8
<\$25k	18-34	Prior marriage	No Children	7
>=25K	35+	Married	2 Children	7
<\$25k	35+	Married	3 Children+	7
No income	35+	Married	No Children	7
>=25K	18-34	Married	2 Children	6
<\$25k	18-34	Never	3 Children+	6
No income	18-34	Married	2 Children	5
<\$25k	18-34	Prior marriage	1 Child	5
<\$25k	18-34	Married	3 Children+	4
>=25K	18-34	Prior marriage	1 Child	4
<\$25k	35+	Never	2 Children	4
>=25K	35+	Prior marriage	3 Children+	4
>=25K	18-34	Married	3 Children+	3
>=25K	18-34	Never	1 Child	3
>=25K	18-34	Prior marriage	2 Children	3
<\$25k	18-34	Prior marriage	3 Children+	3
>=25K	18-34	Prior marriage	No Children	3
No income	35+	Married	3 Children+	3
<\$25k	35+	Never	3 Children+	3
<\$25k	35+	Prior marriage	3 Children+	3
No income	35+	Prior marriage	No Children	3
No income	18-34	Married	1 Child	2
No income	18-34	Married	3 Children+	2
>=25K	18-34	Prior marriage	3 Children+	2
>=25K	35+	Married	3 Children+	2

Table 68 (cont'd).

>=25K	35+	Never	1 Child	2
>=25K	35+	Never	3 Children+	2
>=25K	18-34	Married	1 Child	1
>=25K	18-34	Never	3 Children+	1
No income	18-34	Never	No Children	1
<\$25k	18-34	Prior marriage	2 Children	1
>=25K	35+	Never	2 Children	1
No income	35+	Never	No Children	1
No income	18-34	Married	No Children	0
No income	18-34	Never	1 Child	0
No income	18-34	Never	2 Children	0
>=25K	18-34	Never	2 Children	0
No income	18-34	Never	3 Children+	0
No income	18-34	Prior marriage	1 Child	0
No income	18-34	Prior marriage	2 Children	0
No income	18-34	Prior marriage	3 Children+	0
No income	18-34	Prior marriage	No Children	0
No income	35+	Married	1 Child	0
No income	35+	Married	2 Children	0
No income	35+	Never	1 Child	0
No income	35+	Never	2 Children	0
No income	35+	Never	3 Children+	0
No income	35+	Prior marriage	1 Child	0
No income	35+	Prior marriage	2 Children	0
No income	35+	Prior marriage	3 Children+	0

Table 69 4 Match: Income, Relationship Status, Ethnoracial group and Children

Income	Relationship Status	Ethnoracial group	Children	Cell Content
<\$25k	Prior marriage	White	No Children	64
>=25K	Prior marriage	White	No Children	39
<\$25k	Married	White	No Children	36
<\$25k	Never	White	No Children	34
<\$25k	Prior marriage	Other-than-white	No Children	32
>=25K	Married	White	No Children	24
<\$25k	Married	White	1 Child	21
<\$25k	Never	Other-than-white	No Children	21
<\$25k	Married	White	2 Children	19
<\$25k	Prior marriage	White	1 Child	19
<\$25k	Married	Other-than-white	No Children	18
>=25K	Never	White	No Children	18
>=25K	Prior marriage	Other-than-white	No Children	14
>=25K	Married	Other-than-white	No Children	13
<\$25k	Never	White	1 Child	13
>=25K	Never	Other-than-white	No Children	12
<\$25k	Married	Other-than-white	2 Children	11
<\$25k	Never	Other-than-white	1 Child	11
>=25K	Never	White	1 Child	11
>=25K	Never	White	2 Children	11
>=25K	Prior marriage	White	1 Child	9
<\$25k	Prior marriage	Other-than-white	2 Children	8
<\$25k	Married	White	3 Children+	7
<\$25k	Never	Other-than-white	2 Children	7
<\$25k	Never	Other-than-white	3 Children+	7

Table 69 (cont'd).

No income	Never	White	No Children	7
<\$25k	Prior marriage	Other-than-white	1 Child	6
>=25K	Prior marriage	Other-than-white	2 Children	6
>=25K	Prior marriage	White	2 Children	6
>=25K	Prior marriage	White	3 Children+	6
<\$25k	Never	White	2 Children	5
<\$25k	Prior marriage	White	2 Children	5
<\$25k	Married	Other-than-white	3 Children+	4
>=25K	Never	Other-than-white	1 Child	4
No income	Never	White	2 Children	4
>=25K	Married	Other-than-white	1 Child	3
<\$25k	Married	Other-than-white	1 Child	3
No income	Never	White	3 Children+	3
>=25K	Never	White	3 Children+	3
>=25K	Prior marriage	Other-than-white	1 Child	3
<\$25k	Prior marriage	Other-than-white	3 Children+	3
<\$25k	Prior marriage	White	3 Children+	3
>=25K	Married	White	1 Child	2
>=25K	Married	White	3 Children+	2
No income	Married	White	No Children	2
>=25K	Never	Other-than-white	2 Children	2
No income	Never	Other-than-white	3 Children+	2
>=25K	Never	Other-than-white	3 Children+	2
<\$25k	Never	White	3 Children+	2
No income	Prior marriage	Other-than-white	No Children	2
>=25K	Married	Other-than-white	2 Children	1

Table 69 (cont'd).

