DRUG AND ALCOHOL USE AMONG THE MIDDLE-AGED AND AGED

FINAL REPORT

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by

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Introduction

The purpose of this research was to pilot test a survey of the use of psychoactive prescription and nonprescription medicines and of alcohol among middle-aged and older adults. The need for research in this area has recently been documented in review of the literature on drug use among older adults commissioned by the National Institute on Drug Abuse as the following quote illustrates:

> Drug abuse has generally been associated with adolescents and young adults. It is widely assumed that the eldlerly do not use illicit drugs, and while they have high levels of use of legal drugs, they are believed to use those drugs in a licit, prescribed manner. Similarly, they are usually assumed to use alcohol in a moderate, controlled fashion. While many recognize that some elderly adults do not use licit medications in the manner prescribed by their physicians or specified in the use directions for over-the-counter medications, these instances of non-compliance are typically attributed to misuse. In fact, some individuals feel that, except in rare cases, the term "drug abuse" cannot be properly applied at all to the drug use patterns of eldelry adults and that only the term "drug abuse" can be accurately applied. This presumes that any inappropriate usage of drugs by the elderly is usually inadvertant, and that neither the elderly, nor those providing medications for the elderly intend or are aware that the drugs are ever used in an inappropriate fashion.
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> It is not surprising that there is a general reluctance to consider the issue of substance abuse by the elderly; the implications of even the possibility of such a problem are extremely disturbing. Nevertheless, there are indications that the elderly population is susceptible to substance abuse and that they will be increasingly at risk for at least the next two decades. Research in this area is really just beginning and the relevant literature is limited, often inconclusive, and sometimes contradictory. (Glantz, 1983, p. 1)

The current research literature on use of psychoactive medicines and alcohol has documented the changes in the use of these substances that occur with age and the extent of the use of those substances at different ages. The existing literature has two major shortcomings which will be addressed in the proposed research. First, most of the existing

literature is descriptive and atheoretical (Petersen, 1983). Most previous research on alcohol and psychoactive drug use among middle-aged and older adults has generally not gone beyond examining demographic and socioeconomic correlates of such use. A major goal of this research was to develop predictive models of the use of the three different categories of substances: (1) psychoactive prescription medicines, (2) psychoactive nonprescription medicines, and (3) alcohol. Secondly, the previous research has not generally used a multidisciplinary approach. Thus, a second goal of this proposed research was to develop a multidisciplinary model of use of psychoactive prescription and nonprescription medicines and alcohol that would include social, psychological and medical factors. The narrative which follows is divided into four parts. First, the existing literature is reviewed and existing gaps identified. Second, the methodology of the research is discussed. Third, the results are presented.

Review of Literature

This review will focus on the use of (1) psychoactive prescription medicines, (2) psychoactive nonprescription medicines, and (3) alcohol among middle-aged and older adults. For each of these three major types of drug use, the research literature will be reviewed to identify the recent trends in the quantity and frequency of use and the characteristics of the users.

Psychoactive Prescription Medicines

Psychoactive drugs are among the most common drugs taken by older adults, accounting for approximately 10 percent of all drugs taken by older adults (Choi, 1977; Koch, 1983; Task Force on Prescription Medicines, 1968). Data from the National Disease and Therapeutic Index

confirm that older adults do receive a disproportionate share of psychoactive medicines prescribed by physicians. Prentice (1979) reports that in 1975 people 65 and older represented ten percent of the population but received one-fifth of all orders for psychoactive drugs, with the exception of stimulants. Older adults received less than five percent of the prescription stimulants. While psychoactive medicines are commonly and disproportionately prescribed medicines tend to peak among adults age 35 to 64 and to decrease among older adults (Cafferata and Kasper, 1983; Choi, 1977).

Prevalence and Frequency of Use. Eight major studies have focused on the prevalence of use of prescription psychotropic medicines among adults in the United States. The results of these studies are summarized in Table 1. It is possible to make four generalizations from these data about (1) the prevelance of general use of psychotropic medicines among older adults, (2) the patterns of general use of psychotropic medicines in general by age, (3) patterns of use of specific psychotropic medicines by age, and (4) sex differences in use of psychotropic medicines.

First, these data collected at various times from 1967 to 1980 consistently show that approximately one-fifth to one-fourth of the older population is currently using some type of prescription psychotropic medicine (Cafferata and Kasper, 1983; Guttmann, 1977; Manheimer et al., 1968; Stephens, 1982); approximately one-third have used a prescription psychotropic medicine in the past year (Mellinger et al., 1971; Mellinger and Balter, 1981; Parry et al., 11973; Stephens et al., 1982); and approximately one-half have ever used psychotropic medicines (Stephens et al, 1982). Second, the percent of the population

using a prescription psychoactive medicine tends to increase with age, with the sharpest increases occurring between youth and middle-age and smaller increases occurring between middle-aged and old age (Cafferata and Kasper, 1983; Stephens et al., 1982; Mellinger and Balter, 1981; Parry et al., 1973). Third, minor tranquilizers and sedatives are generally the most commonly used psychotropic medicines in all age groups (Abelson and Atkinson, 1975; Guttmann, 1977; Mellinger et al., 1971; Mellinger and Balter, 1981; Parry et al., 1973). Furthermore, the percentage of the population using minor tranquilizers and sedatives, hypnotics, and antidepressants tends to increase with age while the percentage using stimulants tends to peak among young adults and decline with age (Mellinger and Balter, 1981; Parry et al., 1973). Use of major tranquilizers and antipsychotic medicines among the noninstitutionalized populations is fairly constant across age groups as most adults needing these types of medications are likely to be institutionalized (Mellinger and Balter, 1981; Parry et al., 1973). Finally, women of all ages are generally more likely to take psychotropic medicines than are men (Cafferata and Kasper, 1983; Mellinger et al., 1971; Mellinger and Balter, 1981; Parry et al., 1973).

Data on frequency of use is much less available than data on prevalence of use. The four studies that have collected data on frequency of use indicate that use of psychoactive medicines tends to be less than daily especially for minor tranquilizers and sedatives, the most commonly used psychotropic medicines. In a nationwide survey, Parry et al. (1973) found that older people were less likely than mature and middle-aged adults to be using prescription psychoactive medicines daily. Guttmann (1979) and Stephens et al. (1982) found biomodal

patterns of frequency of use for minor tranquilizers, sedatives, and hynotics, with most respondents reporting use of the drug either daily or infrequently, while antidepressants and antipsychotics were most likely to be used every day. These patterns among older adults are very general adult population in the United States.

Determinants of Use. Use of psychoactive medicines has been found to increase with age and to be greater among women than men (Abelson and Atkinson, 1975; Cafferata and Kasper, 1983; Mellinger et al., 1971; Mellinger and Balter, 1981; Parry et al., 1973; Stephens et al., 1982; Watson et al., 1979). Older adults who live alone (Guttmann, 1977), who are married, and who are working are less likely to be taking these medicines than others (Watson et al., 1980). Guttmann (1977) also found that older adults who use psychotropic medicines have lower life satisfaction than those who do not. Income has been found to be negatively related to current use of psychoactive medicines (Stephens et al., 1982; Watson et al., 1979) but positively related to ever having taken psychoactive medicines (Watson et al., 1980). The illness-morbidity variables are the most strongly related to the use of psychoactive medicines in all studies. Watson et al. (1980) found that total number of chronic conditions and having been hospitalized in the past year were both positively correlated with the use of psychoactive medicines. Respondents who used psychotropic medicines in Guttmann's (1977) study reported that they were in poorer health, were more disabled, and needed more help with services such as housecleaning and legal matters than respondents who did not use psychoactive medicines. Stephens et al. (1982) found that poor self-assessed health ratings were associated with increased use of prescribed psychoactive medicines.

Psychoactive Nonprescription Medicines

Over-the-counter sleeping pills and tranquilizers are among the least common of the drugs mentioned with less than one percent reporting recent use (Guttmann, 1981; Macukanovic et al., 1976; Sharpe and Smith, 1983) and less than three percent reporting use in the previous year (Whittington et al., 1979).

Prevalence of Nonprescription Psychoactive Drug Use. Three studies have examined the use of psychoactive nonprescription medicines. These studies include two national probability surveys of the noninstitutionalized adult population and a survey of noninstitutionalized adults in San Francisco, California. These studies were conducted between 1967 and 1979 and are an ongoing research project of a team of researchers at the Institute for Social Behavior of Oakland, California, the Social Research Group of the George Washington University, and the National Institute of Mental Health. In the San Francisco study and the 1970-71 national survey, nonprescription medicines were defined as use in the previous year of over-the-counter medicines which are advertised and sold as tranquilizers, stimulants or sleeping pills. The definition in the 1979 national survey is essentially the same except that stimulants were dropped.

The data on the prevalence of use of nonprescription psychoactive medicines indicate that use of nonprescription psychoactive medicines is generally less prevalent than the use of prescription psychoactive medicines. Mellinger et al. (1971), in their San Francisco sample, and Parry et al. (1973), in their national sample, found that less than ten percent of the older adults reported any use of over-the-counter stimulants, sleeping pills or tranquilizers in the past year while

Mellinger and Balter (1981) found that only four percent of the older men and older women in their national sample had used over-the-counter sleeping pills or tranquilizers in the past year. Patterns of use vary by type of psychoactive nonprescription medicine. Data from the two national samples indicate that use of nonprescription psychotropic medicines peaks in young adulthood, especialy for use of stimulants, although use of sleeping pills shows a second smaller peak in the oldest age group (Mellinger and Balter, 1981, Parry et al., 1973). Males of all ages are more likely to use stimulants while females are generally more likely to take tranquilizers and sleeping pills. The data on frequency of use indicate that use of nonprescription medicines tends to be short-term and sporadic.

Alcohol

Use of social drugs, particularly alcohol, is receiving increased public attention both because of the potential health hazards of the substances themselves and also because of their potential interactions with prescription and nonprescription medicines. Use of alochol has been studied even less than the use of prescription and nonprescription psychoactive medicines. The only national study was conducted over a decade ago in 1969 (Calahan et al., 1969).

Research on use of alcohol has suggested that the two major categories of reasons for the use of alcohol are (1) social and recreational use and (2) medicinal use. Alcoholic beverages used for self medication are most often used as a psychoactive tonic to help induce sleep, resolve tensions, escape unhappiness, relax or reduce depression. Alcohol has been used historically in medical practice and continues to be used as an ingredient in many prescription and

nonprescription medicines such as cough syrups and tonics (Gomberg, 1980).

Data on the prevalence and frequency of alcohol use by age are summarized as follows. The data from Calahan, Cisen and Crossley's (1969) national sample indicate older cohorts are more likely to abstain from the use of alcohol than are younger people and that twice as many women as men are abstainers at all ages. Heavy use of alcohol tends to peak in middle age for both men and women. For men, the peak is reached between the ages of 45 and 49 when 30 percent are heavy drinkers, followed by a slight decline in percentage of heavy drinkers until 65 when the percentage of heavy drinkers drops precipitously to only seven percent of all men 65 years of age and older. Among women, the peak occurs between the ages 45 to 49 when ten percent drink heavily, followed by a precipitous drop after age 50 when only two to three percent drink heavily. The more recent data from the regional studies continue to show that between 40 and 60 percent of older adults are abstainers (Back and sullivan, 1978; Chien et al., 1978; Dunham, 1981; Guttmann, 1977; Warheit, 1976). In the Houston study in which older adults were asked how many drinks they had had in the previous day, 70 percent of the males and 90 percent of the females reported that they had not had a drink in the previous day (Stephens et al., 1982).

Other adults who have a serious problem with alcoholism are in the minority, the estimates ranging from two percent in a community study (Bailey et al., 1965) to ten percent in studies using clinic and hospital samples (Gomberg, 1980; Zimberg, 1979). Only 1.1 percent of the respondents in Guttmann's (1977) study reported that they had experienced a serious problem in the previous year including blackouts,

arrests, accidents, absences from work or marital difficulties and all had sought treatment for their perceived problem. In studies of elderly psychiatric patients, Simon et al. (1968) and Rosen and Glatt (1971) found that approximately two-thirds of older alcoholics had long standing problems with alcohol while one-third developed their problems in old age. The characteristics of the long standing drinkers tended to be similar to those of younger drinkers while new drinkers were more likely to have experienced problems in later life, including depression, bereavement, retirement, loneliness, marital stress and physical illness. Dunham (1971) has recently investigated patterns of drinking in a sample of residents of low income projects for the elderly in Miami and found that there were seven distinct life-long patterns that could be distinugished includuing life-long abstention, rise and fall pattern, be distinugished includuing life-long abstention, rise and fall pattern, rise and sustained pattern, light throughout life pattern, light with late rise pattern, late starters and the highly variable pattern.

Several variables have been found to affect the use of alcohol. In addition to the effects of age and sex that were discussed above, race and ethnicity have also been found to affect use. Latins, especially women, are less likely to drink than Anglos while Blacks are the most likely group to drink. Calahan et al. (1969) found that the higher the social status of persons as measured by the Index of Social Position, the more likely they were to drink and the less difference there was between the proportions of men and women who drink. In fact, as socioeconomic status decreases, the proportion of people who drink decreases, but the proportion of people who drink who are heavy drinkers increases! This pattern is especially true for women, particularly Black

women. Gomberg (1980) has speculated that this pattern may be due to the fundamentalist religious beliefs which tend to be more prevalent in the lower class than the middle class or to social class differences in socialization about alcohol. The positive relationship between income and drinking has also been found in several regional studies including Guttmann (1977), Dunham (1981) and Stephens et al. (1982). Older people who are married are less likely than those who are not to drink (Dunham, 1981; Stephens et al., 1982). Catholics are less likely to drink than Protestants (Dunham, 1981).

Beliefs and attitudes have also been found to influence use of alcohol. Back and Sullivan (1978) found that fear of medicine among older men was positively related to use of alcohol, leading to the speculation that older men may drink rather than use medicines. Guttmann found that 80 percent of his respondents gave social psychological reasons for drinking including having fun (27 percent), to be accepted by friends (22 percent), to forget about personal problems (30 percent), habit (2 percent), to sleep better (2 percent) and for sociocultural and religious events.

While the effect of alcohol on health has been well established, the effect of health on the decision to drink has received virtually no research attention. Dunham (1981) found that two of the five most frequently given reasons for decreasing drinking after middle age were health reasons—(1) for a specific health problem, and (2) for a general health problem. Other reasons included a loss of interest in alcohol, seldom go to events where alcohol is served, and can no longer afford it. Stephens et al. (1980) found that very few elderly respondents were using alcohol and psychoactive medicines concurrently and that there was

no difference in the number of drinks consumed per day among those older adults using psychoactive substances and those who were not. This finding may indicate that alcohol is a substitute for psychoactive medicine use but this relationship could only be observed using multivariate analysis. Guttmann (1977), on the other hand, found that 37 percent of the Washington, D. C. sample were simultaneously using alcohol and prescription and/or nonprescription medicines, creating a possibility of dangerous interactive effects (Vestal, 1981).

Potential Drug Reactions and Interactions

Increasing age is associated with psysiological changes which increase the risk of hazardous drug reactions and interactions among older adults. In a review of the research on these changes, Bender (1975) concluded that the pharmokinetic functions of absorption, distribution, metabolism and excretion of medicines decreased with age and that pharmacodynamic changes at the receptor sites changed the action of medicines in older people, for example, reducing the action of stimulants and enhancing the action of depressants. In a review of the literature on polypharmacy among adults, Krupka and Veneer (1979) concluded that the risk of reactions and interactions increases with the number of medicines taken. In a study by James (1976), 19 percent of patients who were given one to five drugs had an adverse reaction. In a nine week study of 120 ambulatory geriatric patients in a health clinic, Eberhardt and Robinson (1979) documented 43 drug interactions and 25 percent of the patients reported some unpleasant side effects. In a community sample Sharpe and Smith (1983) reported that 216 of their 300 respondents were taking multiple drugs. The researchers identified 140 potentially interactive drug pairs involving 23 percent of the

respondents. Of the 140 drug interactions identified, 43 percent were classified as minor in terms of their potential to harm the patient, 53 percent as moderate and four percent as major.

Prescription medicines may also interact with nonprescription and social drugs. Although no studies were found which had systematically explored the prevalence of potential interactions among older adults, there is some data on the extent of combined use of these three types of drugs. Guttmann (1977) found that 17.4 percent of his Washington, D. C. sample of older adults reported concurrent use of prescription medicine, nonprescription medicine and alcohol, 25.3 percent use prescription and nonprescription medicines, 8.4 percent use prescription medicines and alcohol, and 12.3 percent use nonprescription medicines and alcohol. Thirty-five percent of the older adults who used psychotropic medicines also reported that they used alcohol, a combination known to be dangerous. In other community studies, Stephens et al., (1982) reported that only 5.7 percent of their older respondents reported currently using psychoactive drugs and alcohol while Raffoul et al. (118) found 11 percent of the instances of drug abuse in their sample of older adults involved drug/drug or drug/alcohol interactions.

A number of studies have used existing records to try to measure the extensiveness of harmful drug reactions and interactions. The National Institute of Drug Abuse routinely monitors drug related incidents in hospitals, emergency rooms and medical examiners' offices as part of its Drug Abuse Warning Network. DAWN data for 1974-75 indicate that adults 50 years and older were involved in only six percent of the drug incidents in hospitals and emergency rooms which involved barbituates, sedatives, tranquilizers, or alcohol/drug

interactions, the lowest incidence for any age group. Only five percent of all these incidents with adults 50 years of age and older involved alcohol/drug interactions (Heller and Wynne, 1975). These data are consistent with data collected from emergency room patient records in Dade County, Florida. In an examination of 1128 patient records, Petersen and Thomas (1979) found that only 5.4 percent of admissions related to psychoactive drug abuse occurred among adults 50 years or older. Most of these incidents among older adults, 80.9 percent, were reactions to psychoactive drugs while only 8.3 percent involved alcohol/drug combinations. In a follow-up of this study, Incardi et al., (1978) examined the Dade County hospital emergency room records from January 1972 to June 1976 and found that only 2.6 percent of the drug related incidents involved adults 60 years of age or older. While these data indicate a low incidence of serious drug reactions, the data do not reflect the occurrence of drug incidents in which the person experiencing the reaction does not get to the emergency room or hospital. It is sobering to note that the DAWN data indicate that 62 percent of all mentions of deaths from psychoactive or psychoactive/alcohol combinations among adults 50 years of age and older were attributed to suicide, a rate that is more than twice as high as that for any other age group (Heller and Wynne, 1975).

Even when not fatal, the use of nonprescription and social drugs simultaneously may have negative effects on the older person's health. Krupka and Veneer report anecdotal evidence on a 79 year old male who lived in his own residence, had seven chronic illnesses and consumed 13 different drugs on a daily basis. When the respondent's total drug intake is examined, potential interactive hazards become evident.

> Since the respondent has had severe heart disease (hospitalized twice in the year prior to interview on an emergency basis), his intake of caffeine of approximately 1250 mg per day is more than twice the recommended safe level. His daily intake of alcohol (minimum of 2 fluid ounces) may interact with the aspirin to exacerbate his ulcers, since alcohol potentiates the effects of salicylates. In addition, his high intake of vitamin C (2250 mg) will interact with the aspirin. Aspirin decreases the effect of vitamin C by increasing its urinary elimination from the body, while vitamin C can increase or potentiate the effect of aspirin by slowing its elimination causing aspirin accumulation and toxicity. The ingestion of vitamin C along with aspirin as well as alcohol with aspirin is not an isolated phenomenon. Twenty percent of elderly respondents in our previous study were taking these drugs simultaneously. Additionally, long term use of aspirin on its own may be hazardous, e.g. kidney damage (Krupa and Veneer, 1979, 92-93).

The authors emphasize the need for health professionals to consider the total drug exposure of older adults including both prescription, over-the-counter and social drugs.

Summary and Identification of Gaps in Knowledge

The review of the research literature revealed that the use of prescription psychoactive drugs increases with age, with the sharpest increases occurring between young adulthood and middle age and smaller increases occurring between middle-age and old age. Adults 65 years of age and older represent approximately ten percent of the U. S. population but consume twenty percent of all psychoactive drugs. The research indicates that between twenty and twenty-five percent of all older adults are currently using a prescription psychoactive medicine. Past research indicates that use of nonprescription psychoactive medicines tends to peak in young adults and to decrease with age. By old age, most studies have found that less than ten percent of the population is using psychoactive nonprescription medicines. Use of alcohol tends to peak in middle-age for both men and women and drop off in old age. In the U. S. population between the ages of 45 and 49, thirty percent of men and ten percent of the women are heavy drinkers.

This declines to seven percent for men and three percent for women among the older adult group. Thus, it is estimated that at least twenty percent of both the middle-aged and older adult population is using psychoactive prescription medicines, psychoactive nonprescription medicines and/or alcohol. What is less known is how much these drugs are used in combination with each other or with other drugs. A recent study by David Guttmann in Washington, D. C. found that nearly twenty percent of older adults were concurrently using prescription medicines, nonprescription medicines, and/or alcohol and that thirty-five percent of older adults were using prescription psychoactive drugs were also using alcohol, a combination that can be fatal.

It is also not known why middle-aged and older adults use psychoactive drugs and alcohol as much as they do. Past research has tended to focus on teenagers and younger adults. What is known is that use of psychoactive prescription medicines is greatest among older adults, especially those who are women, live alone, have low incomes, are in poor health, and have low life satisfaction. Less is known about psychoactive nonprescription medicine use except that use seems to decrease with age and that nonprescription medicines may be used as alternatives to prescription psychoactive medicines among those people who find it difficult to get to a doctor. Use of alcohol has been found to decrease after middle-age and is greater among males than females. Moderate alcohol use is greatest among those with higher levels of education and good incomes while heavy alcohol use is greatest among the less well educated and those with low incomes. Approximately one-third of older adults who drink, report that they do so in order to cope with a personal problem, and older adults who develop a drinking problem for

the first time in old age are most likely to do so if they have experienced a serious personal problem, including bereavement, retirement, loneliness, marital stress or physical illness.