>=25K	Married	Other-than-white	3 Children+	1
No income	Never	Other-than-white	1 Child	1
No income	Never	Other-than-white	2 Children	1
No income	Never	White	1 Child	1
No income	Prior marriage	White	No Children	1
No income	Married	Other-than-white	1 Child	0
No income	Married	Other-than-white	2 Children	0
No income	Married	Other-than-white	3 Children+	0
No income	Married	Other-than-white	No Children	0
No income	Married	White	1 Child	0
No income	Married	White	2 Children	0
>=25K	Married	White	2 Children	0
No income	Married	White	3 Children+	0
No income	Never	Other-than-white	No Children	0
No income	Prior marriage	Other-than-white	1 Child	0
No income	Prior marriage	Other-than-white	2 Children	0
No income	Prior marriage	Other-than-white	3 Children+	0
>=25K	Prior marriage	Other-than-white	3 Children+	0
No income	Prior marriage	White	1 Child	0
No income	Prior marriage	White	2 Children	0
No income	Prior marriage	White	3 Children+	0

Table 70 4 Match: Income, Relationship Status, Education and Children

Income	Relationship Status	Education	Children	Cell Content
<\$25k	Prior marriage	HS, equiv or more	No Children	73
>=25K	Prior marriage	HS, equiv or more	No Children	51

Table 70 (cont'd).

<\$25k	Married	HS, equiv or more	No Children	46
<\$25k	Never	HS, equiv or more	No Children	44
>=25K	Never	HS, equiv or more	No Children	36
>=25K	Married	HS, equiv or more	No Children	29
<\$25k	Married	HS, equiv or more	2 Children	28
<\$25k	Prior marriage	Less than HS	No Children	23
<\$25k	Prior marriage	HS, equiv or more	1 Child	21
<\$25k	Married	HS, equiv or more	1 Child	20
<\$25k	Never	HS, equiv or more	1 Child	18
>=25K	Married	HS, equiv or more	1 Child	15
>=25K	Married	HS, equiv or more	2 Children	12
>=25K	Prior marriage	HS, equiv or more	1 Child	12
<\$25k	Prior marriage	HS, equiv or more	2 Children	12
<\$25k	Never	Less than HS	No Children	11
>=25K	Prior marriage	HS, equiv or more	2 Children	11
<\$25k	Married	Less than HS	No Children	8
<\$25k	Never	HS, equiv or more	2 Children	8
<\$25k	Married	HS, equiv or more	3 Children+	7
<\$25k	Never	Less than HS	1 Child	6
>=25K	Prior marriage	HS, equiv or more	3 Children+	6
No income	Married	HS, equiv or more	2 Children	5
>=25K	Married	HS, equiv or more	3 Children+	5
No income	Married	HS, equiv or more	No Children	5
<\$25k	Never	Less than HS	3 Children+	5
<\$25k	Married	Less than HS	1 Child	4
<\$25k	Married	Less than HS	3 Children+	4

Table 70 (cont'd).

<\$25k	Never	HS, equiv or more	3 Children+	4
<\$25k	Never	Less than HS	2 Children	4
<\$25k	Prior marriage	Less than HS	1 Child	4
<\$25k	Prior marriage	Less than HS	3 Children+	4
No income	Married	HS, equiv or more	3 Children+	3
>=25K	Never	HS, equiv or more	1 Child	3
>=25K	Never	HS, equiv or more	3 Children+	3
No income	Married	HS, equiv or more	1 Child	2
<\$25k	Married	Less than HS	2 Children	2
No income	Married	Less than HS	3 Children+	2
No income	Married	Less than HS	No Children	2
No income	Never	HS, equiv or more	No Children	2
>=25K	Never	Less than HS	1 Child	2
<\$25k	Prior marriage	HS, equiv or more	3 Children+	2
No income	Prior marriage	HS, equiv or more	No Children	2
>=25K	Prior marriage	Less than HS	No Children	2
>=25K	Married	Less than HS	2 Children	1
>=25K	Married	Less than HS	No Children	1
>=25K	Never	HS, equiv or more	2 Children	1
>=25K	Never	Less than HS	No Children	1
>=25K	Prior marriage	Less than HS	2 Children	1
<\$25k	Prior marriage	Less than HS	2 Children	1
No income	Prior marriage	Less than HS	No Children	1
No income	Married	Less than HS	1 Child	0
>=25K	Married	Less than HS	1 Child	0
No income	Married	Less than HS	2 Children	0

Table 70 (cont'd).

>=25K	Married	Less than HS	3 Children+	0
No income	Never	HS, equiv or more	1 Child	0
No income	Never	HS, equiv or more	2 Children	0
No income	Never	HS, equiv or more	3 Children+	0
No income	Never	Less than HS	1 Child	0
No income	Never	Less than HS	2 Children	0
>=25K	Never	Less than HS	2 Children	0
No income	Never	Less than HS	3 Children+	0
>=25K	Never	Less than HS	3 Children+	0
No income	Never	Less than HS	No Children	0
No income	Prior marriage	HS, equiv or more	1 Child	0
No income	Prior marriage	HS, equiv or more	2 Children	0
No income	Prior marriage	HS, equiv or more	3 Children+	0
No income	Prior marriage	Less than HS	1 Child	0
>=25K	Prior marriage	Less than HS	1 Child	0
No income	Prior marriage	Less than HS	2 Children	0
No income	Prior marriage	Less than HS	3 Children+	0
>=25K	Prior marriage	Less than HS	3 Children+	0

Table 71 Match: Age, Relationship Status, Ethnoracial group, Education

Age	Relationship Status	Ethnoracial group	Education	Cell Content
35+	Prior marriage	White	HS, equiv or more	119
35+	Married	White	HS, equiv or more	83
35+	Prior marriage	Other-than-white	HS, equiv or more	47
18-34	Married	White	HS, equiv or more	45
18-34	Never	White	HS, equiv or more	43
35+	Married	Other-than-white	HS, equiv or more	35

Table 71 (cont'd).

35+	Never	White	HS, equiv or more	31
35+	Never	Other-than-white	HS, equiv or more	26
35+	Prior marriage	Other-than-white	Less than HS	19
18-34	Never	Other-than-white	HS, equiv or more	19
18-34	Prior marriage	White	HS, equiv or more	17
18-34	Married	Other-than-white	HS, equiv or more	14
35+	Prior marriage	White	Less than HS	13
35+	Never	Other-than-white	Less than HS	10
35+	Married	White	Less than HS	9
18-34	Never	Other-than-white	Less than HS	9
18-34	Never	White	Less than HS	9
35+	Married	Other-than-white	Less than HS	8
18-34	Prior marriage	Other-than-white	HS, equiv or more	7
18-34	Married	White	Less than HS	4
18-34	Married	Other-than-white	Less than HS	3
18-34	Prior marriage	White	Less than HS	3
35+	Never	White	Less than HS	1
18-34	Prior marriage	Other-than-white	Less than HS	1

Table 72 4 Match: Age, Ethnoracial group, Education and Children

Age	Ethnoracial group	Education	Children	Cell Content
35+	White	HS, equiv or more	No Children	149
35+	Other-than-white	HS, equiv or more	No Children	68
18-34	White	HS, equiv or more	No Children	54
35+	White	HS, equiv or more	1 Child	44
35+	White	HS, equiv or more	2 Children	29

Table 72 (cont'd).

35+	Other-than-white	Less than HS	No Children	23
18-34	White	HS, equiv or more	1 Child	23
18-34	White	HS, equiv or more	2 Children	19
35+	Other-than-white	HS, equiv or more	2 Children	18
35+	White	Less than HS	No Children	18
35+	Other-than-white	HS, equiv or more	1 Child	17
18-34	Other-than-white	HS, equiv or more	No Children	17
18-34	Other-than-white	HS, equiv or more	2 Children	11
35+	White	HS, equiv or more	3 Children+	11
18-34	White	HS, equiv or more	3 Children+	9
18-34	Other-than-white	HS, equiv or more	1 Child	7
35+	Other-than-white	Less than HS	3 Children+	6
18-34	White	Less than HS	1 Child	6
35+	Other-than-white	HS, equiv or more	3 Children+	5
18-34	Other-than-white	HS, equiv or more	3 Children+	5
35+	Other-than-white	Less than HS	1 Child	4
35+	Other-than-white	Less than HS	2 Children	4
18-34	Other-than-white	Less than HS	No Children	4
18-34	White	Less than HS	3 Children+	4
18-34	White	Less than HS	No Children	4
18-34	Other-than-white	Less than HS	1 Child	3
18-34	Other-than-white	Less than HS	2 Children	3
18-34	Other-than-white	Less than HS	3 Children+	3
35+	White	Less than HS	1 Child	3
18-34	White	Less than HS	2 Children	2
35+	White	Less than HS	3 Children+	2

Table 72 (cont'd).

35+	White	Less than HS	2 Children	0
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Table 73 4 Match: Age, Relationship Status, Ethnoracial group and Children

Age	Relationship Status	Ethnoracial group	Children	Cell Content
35+	Prior marriage	White	No Children	96
35+	Married	White	No Children	46
35+	Prior marriage	Other-than-white	No Children	46
18-34	Never	White	No Children	35
35+	Never	White	No Children	25
35+	Married	Other-than-white	No Children	24
35+	Married	White	1 Child	22
35+	Never	Other-than-white	No Children	21
35+	Prior marriage	White	1 Child	20
35+	Married	White	2 Children	17
18-34	Married	White	2 Children	17
18-34	Married	White	No Children	15
18-34	Never	Other-than-white	No Children	13
18-34	Married	White	1 Child	11
35+	Prior marriage	White	2 Children	11
18-34	Never	White	1 Child	10
35+	Prior marriage	Other-than-white	2 Children	10
35+	Married	Other-than-white	2 Children	8

Table 74 4 Match: Age, Relationship Status, Ethnoracial group and Children

35+	Prior marriage	Other-than-white	1 Child	8
18-34	Prior marriage	White	1 Child	8
18-34	Prior marriage	White	No Children	8

Table 74 (cont'd).

35+	Married	White	3 Children+	7
35+	Never	Other-than-white	1 Child	7
18-34	Never	Other-than-white	1 Child	7
35+	Married	Other-than-white	1 Child	6
18-34	Married	Other-than-white	2 Children	6
18-34	Married	Other-than-white	No Children	6
18-34	Married	White	3 Children+	6
35+	Married	Other-than-white	3 Children+	5
35+	Never	White	1 Child	5
35+	Prior marriage	White	3 Children+	5
35+	Never	Other-than-white	2 Children	4
18-34	Never	Other-than-white	2 Children	4
35+	Never	Other-than-white	3 Children+	4
18-34	Never	Other-than-white	3 Children+	4
18-34	Never	White	2 Children	4
18-34	Prior marriage	Other-than-white	2 Children	4
18-34	Prior marriage	White	3 Children+	4
18-34	Married	Other-than-white	3 Children+	3
18-34	Never	White	3 Children+	3
18-34	Married	Other-than-white	1 Child	2
35+	Prior marriage	Other-than-white	3 Children+	2
18-34	Prior marriage	Other-than-white	No Children	2
35+	Never	White	2 Children	1
35+	Never	White	3 Children+	1
18-34	Prior marriage	Other-than-white	1 Child	1
18-34	Prior marriage	Other-than-white	3 Children+	1

Table 74 (cont'd).

18-34 Prior marriage White 2 Children 0

Table 75 4 Match: Age, Relationship Status, Education and Children

Age	Relationship Status	Education	Children	Cell Content
35+	Prior marriage	HS, equiv or more	No Children	117
35+	Married	HS, equiv or more	No Children	61
18-34	Never	HS, equiv or more	No Children	43
35+	Never	HS, equiv or more	No Children	39
35+	Prior marriage	HS, equiv or more	1 Child	26
35+	Married	HS, equiv or more	1 Child	25
35+	Prior marriage	Less than HS	No Children	25
35+	Married	HS, equiv or more	2 Children	24
18-34	Married	HS, equiv or more	2 Children	21
18-34	Married	HS, equiv or more	No Children	19
35+	Prior marriage	HS, equiv or more	2 Children	19
18-34	Married	HS, equiv or more	1 Child	12
18-34	Never	HS, equiv or more	1 Child	11
35+	Never	HS, equiv or more	1 Child	10
35+	Married	Less than HS	No Children	9
18-34	Prior marriage	HS, equiv or more	No Children	9
35+	Married	HS, equiv or more	3 Children+	8
18-34	Married	HS, equiv or more	3 Children+	7
35+	Never	Less than HS	No Children	7
18-34	Prior marriage	HS, equiv or more	1 Child	7
18-34	Never	Less than HS	1 Child	6
18-34	Never	HS, equiv or more	2 Children	5
18-34	Never	Less than HS	No Children	5

Table 75 (cont'd).