Most of the previous research on alcohol and psychoactive drug use among older adults has examined the demographic and socioeconomic correlates of drug use. Eve and Friedsam (1981) focused on why older adults use drugs and on developing predictive models of use of psychoactive substances. They found that the best model that explained use of sleeping pills and tranquilizers among older Texas was the social stress model that has been widely used in social epidemiological studies of mental health. The two major types of variables that have been found to affect mental health are social stressors and social integration. Field studies have found that social stressors such as social and economic problems adversely affect mental health and that membership in well integrated social groups, including family, friends and organizations is conducive to mental health. Using this model, Eve and Friedsam found that the major stressors among older adults were loss of a spouse, low income, transportation problems, health problems, and housing problems. Both objective measures of these problems (e.g., monthly income) and subjective measures (e.g., how well income satisfies needs) were used. Interestingly, the subjective assessments of the social stress variables were more predicitive than the objective measures. Similarly, subjective satisfaction with the frequency of interaction with family, friends, neighbors, clubs and organizations, and reported frequency of feelings of loneliness were more predictive of taking tranquilizers than were objective measures of actual frequency of visits with family, friends, neighbors and clubs and organizaztions.

Also these two variables considered together were very predictive of whether or not older adults were using tranquilizers and sleeping pills. For example, only fifteen percent of older adults who were both satisfied with their incomes and who were seldom lonely were using tranquilizers, but forty-two percent of older adults who reported that the income did not satisfy their needs and who were also often lonely were using tranquilizers.

Research Design

General Model

The starting point for the development of a psychoactive drug and alcohol use model is the social epidemiological model of mental illness. The two major categories of linkage variables studied by social epidemiologists interested in the etiology of mental disorders have been social integration variables and social stressors. Field studies of the sociology of mental health using nonelderly, noninstitutionalized populations have demonstrated that membership in well-integrated social groups is conducive to mental health (Faris and Dunham, 1960; Eaton and Wiel, 1955; Leighton, 1959; Leighton, 1963) and that life stressors such as social and economic problems, adversely affect mental health (Myers and Roberts, 1959; Srole, et al., 1962); Langer and Michael, 1963; Hollingshead and Redlich, 1958). Studies of noninstitutionalized elderly that used marital status as an indicator of social integration have generally found that respondents who are married when compared to respondents who are never married, separated, divorced, or widowed, were better adjusted emotionally to life in terms of mental disorders, life satisfaction and attitudes toward life (Bellin and Hardt, 1958; Gubrium, 1974; Harvey and Bahr, 1974; Hutchison, 1975; Bradburn and Caplovitz, 1965), thus providing tentative support for the beneficial effects of social integration for the elderly. Support for the negative effects of stressors on psychological adjustment has been found in studies using economic problems and/or problems with health as indicators of stressors. (Bellin and Hardt, 1958; Harvey and Bahr, 1974; Hutchison, 1975; Lowenthal, 1964). One study concluded that the interaction of marital status (i.e., social integration) and economic

and health problems (i.e., social stressors) are more predictive of emotional problems than either category of variables considered individually (Hutchison, 1975).

Recently, epidemiologists have demonstrated considerable research interest in developing scales to measure the degree of stressfulness of social stressors. This trend is exemplified in the work of Holmes and Rahe who have found that life event changes of varying consequences, ranging from death of a spouse to minor violations of the law, are stressful. They have developed a Social Readjustment Rating Scale consisting of 43 life event items. The researchers have found that exposure to these life event changes is significantly related to susceptibility to disease. (Holmes and Rahe, 1967; Holmes and Holmes, 1970; Rahe, 1969, 1974; Rahe and Arthur, 1969). Recent research has demonstrated that life event changes may also be significantly related to the mental disorder in nonelderly populations. (Gersten, et al., 1977; Dohrenwend, 1973; Vinokur and Selzer, 1975). A review of the literature has revealed one recent exploratory study of the relationships among a broad range of social stressors measured using a scale of life change events, social integration as measured by the presence of a confidante, and depression in a self selected sample of 120 men and women aged 58 to 88 living in the community in Houston, Texas. The volunteers were recruited from nonrandomly chosen senior citizen centers, retirement communities, public housing, and the outpatient population at Texas Research Institute of Mental Sciences. Stressful events and lack of a confidante were found to have additive effects on depression. (Neiderehe, 1977).

While sociologists have been concerned with social factors in the

etiology of mental disorders, psychologists have focused on the effects of personality factors in coping with stress. In a recent study (Neiderehe, 1977) of the relatonships between stressful events and depression, in a nonrandom sample of elderly people the interaction of stressful life events with the following three personality traits were measured: (1) locus of control or an individual's perception of whether or not he controls his life or is controlled by external agents; (2) field dependence, a perceptual inability to disassemble parts or items from a larger "field" which is thought to reflect a more general lack of developmental progress toward psychological complexity; and (3) rigidity of behavior. Of these three personality traits, only locus of control was found to interact with stressors. Neiderehe found that perception of control over one's life tended to mitigate the effects of stress on depression. Therefore, psychological traits, including locus of control will be included in this study.

To summarize the model, social stressors such as life change events have the potential to create a state of perceived psychological distress including a range of symptoms such as anxiety and depression. Whether or not the social stress does produce anxiety may be mediated by the degree of social support in the individual's social environment and/or the individual's personality predispositions for coping with stress. The interaction of social stress with social support and personality produce a state of perceived anxiety. The felt anxiety has the potential to result in the use of psychoactive prescription medicines, psychoactive and/or nonprescription medicines and/or alcohol. Whether or not perceived anxiety results in the use of psychoactive substances and the type of substance used is determined in the proposed

model by an interaction with other attitudinal characteristics. Specific attitudes that will be examined are attitudes toward drinking (Calahan, et al., 1969), attitudes related to the predisposition to take medicines (Hubbard, et al., 1984), and skepticism toward doctors (Back and Sullivan, 1978).

Data Collection

The data were collected using a telephone survey of 203 randomly selected middle-aged and older adults who were residents of Tarrant County, Texas. The telephoning was done using a bank of five telephones installed at the Texas College of Osteopathic Medicine. The interviewing was done between Monday, June 17, 1985, and Thursday, June 27, 1985. Interviews were conducted from 9 a.m. to 9 p.m. Monday through Thursday, and 9 a.m. to 4 p.m. on Friday and Saturday. Telephone numbers were randomly selected from the April 1985 Fort Worth telephone directory. The methodological guidelines for telephone interviewing developed by Frey (1978) were used. Call records were kept on each number selected in the sample. Up to five attempts were made to reach each number, varying the time of day and day of the week each residence was called. Two thousand telephone numbers were originally selected using a systematic sampling procedure. However, because of a higher than expected number of nonworking numbers (nearly one-third) it was necessary to draw a second sample of 2000 numbers during the second week of the survey.

The goal was to interview a nonproportionately stratified sample of approximately 50 middle-aged men, 50 middle-aged women, 50 older women and 50 older men. At the end of the interview period 50 middle-aged women, 52 middle-aged men, 50 older women and 51 older men

had been interviewed.

Each telephone contact began with a brief screening interview in which the purpose of the research and the sponsoring institutions were identified. The age and sex of all residents of each household were determined and eligible members, if any, were randomly selected to be interviewed. If the selected respondent was not home, the interviewer made an appointment to call back. Before the interview began respondents were informed that their participation in the research was voluntary and that they could refuse to answer questions to which they objected. Verbal consent to be interviewed was thus obtained before the interview began. Each respondent was also informed that he or she would receive $5.00 for participating in the research. Refer to the questionnaire in Appendix A for the text of the interview and a copy of the questionnaire.

Care was taken to collect data as completely and accurately as possible. Interviewers were recruited from among area college students and retired older people and were given a two hour training session prior to interviewing. The Principal Investigator was always present during interviewing to answer questions, etc. for the interviewers. When each interview was completed, the principal investigator went through the questionnaire. If there were any items that had accidentally been omitted, the respondent was immediately recalled and the additional information collected. Also, respondents were recalled to verify that the interview had taken place and to verify names, addresses and Social Security numbers. Twenty-five respondents refused to give their Social Security numbers over the telephone. These respondents were written by the Controller's office at North Texas State University in an effort to

obtain these numbers so the respondent could be paid. In addition to the $5.00 all respondents were also sent a letter from the Principal Investigator thanking them for their help.

Telephone interviewing has a number of advantages and was chosen for those advantages. A major advantage is that it is safer for the interviewer and interviewee. Frey (1978) cites research which indicates that approximately one-fifth of urban residents refuse to admit interviewers who are strangers to their home. A second advantage is that telephone interviewing is faster and cheaper than face-to-face interviewing. Third, the response rate is higher than in a mail survey. The two major disadvantages are the response bias introduced by using a telephone book as a sampling frame and the reluctance of people to answer sensitive questions from a stranger on the telephone.

Measurement

Based on the review of the literature, it was determined that there were three major categories of variables that predispose individuals to use alcohol and psychoactive prescription medicines. These are stressor variables, social integration variables and personality variables. Two major categories of variables were hypothesized to mediate between the predisposing variables and use variables. These variables include anxiety and attitudes. The measures of the dependent, predisposing and mediating variables will be discussed in turn below. The response categories, means, standard deviations, measures of skewness and measures of kurtosis are presented for each variable in Table 2.

Dependent Variables

Alcohol. The measure of use of alcohol that has been used most often in the research literature is frequency of use of alcohol. In order to facilitate comparison of results from this study with results from previous studies with other populations, a measure of frequency of use of alcoholic beverages was adapted from the research of Calahan, et al (1969). The nine response categories ranged from never drinking these beverages to drinking them three or more times a day.

A more detailed percentage frequency is presented in Table 3. Fifty-two percent of the total sample reported that they never use alcohol while only slightly more than six percent of all respondents reported that they use alcohol every day or nearly everyday. There are dramatic differences in the patterns of use in the different age and sex groups. Middle-aged men are the most likely to report that they use alcohol and to report most frequent use while older women are the least

likely to report use and to report the least frequent use. Generally, the middle-aged use alcohol more frequently than older adults, and men use alcohol more frequently than women.

Prescription tranquilizers and sleeping pills. Parallel items measuring the frequency of use of prescription tranquilizers and sleeping pills. Since only 11 percent of the total sample reported that they were currently taking tranquilizers and only four percent reported currently taking sleeping pills, the measures of frequency of use of both these substances were combined into one measure and having taken these substances in the past was retained to maximize the variance in the variable.

The more detailed table showing the percentage of the total sample and four subsamples using prescription tranquilizers and sleeping pills is presented in Table 3. In the total sample, 31 percent of the respondents admitted using tranquilizers and sleeping pills at some time in their lives. Fourteen percent of the respondents had used one or both these medicines in the past year. Only five percent reported using one or both medicines daily.

Nonprescription tranquilizers and sleeping pills. Because only four percent of the total sample had ever used prescription tranquilizers and only 1.5 percent had used them in the past year, those variables were omitted from further analysis.

Predisposing variables

Stress. Three measures of stress were used in this research: a measure of recent life events, a measure of economic strain, and a measure of health. Each of these measures is discussed below.

The Geriatric Scale of Recent Life Events developed by Kiyak,

Liang and Kahana in 1976 (Mangen and Petersen, 1982a) was adopted as the measure of recent life events. The scale consists of 55 items, 23 of which were taken from the Holmes and Rahe Social Readjustment Rating Scale (1976) and the rest of which were developed to be especially relevant for older people from the open-ended questionnaire responses of older people. Weights were assigned to each event by a normative sample of older people. The 55 items used and their weights are shown in Table 4. The Geriatric Scale of Recent Life Events Scale scores were calculated by summing the weights assigned to each of the 55 items. The mean scale scores are presented in Table 1.

Past research had indicated that measures of the subjective assessment of the adequacy of income was more predictive of mental health than was actual income (Eve and Friedsam, 1981). For this research, the measures of subjective assessment of economic strain developed by Pearlin and his colleagues) (Pearlin and Schooler, 1978; Pearlin, Lieberman, Menaghan and Mullan, 1981) were adopted. These ten items are presented in Table 1.

When the economic strain items were factor analyzed, the varimax orthogonal rotation shown in Table 5 produced two factors. However, with the exception of being able to afford all the food the respondent and his/her family needed (which loaded on Factor 2) and feeling that income satifies the respondent's needs (which loaded most highly on Factor 1), most of the items had fairly high factor loadings on both scales. As no distinct conceptual constructs seemed to be represented by the two factors, a one-factor solution was produced. All ten items had factor loadings greater than .40 on the one-factor solution. Regression analyses was used to produce standardized scale scores on the created

variable, economic strain. The means, standard deviations, measures of skewness or kurtosis are presented in Table 7 for all the created variables.

Four global measures of subjective assessment of health were used to develop a measure of health. The measures were adapted primarily from the OARS questionnaire (Pfeiffer, 1977). The results of the factor analysis shown in Table 8 indicate that these four items are all measuring the same concept. Regression analysis was used to create a standardized health scale with means of the different subsamples presented in Table 7.

Social integration. Two types of measures of social integration were included in the research. The first type included subjective measures of satisfaction with integration into personal social networks of family and friends. The second type included subjective measures of how well integrated into society in general the respondent felt and included measures of feelings of social usefulness, anomie and political powerlessness. The construction of these measures is discussed below.

The subjective feelings of social integration presented in Table 1 consist of two subscales taken from the Cavan Attitude Inventory which was developed by Cavan and his associates in 1949, using samples of retired men and women (Mangen and Petersen, 1982b). The two subscales were attitudes toward friends and attitudes toward family. When the 14 items were factor analyzed, four significant orthogonal factors were produced. The items that loaded highest in Factor 1 were items related to satisfaction with family, those on Factor 2 tended to global measures of loneliness, and those on Factor 3 tended to be related to satisfaction with friends. The single item that loaded highly on Factor

4, my family likes to have me around, also loaded fairly highly on Factor 1 so that factor was dropped as it did not seem to be conceptually significant. As a result of this analysis, the family, loneliness and friends items were factor analyzed separately using one factor solutions and the resulting factor loadings shown in Tables 10, 11 and 12 were used to create standardized scale scores for three measures of social integration. One variable, happier to see friends more, was dropped from the analysis because it did not load highly on the friends factor nor was it clearly conceptually related to items on the other factors.

The social usefulness subscale from the Cavan Attitude Inventory was factor analyzed using a rotated Varimax rotation. Although two significant factors were produced as shown in Table 13, they do not appear to be conceptually distinct and a one-factor solution, shown in Table 14 confirms that, in fact, the items are measuring one concept. The factor loadings in Table 14 were used to create standardized scale scores for the social usefulness scale.

Nine items from the expanded Srole Anomia Scale were factor analyzed (Mangen & Petersen, 1982b). While the rotated solution produced a two factor solution as shown in Table 15, the two factors did not seem to be substantively different, and the one factor solution shown in Table 16 also provides an acceptable, substantively meaningful solution. The factor loadings in Table 16 were used to create standardized scores on the anomie scale.

The political powerlessness items were revised items from measures of political powerlessness developed by Rotter, Suman and Levirant (1962) and Neal and Seeman (1964) (cited in Bonjean et al, 1967) and by

Gilmour and Lamb (1975). Factor analysis produced a one factor solution as shown in Table 17 and standardized scale scores were produced using the regression method.

Personality. Two personality measures, mastery and self-esteem, were included. Both measures were adapted from Pearlin and Radabough (1975). While two factors were produced in varimax rotated solution shown in Table 18, Factor 2 contained only one item. Since a one-factor solution shown in Table 19, also provided an acceptable fit, the one factor solution was used to generate the scale scores.

Factor analysis of the Rosenberg self-esteem items as adapted by Pearlin and Radabough (1975), shown in Table 20, produced three significant factors, although only the first two seemed to be conceptually interesting. The items that loaded on the first factor were statements about positive personal qualities while the items that loaded most highly on Factor 2 were negative qualities. The items on Factors 1 and 2 were factored separately producing one-factor solutions shown in Tables 21 and 22. The one-solution factor loadings were used to create two mesures of self-esteem, one for the positive items and a second for the negative items.

Education. Years of education was included as a predisposing variable.

Mediating Variables

Anxiety. A 12 item scale of psychophysiological symptoms of anxiety developed by Derogatio, Lipman and their associates and used by Pearlin and Radabaugh was adopted as the measure of anxiety in this research. The varimax rotated factor solution shown in Table 23 produced three significant factors. The third factor contained a single item and

so was dropped from the analysis. The first factor contained items that were primarily psychological measures of anxiety while those in the second factor were psychophysiological measures of anxiety. These results are consistent with those of Wheaton (1978) using a similar measure of anxiety. The single solution factor loadings in Tables 24 and 25 were used to create the two new scales.

Attitudes. The first attitude measure developed was attitudes toward drinking. These measures were adapted from the work of Calahan et al, (1969) and Pearlin and Radabaugh (1975) and augmented with several additional new items. A two factor varimax solution was produced. The four items that loaded primarily of Factor 1 are generally positive statements about drinking while the two that load primarily of Factor 2 are negative statements. Two of the items (VAR005 and VAR19) do not load highly on either factor and so were eliminated from further analysis. Most of the remaining 11 items tend to load on both factors. Since a one-factor solution seemed to fit the data fairly well, it was decided to use the one-factor solution shown in Table 27 to create the standardized drinking attitudes scale.

The items in predisposition to self-medicate scale were adapted from Hubbard et al, (1984). The varimax rotated solution produced three factors shown in Table 28. Factor 1 contains two items related to a belief that medicine can help cure illness, Factor 2 contains two items relating to increasing the amount of medicine and Factor 3 contains a single item related to saving medicines. Since the three factors contained few items and did not seem to add much conceptually, a one-factor solution was tried and judged to be acceptable as well as conceptually more comprehensible. The one-factor solution is shown in

Table 29. These single solution factor loadings were used to create the standardizd scale scores on the predisposition to self medicate scale.

The final scale created was skepticism toward doctors. Since it could not be factor analyzed because there were too few items, the three items were simply summed to produce the skepticism scale score.

Model

The model showing all the variables measured is presented in Figure 1, and the general pattern of causal relationships tested using multiple regression is shown in Table 2. The variables that are starred in Figure 1 were dropped from the analyses because they created colinearity problems in the regression analyses. The variables dropped included the measures of political powerlessness, the negative measures of self-esteem, and the scale of satisfaction with social integration with friends. Attitudes toward drinking was extremely highly correlated with actual drinking behavior in the total sample and among middle-aged men and women and older men but not among older women, as shown in Table 30. Therefore, the attitude variable was retained in the analysis of drinking behavior among older women but was dropped from the analyses for other groups.

Results

A major hypothesis of this research was that use of alcohol and psychoactive prescription medicines would be universely related to each other. As shown in Table 31 that hypothesis was not confirmed in the sample as a whole or in the four subsamples as none of the Pearson's correlation coefficients are statistically significant.

Effect of Predisposing Variables on the Mediating Variables

The results of the multiple regression analysis of the predisposing predictor variables on the four mediating predictor variables retained are presented for the total sample and for the four subsamples are presented in Tables 32 through 36. The results presented in each table are discussed below.

The results of the analysis of the total sample, those presented in Table 32, revealed that those respondents who felt the most socially useful (Beta =-.35) and who reported that they were the most healthy (Beta =-.23) were the least likely to report psychological symptoms of anxiety while those who reported the most economic stress (Beta=.18) were most likely to report symptoms. Thirty-one percent of the variance in psychological symptoms of anxiety was accounted for by the three significant predictor variables. Those respondents who were most likely to report relatively high numbers of psychophysiological symptoms of anxiety were those who were relatively less healthy (Beta=-.41), who felt relatively less socially useful (Beta=-.22), who had relatively high recent life event scores (Beta=.22) and who were relatively less well educated (Beta=-.20). In all, 47 percent of the variance in psychophysiological symptoms was explained. The predisposition to self-medicate was highest among those respondents who felt lonely

(Beta=-.43), who were less well educated, and who had relatively high scores on the geriatric scale of recent life events (Beta=.14). Thirty-six percent of the variance in the self-medication scale was explained by these predictors. Finally, only two percent of the variance in the scale of skepticism toward doctors was explained by one variable, the geriatric scale of recent life events (Beta=.15).

The results of the analyses of the responses of middle-aged women is reported in Table 33. Forty percent of the variance in psychological symptoms of anxiety was explained by economic stress (Beta=.60), education (Beta=.43) and by feelings of loneliness (Beta=-.27). While the effects of economic stress and loneliness were expected, the findings that better educated women report more psychological symptoms of anxiety was not expected. Inspection of the correlation matrix revealed that education is positively related to the reporting of psychological symptoms but slightly negatively related to the reporting of psychophysiological symptoms among middle-age women, thus suggesting that better educated women are more willing to recognize and admit to psychological symptoms while the less well educated feel more comfortable admitting to physical symptoms. Poor health was related to reporting psychophysiological symptoms of anxiety (Beta=-.47), explaining 21 percent of the variance. Among middle-aged women, there were no significant predictors of either the predisposition to self-medicate or skepticism of doctors.

The results of the analyses among older women is reported in Table 34. Those older women who were most likely to report psychological symptoms of anxiety were those who felt least socially useful (Beta=-.48) and who were in the poorest health (-.30). Forty-eight

percent of the variance in psychological symptoms of anxiety was explained by those two variables. Fifty-nine percent of the variance in psychophysiological symptoms of anxiety among the older women was explained by poor health (Beta=-.49), recent life events (Beta=.39) and fewer years of education (Beta=-.25). Those older women who were relatively more predisposed to self-medicate were also more likely to report that they were lonely (Beta=-.38) and to report economic strata (Beta=.38). Thirty-six percent of the variance in the self-medication scale was explained. Finally, those older women who were anomic, were also the most skeptical of doctors (Beta=.47), with 20 percent of the variance in skepticism explained.

The results of the analyses of middle-aged men reported in Table 35 reveals that nine percent of the variance in the reporting of psychological symptoms of anxiety was explained by poor health (Beta=-.32) while 43 percent of the variance in the psychophysiological symptoms of anxiety reported was explained by poor health (Beta=-.52) and recent life events (Beta=.34). Middle-age men who reported relatively greater predispositions to self-medicate were also relatively more likely to report feelings of loneliness (Beta=-.42) and lack of social usefulness (Beta=-.39) and relatively more recent life events (Beta=.27).

The analyses of older men is reported in Table 36. Those older men who reported the least satisfaction with their families (Beta=-.56) and the most economic strain (Beta=.31) were the most likely to report psychological symptoms of anxiety, with 44 percent of the variance explained. Those older men who were most likely to report psychophysiological symptoms of anxiety, were also more likely to report

feeling lonely (Beta=-.40), being in poor health (Beta=-.35) and feeling less satisfied with their family (Beta=-.27), with 50 pecent of the variance explained. Those older men who had the greatest predisposition to self-medicate were also the most likely to report being lonely (Beta=-.32), having fewer years of education (Beta=-.33), the greatest amount of economic strain (Beta=.25), and the greatest amount of recent life events (Beta=.24). However, they were also the most likely to report satisfaction with their relationships with their families. This unexpected finding may suggest that a concerned family may take an active role in promoting the use of medicine among their older male relatives. Sixty-five percent of the variance in predisposition to self-medicate was explained by these variables. Finally, there were no significant predictors of skepticism toward physicians found among the older men.