35+	Married	Less than HS	3 Children+	4
35+	Never	HS, equiv or more	2 Children	4
35+	Never	HS, equiv or more	3 Children+	4
18-34	Never	Less than HS	3 Children+	4
18-34	Prior marriage	HS, equiv or more	2 Children	4
35+	Prior marriage	HS, equiv or more	3 Children+	4
18-34	Prior marriage	HS, equiv or more	3 Children+	4
35+	Married	Less than HS	1 Child	3
18-34	Never	HS, equiv or more	3 Children+	3
18-34	Never	Less than HS	2 Children	3
35+	Prior marriage	Less than HS	3 Children+	3
18-34	Married	Less than HS	2 Children	2
18-34	Married	Less than HS	3 Children+	2
18-34	Married	Less than HS	No Children	2
35+	Never	Less than HS	1 Child	2
35+	Prior marriage	Less than HS	1 Child	2
18-34	Prior marriage	Less than HS	1 Child	2
35+	Prior marriage	Less than HS	2 Children	2
18-34	Married	Less than HS	1 Child	1
35+	Married	Less than HS	2 Children	1
35+	Never	Less than HS	2 Children	1
35+	Never	Less than HS	3 Children+	1
18-34	Prior marriage	Less than HS	3 Children+	1
18-34	Prior marriage	Less than HS	No Children	1
18-34	Prior marriage	Less than HS	2 Children	0

Table 76 4 Match: Relationship Status, Ethnoracial group, Education and Children

Relationship Status	Ethnoracial group	Education	Children	Cell Content
Prior marriage	White	HS, equiv or more	No Children	93
Never	White	HS, equiv or more	No Children	56
Married	White	HS, equiv or more	No Children	54
Prior marriage	Other-than-white	HS, equiv or more	No Children	33
Married	White	HS, equiv or more	2 Children	33
Married	White	HS, equiv or more	1 Child	30
Never	Other-than-white	HS, equiv or more	No Children	26
Married	Other-than-white	HS, equiv or more	No Children	26
Prior marriage	White	HS, equiv or more	1 Child	25
Prior marriage	Other-than-white	Less than HS	No Children	15
Prior marriage	Other-than-white	HS, equiv or more	2 Children	12
Married	Other-than-white	HS, equiv or more	2 Children	12
Never	White	HS, equiv or more	1 Child	12
Prior marriage	White	HS, equiv or more	2 Children	11
Married	White	HS, equiv or more	3 Children+	11
Prior marriage	White	Less than HS	No Children	11
Never	Other-than-white	HS, equiv or more	1 Child	9
Prior marriage	Other-than-white	HS, equiv or more	1 Child	8
Never	Other-than-white	Less than HS	No Children	8
Married	Other-than-white	HS, equiv or more	1 Child	7
Prior marriage	White	HS, equiv or more	3 Children+	7
Married	White	Less than HS	No Children	7
Never	Other-than-white	HS, equiv or more	2 Children	5
Never	Other-than-white	HS, equiv or more	3 Children+	5

Table 76 (cont'd).

Never	Other-than-white	Less than HS	1 Child	5
Married	Other-than-white	HS, equiv or more	3 Children+	4
Married	Other-than-white	Less than HS	3 Children+	4
Married	Other-than-white	Less than HS	No Children	4
Never	White	HS, equiv or more	2 Children	4
Never	White	Less than HS	No Children	4
Never	Other-than-white	Less than HS	2 Children	3
Never	Other-than-white	Less than HS	3 Children+	3
Prior marriage	White	Less than HS	1 Child	3
Never	White	Less than HS	1 Child	3
Married	White	Less than HS	1 Child	3
Prior marriage	Other-than-white	Less than HS	2 Children	2
Married	Other-than-white	Less than HS	2 Children	2
Prior marriage	Other-than-white	Less than HS	3 Children+	2
Never	White	HS, equiv or more	3 Children+	2
Prior marriage	White	Less than HS	3 Children+	2
Never	White	Less than HS	3 Children+	2
Married	White	Less than HS	3 Children+	2
Prior marriage	Other-than-white	HS, equiv or more	3 Children+	1
Prior marriage	Other-than-white	Less than HS	1 Child	1
Married	Other-than-white	Less than HS	1 Child	1
Never	White	Less than HS	2 Children	1
Married	White	Less than HS	2 Children	1
Prior marriage	White	Less than HS	2 Children	0

Table 77 4 Match: Income, age, Ethnoracial group and Children

Income	Age	Ethnoracial group	Children	Cell Content
<\$25k	35+	White	No Children	92
>=25K	35+	White	No Children	66
<\$25k	35+	Other-than-white	No Children	59
<\$25k	18-34	White	No Children	42
>=25K	35+	Other-than-white	No Children	30
<\$25k	35+	White	1 Child	30
<\$25k	18-34	White	1 Child	23
<\$25k	35+	Other-than-white	2 Children	17
>=25K	35+	White	1 Child	17
<\$25k	35+	White	2 Children	17
>=25K	18-34	White	No Children	15
<\$25k	35+	Other-than-white	1 Child	14
<\$25k	18-34	Other-than-white	No Children	12
<\$25k	18-34	White	2 Children	12
>=25K	35+	White	2 Children	12
<\$25k	18-34	Other-than-white	2 Children	9
>=25K	18-34	Other-than-white	No Children	9
No income	35+	White	No Children	9
<\$25k	35+	Other-than-white	3 Children+	8
<\$25k	18-34	White	3 Children+	7
>=25K	35+	Other-than-white	1 Child	7
<\$25k	18-34	Other-than-white	1 Child	6
<\$25k	18-34	Other-than-white	3 Children+	6
>=25K	35+	White	3 Children+	6
>=25K	18-34	White	1 Child	5

Table 77 (cont'd).