Effects of Predisposing and Mediating Variables on Use Variables

The predisposing and mediating variables that were found to be significant predictors of the frequency of use of alcohol and of use of prescription tranquilizers and sleeping pills are presented in Tables 37 through 46. The data in Tables 32 through 36 and Tables 37 through 44 are combined where appropriate to produce path models to show both the direct and indirect effects of variables in the general model on the use of alcohol and on the use of prescription tranquilizers and sleeping pills for the total sample and for the four subsamples. These path models are shown in Figures 3 through 12. The models of frequency of use of alcohol will be discussed first, followed by the models of the frequency of use of prescription tranquilizers and sleeping pills.

The path models of the frequency of use of alcohol are shown in

Figures 3 through 7. For the total sample and for the four subsamples, the best predictor of the frequency of use of alcohol was attitudes toward the use of alcohol as shown in the Pearson's correlation coefficient in Table 31. The correlation in the total sample (r=.71), and in the subsamples of middle-aged women (r=.69), middle-aged men (r=.82) and older men (r=.76) is so strong that it creates problems of colinearity when other variables are introduced into the equation. Therefore, the attitudes toward drinking have been eliminated from the analysis present below for those four groups but is retained for the subsample of older women where the r is only .340. The findings that approximately half the variance in drinking behaviors is explained by attitudes is itself a substantively significant finding which lends support to a social model of alcohol related behavior. (See Conrad and Scheider, 1980, for a discussion of social versus medical models regarding alcohol.) The models discussed below for the total sample, middle-aged women, middle-aged men and older men thus are models of what other variables affect frequency of alcohol use when attitudes toward drinking are removed from the model.

The causal model of frequency of alcohol use for all respondents is presented in Figure 3. With attitudes removed from the model, the major predictors of frequency of use of alcohol are lack of satisfaction with family relationships (Beta=-.28) and education (Beta=.17).

Among middle-aged women shown in Figure 4, frequency of use is increased by higher levels of education (Beta=.27) and lack of feelings of usefulness (Beta=-.31). The negative relationship between psychophysiological symptoms of anxiety (Beta=-.29) was unexpected. However, among middle-aged women, use of alcohol and use of prescription

tranquilizers and sleeping pills are inversely related. Thus, the negative relationship between these symptoms and use of alcohol may be due to the fact that middle-aged women experiencing anxiety prefer prescription psychotropic medicines to alcohol. Health has an indirect positive effect as frequency of use of alcohol through its negative effect on psychophsiological symptoms (indirect path=.14) thus indicating that there is a slight tendency for women in relatively good health to drink more than relatively less healthy women. Overall, 19 percent of the variance in frequency of use of alcohol was explained among middle-aged women.

Among older women shown in Figure 5, frequency of use of alcohol was most strongly affected by attitudes toward drinking (Beta=.42) with those with more positive attitudes drinking more than those with more negative views. Also, those with a predisposition to self-medicate reported less frequent use of alcohol than others (Beta=-.30). Economic strain has an indirect negative effect on frequency of use of alcohol (indirect path=-.11) indicating those under the most strain are the most likely to be predisposed to self-medicate but least likely to drink. Social integration has an indirect positive effect on frequency of use of alcohol through the self-medication variable (indirect path=.14) indicating that those older women who are the most lonely are the least likely to be positively predisposed to medicines and are, therefore, likely to drink more frequently. Overall, 16 percent of the variance in the frequency of use of alcohol is explained among older women. When attitudes are dropped from the model for older women, no other variables explain a significant percent of the variance in frequency of use of alcohol.

Among middle-aged men, shown in Figure 6, the frequency of use of alcohol is greatest among those who are least satisfied with their family relationships and those who are best educated (Beta=.37), with 29 percent of the variance explained. Among older men, shown in Figure 7, the only predictor of frequency of alcohol use is lack of satisfaction with family relationships (Beta=-.37), with 14 percent of the variance explained.

In summary, the major variable that predicts frequency of use of alcohol among the total sample and all four subsamples is the attitudes toward drinking, thus providing support for a social model of use of alcohol in the general population. Among older women, attitudes toward drinking remains the major predictor of drinking behavior. Among older men, satisfaction with the quality of relationships with family is the major predictor when attitudes are not included in the model. Among middle-aged men and women, education emerges as an important predictor, with the better educated drinking more frequently than those with less education. Also, among the middle-aged, social integration variables are important. Among the men, satisfaction with family relationships is most important while among women, feelings of social usefulness are most important. This sex difference in the social integration variables that predict drinking behavior is interesting. Perhaps these differences among men and women in middle-age reflect the beginning of changing concerns among men and women that have been documented among the old (Neugarten and Hagestad, 1977). Middle-aged men have generally attained their highest level of success in their caeers and begin to focus on their families as sources of satisfaction. Middle-aged women, on the other hand, have tended to be more family-centered than career-centered

and in middle-age, with child rearing functions declining, may begin to be more concerned about their impact on the world beyond their own families.

The causal models of use prescription tranquilizers and sleeping pills is presented in Figures 8 through 12. Among the total sample, in Figure 8, 11 percent of the variance is explained by recent life events (Beta=.16) and poor health (Beta=-.27). Among middle-aged women, in Figure 9, the major predictors of frequency of use of prescription tranquilizers and sleeping pills is psychophysiological symptoms of anxiety (Beta=.43) and lack of self-esteem (Beta=-.32). Contrary to expectations, social integration as measured by the loneliness items was positively related to use (Beta=.25). One possible explanation is that an interaction effect is occurring; that is among those women who are most anxious and lowest in self-esteem, that those who are the most integrated into caring social networks are the most likely to be guided into the formal service provider network and, thus, to receive psychoactive medicines to deal with anxiety. Health has an indirect negative effect (indirect path=.20) on use of prescription tranquilizers and sleeping pills. Overall, 33 percent of the variance in the use of prescription tranquilizers and sleeping pills among middle-aged women was explained.

Among older women in Figure 10, those who were most likely to use prescription tranquilizers and sleeping pills were those older women who were most anomic (Beta=.47), most lonely (Beta=-.40), and had the most psychophysiological symptoms of anxiety (Beta=.31). Recent life events have an indirect positive effect through anxiety (indirect path=.12), health has an indirect negative effect through the same variable

(indirect path=.15), as does education (indirect path=.08).

Among middle-age males in Figure 11, 12 percent of the variance in the use of prescription tranquilizers and sleeping pills was explained by feelings of lack of social usefulness (Beta=-.37). Among older men in Figure 12 frequency of use of these psychoactive substances was explained by recent life events (Beta=.42), poor health (Beta=-.40) and lack of satisfaction with family relationships (Beta=-.27). Overall, these variables explained 40 percent of the variance in the frequency of use of prescription tanquilizers and sleeping pills.

To summarize the major trends observed, it is interesting that among both middle-aged and older women, psychophysiological symptoms of anxiety are strongly, positively related to the use of tranquilizers and sleeping pills while among men neither the psychological nor psychophysiological symptoms of anxiety are related to the use of these substances. While it is only speculation at this point, the reason for this sex difference may be that males are less willing to admit to these symptoms than are women. Among males and females, measures of stress and social integration are also directly and or indirectly involved in the use of psychoactive medicines although as the results with middle-age women suggest, the relationship may not be a simple one. When social integration does not protect one from experiencing anxiety in the first place, it may facilitate receiving professional treatment when anxiety does occur.

Summary and Conclusions

The purpose of this research project was to examine the use of prescription and nonprescription tranquilizers and sleeping pills and the use of alcohol among middle-aged and older adults and to test a multidisciplinary model of social, psychological and health variables that influence the use of these substances. The model tested predicted that social stressors, social integration, and personality variables would interact and create a predisposition to use psychoactive medicines and alcohol and that the actual choice of use of these substances would be mediated by anxiety and attitudes toward drinking and drugs. The dependent variables were frequency of use of alcohol and of a combination of the prescription and psychoactive medicines. Use of nonprescription psychoactive medicines was dropped from the analysis because few respendents used either of these medicines. The data were collected from a random, nonproportionately stratified sample of telephone subscribers in Ft. Worth, Texas in the summer of 1985. Fifty middle-aged women, 52 middle-aged men, 50 older women, and 51 older men.

Fifty-two percent of the sample reported that they never use alcohol and only six percent reported that they drink every day or nearly every day. Middle-aged men reported the most frequent use of alcohol and older women the least frequent.

In all four age/sex groups, attitudes toward drinking were the best predictor of frequency of drinking, thus providing support for a social model of use of alcohol. Because of colinearity between attitudes and

frequency of drinking, the attitude variable was not used in the multivariate regression analysis for middle-aged men and women and older men. Among older women, attitudes toward drinking remain the major predictor of drinking behavior. Among older men, satisfaction with the quality of relationships with family is the major predictor when attitudes are not included in the model. Among middle-aged men and women, education emerges as an important predictor, with the better educated drinking more frequently than those with less education. Also, among the middle-aged, social integration variables are important. Among the men, satisfaction with family relationships is most important while among women, feelings of social usefulness are most important. This sex difference in the social integration variables that predict drinking behavior is interesting. Perhaps these differences among men and women in middle-age reflect the beginning of changing concerns among men and women that have been documented among the old (Neugarten and Hagestad, 1977). Middle-aged men have generally attained their highest level of success in their careers and begin to focus on their families as sources of satisfaction. Middle-aged women, on the other hand, have tended to be more family-centered than career-centered and in middle age, with child rearing functions declining, may begin to be more concerned about their impact on the world beyond their own families.

Thirty-one percent of the sample reported that they had used prescription tranquilizers and/or sleeping pills at some point. Only 14 percent of the respondents reported use of one or both of these medicines in the past year and only five percent reported using these medicines daily. Older women were the most likely to report use of prescription tranquilizers, followed by middle-aged women, middle-aged

men, and older men.

To summarize the major predictors of the use of prescription tranquilizers and sleeping pills, it is interesting that among both middle-aged and older women, psychophysiological symptoms of anxiety are strongly positively related to the use of tranquilizers and sleeping pills while among men neither the psychological nor psychophysiological symptoms of anxiety are related to the use of these substances. While it is only speculation at this point, the reason for this sex difference may be that males are less willing to admit to these symptoms than are women. Among males and females, measures of stress and social integration are also directly and/or indirectly involved in the use of psychoactive medicines although as the results with middle-aged women suggest, the relationship may not be a simple one. When social integration does not protect one from experiencing anxiety in the first place, it may facilitate receiving professional treatment when anxiety does occur.

In conclusion, the hypothesis that prescription psychoactive medicines and alcohol are used as alternatives was not confirmed by this research. Although use of these two types of substances were inversely related among middle-aged men and women, they were positively correlated among older men and women, and none of the four correlations were statistically significant. The research does indicate that the causal determinants of use of alcohol and of psychoactive medicines differ among the four age/sex groups examined and future research should focus on the nature of these differences and their meanings.

TABLE 1. COMPARISON OF TYPES OF PSYCHOACTIVE PRESCRIPTION MEDICINES TAKEN BY AGE

Percentage of Population 60+ Reporting Frequent Use of Prescription and Nonprescription Psychotropic Medicines (California, 1967-68)

	Male	Female	Total
Stimulant	0%	4%	2%
Sedative	10	13	11
Tranquilizer	7	10	8
Any of the Three	13	19	16
N	(135)	(93)	(228)

(Manheimer et al., 1968)

Percent Using Psychotropic Prescription Medicines in Past Year (1967, San Francisco)

Drug Class	Males 60+	Females 60+
Stimulant	--	3
Minor Tranquilizer	5	10
Sedative	4	9
Hypnotic	9	13
None of the Above	77	66

(Mellinger et al., 1971)

Percentage Using Psychoactive Drugs in Past Year in United States (1969-1970) Among Age Groups

Drug Class and Sex	18-20	30-44	45-59	60-74	All Ages
Major Tranquilizer					
Men	*	1	1	*	1
Women	1	2	2	2	2
Minor Tranquilizer/ Sedative					
Men	5	7	9	11	8
Women	12	21	22	25	20
Antidepressant					
Men	*	2	1	4	2
Women	2	2	2	2	2
Stimulant					
Men	1	2	2	1	2
Women	10	11	6	3	8
Hypnotic					
Men	1	1	2	7	3
Women	3	3	4	8	4
All Psychoactive Drugs Used any during past year					
Men	6	12	14	21	13
Women	23	32	31	32	29
TOTAL	15	24	23	27	

*Less than 0.5 percent
*No cases

(Parry et al., 1973)

TABLE 1. COMPARISON OF TYPES OF PSYCHOACTIVE PRESCRIPTION MEDICINES TAKEN BY AGE - continued

Percent Using in Past Year (U.S.A., 1974-75)

Drug Class	All adults 18+	Adults 50+
Sedatives	10%	15%
Tranquilizers	15	14
Stimulants	3	1

(Abelson and Atkinson, 1975)

Percent Currently Using (Washington, D.C., 1977)

Drug Class	Adults 60+
Sedative/tranquilizer	16.6%
Antidepressant	1.6
Nervous System	2.7
Analgesic	7.8

(Guttman, 1977)

Prevalence of Past Year Use of Medically Prescribed Psychotherapeutic Drugs* by Drug Class, Age and Sex, 1979

	% Using During Past 12 Months in Age/Sex Group				
Drug Class and Sex	18-34	35-40	50-64	65-79	All
Antianxiety Agents					
Men	4.1	8.1	12.4	9.1	7.5
Women	7.9	16.6	19.5	18.7	14.1
Hypnotics					
Men	0.8	0.7	4.1	5.3	2.1
Women	1.7	2.4	3.5	6.5	3.0
Daytime Sedatives					
Men	0.5	0.4	1.3	0.8	0.7
Women	1.5	1.4	2.4	2.6	1.9
Antidepressants					
Men	0.3	1.8	1.9	2.8	1.3
Women	2.1	1.1	4.7	4.1	2.8
Antipsychotics					
Men	0.8	0.4	2.0	1.1	1.0
Women	1.8	2.1	0.6	1.2	1.5
Any of the Five Classes					
Men	6.1	9.7	18.3	16.2	11.0
Women	13.3	21.4	26.5	27.5	20.2
No. of Persons--Unwtd.					
(Men)	(452)	(257)	(340)	(285)	(1334)
(Women)	(577)	(310)	(427)	(513)	(1827)

*Figures refer to use of medications obtained through conventional medical channels, excluding hospital use.
(Mellinger and Balter, 1981)

TABLE 1. COMPARISON OF TYPES OF PSYCHOACTIVE MEDICINES TAKEN BY AGE - continued

Respondents Who Used Psychoactive Drugs for Selected Time Periods

	55-64 years	65-74 years	75 years or more	Percent of total sample
Currently	17.1	17.5	19.3	17.6
In past year	31.3	31.2	30.5	31.1
Ever	57.5	51.3	45.6	53.1
N	(515)	(338)	(197)	(1,101)

(Stephens et al., 1982)

Persons With at Least One Psychotropic Drug Prescription

	All Ages	Less than 19 years	19-34 years	35-39 years	50-64 years	65 years or more
Males						
Population in thousands	102,602	35,333	26,324	16,455	15,264	9,226
Percent	6.2	2.2	3.6	8.0	12.9	14.3
Females						
Population in thousands	109,496	33,531	28,127	18.026	16,754	13,058
Percent	11.8	1.7	8.2	17.5	23.0	23.0

(Cafferata and Kaspar, 1983)

TABLE 2

MEANS, STANDARD DEVIATIONS, AND MEASURES OF SKEWNESS AND KURTOSIS FOR ALL VARIABLES IN THE PATH MODEL FOR ALL RESPONDENTS AND SUBSAMPLES