>=25K	18-34	White	2 Children	5
>=25K	18-34	White	3 Children+	5
>=25K	35+	Other-than-white	2 Children	5
<\$25k	35+	White	3 Children+	5
>=25K	18-34	Other-than-white	2 Children	4
No income	18-34	White	2 Children	4
>=25K	18-34	Other-than-white	1 Child	3
>=25K	35+	Other-than-white	3 Children+	2
No income	35+	Other-than-white	No Children	2
No income	35+	White	3 Children+	2
No income	18-34	Other-than-white	1 Child	1
No income	18-34	Other-than-white	2 Children	1
No income	18-34	Other-than-white	3 Children+	1
>=25K	18-34	Other-than-white	3 Children+	1
No income	18-34	White	1 Child	1
No income	18-34	White	3 Children+	1
No income	18-34	White	No Children	1
No income	35+	Other-than-white	3 Children+	1
No income	18-34	Other-than-white	No Children	0
No income	35+	Other-than-white	1 Child	0
No income	35+	Other-than-white	2 Children	0
No income	35+	White	1 Child	0
No income	35+	White	2 Children	0

Table 78 3 Match: Income, Age, Relationship Status

Income	Age	Relationship Status	Cell Content
<\$25k	35+	Prior marriage	124
<\$25k	35+	Married	80
>=25K	35+	Prior marriage	71
<\$25k	18-34	Never	62
>=25K	35+	Married	45
<\$25k	18-34	Married	39
<\$25k	35+	Never	38
>=25K	35+	Never	29
>=25K	18-34	Married	18
>=25K	18-34	Never	17
<\$25k	18-34	Prior marriage	16
>=25K	18-34	Prior marriage	12
No income	35+	Married	10
No income	18-34	Married	9
No income	35+	Prior marriage	3
No income	18-34	Never	1
No income	35+	Never	1
No income	18-34	Prior marriage	0

Table 79 3 Match: Income, Relationship Status, Ethnoracial group

Income	Relationship Status	Ethnoracial group	Cell Content
<\$25k	Prior marriage	White	91
<\$25k	Married	White	83
>=25K	Prior marriage	White	60
<\$25k	Never	White	54
<\$25k	Prior marriage	Other-than-white	49

Table 79 (cont'd).

<\$25k	Never	Other-than-white	46
>=25K	Married	White	43
<\$25k	Married	Other-than-white	36
>=25K	Never	White	28
>=25K	Prior marriage	Other-than-white	23
>=25K	Married	Other-than-white	20
>=25K	Never	Other-than-white	18
No income	Married	White	15
No income	Married	Other-than-white	4
No income	Never	White	2
No income	Prior marriage	Other-than-white	2
No income	Prior marriage	White	1
No income	Never	Other-than-white	0

Table 80 3 Match: Income, Ethnoracial group and Education

Income	Ethnoracial group	Education	Cell Content
<\$25k	White	HS, equiv or more	199
>=25K	White	HS, equiv or more	125
<\$25k	Other-than-white	HS, equiv or more	86
>=25K	Other-than-white	HS, equiv or more	57
<\$25k	Other-than-white	Less than HS	45
<\$25k	White	Less than HS	31
No income	White	HS, equiv or more	14
No income	Other-than-white	HS, equiv or more	5
>=25K	Other-than-white	Less than HS	4
No income	White	Less than HS	3

Table 80 (cont'd).

>=25K	White	Less than HS	3
No income	Other-than-white	Less than HS	1

Table 81 3 Match: Income, Education and Children

Income	Education	Children	Cell Content
<\$25k	HS, equiv or more	No Children	163
>=25K	HS, equiv or more	No Children	116
<\$25k	HS, equiv or more	1 Child	59
<\$25k	HS, equiv or more	2 Children	48
<\$25k	Less than HS	No Children	42
>=25K	HS, equiv or more	1 Child	30
>=25K	HS, equiv or more	2 Children	24
>=25K	HS, equiv or more	3 Children+	14
<\$25k	Less than HS	1 Child	14
<\$25k	HS, equiv or more	3 Children+	13
<\$25k	Less than HS	3 Children+	13
No income	HS, equiv or more	No Children	9
<\$25k	Less than HS	2 Children	7
No income	HS, equiv or more	2 Children	5
>=25K	Less than HS	No Children	4
No income	HS, equiv or more	3 Children+	3
No income	Less than HS	No Children	3
No income	HS, equiv or more	1 Child	2
>=25K	Less than HS	1 Child	2
>=25K	Less than HS	2 Children	2
No income	Less than HS	3 Children+	2

Table 81 (cont'd).

No income	Less than HS	1 Child	0
No income	Less than HS	2 Children	0
>=25K	Less than HS	3 Children+	0

Table 82 3 Match: Age, Relationship Status and Education

Age	Relationship Status	Education	Cell Content
35+	Prior marriage	HS, equiv or more	166
35+	Married	HS, equiv or more	118
18-34	Never	HS, equiv or more	62
18-34	Married	HS, equiv or more	59
35+	Never	HS, equiv or more	57
35+	Prior marriage	Less than HS	32
18-34	Prior marriage	HS, equiv or more	24
18-34	Never	Less than HS	18
35+	Married	Less than HS	17
35+	Never	Less than HS	11
18-34	Married	Less than HS	7
18-34	Prior marriage	Less than HS	4

Table 83 3 Match: Income, Age and Ethnoracial group

Income	Age	Ethnoracial group	Cell Content
<\$25k	35+	White	145
>=25K	35+	White	100
<\$25k	35+	Other-than-white	98
<\$25k	18-34	White	84
>=25K	35+	Other-than-white	44
<\$25k	18-34	Other-than-white	33

Table 83 (cont'd).