VARIABLES	RESPONDENTS					
Use of Psychoactive Substances	Total Sample (N=203)	Middle-Aged Women (N=50)	Middle-Aged Men (N=52)	Older Women (N=50)	Older Men (N=51)	RESPONSE CATEGORIES
Use of alcohol						
M=	1.527	1.180	2.308	.620	1.961	0=Never drinks 1=Less than once a month, but at least once a year 2=About once a month 3=Two or three times a month 4=Once or twice a week 5=Three or four times a week 6=Nearly every day 7=Once a day 8=Two times a day 9=Three or more times a day
SD=	2.126	1.612	2.210	1.354	2.676	
SK=	1.396	1.156	.647	3.001	1.198	
K=	1.129	.043	-.553	10.318	.175	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Use of prescription tranquilizers and sleeping pills						
M=	.897	.560	.923	1.220	.882	1=Never taken 2=Have taken in the past but not now 3=less than once a month but at least once a year 4=Two or three times a month 5=Once or twice a week 6=Three or four times a week 7=Nearly every day 8=Every day
SD=	2.006	1.232	2.186	2.197	2.224	
SK=	2.726	4.738	2.749	2.125	2.561	
K=	6.549	27.697	6.573	3.735	5.286	
(MD)=	(0)	(0)	(0)	(0)	(0)	
STRESS Geriactric Scale of recent life events						47-815
M=	517.483	565.760	485.154	520.980	499.686	
SD=	223.486	229.202	240.686	190.543	227.767	
SK=	.342	.554	.397	.444	.112	
K=	-.103	.289	-.079	-.372	-.624	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Economic strain Afford home						71-80 0=yes 1=no
M=	.074	.140	.058	.060	.039	
SD=	.262	.351	.235	.240	.196	
SK=	3.282	2.140	3.908	3.821	4.893	
K=	8.859	2.684	13.799	13.124	22.834	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle Aged Men	Older Women	Older Men	
Afford car						0=yes 1=no
M=	.233	.260	.115	.490	.078	2=not applicable
SD=	.537	.487	.323	.820	.272	
SK=	2.263	1.667	2.480	1.217	3.232	
K=	4.109	1.991	4.314	-3.56	8.789	
(MD)=	(1)	(0)	(0)	(0)		
Afford furniture						0=always 1=usually
M=	1.158	1.280	1.115	1.300	.941	2=occasionally
SD=	.952	.882	.808	1.093	.988	3=never
SK=	.201	-.034	-.217	.049	.769	
K=	-1.064	-.863	-1.431	-1.390	-.437	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Afford food						0=always 1=usually
M=	.243	.327	.135	.260	.255	2=occasionally
SD=	.504	.516	.345	.633	.483	3=never
SK=	2.230	1.231	2.205	2.754	1.698	
K=	5.597	.505	2.976	7.840	2.107	
(MD)=	(1)	(1)	(0)	(0)	(0)	
Afford medical care						0=always 1=usually
M=	.342	.469	.231	.400	.275	2=occasionally
SD=	.629	.710	.509	.782	.451	3=never
SK=	2.014	1.568	2.192	2.077	1.041	
K=	4.196	2.382	4.194	3.764	-.954	
(MD)=	(1)	(1)	(0)	(0)	(0)	
Afford clothing						0=always 1=usually
M=	.554	.694	.404	.620	.510	2=occasionally
SD=	.753	.871	.569	.830	.703	3=never
SK=	1.226	1.047	1.058	1.049	1.399	
K=	.848	.212	.180	-.007	1.991	
(MD)=	(1)	(1)	(0)	(0)	(0)	
Afford Activities						0=always 1=usually
M=	1.015	1.143	1.000	.960	.961	2=occasionally
SD=	.985	.957	.863	.928	1.058	3=never
SK=	.475	.148	.380	1.593	.714	
K=	-.967	-1.170	-.722	1.581	-.776	
(MD)=	(1)	(1)	(0)	(0)	(0)	
Difficulty Paying bills						0=no difficulty 1=a little difficulty
M=	.591	.740	.673	.660	.373	2=some difficulty
SD=	.893	.965	.834	.626	.824	3=a great deal of difficulty
SK=	1.365	.981	1.112	.395	2.103	
K=	.787	-.282	.604	-.612	3.261	
(MD)=	(0)	(0)	(0)	(0)	(0)	
End of the month money						0=some money left over
M=	.460	.531	.346	.660	.314	1=just enough to make ends meet
SD=	.574	.581	.480	.626	.547	2=not enough to make ends meet
SK=	.795	.541	.666	.395	1.565	
K=	-.363	-.634	-1.620	-.612	1.633	
(MD)=	(1)	(1)	(0)	(0)	(0)	
Income satisfy needs						0=very well 1=fairly well
M=	.645	.660	.731	.660	.529	2=not well at all
SD=	.582	.593	.630	.519	.578	
SK=	.251	.258	.274	-.235	.528	
K=	-.685	-.610	-.586	-.957	-.659	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
Self rating of health						37-40
Rate health						0=poor 1=fair 2=good 3=excellent
M=	1.961	2.220	2.173	1.560	1.882	
SD=	.922	.932	.734	.951	.931	
SK=	-.572	-1.093	-.905	.118	-.533	
K=	-.502	.386	1.397	-.908	-.461	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Health problems in the way						0=a great deal 1=some 2=not at all
M=	1.399	1.520	1.481	1.220	1.373	
SD=	.692	.646	.641	.764	.692	
SK=	-.719	-1.021	-.853	-.401	-.652	
K=	-.652	-.009	-.271	-1.161	-.671	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Compared to others						0=worse than most 1=about the same 2=better than most
M=	1.517	1.540	1.500	1.520	1.510	
SD=	.608	.613	.610	.646	.579	
SK=	-.867	-.988	-.807	-1.021	-.684	
K=	-.238	.017	-.285	-.009	-.489	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Compared to 5 years ago						0=worse 1=about the same 2=better
M=	.818	1.020	.865	.620	.765	
SD=	.697	.685	.658	.697	.710	
SK=	.265	-.025	.146	.682	.375	
K=	-.927	-.783	-.629	-.661	-.917	
(MD)=	(0)	(0)	(0)	(0)	(0)	
SOCIAL INTEGRATION						
Subjective feelings of social integration						41-54
More friends than before						0=strongly disagree 1=somewhat disagree
M=	2.473	2.480	2.750	2.520	2.137	2=not sure
SD=	1.470	1.529	1.399	1.313	1.600	3=somewhat agree
SK=	-.404	-.443	-.696	-.552	.011	4=strongly agree
K=	-1.355	-1.418	-.994	-.992	-1.644	
(MD)=	(0)	(0)	(0)	(0)	(0)	
More lonely						0=strongly agree 1=somewhat agree
M=	3.458	3.720	3.712	2.290	3.471	2=not sure
SD=	1.153	.757	.800	1.614	1.084	3=somewhat disagree
SK=	-2.159	-3.593	-3.240	-1.018	-2.327	4=strongly disagree
K=	3.368	14.253	10.912	-.792	4.748	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Happier to see friends more						0=strongly agree 1=somewhat disagree
M=	1.768	2.260	1.769	1.480	1.569	2=not sure
SD=	1.476	1.468	1.395	1.488	1.473	3=somewhat agree
SK=	.220	-.391	.386	.505	.446	4=strongly agree
K=	-1.490	-1.373	-1.312	-1.343	-1.325	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
No one to talk to						0=strongly agree 1=somewhat agree
M=	3.576	3.720	3.788	3.260	3.529	2=not sure
SD=	1.019	.904	.723	1.382	.902	3=somewhat disagree
SK=	-2.651	-3.541	-4.183	-1.746	-2.302	4=strongly disagree
K=	6.054	11.937	18.433	1.486	5.335	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Lonely much of the time						0=strongly agree 1= somewhat agree
M=	3.709	3.980	3.885	3.360	3.608	2=not sure
SD=	.917	.141	.583	1.352	1.002	3=somewhat disagree
SK=	-3.319	-7.071	-6.182	-1.885	-2.733	4=strongly disagree
K=	9.912	50.000	40.662	1.900	6.662	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Friends make life happy						0=strongly disagree 1=somewhat disagree
M=	3.704	3.680	3.769	3.820	3.549	2=not sure
SD=	.705	.768	.757	.523	.730	3=somewhat agree
SK=	-3.115	-3.319	-3.812	-3.797	-1.944	4=strongly agree
K=	10.830	12.566	15.053	17.225	4.200	
(MD)=	(0)	(0)	(0)	(0)	(0)	
All good friends wish						0=strongly disagree 1=somewhat disagree
M=	2.852	2.920	2.846	3.060	2.588	2=not sure
SD=	1.396	1.368	1.363	1.236	1.590	3=somewhat agree
SK=	-.913	-.947	-.918	-1.200	-.650	4=strongly agree
K=	-.669	-.636	-.577	.161	-1.273	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Family likes to have around						0=strongly disagree 1=somewhat disagree
M=	3.768	3.740	3.865	3.780	3.686	2=not sure
SD=	.711	.828	.444	.679	.836	3=somewhat agree
SK=	-4.055	-3.961	-3.449	-4.184	-3.611	4=strongly agree
K=	17.819	16.065	11.512	20.287	13.927	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Satisfied way family treats						0=strongly disagree
M=	3.586	3.500	3.635	3.600	3.608	1=somewhat disagree
SD=	.899	.995	.817	.857	.940	2=not sure
SK=	-2.760	-2.720	-2.807	-2.755	-2.884	3=somewhat agree
K=	7.611	7.476	8.635	7.987	8.195	4=strongly agree
(MD)=	(0)	(0)	(0)	(0)	(0)	
Wish family pay more attention						0=strongly agree 1=somewhat agree
M=	3.123	3.180	2.981	3.040	3.294	2=not sure
SD=	1.324	1.366	1.421	1.277	1.238	3=somewhat disagree
SK=	-1.277	-1.341	-.946	-1.118	-1.975	4=strongly disagree
K=	.112	.142	-.802	-.169	2.813	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Finest family						0=strongly disagree 1=somewhat disagree
M=	3.768	3.900	3.673	3.820	3.686	2=not sure
SD=	.630	.303	.760	.629	.707	3=somewhat agree
SK=	-3.499	-2.750	-2.711	-4.978	-2.648	4=strongly agree
K=	13.642	5.792	7.092	28.548	7.146	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
Trip to boss around						0=strongly agree 1=somewhat agree
M=	3.562	3.480	3.750	3.540	3.471	2=not sure
SD=	1.039	1.165	.738	1.054	1.155	3=somewhat disagree
SK=	-2.360	-2.089	-3.220	-2.453	-2.073	4=strongly disagree
K=	4.234	2.892	9.705	5.058	2.890	
(MD)=	(0)	(0)	(0)	(0)	(0)	
More love than ever						0=strongly disagree 1=somewhat disagree
M=	2.621	2.680	2.654	2.680	2.471	2=not sure
SD=	1.452	1.491	1.413	1.362	1.567	3=somewhat agree
SK=	-.649	-.692	-.696	-.700	-.544	4=strongly agree
K=	-1.052	-1.097	-.875	-.904	-1.295	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Does not care						0=strongly agree 1=somewhat agree
M=	3.812	3.780	3.885	3.776	3.804	2=not sure
SD=	.687	.887	.615	.685	.530	3=somewhat disagree
SK=	-4.389	-3.925	-5.711	-4.138	-3.548	4=strongly disagree
K=	19.894	14.228	33.802	19.846	15.346	
(MD)=.	(0)	(1)	(0)	(1)	(0)	
Subjective feelings of social usefulness						30-36
I am useful						0=strongly disagree 1=somewhat disagree
M=	3.729	3.900	3.923	3.580	3.510	2=not sure
SD=	.660	.303	.296	.810	.903	3=somewhat agree
SK=	-3.287	-2.750	-3.271	-2.666	-2.238	4=strongly agree
K=	12.771	5.792	9.043	8.426	5.106	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Life is meaningless						0=strongly agree 1=somewhat agree
M=	3.847	3.960	3.962	3.740	3.725	2=not sure
SD=	.661	.198	.194	.853	.961	3=somewhat disagree
SK=	-4.913	-4.841	-4.944	-3.785	-3.355	4=strongly disagree
K=	24.283	22.331	23.338	14.337	9.934	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Days are too short						0=strongly disagree 1=somewhat disagree
M=	2.990	3.460	2.981	2.660	2.863	2=not sure
SD=	1.400	1.164	1.379	1.520	1.429	3=somewhat agree
SK=	-1.152	-2.203	-1.177	-.772	-.949	4=strongly agree
K=	-.180	3.628	-.030	-.971	-.619	
(MD)=	(0)	(0)	(0)	(0)	(0)	
No point in living						0=strongly agree 1=somewhat agree
M=	3.724	3.820	3.808	3.580	3.686	2=not sure
SD=	.846	.720	.715	1.012	.905	3=somewhat disagree
SK=	-3.057	-3.821	3.714	-2.381	-3.026	4=strongly disagree
K=	8.033	13.124	12.585	4.491	8.291	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Busy and useful						0=strongly disagree 1=somewhat disagree
M=	3.739	3.940	3.846	3.500	3.667	2=not sure
SD=	.701	.240	.364	.995	.841	3=somewhat agree
SK=	-3.775	-3.821	-1.976	-2.461	-3.496	4=strongly agree
K=	16.091	13.124	1.980	5.781	13.296	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
Busy and useful						0=strongly disagree 1=somewhat agree
M=	3.739	3.940	3.846	3.500	3.667	2=not sure
SD=	.701	.240	.364	.995	.841	3=somewhat disagree
SK=	-3.775	-3.821	-1.976	-2.461	-3.496	4=strongly disagree
K=	16.091	13.124	1.980	5.781	13.296	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Most useful period						0=strongly disagree 1=somewhat disagree
M=	2.571	2.760	2.942	2.320	2.255	2=not sure
SD=	1.479	1.479	1.290	1.544	1.521	3=somewhat agree
SD=	-.475	-.751	-.859	-.253	-.096	4=strongly agree
K=	-1.344	-1.054	-.678	-1.548	-1.595	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Not very useful						0=strongly agree 1=somewhat agree
M=	3.626	3.940	3.827	3.300	3.431	2=not sure
SD=	.932	.240	.617	1.216	1.153	3=somewhat disagree
SK=	-2.630	-3.821	-4.040	-1.602	-1.983	4=strongly disagree
K=	5.883	13.124	16.420	1.192	2.625	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Subjective feelings of political powerlessness and anomie						55-70
Public off. not interested						0=strongly disagree 1=somewhat disagree
M=	2.192	2.240	2.327	1.980	2.216	2=not sure
SD=	1.427	1.379	1.424	1.478	1.447	3=somewhat agree
SK=	-.287	-.160	-.567	-.043	-.352	4=strongly agree
K=	-1.397	-1.439	-1.174	-1.517	-1.387	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Not known whom to count on						0=strongly disagree 1=somewhat disagree
M=	2.172	2.160	1.962	2.240	2.333	2=not sure
SD=	1.491	1.361	1.495	1.598	1.519	3=somewhat agree
SK=	-.191	-.150	-.042	-.223	-.382	4=strongly agree
K=	-1.503	-1.380	-1.576	-1.644	-1.421	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Live for today						0=strongly disagree 1=somewhat disagree
M=	1.946	1.900	1.327	2.640	1.941	2=not sure
SD=	1.718	1.644	1.556	1.638	1.816	3=somewhat agree
SK=	.061	.109	.726	-.781	.133	4=strongly agree
K=	-1.768	-1.710	-1.130	-1.137	-1.889	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Condition getting worse						0=strongly disagree 1=somewhat disagree
M=	1.685	1.360	1.538	2.520	1.333	2=not sure
SD=	1.595	1.481	1.578	1.515	1.545	3=somewhat agree
SK=	.321	.638	.503	-.590	.800	4=strongly agree
K=	-1.530	-1.137	-1.361	-1.212	-.957	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Not fair bring child						0=strongly disagree 1=somewhat disagree
M=	1.103	1.080	.712	1.680	.961	2=not sure
SD=	1.447	1.441	1.258	1.622	1.311	3=somewhat agree
SK=	.957	1.007	1.497	.396	1.128	4=strongly agree
K=	-.640	-.531	.702	-1.513	-.101	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
Most not care next fellow						0=strongly disagree 1=somewhat disagree
M=	1.690	1.480	1.635	1.640	2.000	2=not sure
SD=	1.569	1.607	1.534	1.509	1.625	3=somewhat agree
SK=	.215	.545	.311	.166	-.146	4=strongly agree
K=	-1.610	-1.419	-1.503	-1.656	-1.713	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Money most important						0=strongly disagree 1=somewhat disagree
M=	.857	.700	.769	.900	1.059	2=not sure
SD=	1.370	1.313	1.262	1.446	1.462	3=somewhat agree
SK=	1.405	1.712	1.673	1.446	1.014	4=strongly agree
K=	.442	1.445	1.563	.535	-.595	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Is anything worthwhile						0=strongly disagree 1=somewhat disagree
M=	.887	.600	.731	1.220	1.000	2=not sure
SD=	1.325	1.107	1.190	1.556	1.356	3=somewhat agree
SK=	1.179	1.807	1.275	.701	1.151	4=strongly agree
K=	-.199	1.999	-.130	-1.298	-.098	
(MD)=	(0)	(0)	(0)	(0)	(0)	
No right or wrong ways						0=strongly disagree 1=somewhat disagree
M=	.759	.480	.500	1.020	1.039	2=not sure
SD=	1.273	.931	1.146	1.421	1.442	3=somwhat agree
SK=	1.569	2.352	2.153	1.163	1.138	4=strongly agree
K=	1.077	5.314	3.183	-.060	-.217	
(MD)=	(0)	(0)	(0)	(0)	(0)	
No say about government						0=strongly disagree 1=somewhat disagree
M=	1.463	1.360	1.404	1.620	1.471	2=not sure
SD=	1.577	1.638	1.537	1.640	1.528	3=somwhat agree
SK=	.520	.607	.660	.299	.583	4=strongly agree
K=	-1.404	-1.432	-1.195	-1.668	-1.258	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Politics so complicated						0=strongly disagree 1=somewhat disagree
M=	2.567	2.280	2.192	3.200	2.608	2=not sure
SD=	1.554	1.591	1.692	1.125	1.576	3=somewhat agree
SK=	-.673	-.355	-.364	-1.398	-.686	4=strongly agree
K=	-1.173	-1.550	-1.663	.840	-1.191	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Public off not care						0=strongly disagree 1=somewhat disagree
M=	1.926	1.800	1.750	2.200	1.961	2=not sure
SD=	1.519	1.400	1.595	1.485	1.587	3=somewhat agree
SK=	.126	.233	.337	-.164	.098	4=strongly agree
K=	-1.552	-1.373	-1.565	-1.502	-1.668	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Government not care						0=strongly disagree 1=somewhat disagree
M=	1.665	1.780	1.365	1.900	1.627	2=not sure
SD=	1.508	1.447	1.469	1.474	1.624	3=somewhat agree
SK=	.323	.107	.642	.100	.462	4=strongly agree
K=	-1.448	-1.527	-1.129	-1.500	-1.472	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
Protecting personal interest						0=strongly disagree 1=somewhat disagree
M=	2.581	2.520	2.346	2.740	2.725	2=not sure
SD=	1.441	1.502	1.494	1.306	1.457	3=somewhat agree
SK=	-.651	-.586	-.479	-.810	-.791	4=strongly agree
K=	-1.011	-1.163	-1.262	-.527	-.884	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Can influence decisions						0=strongly disagree 1=somewhat disagree
M=	1.167	1.060	1.096	1.320	1.196	2=not sure
SD=	1.379	1.284	1.432	1.392	1.429	3=somewhat agree
SK=	.987	1.209	1.076	.815	.968	4=strongly agree
K=	-.421	.287	-.330	-.652	-.535	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Can influence society						0=strongly disagree 1=somewhat disagree
M=	1.034	.720	.981	1.220	1.216	2=not sure
SD=	1.351	1.144	1.306	1.447	1.460	3=somewhat agree
SK=	1.177	1.691	1.245	.988	.973	4=strongly agree
K=	.001	1.862	.283	-.481	-.563	
(MD)=	(0)	(0)	(0)	(0)	(0)	
PERSONALITY						
Mastery						
No way to solve problems						0=strongly disagree 1=somewhat disagree
M=	1.493	1.800	.827	1.720	1.647	2=not sure
SD=	1.527	1.591	1.324	1.499	1.521	3=somewhat agree
SK=	.444	.089	1.437	.161	.347	4=strongly agree
K=	-1.407	-1.674	.660	-1.517	-1.479	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Pushed around						0=strongly disagree 1=somewhat disagree
M=	.995	1.100	1.077	.920	.822	2=not sure
SD=	1.426	1.488	1.426	1.510	1.306	3=somewhat agree
SK=	1.084	1.022	.957	1.179	1.291	4=strongly agree
K=	-.454	-.581	-.696	-.418	.251	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Little control						0=strongly disagree 1=somewhat disagree
M=	.956	.720	.596	1.580	.941	2=not sure
SD=	1.317	1.144	1.089	1.500	1.318	3=somewhat agree
SK=	1.079	1.691	1.826	.237	1.095	4=strongly agree
K=	-.359	1.862	2.131	-1.587	-.365	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Do anything						0=strongly agree 1=somewhat agree
M=	.734	.660	.500	.900	.882	2=not sure
SD=	1.189	1.255	.874	1.313	1.259	3=somewhat disagree
SK=	1.742	1.910	1.921	1.487	1.606	4=strongly disagree
K=	1.936	2.329	3.010	.990	1.563	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Helpless dealing with problems						0=strongly disagree 1=somewhat disagree
M=	.921	.900	.519	1.380	.902	2=not sure
SD=	1.329	1.432	.960	1.602	1.136	3=somewhat agree
SK=	1.168	1.138	1.811	.676	1.051	4=strongly agree
K=	-.158	-.485	2.068	-1.246	-.340	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Future depends on me						0=strongly disagree 1=somewhat disagree
M=	.557	.480	.442	.840	.471	2=not sure
SD=	1.039	1.054	.916	1.267	.857	3=somewhat agree
SK=	2.120	2.394	2.800	1.378	2.478	4=strongly agree
K=	3.712	4.842	8.256	.636	6.846	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
Protecting personal interest						0=strongly disagree 1=somewhat disagree
M=	2.581	2.520	2.346	2.740	2.725	2=not sure
SD=	1.441	1.502	1.494	1.306	1.457	3=somewhat agree
SK=	-.651	-.586	-.479	-.810	-.791	4=strongly agree
K=	-1.011	-1.163	-1.262	-.527	-.884	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Can influence decisions						0=strongly disagree 1=somewhat disagree
M=	1.167	1.060	1.096	1.320	1.196	2=not sure
SD=	1.379	1.284	1.432	1.392	1.429	3=somewhat agree
SK=	.987	1.209	1.076	.815	.968	4=strongly agree
K=	-.421	.287	-.330	-.652	-.535	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Can influence society						0=strongly disagree 1=somewhat disagree
M=	1.034	.720	.981	1.220	1.216	2=not sure
SD=	1.351	1.144	1.306	1.447	1.460	3=somewhat agree
SK=	1.177	1.691	1.245	.988	.973	4=strongly agree
K=	.001	1.862	.283	-.481	-.563	
(MD)=	(0)	(0)	(0)	(0)	(0)	
PERSONALITY						
Mastery						
No way to solve problems						0=strongly disagree 1=somewhat disagree
M=	1.493	1.800	.827	1.720	1.647	2=not sure
SD=	1.527	1.591	1.324	1.499	1.521	3=somewhat agree
SK=	.444	.089	1.437	.161	.347	4=strongly agree
K=	-1.407	-1.674	.660	-1.517	-1.479	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Pushed around						0=strongly disagree 1=somewhat disagree
M=	.995	1.100	1.077	.920	.822	2=not sure
SD=	1.426	1.488	1.426	1.510	1.306	3=somewhat agree
SK=	1.084	1.022	.957	1.179	1.291	4=strongly agree
K=	-.454	-.581	-.696	-.418	.251	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Little control						0=strongly disagree 1=somewhat disagree
M=	.956	.720	.596	1.580	.941	2=not sure
SD=	1.317	1.144	1.089	1.500	1.318	3=somewhat agree
SK=	1.079	1.691	1.826	.237	1.095	4=strongly agree
K=	-.359	1.862	2.131	-1.587	-.365	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Do anything						0=strongly agree 1=somewhat agree
M=	.734	.660	.500	.900	.882	2=not sure
SD=	1.189	1.255	.874	1.313	1.259	3=somewhat disagree
SK=	1.742	1.910	1.921	1.487	1.606	4=strongly disagree
K=	1.936	2.329	3.010	.990	1.563	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Helpless dealing with problems						0=strongly disagree 1=somewhat disagree
M=	.921	.900	.519	1.380	.902	2=not sure
SD=	1.329	1.432	.960	1.602	1.136	3=somewhat agree
SK=	1.168	1.138	1.811	.676	1.051	4=strongly agree
K=	-.158	-.485	2.068	-1.246	-.340	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Future depends on me						0=strongly disagree 1=somewhat disagree
M=	.557	.480	.442	.840	.471	2=not sure
SD=	1.039	1.054	.916	1.267	.857	3=somewhat agree
SK=	2.120	2.394	2.800	1.378	2.478	4=strongly agree
K=	3.712	4.842	8.256	.636	6.846	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
Little to change things						0=strongly disagree 1=somewhat disagree
M=	1.429	.980	.596	2.420	1.745	2=not sure
SD=	1.579	1.505	1.089	1.472	1.585	3=somewhat agree
SK=	.555	1.233	1.637	-.496	.313	4=strongly agree
K=	-1.364	-.142	1.075	-1.217	-1.572	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Self-esteem						
Worth equal to others						0=strongly disagree 1=somewhat disagree
M=	3.867	3.880	3.962	3.800	3.824	2=not sure
SD=	.484	.480	.194	.639	.518	3=somewhat agree
SK=	-5.084	-4.976	-4.944	-4.696	-3.839	4=strongly agree
K=	31.063	27.541	23.338	26.029	17.610	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Have good qualities						0=strongly disagree 1=somewhat disagree
M=	3.862	3.900	3.942	3.820	3.784	2=not sure
SD=	.399	.303	.235	.388	.577	3=somewhat agree
SK=	-3.480	-2.750	-3.908	-1.718	-3.227	4=strongly agree
K=	15.468	5.792	13.799	.989	11.616	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Am a failure						0=strongly disagree 1=somewhat disagree
M=	3.887	4.000	3.827	3.860	3.863	2=not sure
SD=	.509	.000	.706	.535	.491	3=somewhat agree
SK=	-5.408	.000	-4.602	-4.302	-4.565	4=strongly agree
K=	31.382	.000	21.571	19.345	23.804	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Do as well as others						0=strongly disagree 1=somewhat disagree
M=	3.542	3.700	3.808	3.120	3.529	2=not sure
SD=	.929	.789	.445	1.256	.924	3=somewhat agree
SK=	-2.554	-3.299	-2.279	-1.523	-2.700	4=strongly agree
K=	6.352	11.733	4.805	1.216	7.755	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Not much proud of						0=strongly agree 1=somewhat agree
M=	3.833	3.860	3.865	3.800	3.804	2=not sure
SD=	.683	.700	.595	.728	.722	3=somewhat disagree
SK=	-4.665	-5.003	-5.767	-4.290	-4.337	4=strongly disagree
K=	21.770	24.542	36.390	19.034	19.470	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Positive attitude						0=strongly disagree 1=somewhat agree
M=	3.768	3.940	3.712	3.700	3.725	2=not sure
SD=	.589	.240	.605	.789	.568	3=somewhat disagree
SK=	-3.417	3.821	-2.540	-3.299	-2.679	4=strongly disagree
K=	14.241	13.124	7.589	11.733	9.434	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Satisfied with self						0=strongly disagree 1=somewhat disagree
M=	3.552	3.580	3.673	3.400	3.549	2=not sure
SD=	.857	.883	.760	.990	.783	3=somewhat agree
SK=	-2.382	-2.571	-2.711	-1.947	-2.644	4=strongly agree
K=	5.645	6.734	7.092	3.315	9.053	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
Useless at times						0=strongly agree 1=somewhat agree
M=	3.000	3.280	3.385	2.340	2.980	2=not sure
SD=	1.425	1.213	1.191	1.636	1.421	3=somewhat disagree
SK=	-1.037	-1.426	-1.962	-.140	-1.139	4=strongly disagree
K=	-.577	.472	2.614	-1.802	-.245	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Wish more respect						0=strongly agree 1=somewhat agree
M=	3.379	3.600	3.308	3.260	3.353	2=not sure
SD=	1.164	.969	1.229	1.382	1.036	3=somewhat disagree
SK=	-1.824	-2.468	-1.610	-1.649	-1.780	4=strongly disagree
K=	1.984	5.173	1.125	1.104	2.400	
(MD)=	(0)	(0)	(0)	(0)	(0)	
No good at all						0=strongly agree 1=somewhat agree
M=	3.626	3.800	3.538	3.380	3.784	2=not sure
SD=	.948	.670	.979	1.260	.730	3=somewhat disagree
SK=	-2.532	-3.561	-2.065	-1.726	-4.138	4=strongly disagree
K=	5.107	12.178	2.842	1.306	18.026	
(MD)=	(0)	(0)	(0)	(0)	(0)	
ATTITUDES						
Attitudes toward drinking						3-19
Good things about drinking						0=strongly disagree 1=somewhat disagree
M=	.916	.560	1.385	.580	1.118	2=not sure
SD=	1.367	1.163	1.510	1.162	1.437	3=somewhat agree
SK=	1.139	1.995	.443	1.952	.880	4=strongly agree
K=	-.339	2.615	-1.554	2.491	-.841	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Drinking helps relax						0=strongly disagree 1=somewhat disagree
M=	1.635	1.240	2.192	1.420	1.667	2=not sure
SD=	1.517	1.379	1.496	1.430	1.627	3=somewhat agree
SK=	.138	.473	-.342	.255	.128	4=strongly agree
K=	-1.642	-1.534	-1.431	-1.656	-1.777	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Bad for health						0=strongly agree 1=somewhat agree
M=	.207	.180	.231	.160	.255	2=not sure
SD=	.854	.800	.942	.792	.891	3=somewhat disagree
SK=	4.117	4.636	3.908	4.841	3.703	4=strongly disagree
K=	15.418	20.789	13.799	22.331	12.956	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Makes more sociable						0=strongly disagree 1=somewhat disagree
M=	1.251	1.020	1.173	1.120	1.686	2=not sure
SD=	1.415	1.363	1.396	1.350	1.490	3=somewhat agree
SK=	.617	.920	.757	.759	.151	4=strongly agree
K=	-1.216	-.797	-1.020	-.996	-1.559	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Nice to help celebrate						0=strongly disagree 1=somewhat disagree
M=	1.202	.900	1.346	1.060	1.490	2=not sure
SD=	1.477	1.313	1.532	1.476	1.541	3=somewhat agree
SK=	.689	.924	.541	.923	.446	4=strongly agree
K=	-1.213	-1.057	-1.445	-.867	-1.433	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
Moderate bad for health						0=strongly agree 1=somewhat agree
M=	1.315	1.100	1.558	1.060	1.529	2=not sure
SD=	1.538	1.542	1.526	1.449	1.604	3=somewhat disagree
SK=	.662	.939	.420	1.108	.368	4=strongly disagree
K=	-1.197	-.854	-1.393	-.287	-1.569	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Helps when worried						0=strongly disagree 1=somewhat disagree
M=	.384	.060	.385	.460	.627	2=not sure
SD=	.890	.240	.889	1.014	1.076	3=somewhat agree
SK=	2.567	3.821	2.627	2.374	1.709	4=strongly agree
K=	6.051	13.124	6.695	5.092	1.858	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Is a sin						0=strongly agree 1=somewhat agree
M=	1.419	1.020	1.904	1.160	1.569	2=not sure
SD=	1.604	1.301	1.829	1.517	1.603	3=somewhat disagree
SK=	.560	1.003	.067	.851	.386	4=strongly disagree
K=	-1.363	-.227	-1.904	-.912	-1.535	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Improves appetite						0=strongly disagree 1=somewhat disagree
M=	1.768	1.360	1.981	1.640	2.078	2=not sure
SD=	1.428	1.439	1.350	1.382	1.468	3=somewhat agree
SK=	-.007	.399	-.212	.108	-.299	4=strongly agree
K=	-1.416	-1.476	-1.229	-1.232	-1.330	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Makes driving unsafe						0=strongly agree 1=somewhat agree
M=	.409	.240	.365	.460	.569	2=not sure
SD=	1.008	.657	.908	1.164	1.204	3=somewhat disagree
SK=	2.686	3.313	3.114	2.566	2.049	4=strongly disagree
K=	6.183	11.483	9.764	5.243	2.815	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Polite thing to do						0=strongly disagree 1=somewhat disagree
M=	.783	.360	.769	.760	1.235	2=not sure
SD=	1.260	.921	1.198	1.205	1.518	3=somewhat agree
SK=	1.422	2.802	1.462	1.287	.834	4=strongly agree
K=	.602	7.178	.905	.168	-.912	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Never drink alone						0=strongly agree 1=somewhat agree
M=	1.291	1.220	1.212	1.360	1.373	2=not sure
SD=	1.567	1.475	1.637	1.575	1.612	3=somewhat disagree
SK=	.764	.876	.873	.743	.642	4=strongly disagree
K=	-1.037	-.688	-1.000	-1.017	-1.294	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Is fun						0=strongly disagree 1=somewhat disagree
M=	.823	.460	1.288	.720	.804	2=not sure
SD=	1.238	.930	1.437	1.179	1.184	3=somewhat agree
SK=	1.243	1.942	.702	1.354	1.225	4=strongly agree
K=	.142	2.516	-1.028	.398	.125	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Never drink at all						0=strongly agree 1=somewhat agree
M=	1.300	1.020	1.788	.900	1.471	2=not sure
SD=	1.651	1.518	1.829	1.403	1.701	3=somewhat disagree
SK=	.703	1.058	.186	1.246	.534	4=strongly disagree
K=	-1.283	-.577	-1.873	-.052	-1.543	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
More harm than good						0=strongly agree 1=somewhat agree
M=	.433	.300	.750	.100	.569	2=not sure
SD=	1.000	.735	1.281	.580	1.118	3=somewhat disagree
SK=	2.527	2.662	1.653	6.528	2.189	4=strongly disagree
K=	5.503	6.628	1.412	44.006	3.940	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Too much is okay						0=strongly disagree 1=somewhat disagree
M=	.187	.140	.173	.200	.235	2=not sure
SD=	.671	.606	.706	.728	.651	3=somewhat agree
SK=	4.533	5.652	4.602	4.290	4.259	4=strongly disagree
K=	21.586	34.955	21.571	19.034	22.425	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Too much is never okay						0=strongly agree 1=somewhat agree
M=	.261	.200	.327	.340	.176	2=not sure
SD=	.921	.808	1.024	1.099	.713	3=somewhat disagree
SK=	3.611	4.447	3.170	3.114	4.554	4=strongly disagree
K=	11.656	19.411	8.828	8.155	21.104	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Predisposition to self medicate						20-29
Medicate when symptoms begin						0=strongly disagree 1=somewhat disagree
M=	.887	.360	.635	1.540	1.020	2=not sure
SD=	1.343	.875	1.237	1.541	1.364	3=somewhat agree
SK=	1.249	2.828	1.843	.340	1.096	4=strongly agree
K=	.022	7.887	1.971	-1.572	-.226	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Take more						0=strongly disagree 1=somewhat disagree
M=	.438	.220	.346	.520	.667	2=not sure
SD=	.990	.815	.837	1.129	1.108	3=somewhat agree
SK=	2.491	3.802	3.010	2.296	1.811	4=strongly agree
K=	5.329	13.718	9.348	4.235	2.433	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Stop taking						0=strongly disagree 1=somewhat disagree
M=	2.517	2.500	2.500	2.260	2.451	2=not sure
SD=	1.660	1.669	1.709	1.640	1.665	3=somewhat agree
SK=	-.519	-.521	-.515	-.627	-.465	4=strongly agree
K=	-1.473	-1.477	-1.554	-1.374	-1.546	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Save medicine						0=strongly disagree 1=somewhat disagree
M=	.768	.360	.712	.740	1.255	2=not sure
SD=	1.379	.942	1.319	1.352	1.683	3=somewhat agree
SK=	1.511	2.709	1.574	1.683	.785	4=strongly agree
K=	.623	6.449	.847	1.331	-1.228	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Share						0=strongly disagree 1=somewhat disagree
M=	.172	.020	.192	.200	.275	2=not sure
SD=	.714	.141	.742	.808	.896	3=somewhat agree
SK=	4.598	7.071	4.165	4.447	3.583	4=strongly agree
K=	20.815	50.000	17.448	19.411	12.248	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
OTC not strong						0=strongly disagree 1=somewhat disagree
M=	.724	.400	.500	1.140	.863	2=not sure
SD=	1.236	.881	1.146	1.485	1.249	3=somewhat agree
SK=	1.588	2.652	2.153	.919	1.359	4=strongly agree
K=	1.159	7.083	3.183	-.720	.663	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Prevents health problems						0=strongly disagree 1=somewhat disagree
M=	.724	.302	.500	.840	1.235	2=not sure
SD=	1.291	.913	1.163	1.346	1.505	3=somewhat agree
SK=	1.573	2.988	2.255	1.298	.828	4=strongly agree
K=	.960	8.051	3.747	.125	.870	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Increase amount						0=strongly disagree 1=somewhat disagree
M=	.064	.000	.019	.120	.118	2=not sure
SD=	.346	.000	.139	.328	.588	3=somewhat agree
SK=	8.252	.000	7.211	2.412	6.121	4=strongly agree
K=	84.922	.000	52.000	3.974	39.866	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Not sure take more						0=strongly disagree 1=somewhat disagree
M=	.079	.040	.038	.000	.235	2=not sure
SD=	.471	.198	.194	.000	.885	3=somewhat agree
SK=	7.163	4.841	4.944	.000	3.832	4=strongly agree
K=	54.057	22.331	23.338	.000	13.733	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Old need more						0=strongly disagree 1=somewhat disagree
M=	1.488	.980	1.231	1.820	1.922	2=not sure
SD=	1.520	1.332	1.554	1.535	1.481	3=somewhat agree
SK=	.391	.955	.706	.104	-.052	4=strongly agree
K=	-1.454	-.650	-1.226	-1.549	-1.523	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Skepticism toward doctors						265-267
Doubts about Dr.						0=strongly disagree 1=somewhat disagree
M=	2.520	2.780	2.481	2.440	2.380	2= not sure
SD=	1.401	1.418	1.379	1.473	1.338	3=somewhat agree
SK=	-.546	-.934	-.612	-.416	-.318	4=strongly agree
K=	-1.087	-.538	-.898	-1.288	-1.293	
(MD)=	(1)	(0)	(0)	(0)	(1)	
Demand details						0=strongly disagree 1=somewhat disagree
M=	3.203	3.540	3.231	2.820	3.220	2=not sure
SD=	1.207	.952	1.231	1.380	1.148	3=somewhat agree
SK=	-1.410	-2.336	-1.577	-.730	-1.548	4=strongly agree
K=	.708	4.944	1.280	-.984	1.443	
(MD)=	(1)	(0)	(0)	(0)	(1)	
Trying different Drs.						0=strongly disagree 1=somewhat disagree
M=	2.202	2.580	2.115	2.160	1.961	2=not sure
SD=	1.520	1.486	1.605	1.530	1.428	3=somewhat agree
SK=	-.193	-.823	-.047	-.067	.071	4=strongly agree
K=	-1.542	-.847	-1.688	-1.638	-1.460	
(MD)=	(0)	(0)	(0)	(0)	(0)	

	Total Sample	Middle-Aged Women	Middle-Aged Men	Older Women	Older Men	
ANXIETY						
Psychophysiological symptoms of anxiety						98-111
Lack enthusiasm						0=not often or never 1=sometimes 2=frequently
M=	.665	.580	.635	.760	.686	
SD=	.722	.673	.658	.797	.761	
SK=	.603	.744	.553	.466	.606	
K=	-.876	-.506	-.629	-1.264	-1.006	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Poor appetite						0=not often or never 1=sometimes 2=frequently
M=	.276	.160	.192	.400	.353	
SD=	.608	.468	.487	.728	.688	
SK=	2.052	3.043	2.595	1.518	1.710	
K=	2.841	8.830	6.244	.707	1.430	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Feel lonely						0=not often or never 1=sometimes 2=frequently
M=	.281	.160	.231	.460	.275	
SD=	.550	.422	.469	.676	.568	
SK=	1.842	2.721	1.892	1.181	1.999	
K=	2.449	7.353	2.917	.186	3.082	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Feel bored						0=not often or never 1=sometimes 2=frequently
M=	.296	.100	.327	.420	.333	
SD=	.537	.303	.550	.609	.589	
SK=	1.649	2.750	1.473	1.165	1.609	
K=	1.828	5.792	1.329	.391	1.648	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Trouble sleeping						0=not often or never 1=sometimes 2=frequently
M=	.463	.300	.462	.700	.392	
SD=	.712	.580	.727	.789	.695	
SK=	1.211	1.828	1.255	.597	1.519	
K=	.022	2.407	.111	-1.128	.875	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Feel like crying						0=not often or never 1=sometimes 2=frequently
M=	.335	.300	.308	.480	.255	
SD=	.585	.544	.612	.646	.523	
SK=	1.565	1.664	1.861	1.021	1.990	
K=	1.414	1.982	2.333	-.009	3.280	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Feel Blue						0=not often or never 1=sometimes 2=frequently
M=	.320	.220	.269	.420	.373	
SD=	.537	.418	.528	.609	.564	
SK=	1.437	1.394	1.866	1.165	1.224	
K=	1.144	-.061	2.767	.391	.594	
(MD)=	(0)	(0)	(0)	(0)	(0)	

Feel low energy						0=not often or never 1=sometimes 2=frequently
M=	.818	.680	.692	1.100	.804	
SD=	.725	.683	.701	.707	.749	
SK=	.293	.507	.512	-.144	.341	
K=	-1.057	-.744	-.817	-.934	-1.120	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Hopeless about future						0=not often or never 1=sometimes 2=frequently
M=	.277	.100	.096	.380	.333	
SD=	.525	.303	.358	.697	.589	
SK=	2.282	2.750	4.048	1.581	1.609	
K=	4.275	5.792	17.258	1.032	1.648	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Worry						0=not often or never 1=sometimes 2=frequently
M=	.744	.840	.673	.940	.529	
SD=	.786	.766	.760	.867	.703	
SK=	.487	.284	.637	.119	.971	
K=	-1.219	-1.219	-.972	-1.678	-.311	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Feel weak						0=not often or never 1=sometimes 2=frequently
M=	.389	.240	.192	.720	.412	
SD=	.668	.555	.445	.809	.698	
SK=	1.467	2.285	2.279	.564	1.430	
K=	.783	4.299	4.805	-1.237	.641	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Headaches						0=not often or never 1=sometimes 2=frequently
M=	.246	.240	.231	.460	.059	
SD=	.553	.555	.546	.706	.238	
SK=	2.174	2.285	2.351	1.235	3.865	
K=	3.654	4.299	4.634	.166	13.462	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Difficult keeping balance						0=not often or never 1=sometimes 2=frequently
M=	.296	.140	.192	.660	.196	
SD=	.590	.405	.487	.772	.491	
SK=	1.863	3.048	2.595	.682	2.561	
K=	2.317	9.483	6.244	-.977	6.049	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Heart pounding						0=not often or never 1=sometimes 2=frequently
M=	.399	.300	.250	.540	.510	
SD=	.692	.647	.590	.734	.758	
SK=	1.455	1.980	2.272	.984	1.112	
K=	.643	2.512	3.965	-.421	-.305	
(MD)=	(0)	(0)	(0)	(0)	(0)	

TABLE 3. FREQUENCY OF USE OF ALCOHOL AND PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS FOR THE TOTAL SAMPLE AND FOUR SUBSAMPLES

Alcohol Categories	Total Sample	Middle-Aged Women	Older Women	Middle-Aged Men	Older Men
Never use	52.2%	54.0%	72.0%	32.7%	51.0%
Less than once a month	12.8	16.0	14.0	9.6	11.8
About once a month	7.9	6.0	6.0	15.4	3.9
Two or three times a month	8.4	12.0	2.0	11.5	7.8
Once or twice a week	8.4	6.0	4.0	15.4	7.8
Three or four times a week	3.9	6.0	0.0	5.4	3.9
Nearly every Day	.5	0.0	2.0	1.9	
Once a day	4.9	0.0	0.0	7.7	9.8
Two times a day	.5	0.0	0.0	0.0	2.0
Three or more times a day	.5	0.0	0.0	0.0	2.0
	100.00 (N=203)	100.00 (N=50)	100.00 (N=50)	100.0 (N=52)	100.00 (N=51)

TABLE 4. ITEMS AND WEIGHTS IN THE GERIATRIC SCALE OF RECENT LIFE EVENTS

	yes	no	weight
Did you have a minor illness?	1	0	27
Did you have a loss of hearing/vision?	1	0	67
Did you have difficulty walking?	1	0	53
Did you get a divorce?	1	0	57
Were you separated from your spouse?	1	0	57
Was a family member ill?	1	0	54
Did you gain a new family member?	1	0	45
Did a close friend die?	1	0	47
Was there a change in number of family get-togethers?	1	0	50
Did any family members have an outstanding personal achievement?	1	0	45
Did you relinquish financial responsibility?	1	0	59
Did you have financial difficulty?	1	0	59
Did you change work hours/conditions?	1	0	38
Did you change residence?	1	0	52
Did you sell major possessions?	1	0	49
Did you have a personal achievement?	1	0	44
Did you reduce recreation?	1	0	47
Was your spouse unfaithful?	1	0	68
Were you fired from a job?	1	0	57
Did you lose a valuable object?	1	0	45
Was a child married?	1	0	43
Did you get a large loan?	1	0	51
Were you involved in a minor legal violation?	1	0	31
Did you have trouble with neighbors?	1	0	41
Did you have trouble with Social Security?	1	0	54
Did you experience age discrimination?	1	0	53
Did you have a major illness?	1	0	65
Did you change sleep habits?	1	0	46
Did you change eating habits?	1	0	45
Did you go through menopause?	1	0	46
Did a spouse die?	1	0	79
Were you married?	1	0	64
Did you have a marital reconciliation?	1	0	47
Did you have more arguments with your spouse?	1	0	42
Did you have fewer arguments with your spouse?	1	0	35
Did a family member die?	1	0	66
Did a family member's health improve?	1	0	66
Did you have trouble with children?	1	0	57
Were you a victim of a crime?	1	0	73
Did your financial state improve?	1	0	59
Did you retire?	1	0	57
Did you decrease church activity?	1	0	50
Did you increase church activity?	1	0	50
Did you experience more recreation?	1	0	44
Did you travel or take a vacation?	1	0	44
Did you stop driving?	1	0	68

TABLE 4. ITEMS AND WEIGHTS IN THE GERIATRIC SCALE OF RECENT LIFE EVENTS - continued

	yes	no	weight
Did you go to jail?	1	0	79
Were you unemployed one month?	1	0	43
Were you demoted?	1	0	56
Were you promoted?	1	0	64
Did a grandchild get married?	1	0	26
Did you have an argument with your boss or a co-worker	1	0	43
Did you move to a home for the aged?	1	0	75
Did you feel your family and friends turn away?	1	0	68

TABLE 5

ROTATED FACTOR MATRIX

FOR INCOME VARIABLES

Variables		Factor Loadings: Factor 1	Factor 2
VAR071	Afford home	.33242	.29560
VAR072	Afford car	.45911	.25494
VAR073	Afford furniture	.59950	.36703
VAR074	Afford food	.16728	.74283
VAR075	Afford medical care	.30724	.65760
VAR076	Afford clothing	.44568	.63289
VAR077	Afford activities	.65092	.42035
VAR078	Difficulty paying bills	.65274	.28583
VAR079	End month money	.70249	.27974
VAR080	Income satisfy needs	.57188	.10870

TABLE 6

FACTOR MATRIX FOR INCOME VARIABLES
WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR071	Afford home	.44744
VAR072	Afford car	.52072
VAR073	Afford furniture	.70295
VAR074	Afford food	.57036
VAR075	Afford medical care	.63805
VAR076	Afford clothing	.74163
VAR077	Afford activities	.77573
VAR078	Difficulty paying bills	.68214
VAR079	End month money	.71296
VAR080	Income satisfy needs	.50759

TABLE 7

MEANS, STANDARD DEVIATIONS, MEASURES OF SKEWNESS AND MEASURES OF KURTOSIS CREATED VARIABLES FOR TOTAL SAMPLE AND FOUR SUBSAMPLES

VARIABLES	RESPONDENTS					RANGE
	Total Sample (N=203)	Middle-Aged Women (N=50)	Middle-Aged Men (N=52)	Older Women (N=50)	Older Men (N=51)	
Economic Strain						
M=	.000	.171	-.118	.158	-.193	-1.041 to
SD=	.941	1.054	.714	1.057	.887	3.172
SK=	.969	.847	.530	.753	1.313	
K=	.452	-.014	.430	-.038	1.264	
(MD)=	(3)	(2)	(0)	(1)	(0)	
Health						
M=	.000	.260	.183	-.375	-.074	-2.213 to
SD=	.917	.910	.770	.964	.906	1.195
SK=	-.593	-1.140	-.671	-.026	-.601	
K=	-.388	.706	.380	-.734	-.348	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Social Integration, family						
M=	.000	-.035	.058	.016	-.039	-5.283 to
SD=	.907	.955	.732	.961	.986	.535
SK=	-3.102	-3.083	-2.557	-4.047	-2.514	
K=	11.238	11.205	6.879	19.863	6.002	
(MD)=	(1)	(0)	(0)	(1)	(0)	
Social Integration, friends						
M=	.000	.024	.078	.109	-.209	-2.468 to
SD=	.838	.825	.847	.671	.966	.978
SK=	-.646	-.595	-.720	-.564	-.444	
K=	-.538	-.719	-.542	-.698	-.877	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Anomia						
M=	.000	-.078	-.131	.183	.031	-1.337 to
SD=	.951	.912	.969	.931	.985	1.819
SK=	.359	.442	.540	.196	.323	
K=	-1.136	-.926	-1.003	-1.180	-1.274	
(MD)=	(0)	(0)	(0)	(0)	(0)	

Political Power, lessness						
M=	.000	-.078	-.131	.183	.031	-1.337 to
SD=	.951	.912	.969	.931	.985	1.819
SK=	.359	.442	.540	.196	.323	
K=	-1.136	-.926	-1.003	-1.180	-1.274	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Self-esteem, positive items						
M=	.000	.177	.110	-.194	-.096	-6.078 to
SD=	.879	.492	.656	1.101	1.081	.455
SK=	-3.805	-1.956	-2.337	-3.295	-3.778	
K=	19.770	2.872	5.388	12.913	18.510	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Self-esteem, negative items						
M=	.000	.209	-.017	-.275	.083	-3.712 to
SD=	.880	.618	.962	1.069	.752	.523
SK=	-2.186	-2.876	-1.832	-1.611	-3.090	
K=	4.242	9.370	2.136	1.655	11.307	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Psychological symptoms of anxiety						
M=	.000	-.299	-.067	.276	.091	-.683 to
SD=	.870	.505	.804	1.023	.970	3.369
SK=	1.556	1.605	1.288	1.049	1.643	
K=	2.116	1.969	.695	.311	2.563	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Psycho-physiological symptoms of anxiety						
M=	.000	-.236	-.266	.535	-.022	-.745 to
SD=	.888	.752	.601	1.056	.868	2.665
SK=	1.337	2.131	1.904	.423	1.397	
K=	.701	-.995	3.656	-1.212	1.167	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Attitudes toward drinking						
M=	.000	-.302	.285	-.193	.196	-1.076 to
SD=	.953	.847	1.012	.807	1.014	2.459
SK=	.709	1.158	.296	1.037	.448	
K=	-.716	.119	-1.373	.371	-.853	
(MD)=	(0)	(0)	(0)	(0)	(0)	