>=25K	18-34	White	30
>=25K	18-34	Other-than-white	17
No income	35+	White	11
No income	18-34	White	7
No income	18-34	Other-than-white	3
No income	35+	Other-than-white	3
No income	35+	White	0

Table 84 3 Match: Income, Age and Education

Income	Age	Education	Cell Content
<\$25k	35+	HS, equiv or more	192
>=25K	35+	HS, equiv or more	139
<\$25k	18-34	HS, equiv or more	93
<\$25k	35+	Less than HS	52
>=25K	18-34	HS, equiv or more	43
<\$25k	18-34	Less than HS	24
No income	35+	HS, equiv or more	10
No income	18-34	HS, equiv or more	9
>=25K	18-34	Less than HS	4
No income	35+	Less than HS	3
>=25K	35+	Less than HS	3
No income	18-34	Less than HS	1

Table 85 3 Match: Income, Age and Children

Income	Age	Children	Cell Content
<\$25k	35+	No Children	151

Table 85 (cont'd).

>=25K	35+	No Children	96
<\$25k	18-34	No Children	54
<\$25k	35+	1 Child	44
<\$25k	35+	2 Children	34
<\$25k	18-34	1 Child	29
>=25K	18-34	No Children	24
>=25K	35+	1 Child	24
<\$25k	18-34	2 Children	21
>=25K	35+	2 Children	17
<\$25k	18-34	3 Children+	13
<\$25k	35+	3 Children+	13
No income	35+	No Children	11
>=25K	18-34	2 Children	9
>=25K	18-34	1 Child	8
>=25K	35+	3 Children+	8
>=25K	18-34	3 Children+	6
No income	18-34	2 Children	5
No income	35+	3 Children+	3
No income	18-34	1 Child	2
No income	18-34	3 Children+	2
No income	18-34	No Children	1
No income	35+	1 Child	0
No income	35+	2 Children	0

Table 86 3 Match: Income, Relationship Status and Education

Income	Relationship Status	Education	Cell Content
<\$25k	Prior marriage	HS, equiv or more	108
<\$25k	Married	HS, equiv or more	102
>=25K	Prior marriage	HS, equiv or more	79
<\$25k	Never	HS, equiv or more	74
>=25K	Married	HS, equiv or more	61
>=25K	Never	HS, equiv or more	43
<\$25k	Prior marriage	Less than HS	32
<\$25k	Never	Less than HS	26
<\$25k	Married	Less than HS	18
No income	Married	HS, equiv or more	15
No income	Married	Less than HS	3
>=25K	Never	Less than HS	3
>=25K	Prior marriage	Less than HS	3
>=25K	Married	Less than HS	2
No income	Never	HS, equiv or more	2
No income	Prior marriage	HS, equiv or more	2
No income	Prior marriage	Less than HS	1
No income	Never	Less than HS	0

Table 87 3 Match: Income, Relationship Status and Children

Income	Relationship Status	Children	Cell Content
<\$25k	Prior marriage	No Children	96
<\$25k	Never	No Children	55
<\$25k	Married	No Children	54
>=25K	Prior marriage	No Children	53

Table 87 (cont'd).

>=25K	Never	No Children	37
<\$25k	Married	2 Children	30
>=25K	Married	No Children	30
<\$25k	Prior marriage	1 Child	25
<\$25k	Married	1 Child	24
<\$25k	Never	1 Child	24
>=25K	Married	1 Child	15
>=25K	Married	2 Children	13
<\$25k	Prior marriage	2 Children	13
<\$25k	Never	2 Children	12
>=25K	Prior marriage	1 Child	12
>=25K	Prior marriage	2 Children	12
<\$25k	Married	3 Children+	11
<\$25k	Never	3 Children+	9
No income	Married	No Children	7
>=25K	Prior marriage	3 Children+	6
<\$25k	Prior marriage	3 Children+	6
No income	Married	2 Children	5
No income	Married	3 Children+	5
>=25K	Married	3 Children+	5
>=25K	Never	1 Child	5
>=25K	Never	3 Children+	3
No income	Prior marriage	No Children	3
No income	Married	1 Child	2
No income	Never	No Children	2
>=25K	Never	2 Children	1

Table 87 (cont'd).

No income	Never	1 Child	0
No income	Never	2 Children	0
No income	Never	3 Children+	0
No income	Prior marriage	1 Child	0
No income	Prior marriage	2 Children	0
No income	Prior marriage	3 Children+	0

Table 88 3 Match: Income, Ethnoracial group and Children

Income	Ethnoracial group	Children	Cell Content
<\$25k	White	No Children	134
>=25K	White	No Children	81
<\$25k	Other-than-white	No Children	71
<\$25k	White	1 Child	53
>=25K	Other-than-white	No Children	39
<\$25k	White	2 Children	29
<\$25k	Other-than-white	2 Children	26
>=25K	White	1 Child	22
<\$25k	Other-than-white	1 Child	20
>=25K	White	2 Children	17
<\$25k	Other-than-white	3 Children+	14
<\$25k	White	3 Children+	12
>=25K	White	3 Children+	11
>=25K	Other-than-white	1 Child	10
No income	White	No Children	10
>=25K	Other-than-white	2 Children	9
No income	White	2 Children	4

Table 88 (cont'd).