Predisposition to self-medicate						
M=	.000	-.350	-.154	.156	.347	-.682 to
SD=	.878	.363	.543	.781	1.338	6.987
SK=	3.799	1.502	1.269	1.426	3.257	
K=	22.627	1.833	1.046	2.803	12.717	
(MD)=	(0)	(0)	(0)	(0)	(0)	
Skepticism toward doctors						
M=	7.926		7.827	7.420	7.560	1.000 to
SD=	2.693		2.677	2.756	2.400	12.000
SK=	-.318		-.445	-.331	.084	
K=	-.717		-.448	-.634	-.567	
(MD)=	(1)	(0)	(0)	(0)	(1)	

TABLE 8

FACTOR MATRIX FOR HEALTH VARIABLES

Variables		Factor Loadings Factor 1
VAR037	Rate health	.88561
VAR038	Health problems in way	.71203
VAR039	Compared to others	.45195
VAR040	Compared to 5 years ago	.50692

TABLE 9

ROTATED FACTOR MATRIX

FOR SOCIAL INTEGRATION VARIABLES

Variables		Factor Loadings			
		Factor 1	Factor 2	Factor 3	Factor 4
VAR041	More friends than before	.06451	-.00901*	.57467*	.14839
VAR042	More lonely	.16019	.64783	.14915	.08847
VAR043	Happier to see friends more	.27100	.37076*	-.14892	-.03133
VAR044	No one to talk to	.23369	.44673*	.12493	.16045
VAR045	Lonely much of time	-.04346	.82442	.14124*	.07407
VAR046	Friends make life happy	.01254	.15321	.40589*	.35692
VAR047	All food friends wish	.31673*	.05848	.69423	.04939
VAR048	Family likes to have around	.45670*	.16073	.24317	.83992*
VAR049	Satisfied way family treats	.63526*	.22476	.25041	.30261
VAR050	Wish family pay more attention	.58561*	.33964	-.02150	-.01600
VAR051	Finest family	.40344	.04116	.34782	.09444
VAR052	Trys to boss around	.37507	.01938	.06189*	.03415
VAR053	More love than ever	.04613*	.13803	.57395	.03983
VAR054	Does not care	.41006	.09323	.12313	.19728

TABLE 10

FACTOR MATRIX FOR SOCIAL INTEGRATION WITH FAMILY VARIABLES WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings: Factor 1
VAR048	Family likes to have around	.75794
VAR049	Satisfied way family treats	.82539
VAR050	With family pay more attention	.49830
VAR051	Finest family	.51037
VAR052	Trys to boss around	.29734
VAR053	More love than ever	.24388
VAR054	Does not care	.47050

TABLE 11

FACTOR MATRIX FOR LONELINESS VARIABLES
WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR042	More lonely	.70299
VAR044	No one to talk to	.49991
VAR045	Lonely much of time	.79057

TABLE 12

FACTOR MATRIX FOR SOCIAL INTEGRATION
WITH FRIENDS VARIABLES WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR041	More friends than before	.62208
VAR046	Friends make life happy	.46266
VAR047	All good friends wish	.68702
VAR053	More love than ever	.59881

TABLE 13

ROTATED FACTOR MATRIX

FOR SOCIAL USEFULNESS VARIABLES

Variables		Factor Loadings	
		Factor 1	Factor 2
VAR030	I am useful	.34239	.50259
VAR031	Life is meaningless	.36669	.31486*
VAR032	Days are too short	.03321	.36775*
VAR033	No point in living	.15184	.52596*
VAR034	Busy and useful	.27713	.75906
VAR035	Most useful period	.39093	.21116
VAR036	Not very useful	.99842*	.04643

TABLE 14

FACTOR MATRIX FOR SOCIAL USEFULNESS VARIABLES
WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR030	I am useful	.66455
VAR031	Life is meaningless	.49546
VAR032	Days are too short	.29398
VAR033	No point in living	.51305
VAR034	Busy and useful	.71182
VAR035	Most useful period	.41653
VAR036	Not very useful	.52586

TABLE 15

ROTATED FACTOR MATRIX
FOR ANOMIE VARIABLES

Variables		Factor Loadings: Factor 1	Factor 2
VAR055	Public off not interested	.52748	.07627
VAR056	Not know whom to count on	.57724	.05633
VAR057	Live for today	.42572	.34472
VAR058	Condition getting worse	.62853	.26624
VAR059	Not fair bring child	.36868	.54461
VAR060	Most not care next fellow	.51108	.32885
VAR061	Money most important	.01667	.58124
VAR062	Is anything worthwhile	.15281	.62259
VAR063	No right or wrong ways	.27969	.51801

TABLE 16

FACTOR MATRIX FOR ANOMIE VARIABLES
WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR055	Public off not interested	.42035
VAR056	Not know whom to count on	.43828
VAR057	Live for today	.55700
VAR058	Condition getting worse	.63218
VAR059	Not fair bring child	.64629
VAR060	Most not care next fellow	.60046
VAR061	Money most important	.39129
VAR062	Is anything worthwhile	.51442
VAR063	No right or wrong ways	.55726

TABLE 17

FACTOR MATRIX FOR POLITICAL
POWERLESSNESS VARIABLES

Variables		Factor Loadings Factor 1
VAR064	No say about government	.79018
VAR065	Politics so complicated	.42871
VAR066	Public off not care	.88569
VAR067	Government not care	.79844
VAR068	Protecting personal interest	.56018
VAR069	Can influence decisions	.69466
VAR070	Can influence society	.65315

TABLE 18

ROTATED FACTOR MATRIX
FOR MASTERY VARIABLES

Variables		Factor Loadings Factor 1	Factor 2
VAR081	No way solve problems	.53249*	.17868
VAR082	Pushed around	.61883*	.04287
VAR083	Little control	.58868*	.18839
VAR084	Do anything	.36881	.42741
VAR085	Helpless dealing problems	.77235*	.11555
VAR086	Future depends on me	.06463	.76395*
VAR087	Little to change things	.59196*	.23037

TABLE 19

FACTOR MATRIX FOR MASTERY VARIABLES
WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR081	No way solve problems	.56570
VAR082	Pushed around	.59414
VAR083	Little control	.62571
VAR084	Do anything	.47599
VAR085	Helpless dealing problems	.75555
VAR086	Future depends on me	.27311
VAR087	Little to change things	.64233

TABLE 20

ROTATED FACTOR MATRIX
FOR SELF-ESTEEM VARIABLES

Variables		Factor 1	Factor 2	Factor 3
VAR088	Worth equal to others	.99497 *	-.07612	-.05699
VAR089	Have good qualities	.45318 *	.27102	.23372
VAR090	Am a failure	.03844	.25598 *	-.00223
VAR091	Do as well as others	.33308 *	.21624	.19315 *
VAR092	Not much proud of	.02095	-.04573	.30131
VAR093	Positive attitude	.58453 *	.17584	.30795
VAR094	Satisfied with self	.31038	.14452	.64208 *
VAR095	Useless at times	.22862	.58145 *	.19473
VAR096	Wish more respect	.07693	.61647 *	.02070
VAR097	No good at all	.04985	.86066 *	-.06987

TABLE 21

FACTOR MATRIX FOR POSITIVE SELF-ESTEEM VARIABLES
WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR088	Worth equal to others	.69478
VAR089	Have good qualities	.54815
VAR091	Do as well as others	.44108
VAR093	Positive attitude	.77194
VAR094	Satisfied with self	.49506

TABLE 22

FACTOR MATRIX FOR NEGATIVE SELF-ESTEEM
VARIABLES WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR090	Am a failure	.26389
VAR095	Useless at times	.60278
VAR096	Wish more respect	.65054
VAR097	No good at all	.82060

TABLE 23

ROTATED FACTOR MATRIX

FOR ANXIETY VARIABLES

Variables		Factor 1	Factor 2	Factor 3
VAR098	Lack enthusiasm	.32031*	.06653	.21446
VAR099	Poor appetite	.40996	.37808	.12163
VAR100	Feel lonely	.53899*	.20174	.05381
VAR101	Feel bored	.74287*	.05921	.10598
VAR102	Trouble sleeping	.25772	.32521	.24079
VAR103	Feel like crying	.37864	.39177	-.00886
VAR104	Feel blue	.66996*	.24713	.11317
VAR105	Feel low energy	.25598	.26163	.93007*
VAR106	Hopeless about future	.39594*	.12481	.19710
VAR107	Worry	.38825	.23943	.14830
VAR108	Feel weak	.27679	.69892*	.28054
VAR109	Headaches	.01743	.34618*	.05864
VAR110	Difficulty keeping balance	.20947	.64028*	.01033
VAR111	Heart pounding	.14186	.42771*	.14573

TABLE 24

FACTOR MATRIX FOR PSYCHOLOGICAL MEASURES

OF ANXIETY WITH A ONE-FACTOR SOLUTION

		Factor Loadings
Variables		Factor 1
VAR098	Lack enthusiasm	.35575
VAR100	Feel lonely	.56056
VAR101	Feel bored	.73795
VAR104	Feel blue	.71661
VAR106	Hopeless about future	.44909

TABLE 25

FACTOR MATRIX FOR PSYCHOPHYSIOLOGICAL MEASURES
OF ANXIETY WITH A ONE-FACTOR SOLUTION

		Factor Loadings
Variables		Factor 1
VAR108	Feel weak	.83297
VAR109	Headaches	.30174
VAR110	Difficulty keeping balance	.60849
VAR111	Heart pounding	.47212

TABLE 26

ROTATED FACTOR MATRIX
FOR ATTITUDES TOWARD DRINKING VARIABLES

Variables		Factor Loadings Factor 1	Factor 2
VAR003	Good things about drinking	.47027	.51848
VAR004	Drinking helps relax	.60105	.40467
VAR005	Bad for health	-.08943	.06114
VAR006	Makes more sociable	.63708*	.08363
VAR007	Nice to help celebrate	.71161	.40776
VAR008	Moderate bad for health	.23608	.68082*
VAR009	Helps when worried	.50389*	.08908
VAR010	Is a sin	.33113	.59424
VAR011	Improves appetite	.60135*	-.01843
VAR012	Makes driving unsafe	.07922	.37602*
VAR013	Polite thing to do	.52954*	.18657
VAR014	Never drink alone	.03115	.29544
VAR015	Is fun	.59792	.26487
VAR016	Never drink at all	.56041	.62161
VAR017	More harm than good	.32735	.42766
VAR018	Too much is OK	.24970	.18346
VAR019	Too much is never OK	-.04308	.19697

TABLE 27

FACTOR MATRIX FOR ATTITUDES TOWARD DRINKING VARIABLES WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR003	Good things about drinking	.69565
VAR004	Drinking helps relax	.72476
VAR006	Makes more sociable	.54066
VAR007	Nice to help celebrate	.81062
VAR008	Moderate bad for health	.59558
VAR009	Helps when worried	.44675
VAR010	Is a sin	.62254
VAR011	Improves appetite	.44714
VAR012	Makes driving unsafe	.29511
VAR013	Polite thing to do	.52953
VAR014	Never drink alone	.20747
VAR015	Is fun	.63069
VAR016	Never drink at all	.82195
VAR017	More harm than good	.52693
VAR018	Too much is OK	.30986

TABLE 28

ROTATED FACTOR MATRIX OF ATTITUDES
TOWARD SELF-MEDICATION VARIABLES

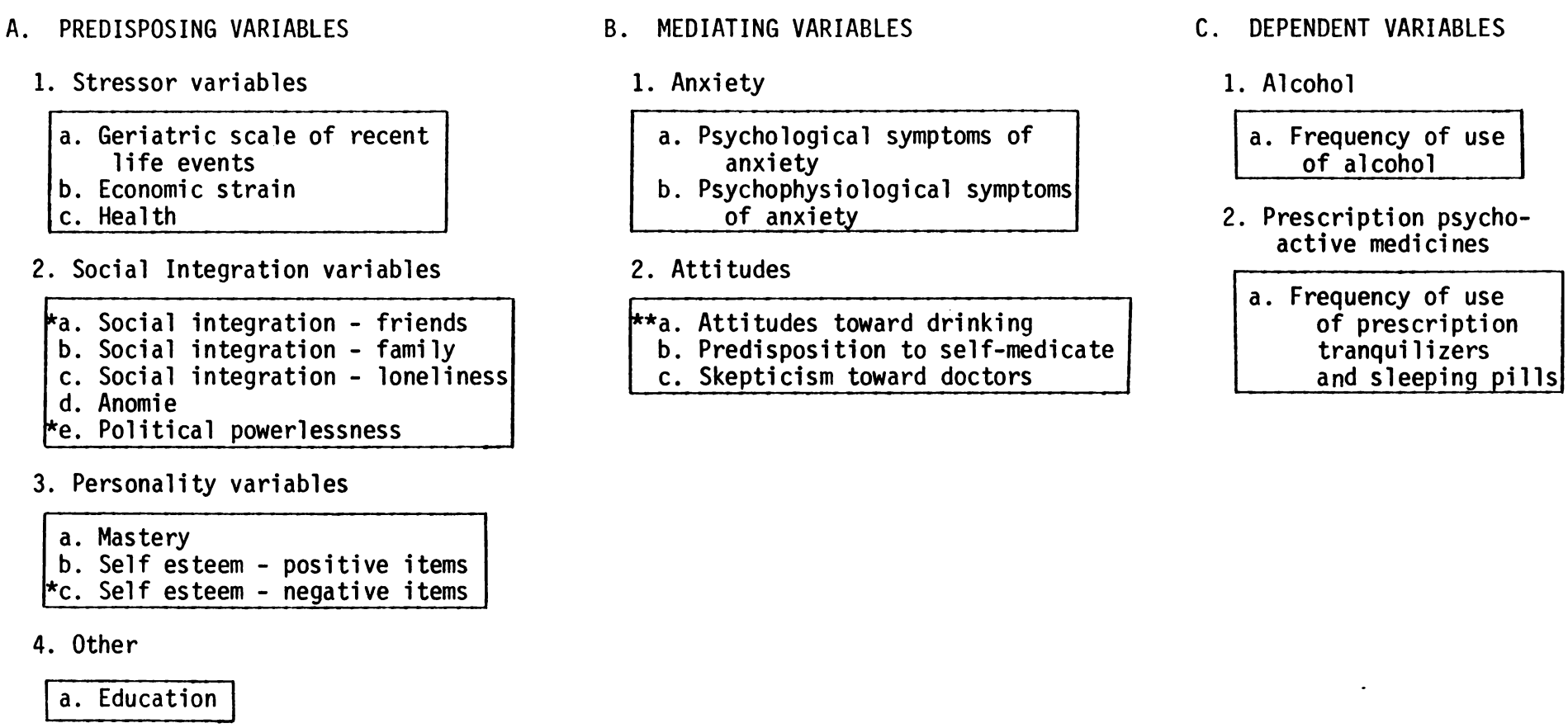
Variables		Factor Loadings		
		Factor 1	Factor 2	Factor 3
VAR020	Medicate when symptoms begin	.79948*	.12296	.00413
VAR021	Take more	.52682*	.26053	.17412
VAR022	Stop taking	.01520	.06797	.18564
VAR023	Saving medicine	.24324	.11416	.69652*
VAR024	Share	.10812	.36150	.47991
VAR025	OTC not strong	.38050	-.05031	.32589
VAR026	Prevents health problems	.35795	.12746	.38627
VAR027	Increase amount	.18646	.68752*	.14861
VAR028	Not sure take more	.15887	.75185*	.20465
VAR029	Old need more	.30360	.12344	.12849

TABLE 29

FACTOR MATRIX OF ATTITUDES TOWARD SELF-MEDICATION VARIABLES WITH A ONE-FACTOR SOLUTION

Variables		Factor Loadings Factor 1
VAR020	Medicate when symptoms begin	.49158
VAR021	Take more	.56005
VAR022	Stop taking	.14714
VAR023	Save medicine	.54714
VAR024	Share	.53522
VAR025	OTC not strong	.37971
VAR026	Prevents health problems	.50759
VAR027	Increase amount	.57876
VAR028	Not sure take more	.60629
VAR029	Old need more	.33387

FIGURE 1. VARIABLES INCLUDED IN THE ANALYSIS



*Variables dropped from regression analyses for all groups.

** Variable dropped from analyses for all groups except older women.

FIGURE 2. GENERAL CAUSAL MODEL

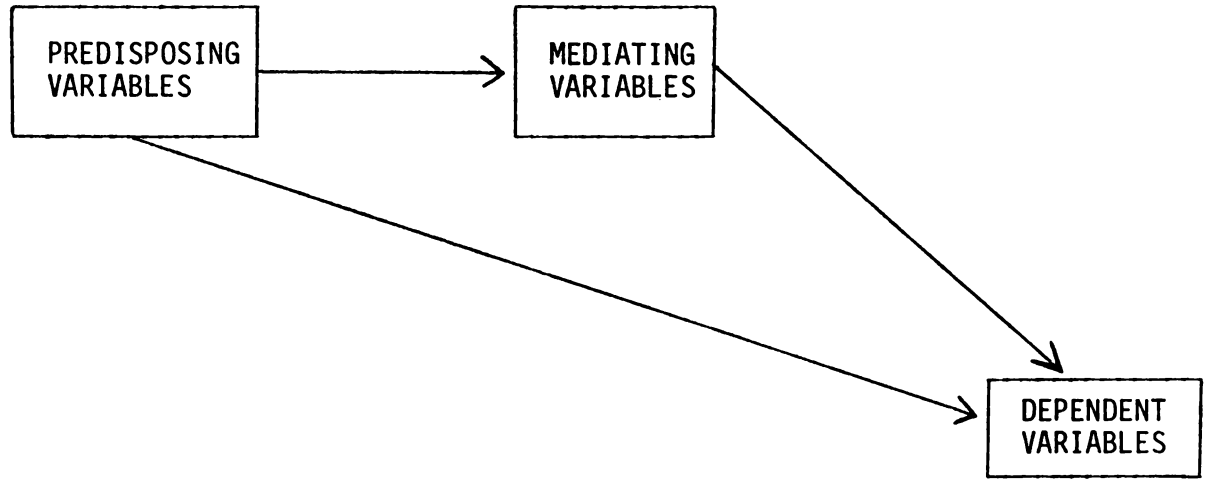


TABLE 30

CORRELATIONS OF ATTITUDES TOWARD DRINKING WITH THE FREQUENCY OF USE OF ALCOHOL

Sample	T
Total sample	.714*
Middle-aged women	.691*
Older women	.340*
Middle-aged men	.815*
Older men	.755*

*$p \leq .05$

TABLE 31

CORRELATIONS OF FREQUENCY OF USE OF ALCOHOL WITH FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS

Sample	r	
Total sample	.023	(p = .371)
Middle-aged women	-.134	(p = .177)
Older women	.173	(p = .115)
Middle-aged men	-.170	(p = .115)
Older men	.194	(p = .086)

TABLE 32

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING PREDICTOR VARIABLES ON THE MEDIATING VARIABLES AMONG ALL RESPONDENTS

A. Psychological symptoms of anxiety

Predictor Variables	Beta
Socially useful	-.35
Health	-.23
Economic stress	.18
R^2	(.31)

B. Psychophysiological symptoms of anxiety

Predictor Variables	Beta
Health	-.41
Socially useful	-.22
Geriatric scale of recent life events	.22
Education	-.20
R^2	(.47)

C. Predisposition to self-medication

Predictor Variables	Beta
Social integration - loneliness	-.43
Education	-.28
Geriatric scale of recent life events	.14
R^2	(.36)

D. Skepticism of doctors

Predictor Variables	Beta
Geriatric scale of recent life events	.15
R^2	(.02)

TABLE 33

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF PREDISPOSING PREDICTOR VARIABLES ON MEDIATING VARIABLES AMONG MIDDLE-AGED WOMEN

A. Psychological symptoms of anxiety

Predictor Variables	Beta
Economic stress	.60
Education	.43
Social integration-loneliness	-.27
R^2	(.40)

B. Psychophysiological symptoms of anxiety

Predictor Variables	Beta
Health	-.47
R^2	(.21)

C. Predisposition to self-medicate

Predictor Variables	Beta
None	

D. Skepticism toward doctors

Predictor Variables	Beta
None	

TABLE 34

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF PREDISPOSING PREDICTOR VARIABLES ON MEDIATING VARIABLES AMONG OLDER WOMEN

A. Psychological symptoms of anxiety

Predictor Variables	Beta
Socially useful	-.48
Health	-.30
R^2	(.48)

B. Psychophysiological symptoms of anxiety

Predictor Variables	Beta
Health	-.49
Geriatric scale of recent life events	.39
Education	-.25
R^2	(.59)

C. Predisposition to self-medicate

Predictor Variables	Beta
Social integration-loneliness	-.38
Economic stress	.38
R^2	(.36)

D. Skepticism toward doctors

Predictor Variables	Beta
Anomie	.47
R^2	(.20)

TABLE 35

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING PREDICTOR VARIABLES ON MEDIATING VARIABLES AMONG MIDDLE-AGED MEN

A. Psychological symptoms of anxiety

Predictor Variables	Beta
Health	-.32
R^2	(.09)

B. Psychophysiological symptoms of anxiety

Predictor Variables	Beta
Health	-.52
Geriatric scale of recent life events	.34
R^2	(.43)

C. Predisposition to self medicate

Predictor Variables	Beta
Social integration-loneliness	-.42
Socially useful	-.39
Geriatric scale of recent life events	.27
R^2	(.44)

D. Skepticism toward doctors

Predictor Variables	Beta
None	

TABLE 36

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING PREDICTOR VARIABLES ON THE MEDIATING VARIABLES AMONG OLDER MEN

A. Psychological symptoms of anxiety

Predictor Variables	Beta
Family	-.56
Economic stress	.31
R^2	(.44)

B. Psychophysiological symptoms of anxiety

Predictor Variables	Beta
Social integration-loneliness	-.40
Health	-.35
Social integration-family	-.27
R^2	(.50)

C. Predisposition to self medicate

Predictor Variables	Beta
Social integretion-loneliness	-.32
Education	-.33
Economic stress	.25
Geriatric scale of recent life events	.24
Social integration-family	.21
R^2	(.65)

D. Skepticism toward doctors

Predictor Variables	Beta
None	

TABLE 37

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF USE OF ALCOHOL AMONG ALL RESPONDENTS

Predictor Variables	Beta
Education	.28
Social integration-family	-.17
R^2	(.08)

TABLE 38

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF USE OF ALCOHOL AMONG MIDDLE-AGED WOMEN

Prediction variables	Beta
Socially useful	-.31
Psychophysiological symptoms of anxiety	-.29
Education	.27
R^2	(.19)

TABLE 39

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF USE OF ALCOHOL AMONG OLDER WOMEN

Predictor variables	Beta
Attitudes tword drinking	.42
Predisposition to self-medicate	-.30
R^2	(.16)

TABLE 40

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF USE OF ALCOHOL AMONG MIDDLE-AGED MEN

Predictor variables	Beta
Social integration-family	-.40
Education	.37
R^2	(.29)

TABLE 41

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF THE USE OF ALCOHOL AMONG OLDER MEN

Predictor Variables	Beta
Social intregration-Family	-.37
R^2	(.14)

TABLE 42

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS AMONG ALL RESPONDENTS

Predictor variables	Beta
Health	-.27
Geriatric scale of recent life events	.16
R^2	(.11)

TABLE 43

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS AMONG MIDDLE-AGED WOMEN

Predictor variables	Beta
Psychophysiological symptoms of anxiety	.43
Self-esteem positive items	-.32
Social intregretion-loneliness	.25
R^2	(.33)

TABLE 44

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS AMONG OLDER WOMEN

Predictor variables	Beta
Anomie	.47
Social integration-loneliness	-.40
Economic stress	-.51
Psychophysiological symptoms of anxiety	.31
R^2	(.41)

TABLE 45

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS AMONG MIDDLE-AGED MEN

Predictor variables	Beta
Useful	-.37
R^2	(.12)

TABLE 46

STANDARDIZED REGRESSION COEFFICIENTS SHOWING THE EFFECTS OF THE PREDISPOSING AND MEDIATING VARIABLES ON THE FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS AMONG OLDER MEN

Predictor variables	Beta
Geriatric scale of recent life events	.42
Health	-.40
Social intregration-family	.27
R^2	(.40)

FIGURE 3. CAUSAL MODEL OF FREQUENCY OF USE OF ALCOHOL AMONG ALL RESPONDENTS

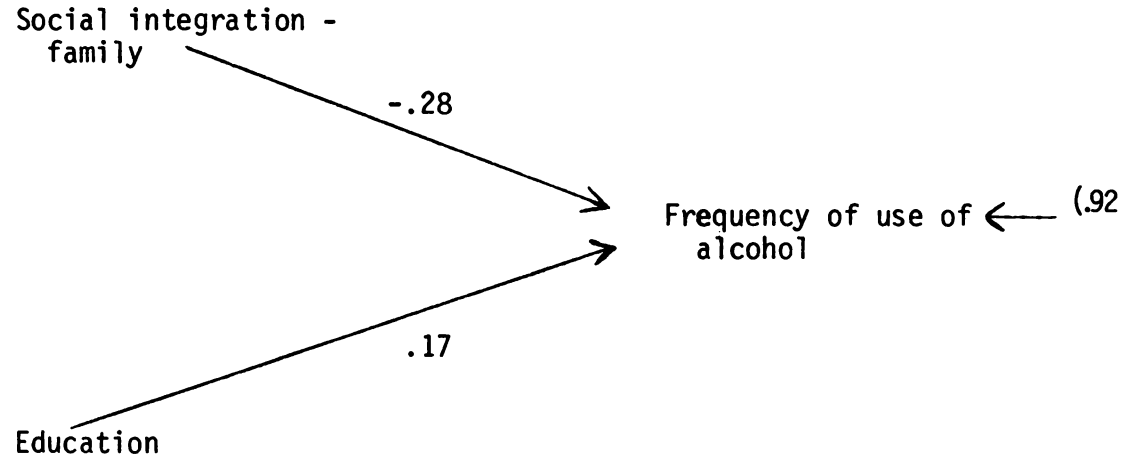


FIGURE 4. CAUSAL MODEL OF THE FREQUENCY OF USE OF ALCOHOL AMONG MIDDLE-AGED WOMEN

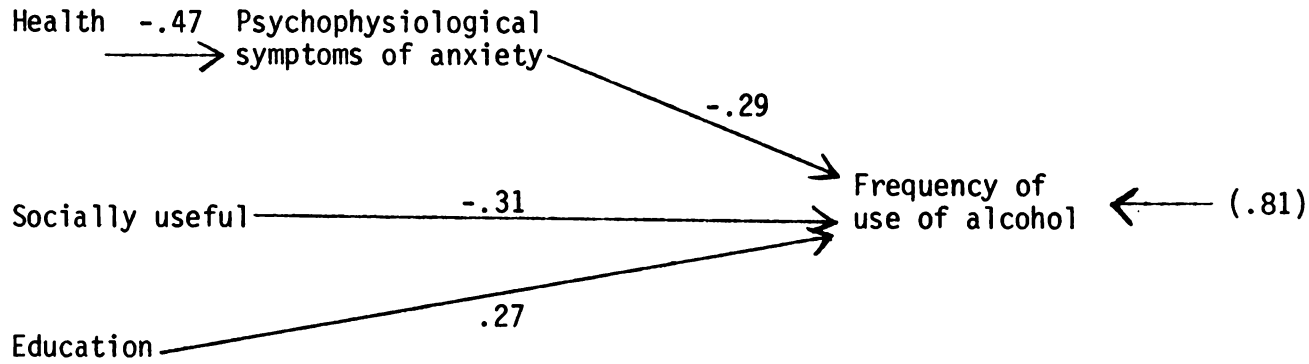


FIGURE 5. CAUSAL ANALYSIS OF FREQUENCY OF USE OF ALCOHOL AMONG OLDER WOMEN

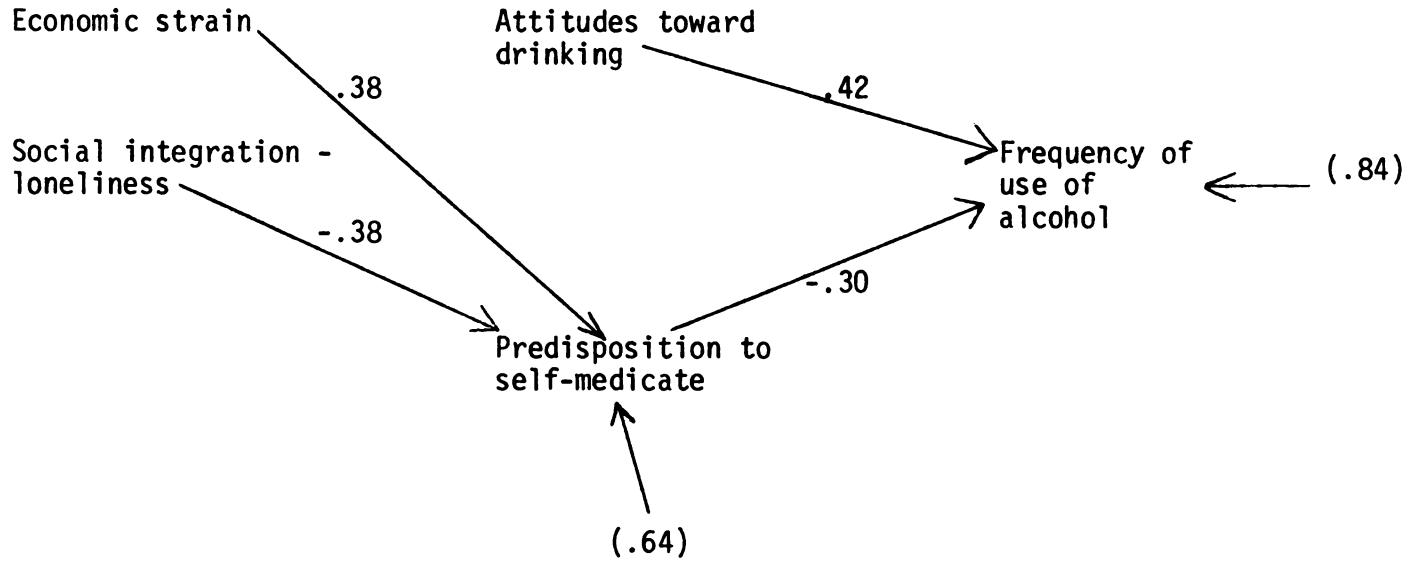


FIGURE 6. CAUSAL MODEL OF THE FREQUENCY OF ALCOHOL USE AMONG MIDDLE-AGED MEN

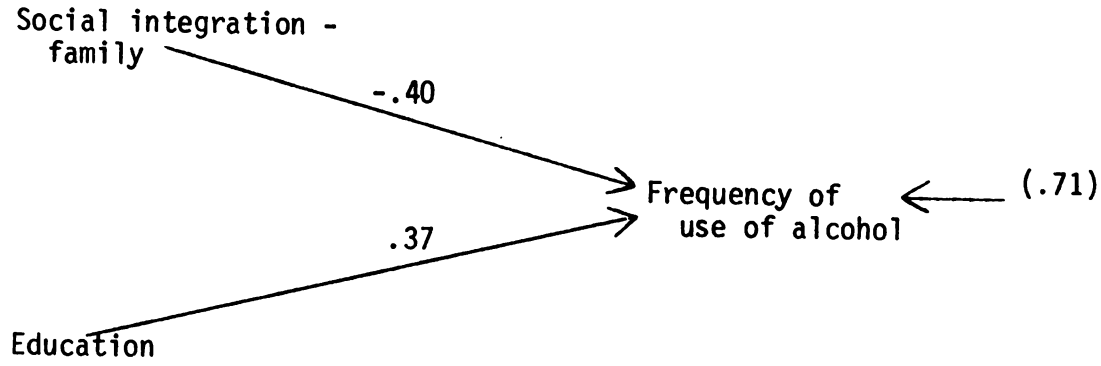


FIGURE 7. CAUSAL MODEL OF FREQUENCY OF USE OF ALCOHOL AMONG OLDER MEN

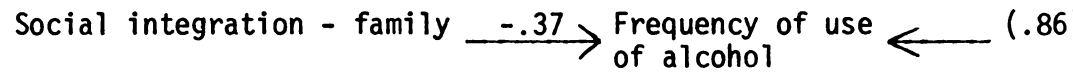


FIGURE 8. CAUSAL MODEL OF THE FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS AMONG ALL RESPONDENTS

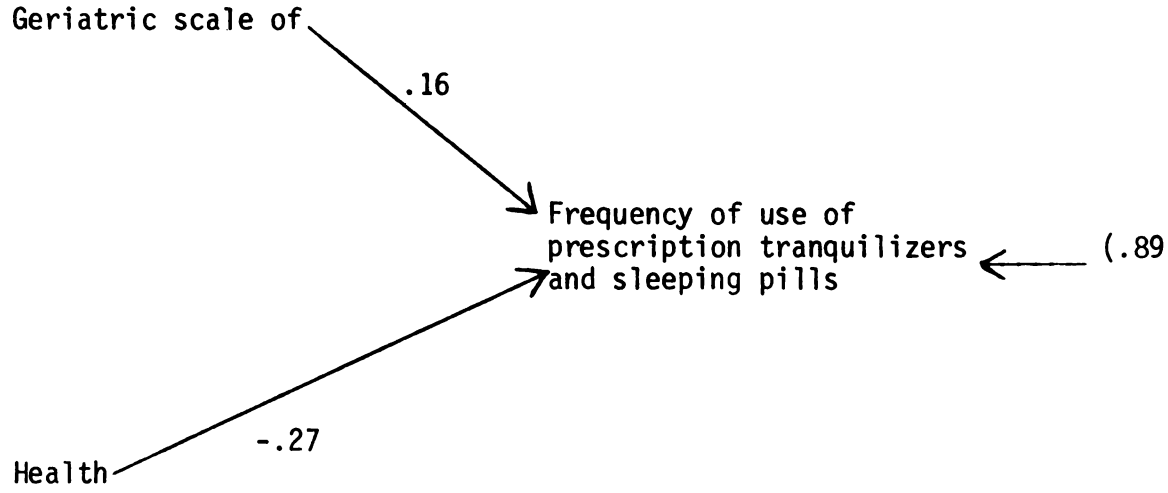


FIGURE 9. CAUSAL MODEL OF THE FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS AMONG MIDDLE-AGED WOMEN

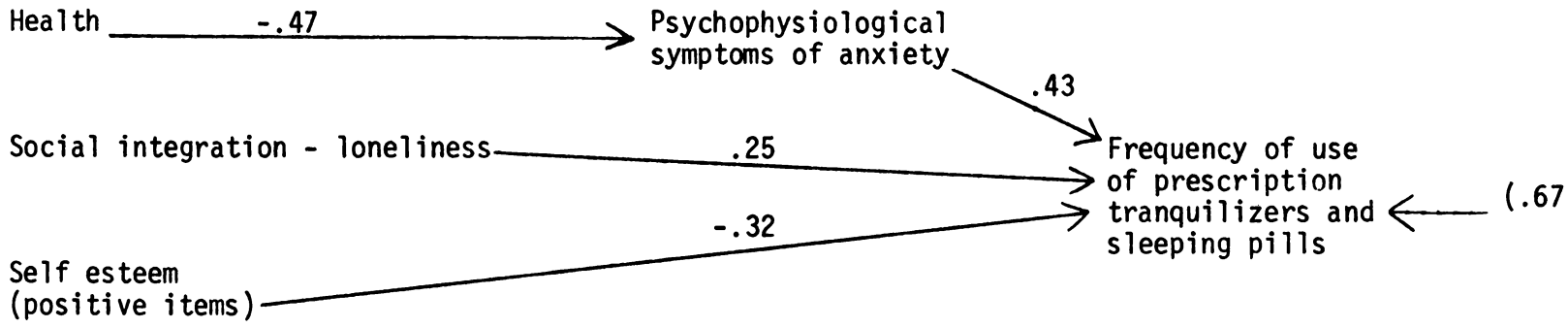


FIGURE 10. CAUSAL MODEL OF FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS AMONG OLDER WOMEN

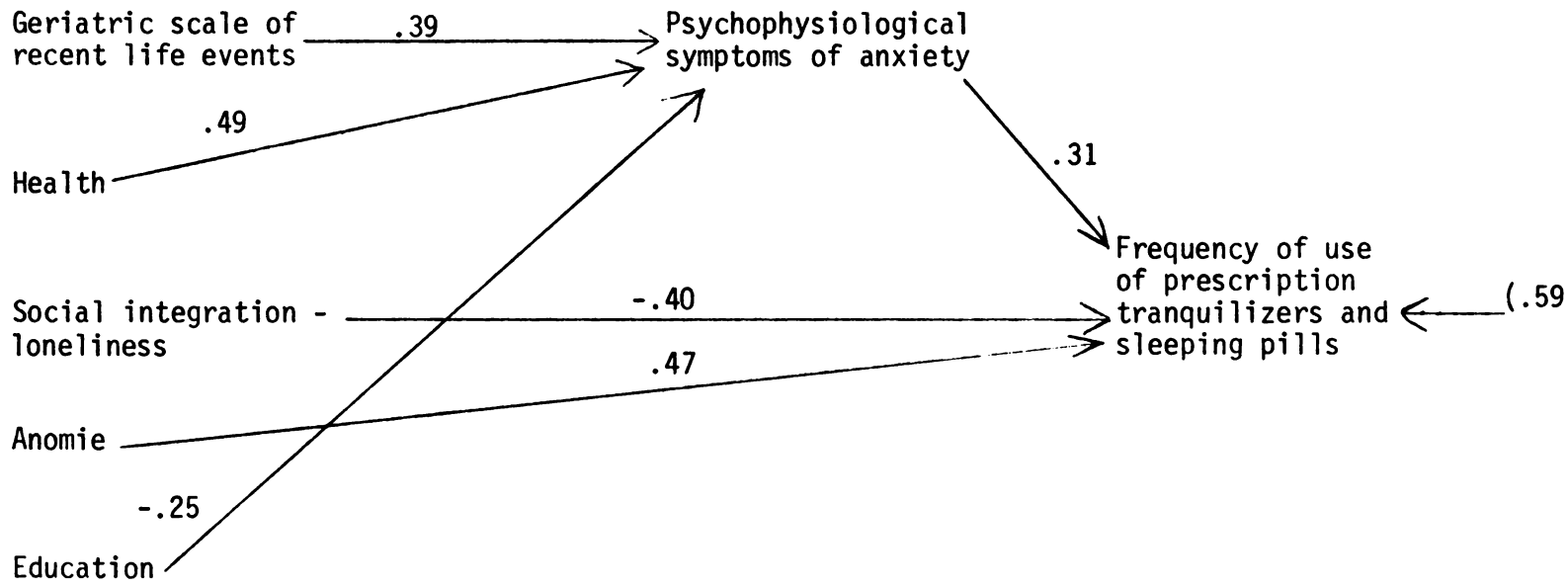


FIGURE 11. CAUSAL MODEL OF FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS AMONG MIDDLE-AGED MEN

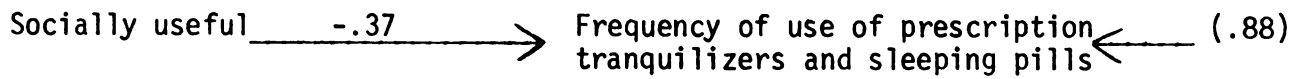
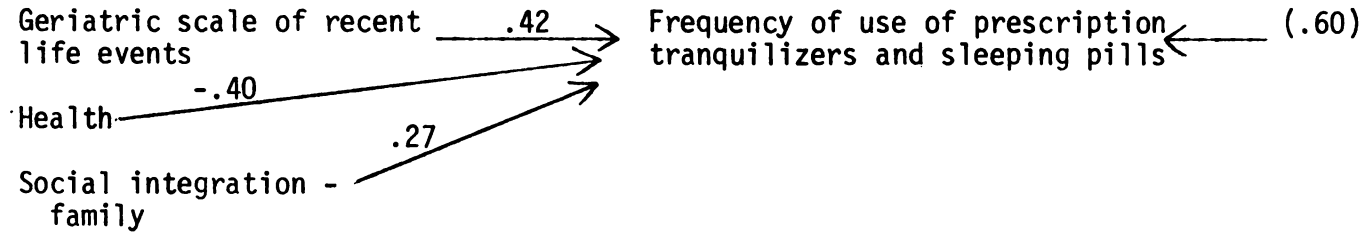


FIGURE 12. CAUSAL MODEL OF FREQUENCY OF USE OF PRESCRIPTION TRANQUILIZERS AND SLEEPING PILLS



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APPENDIX A

INTERVIEW QUESTIONNAIRE

QUESTIONNAIRE

FOR

ALCOHOL, TRANQUILIZER AND SLEEPING PILL STUDY

constructed by

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Draft 3

May 8, 1985

Introduction

Hello. My name is (YOUR NAME). I am calling from the Center for Studies in Aging at North Texas State University. Have I reached the home of (INSERT NAME IN TELEPHONE BOOK)? Are your Mr./Ms. _____? Mr./Ms. _____, we are interviewing residents of _____ County about their attitudes toward the use of alcohol, sleeping pills and tranquilizers in our society today. As you know, use of these substances is increasing, and we would like to know why. To learn the answers we need help from concerned citizens like you.

Mr./Ms. _____, I would like to ask you a few questions to determine if you are eligible to participate in this survey. If you are eligible, we will pay you $5.00 as a token of our appreciation for your help. Please tell me if you are younger than 45 or if you are 45 years of age or older. (FILL IN GRID)

(IF 45 OR OLDER, ASK: MAY I ASK YOUR EXACT AGE PLEASE? THANK YOU.)

Is there anyone (else) who lives at your address who is 45 years of age or older? (IF YES, ASK SEX AND AGE. USE CHART TO DETERMINE WHO TO INTERVIEW. SAY, THANK YOU. IF THERE IS NO ONE 45 YEARS OF AGE OR OLDER, SAY: I am sorry. No one in your household fits our profile. Thank you very much for talking to us. Have a nice day/evening.)

According to my chart, I should interview (you or other). (IF OTHER, ASK IF "OTHER" IS HOME AND IF YOU CAN SPEAK TO HIM/HER. IF NOT, INTERVIEW OTHER ELIGIBLE ADULT IN HIS/HER PLACE. IF "OTHER," REINTRODUCE YOURSELF AND CONTINUE. IF IT IS THE SAME RESPONDENT, CONTINUE.)

Residents of Household

	Sex	Age				
	M or F	less than 45	45-64	65+	Name	Time convenient to call
1.						
2.						
3.						
4.						
5.						

CODING SPACE

I would like to tell you a little more about our research. The Center for Studies in Aging has a grant from the Hogg Foundation for Mental Health to find out what Texans think about the use of alcohol, tranquilizers and sleeping pills. We would like to ask you a series of questions about your attitudes toward these substances. Your participation in the interview is entirely voluntary. You may choose not to answer any question to which you object. Your answers are strictly confidential. No one will ever know you participated in the study or what your answers were. The interview will take approximately 30 minutes, and we will pay you $5.00 as a way of expressing our thanks to you for participating in this important research. Do you have any questions about the research? (ANSWER QUESTIONS.)

Now I would like to begin.

Respondent ID ___ ___ ___ (1 2 3)

Card 1 (4)

Sex of respondent (5)
1 male
0 female

Age of respondent (6 7)
_____ years

I. ATTITUDES TOWARD DRINKING

First, I am going to read you a series of statements about the drinking of alcoholic beverages. After I read each statement, please tell me if you strongly agree, somewhat agree, somewhat disagree, strongly disagree, or are not sure about that statement. There are no right or wrong answers. Just tell me what you think. (INTERVIEWER SHOULD CIRCLE THE CORRECT ANSWER.)