>=25K	Other-than-white	3 Children+	3
No income	White	3 Children+	3
No income	Other-than-white	3 Children+	2
No income	Other-than-white	No Children	2
No income	Other-than-white	1 Child	1
No income	Other-than-white	2 Children	1
No income	White	1 Child	1

Table 89 3 Match: Age, Relationship Status and Ethnoracial group

Age	Relationship Status	Ethnoracial group	Cell Content
35+	Prior marriage	White	132
35+	Married	White	92
35+	Prior marriage	Other-than-white	66
18-34	Never	White	52
18-34	Married	White	49
35+	Married	Other-than-white	43
35+	Never	Other-than-white	36
35+	Never	White	32
18-34	Never	Other-than-white	28
18-34	Prior marriage	White	20
18-34	Married	Other-than-white	17
18-34	Prior marriage	Other-than-white	8

Table 90 3 Match: Age, Ethnoracial group and Education

Age	Ethnoracial group	Education	Cell Content
35+	White	HS, equiv or more	233
35+	Other-than-white	HS, equiv or more	108

Table 90 (cont'd).

18-34	White	HS, equiv or more	105
18-34	Other-than-white	HS, equiv or more	40
35+	Other-than-white	Less than HS	37
35+	White	Less than HS	23
18-34	White	Less than HS	16
18-34	Other-than-white	Less than HS	13

Table 91 3 Match: Age, Education and Children

Age	Education	Children	Cell Content
35+	HS, equiv or more	No Children	217
18-34	HS, equiv or more	No Children	71
35+	HS, equiv or more	1 Child	61
35+	HS, equiv or more	2 Children	47
35+	Less than HS	No Children	41
18-34	HS, equiv or more	1 Child	30
18-34	HS, equiv or more	2 Children	30
35+	HS, equiv or more	3 Children+	16
18-34	HS, equiv or more	3 Children+	14
18-34	Less than HS	1 Child	9
35+	Less than HS	3 Children+	8
18-34	Less than HS	No Children	8
35+	Less than HS	1 Child	7
18-34	Less than HS	3 Children+	7
18-34	Less than HS	2 Children	5
35+	Less than HS	2 Children	4

Table 92 3 Match: Relationship Status, Ethnoracial group and Education

Relationship Status	Ethnoracial group	Education	Cell Content
Prior marriage	White	HS, equiv or more	136
Married	White	HS, equiv or more	128
Never	White	HS, equiv or more	74
Prior marriage	Other-than-white	HS, equiv or more	54
Married	Other-than-white	HS, equiv or more	49
Never	Other-than-white	HS, equiv or more	45
Prior marriage	Other-than-white	Less than HS	20
Never	Other-than-white	Less than HS	19
Prior marriage	White	Less than HS	16
Married	White	Less than HS	13
Married	Other-than-white	Less than HS	11
Never	White	Less than HS	10

Table 93 3 Match: Relationship Status, Education and Children

Relationship Status	Education	Children	Cell Content
Prior marriage	HS, equiv or more	No Children	126
Never	HS, equiv or more	No Children	82
Married	HS, equiv or more	No Children	80
Married	HS, equiv or more	2 Children	45
Married	HS, equiv or more	1 Child	37
Prior marriage	HS, equiv or more	1 Child	33
Prior marriage	Less than HS	No Children	26
Prior marriage	HS, equiv or more	2 Children	23
Never	HS, equiv or more	1 Child	21
Married	HS, equiv or more	3 Children+	15

Table 93 (cont'd).

Never	Less than HS	No Children	12
Married	Less than HS	No Children	11
Never	HS, equiv or more	2 Children	9
Prior marriage	HS, equiv or more	3 Children+	8
Never	Less than HS	1 Child	8
Never	HS, equiv or more	3 Children+	7
Married	Less than HS	3 Children+	6
Never	Less than HS	3 Children+	5
Prior marriage	Less than HS	1 Child	4
Married	Less than HS	1 Child	4
Never	Less than HS	2 Children	4
Prior marriage	Less than HS	3 Children+	4
Married	Less than HS	2 Children	3
Prior marriage	Less than HS	2 Children	2

Table 94 3 Match: Relationship Status, Ethnoracial group and Children

Relationship Status	Ethnoracial group	Children	Cell Content
Prior marriage	White	No Children	104
Married	White	No Children	61
Never	White	No Children	60
Prior marriage	Other-than-white	No Children	48
Never	Other-than-white	No Children	34
Married	White	2 Children	34
Married	White	1 Child	33
Married	Other-than-white	No Children	30
Prior marriage	White	1 Child	28

Table 94 (cont'd).

Never	White	1 Child	15
Never	Other-than-white	1 Child	14
Prior marriage	Other-than-white	2 Children	14
Married	Other-than-white	2 Children	14
Married	White	3 Children+	13
Prior marriage	White	2 Children	11
Prior marriage	Other-than-white	1 Child	9
Prior marriage	White	3 Children+	9
Married	Other-than-white	1 Child	8
Never	Other-than-white	2 Children	8
Never	Other-than-white	3 Children+	8
Married	Other-than-white	3 Children+	8
Never	White	2 Children	5
Never	White	3 Children+	4
Prior marriage	Other-than-white	3 Children+	3

Table 95 3 Match: Ethnoracial group, Education and Children

Ethnoracial group	Education	Children	Cell Content
White	HS, equiv or more	No Children	203
Other-than-white	HS, equiv or more	No Children	85
White	HS, equiv or more	1 Child	67
White	HS, equiv or more	2 Children	48
Other-than-white	HS, equiv or more	2 Children	29
Other-than-white	Less than HS	No Children	27
Other-than-white	HS, equiv or more	1 Child	24
White	Less than HS	No Children	22

Table 95 (cont'd).

White	HS, equiv or more	3 Children+	20
Other-than-white	HS, equiv or more	3 Children+	10
White	Less than HS	1 Child	9
Other-than-white	Less than HS	3 Children+	9
Other-than-white	Less than HS	1 Child	7
Other-than-white	Less than HS	2 Children	7
White	Less than HS	3 Children+	6
White	Less than HS	2 Children	2

Table 96 3 Match: Age, Relationship Status and Children

Age	Relationship Status	Children	Cell Content
35+	Prior marriage	No Children	142
35+	Married	No Children	70
18-34	Never	No Children	48
35+	Never	No Children	46
35+	Married	1 Child	28
35+	Prior marriage	1 Child	28
35+	Married	2 Children	25
18-34	Married	2 Children	23
18-34	Married	No Children	21
35+	Prior marriage	2 Children	21
18-34	Never	1 Child	17
18-34	Married	1 Child	13
35+	Married	3 Children+	12
35+	Never	1 Child	12
18-34	Prior marriage	No Children	10

Table 96 (cont'd).