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
1. Good things can be said about drinking. Do you strongly agree, somewhat agree, somewhat disagree, strongly disagree, or are you not sure about this statement?	4	3	2	1	0	9	8
2. Drinking can help one to relax.	4	3	2	1	0	9	9
3. Too much drinking is bad for one's health.	0	1	2	3	4	9	10
4. Drinking makes people more sociable.	4	3	2	1	0	9	11
5. Alcoholic beverages are nice to help celebrate special occasions.	4	3	2	1	0	9	12
6. Even moderate drinking is bad for one's health.	0	1	2	3	4	9	13
7. Drinking helps when one is worried.	4	3	2	1	0	9	14
8. According to the teachings of the Bible, drinking is a sin.	0	1	2	3	4	9	15
9. A small drink improves one's appetite.	4	3	2	1	0	9	16
10. Even one or two drinks before driving make driving unsafe.	0	1	2	3	4	9	17

		strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
11.	Drinking is the polite thing to do in certain circumstances.	4	3	2	1	0	9	18
12.	One should never drink alone.	0	1	2	3	4	9	19
13.	Drinking is fun.	4	3	2	1	0	9	20
14.	One should never drink at all.	0	1	2	3	4	9	21
15.	Drinking does more harm than good.	0	1	2	3	4	9	22
16.	Occasionally drinking too much is okay.	4	3	2	1	0	9	23
17.	Drinking too much is never acceptable.	0	1	2	3	4	9	24

THANK YOU.

II. PREDISPOSITION TO SELF-MEDICATE

Next, I am going to read you a series of statements about prescription and nonprescription medicines. After I read each statement, please tell me if you strongly agree, somewhat agree, somewhat disagree, strongly disagree, or are not sure about each statement.

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
1. You should start using some sort of medication as soon as you begin to have any symptoms of illness. Do you strongly agree, somewhat agree, somewhat disagree, strongly disagree or are you not sure about this statement?	4	3	2	1	0	9	25
2. If you are really feeling badly, it is a good idea to take more prescription medicines.	4	3	2	1	0	9	26
3. If a prescription medicine isn't making you feel any better, you should stop taking it.	4	3	2	1	0	9	27
4. It is important to save prescription medicines in case you need them again.	4	3	2	1	0	9	28
5. If a prescription medicine works well for you, it's a good idea to share it with family and friends who have the same problem.	4	3	2	1	0	9	29
6. Most of the medicines you can buy at a drugstore without a prescription aren't strong enough to do you any harm.	4	3	2	1	0	9	30

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
7. Taking medicine is a good way to prevent health problems from developing.	4	3	2	1	0	9	31
8. If you don't think a prescription medicine is working well, you should start taking more of it to increase its effect.	4	3	2	1	0	9	32
9. If you can't remember whether or not you've taken all the pills you were suppose to take on a given day, it is a good idea to take more to be safe.	4	3	2	1	0	9	33
10. As you get older, it is normal for an individual to need more medicines.	4	3	2	1	0	9	34

THANK YOU.

III. SOCIAL USEFULNESS

Please tell me how much you agree or disagree with the following statements about your attitudes toward life in general.

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
1. I am useful to those around me. Do you strongly agree, somewhat agree, somewhat disagree, strongly disagree, or are you not sure about this statement?	4	3	3	1	0	9	35
2. My life is meaningless now.	0	1	2	3	4	9	36
3. The days are too short for all I want to do.	4	3	2	1	0	9	37
4. Sometimes I feel there is no point in living.	0	1	2	3	4	9	38
5. My life is busy and useful.	4	3	2	1	0	9	39
6. This is the most useful period of my life.	4	3	2	1	0	9	40
7. I can't help feeling that my life is not very useful.	0	1	2	3	4	9	41

THANK YOU.

IV. HEALTH

Now I would like to ask you about your health, please.

1. How would you rate your health overall at the present time - excellent, good, fair, or poor? 42

Excellent	3
Good	2
Fair	1
Poor	0
No response	9

2. How much do health problems stand in the way of your doing things you want to do - not at all, some, a great deal? 43

Not at all	2
Some	1
A great deal	0
No response	9

3. How would you rate your health compared to others your age - better than most, about the same, or worse than most? 44

Better than most	2
About the same	1
Worse than most	0
No response	9

4. How would you rate your health compared to 5 years ago - better, about the same, or worse? 45

Better	2
About the same	1
Worse	0
No response	9

THANK YOU.

V. SOCIAL INTEGRATION

Another area of our lives that is of concern to us is our relationships to our family and friends. After I read each statement below, please indicate if you strongly agree, somewhat agree, somewhat disagree or strongly disagree with it in terms of your own situation.

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
1. I have more friends now than I ever had before.	4	3	2	1	0	9	46
2. I never dreamed I could be as lonely as I am now.	0	1	2	3	4	9	47
3. I would be happier if I could see my friends more often.	0	1	2	3	4	9	48
4. I have no one to talk to about personal things.	0	1	2	3	4	9	49
5. I have so few friends that I am lonely much of the time.	0	1	2	3	4	9	50
6. My friends make my life happy and cheerful.	4	3	2	1	0	9	51
7. I have all the good friends anyone could wish.	4	3	2	1	0	9	52
8. My family likes to have me around.	4	3	2	1	0	9	53
9. I am perfectly satisfied with the way my family treats me.	4	3	2	1	0	9	54
10. I wish my family would pay more attention to me.	0	1	2	3	4	9	55
11. I think my family is the finest in the world.	4	3	2	1	0	9	56

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
12. My family is always trying to boss me around.	0	1	2	3	4	9	57
13. I get more love and affection than I ever did before.	4	3	2	1	0	9	58
14. My family really does not care for me.	0	1	2	3	4	9	59

THANK YOU.

VI. ANOMIE AND ALIENATION

Now I'd like your opinion on a number of different conditions in our society. I am going to read you several statements. With each statement some people agree and some disagree. As I read each statement will you tell me if you strongly agree, somewhat agree, somewhat disagree, strongly disagree, or are not sure? For example, here is the first statement:

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
1. Most public officials are not really interested in the problems of the average man.	4	3	2	1	0	9	60
2. These days a person doesn't really know whom he can count on.	4	3	2	1	0	9	61
3. Nowadays, a person has to live pretty much for today and let tomorrow take care of itself.	4	3	2	1	0	9	62
4. In spite of what some people say, the condition of the average man is getting worse.	4	3	2	1	0	9	63
5. It's hardly fair to bring a child into the world with the way things look for the future.	4	3	2	1	0	9	64
6. Most people don't really care what happens to the next fellow.	4	3	2	1	0	9	65
7. Next to health, money is the most important thing in life.	4	3	2	1	0	9	66
8. You sometimes can't help wondering whether anything is worthwhile.	4	3	2	1	0	9	67

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
9. To make money there are no right or wrong ways anymore, only easy and hard ways.	4	3	2	1	0	9	68
10. People like me don't have any say about what the government does.	4	3	2	1	0	9	69
11. Sometimes politics and government seem so complicated that a person like me can't really understand what is going on.	4	3	2	1	0	9	70
12. I don't think public officials care much what people like me think.	4	3	2	1	0	9	71
13. I don't think the government cares much what happens to people like me.	4	3	2	1	0	9	72
14. Persons like myself have little chance of protecting our personal interests when they conflict with those of strong pressure groups.	4	3	2	1	0	9	73
15. The average citizen can have an influence on government decisions.	0	1	2	3	4	9	74
16. People like me can have an influence on what happens in society at large.	0	1	2	3	4	9	75

THANK YOU.

VII. ECONOMICS

In these days of high inflation and high unemployment, we are all concerned about economics, especially among people with fixed incomes. I would like to ask you some questions about your own economic situation at the present time, please.

1. Are you able to afford a home that you think is suitable for (yourself/your family), yes or no? 76

   0 yes
   1 no
   9 no response

2. Are you able to afford the kind of car you need, yes or no? 77

   0 yes
   1 no
   2 not applicable
   9 no response

How often are you able to afford:

	never	occasionally	usually	always	no response	
3. furniture or household equipment that needs to be replaced, never, occasionally, usually, or always?	3	2	1	0	9	78
4. the kind or amount of food (you/your family) should have, never, occasionally, usually, or always?	3	2	1	0	9	79
5. the kind or amount of medical care (you/your family) should have, never, occasionally, usually, or always?	3	2	1	0	9	80

ID 1 2 3

CARD 2/4

	never	occasionally	usually	always	no response	
6. the kind of clothing (you/your family) should have, never, occasionally, usually, or always?	3	2	1	0	9	5
7. the leisure activities (you/your family) should have, never, occasionally, usually, or always?	3	2	1	0	9	6
8. How much difficulty do you have paying your bills, a great deal, some difficulty, a little difficulty, or no difficulty?	3	2	1	0	9	7

3 a great deal
2 some difficulty
1 a little difficulty
0 no difficulty
9 no response

9. At the end of the month, do you end up with some money left over, just enough to make ends meet, or not enough money to make ends meet? 8

0 some money left over
1 just enough to make ends meet
2 not enough to make ends meet
9 no response

10. How well does your income satisfy your needs, very well, fairly well, not well at all? 9

0 very well
1 fairly well
2 not well at all
9 no response

THANK YOU.

VIII. PERSONALITY

Now, I would like to ask you some more questions about your attitudes toward life in general and your attitudes about yourself.

A. MASTERY

How strongly do you agree or disagree with these statements about yourself?

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
1. There is really no way I can solve some of the problems I have. Do you strongly agree, somewhat agree, somewhat disagree, strongly disagree, or are you not sure?	4	3	2	1	0	9	10
2. Sometimes I feel that I am being pushed around in life.	4	3	2	1	0	9	11
3. I have little control over things that happen to me.	4	3	2	1	0	9	12
4. I can do just about anything I really set my mind to do.	0	1	2	3	4	9	13
5. I often feel helpless in dealing with problems in life.	4	3	2	1	0	9	14
6. What happens to me in the future depends mostly on me.	0	1	2	3	4	9	15
7. There is little I can do to change many of the important things in my life.	4	3	2	1	0	9	16

B. SELF ESTEEM

	strongly agree	somewhat agree	not sure	somewhat disagree	strongly disagree	no response	
1. I feel that I am a person of worth at least an equal with others.	4	3	2	1	0	9	17
2. I feel that I have a number of good qualities.	4	3	2	1	0	9	18
3. All in all, I am inclined to feel that I am a failure.	0	1	2	3	4	9	19
4. I am able to do things as well as most other people.	4	3	2	1	0	9	20
5. I feel I do not have much to be proud of.	0	1	2	3	4	9	21
6. I take a positive attitude toward myself.	4	3	2	1	0	9	22
7. On the whole, I am satisfied with myself.	4	3	2	1	0	9	23
8. I certainly feel useless at times.	0	1	2	3	4	9	24
9. I wish I could have more respect for myself.	0	1	2	3	4	9	25
10. At times I think I am no good at all.	0	1	2	3	4	9	26

THANK YOU.

IX. DISTRESS

In this next series of questions, I would like to ask you about your feelings. Do not dwell on one question too long. Usually, the first answer that comes into your head will be the best.

How often do the following statements apply to you: frequently, sometimes, not often or never?

	frequently	sometimes	not often or never	no response	
1. How often in general do you: lack enthusiasm for doing anything? frequently, sometimes, not often or never?	2	1	0	9	27
2. How often do you have a poor appetite?	2	1	0	9	28
3. How often do you feel lonely?	2	1	0	9	29
4. How often do you feel bored or have little interest in doing things?	2	1	0	9	30
5. How often do you have trouble getting to sleep or staying asleep?	2	1	0	9	31
6. How often do you cry easily or feel like crying?	2	1	0	9	32
7. How often do you feel downhearted or blue?	2	1	0	9	33
8. How often do you feel low in energy or slowed down?	2	1	0	9	34
9. How often do you feel hopeless about the future?	2	1	0	9	35
10. How often do you worry about things?	2	1	0	9	36
11. How often do you feel weak all over?	2	1	0	9	37

	frequently	sometimes	not often or never	no response	
12. How often are you troubled by headaches?	2	1	0	9	38
13. How often do you have difficulty keeping your balance when walking?	2	1	0	9	39
14. How often are you troubled by your heart pounding or shortness of breath?	2	1	0	9	40

THANK YOU.

X. THE GERIATRIC SCALE OF RECENT LIFE EVENTS

Tell me if you have personally experienced any of the events listed below in the past 3 years. Just say yes or no to each event.

Event	Yes	No	Weight			
1. Did you have a minor illness, yes or no?	1	0	27	41	42	43
2. Did you have a loss of hearing/vision?	1	0	67	44	45	46
3. Did you have difficulty walking?	1	0	53	47	48	49
4. Did you get a divorce?	1	0	57	50	51	52
5. Were you separated from your spouse?	1	0	57	53	54	55
6. Was a family member ill?	1	0	54	56	57	58
7. Did you gain a new family member?	1	0	45	59	60	61
8. Did a close friend die?	1	0	47	62	63	64
9. Was there a change in number of family get-togethers?	1	0	50	65	66	67
10. Did any family members have an outstanding personal achievement?	1	0	45	68	69	70
11. Did you relinquish financial responsibility?	1	0	59	71	72	73
12. Did you have financial difficulty?	1	0	59	74	75	76
13. Did you change work hours/conditions?	1	0	38	77	78	79
					blank 80	
		ID		1	2	3
		CARD			3 4	

Event	Yes	No	Weight			
14. Did you change residence?	1	0	52	5	6	7
15. Did you sell major possessions?	1	0	49	8	9	10
16. Did you have a personal achievement?	1	0	44	11	12	13
17. Did you reduce recreation?	1	0	47	14	15	16
18. Was your spouse unfaithful?	1	0	68	17	18	19
19. Were you fired from a job?	1	0	57	20	21	22
20. Did you lose a valuable object?	1	0	45	23	24	25
21. Was a child married?	1	0	43	26	27	28
22. Did you get a large loan	1	0	51	29	30	31
23. Were you involved in a minor legal violation?	1	0	31	32	33	34
24. Did you have trouble with neighbors?	1	0	41	35	36	37
25. Did you have trouble with social security?	1	0	54	38	39	40
26. Did you experience age discrimination?	1	0	53	41	42	43
27. Did you have a major illness?	1	0	65	44	45	46
28. Did you change sleep habits?	1	0	46	47	48	49
29. Did you change eating habits?	1	0	45	50	51	52
30. Did you go through menopause?	1	0	46	53	54	55
31. Did a spouse die?	1	0	79	56	57	58

Event	Yes	No	Weight			
32. Were you married?	1	0	64	59	60	61
33. Did you have a marital reconciliation?	1	0	47	62	63	64
34. Did you have more arguments with your spouse?	1	0	42	65	66	67
35. Did you have fewer arguments with your spouse?	1	0	35	68	69	70
36. Did a family member die?	1	0	66	71	72	73
37. Did a family member's health improve?	1	0	66	74	75	76
38. Did you have trouble with children?	1	0	57	77	78	79
					blank 80	
		ID		1	2	3
		CARD			4 4	
39. Were you a victim of a crime?	1	0	73	5	6	7
40. Did your financial state improve?	1	0	59	8	9	10
41. Did you retire?	1	0	57	11	12	13
42. Did you decrease church activity?	1	0	50	14	15	16
43. Did you increase church activity?	1	0	50	17	18	19
44. Did you experience more recreation?	1	0	44	20	21	22
45. Did you travel or take a vacation?	1	0	44	23	24	25
46. Did you stop driving?	1	0	68	26	27	28

Event	Yes	No	Weight			
47. Did you go to jail?	1	0	79	29	30	31
48. Were you unemployed one month?	1	0	43	32	33	34
49. Were you demoted?	1	0	56	35	36	37
50. Were you promoted?	1	0	64	38	39	40
51. Did a grandchild get married?	1	0	26	41	42	43
52. Did you have an argument with your boss or a coworker?	1	0	43	44	45	46
53. Did you move to a home for the aged?	1	0	75	47	48	49
54. Did you feel your family and friends turn away?	1	0	68	50	51	52

THANK YOU.

XI. USE OF ALCOHOL AND MEDICINES

Finally, we would like to conclude our interview by asking you about your own use of alcohol, tranquilizers and sleeping pills and your reasons for using these substances.

A. ALCOHOL

1. The next few questions ask you about your use of various types of drinks that contain alcohol, including wine, beer, whiskey or liquor. How often do you usually have any drinks of these types? Would you say: 53 54

Three or more times a day	9
Two times a day	8
Once a day	7
Nearly every day	6
Three or four times a week	5
Once or twice a week	4
Two or three times a month	3
About once a month	2
Less than once a month but at least once a year	1
I never drink	0
No response	99

If responds 1-9, ask questions A2 and B1-B17.

If responds 0, ask questions C1-C8.

A2. When you drink, how many drinks do you usually have at a time? 55

1
2
3
4
5 or more

[GO ON TO B1-B17.]

B. ALCOHOL REASONS [ASK IF PERSON DRINKS AT ALL]

People drink wine, beer, and other alcoholic beverages for different reasons. I will read you some statements people have made about why they they drink. Thinking of yourself and your reasons, how true is each of these reasons for you personally: sometimes or always true, or never true?

	sometimes or always true	never true	no response	
1. I drink because it helps me relax.	1	0	9	56
2. I drink to be sociable.	1	0	9	57
3. I like the taste.	1	0	9	58
4. I drink because people I know drink.	1	0	9	59
5. I drink when I want to forget my problems	1	0	9	60
6. I drink to celebrate special occasions.	1	0	9	61
7. A drink helps me forgét my worries.	1	0	9	62
8. A drink improves my appetite for food.	1	0	9	63
9. I accept a drink because it is the polite thing to do in certain circumstances.	1	0	9	64
10. A drink helps cheer me up when I'm in a bad mood.	1	0	9	65
11. I drink when I am tense or nervous.	1	0	9	66
12. A drink helps me when things go wrong.	1	0	9	67
13. A drink helps me gain self-confidence	1	0	9	68

	sometimes or always true	never true	no response	
14. A drink helps me when I am lonesome.	1	0	9	69
15. I drink when I am bored.	1	0	9	70
16. A drink helps me sleep better.	1	0	9	71
17. I drink because it is a habit.	1	0	9	72

THANK YOU.

C. NONDRINKER REASONS [ASK IF PERSON DOES NOT DRINK AT ALL]

People have different reasons for not drinking alcoholic beverages. I will read you some reasons for not drinking. Thinking of yourself and your reasons, how true is each of these reasons for you personally: sometimes or always true, or never true?

	sometimes or always true	never true	no response	
1. Drinking is against my religious beliefs.	1	0	9	73
2. I don't drink because of my health.	1	0	9	74
3. I don't like the taste.	1	0	9	75
4. I don't drink because people I know don't drink.	1	0	9	76
5. I don't drink because it is wrong.	1	0	9	77
6. I don't drink because I don't need to.	1	0	9	78
7. I don't drink because it is too expensive.	1	0	9	79
				blank 80
			ID	1 2 3
			CARD	5 4
8. I don't go places where drinks are served.	1	0	9	5

THANK YOU.

D. TRANQUILIZERS AND SLEEPING PILLS

1. Next, I would like to ask you about your use of prescription and nonprescription tranquilizers and sleeping pills. How often do you currently take prescription tranquilizers? Would you say: 6

Every day	8
Nearly every day	7
Three or four times a week	6
Once or twice a week	5
Two or three times a month	4
About once a month	3
Less than once a month but at least once a year	2
I have taken prescription tranquilizers in the past but do not take them now	1
I have never taken prescription tranquilizers	0
No response	9

2. How often do you take prescription sleeping pills? 7

Every day	8
Nearly every day	7
Three or four times a week	6
Once or twice a week	5
Two or three times a month	4
About once a month	3
Less than once a month but at least once a year	2
I have used prescription sleeping pills in the past, but I do not take them now	1
I have never used prescription sleeping pills	0
No response	9

3. How often do you use over-the-counter tranquilizers that you can get without a prescription? 8

Every day	8
Nearly every day	7
Three or four times a week	6
Once or twice a week	5
Two or three times a month	4
About once a month	3
Less than once a month but at least once a year	2
I have used nonprescription tranquilizers in the past, but I do not use them now	1
I have never taken nonprescription tranquilizers	0
No response	9

4. How often do you use over-the-counter sleeping pills that you can get without a prescription? 9

Every day	8
Nearly every day	7
Three or four times a week	6
Once or twice a week	5
Two or three times a month	4
About once a month	3
Less than once a month but at least once a year	2
I have used nonprescription sleeping pills in the past, but I do not use them now	1
I have never used nonprescription sleeping pills	0
No response	9

THANK YOU.

(IF TAKES ANY PILLS, NOW ASK QUESTIONS E1-E8.)

(IF TAKES NO PILLS, NOW ASK QUESTIONS F1-F6.)

E. PILL USE REASONS

People have different reasons for taking sleeping pills or tranquilizers. I will read you some statements people have made about why they take these medicines. Thinking of yourself and your reasons, how true is each of these reasons for you: sometimes or always true, or never true?

	sometimes or always true	never true	no response	
1. These medicines help me relax.	1	0	9	10
2. They help me forget my problems.	1	0	9	11
3. They help me when I am nervous.	1	0	9	12
4. They help me when things go wrong.	1	0	9	13
5. They help me when I am lonesome.	1	0	9	14
6. They help me when I am bored.	1	0	9	15
7. They help me sleep better.	1	0	9	16
8. I take them because it is a habit.	1	0	9	17

THANK YOU.

F. NON-PILL USE REASONS

People have different reasons for not using tranquilizers and sleeping pills. I will read you some reasons for not using these medicines. Thinking of yourself and your reasons, how true is each of these reasons for you personally: true, or not true?

	true	not true	no response	
1. Taking these medicines is against my religion.	1	0	9	18
2. Taking these medicines can be bad for your health.	1	0	9	19
3. I can't afford to buy these medicines.	1	0	9	20
4. People I know don't take these medicines.	1	0	9	21
5. I don't need these medicines.	1	0	9	22
6. The doctor won't give me these medicines.	1	0	9	23

THANK YOU.

ATTITUDES TOWARD PHYSICIANS

Please state your agreement or disagreement with these statements about doctors.

	strongly agree	agree	not sure	disagree	strongly disagree	
1. I have doubts about some things that doctors say they can do. Do you . .	4	3	2	1	0	24
2. When I am ill, I demand to know the details of all that is being done for me.	4	3	2	1	0	25
3. I believe in trying out different doctors to find the one that can give me the best care.	4	3	2	1	0	26

THANK YOU.

XI. EDUCATION

Finally, please tell me the highest grade in school that you have completed in years.

27 28

1
2
3
4
5
6
7
8
9
10
11
12 - high school graduate
13
14
15
16 - or college graduate
17+ - at least some post graduate education

99 - no response

THANK YOU.

Thank you very much for completing the interview. I would like to check your address to make sure it is correct, so we can get a check in the mail to you immediately. According to the telephone listing, your address is:

_____

_____

_____

Is that correct? Thank you. What is the city and zip code, please?

Thank you. The check should arrive within a month.