18-34	Married	3 Children+	9
18-34	Prior marriage	1 Child	9
18-34	Never	2 Children	8
18-34	Never	3 Children+	7
35+	Prior marriage	3 Children+	7
35+	Never	2 Children	5
35+	Never	3 Children+	5
18-34	Prior marriage	3 Children+	5
18-34	Prior marriage	2 Children	4

Table 97 2 Match: Income and Age

Income	Age	Cell Content
<\$25k	35+	244
>=25K	35+	143
<\$25k	18-34	118
>=25K	18-34	47
No income	35+	14
No income	18-34	9

Table 98 2 Match: Income and Relationship Status

Income	Relationship Status	Cell Content
<\$25k	Prior marriage	140
<\$25k	Married	120
<\$25k	Never	100
>=25K	Prior marriage	83
>=25K	Married	63
>=25K	Never	46

Table 98 (cont'd).

No income	Married	18
No income	Prior marriage	3
No income	Never	2

Table 99 2 Match: Income and Ethnoracial group

Income	Ethnoracial group	Cell Content
<\$25k	White	230
<\$25k	Other-than-white	132
>=25K	White	129
>=25K	Other-than-white	61
No income	White	17
No income	Other-than-white	6

Table 100 2 Match: Income and Education

Income	Education	Cell Content
<\$25k	HS, equiv or more	286
>=25K	HS, equiv or more	181
<\$25k	Less than HS	76
No income	HS, equiv or more	19
>=25K	Less than HS	8
No income	Less than HS	5

Table 101 2 Match: Income and Children

Income	Children	Cell Content
<\$25k	No Children	205
>=25K	No Children	120
<\$25k	1 Child	73

Table 101 (cont'd).

<\$25k	2 Children	55
>=25K	1 Child	32
>=25K	2 Children	26
<\$25k	3 Children+	26
>=25K	3 Children+	14
No income	No Children	12
No income	2 Children	5
No income	3 Children+	5
No income	1 Child	2

Table 102 2 Match: Age and Relationship Status

Age	Relationship Status	Cell Content
35+	Prior marriage	198
35+	Married	135
18-34	Never	80
35+	Never	68
18-34	Married	66
18-34	Prior marriage	28

Table 103 2 Match: Age and Ethnoracial group

Age	Ethnoracial group	Cell Content
35+	White	256
35+	Other-than-white	145
18-34	White	121
18-34	Other-than-white	53

Table 104 2 Match: Age and Education

Age	Education	Cell Content
35+	HS, equiv or more	341
18-34	HS, equiv or more	145
35+	Less than HS	60
18-34	Less than HS	29

Table 105 2 Match: Age and Children

Age	Children	Cell Content
35+	No Children	258
18-34	No Children	79
35+	1 Child	68
35+	2 Children	51
18-34	1 Child	39
18-34	2 Children	35
35+	3 Children+	24
18-34	3 Children+	21

Table 106 2 Match: Relationship Status, Ethnoracial group

Relationship Status	Ethnoracial group	Cell Content
Prior marriage	White	152
Married	White	141
Never	White	84
Prior marriage	Other-than-white	74
Never	Other-than-white	64
Married	Other-than-white	60

Table 107 2 Match: Relationship Status and Education

Relationship Status	Education	Cell Content
Prior marriage	HS, equiv or more	190
Married	HS, equiv or more	177
Never	HS, equiv or more	119
Prior marriage	Less than HS	36
Never	Less than HS	29
Married	Less than HS	24

Table 108 2 Match Relationship Status and Children

Relationship Status	Children	Cell Content
Prior marriage	No Children	152
Never	No Children	94
Married	No Children	91
Married	2 Children	48
Married	1 Child	41
Prior marriage	1 Child	37
Never	1 Child	29
Prior marriage	2 Children	25
Married	3 Children+	21
Never	2 Children	13
Prior marriage	3 Children+	12
Never	3 Children+	12

Table 109 2 Match: Ethnoracial group and Education

Ethnoracial group	Education	Cell Content
White	HS, equiv or more	338

Table 109 (cont'd).

Other-than-white	HS, equiv or more	148
Other-than-white	Less than HS	50
White	Less than HS	39

Table 110 2 Match: Ethnoracial group and Children

Ethnoracial group	Children	Cell Content
White	No Children	225
Note White	No Children	112
White	1 Child	76
White	2 Children	50
Other-than-white	2 Children	36
Other-than-white	1 Child	31
White	3 Children+	26
Other-than-white	3 Children+	19

Table 111 2 Match: Education and Children

Education	Children	Cell Content
HS, equiv or more	No Children	288
HS, equiv or more	1 Child	91
HS, equiv or more	2 Children	77
Less than HS	No Children	49
HS, equiv or more	3 Children+	30
Less than HS	1 Child	16
Less than HS	3 Children+	15
Less than HS	2 Children	9

Table 112 1 Match: Income

Income	Cell Content
<\$25K	362
>=25K	189
No Income	24

Table 113 1 Match: Age

Income	Cell Content
35+	401
18-34	174

Table 114 1 Match: Relationship Status

Relationship Status	Cell Content
Prior Marriage	226
Married	201
Never Married	148

Table 115 1 Match: Ethnoracial group

Ethnoracial group	Cell Content
White	377
Other-than-white	198

Table 116 1 Match: Education

Education	Cell Content
HS, equiv or more	486
Less than HS	89

Table 117 1 Match: Children

Children	Cell Content
No Children	337

Table 117 (cont'd).

1 Child	107
2 Children	86
3 Children+	45

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