A comprehensive analysis of worry in the elderly.

Julia B. Hunt
University of Massachusetts Amherst

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A COMPREHENSIVE ANALYSIS OF
WORRY IN THE ELDERLY

A Thesis Presented
by
JULIA B. HUNT

Submitted to the Graduate School of the
University of Massachusetts in the partial fulfillment
of the requirements for the degree of
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A COMPREHENSIVE ANALYSIS OF
WORRY IN THE ELDERLY

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by
JULIA B. HUNT

Approved as to style and content by:

Patricia Wisocki, Chair

Marian MacDonald, Member

James Averill, Member

Charles Clifton, Chairperson
Department of Psychology
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ABSTRACT

A COMPREHENSIVE ANALYSIS
OF WORRY IN THE ELDERLY

MAY 1993

JULIA B. HUNT, B.A., UNIVERSITY OF CONNECTICUT
M.S., UNIVERSITY OF MASSACHUSETTS

Directed by: Professor Patricia Wisocki

Worry is a major component of generalized anxiety disorder and it figures prominently in the symptom patterns of several other anxiety related psychological disorders such as depression, obsessive compulsive disorder, and insomnia. Most of the work on worry has been done by Borkovec and his colleagues at Pennsylvania State University with college students. They defined worry as: "a chain of thoughts and images, negatively affect-laden and relatively uncontrollable." (p.10). They said that the worry process represents "an attempt to engage in mental problem solving on an issue whose outcome in uncertain, but contains one or more negative outcomes" (p.10). The chronic worriers among college student populations used in Borkovec's work spent at least 40% of their day in worry and primarily worried about "social evaluative fears", such as what other people think, meeting people, and making mistakes.

While the elderly would appear to be particularly susceptible to worry (American Association of Retired Persons, 1985; Blazer & Williams, 1980; Gaitz, 1977; Karacan et al., 1976; Lawton, 1985; Wisocki, 1984), data from a number of studies (Wisocki, 1988) has suggested that the elderly actually experience low levels of worry. This research effort was an attempt to explore in depth the nature of worry among an elderly sample of subjects who defined themselves as worriers.

Five focus groups were conducted with 28 elderly individuals who were classified as serious worriers. The group discussions revolved around the following topics: what they worry about; has the worry process changed with age; how is worry defined; how
does worry differ from anxiety and depression; the psychological and physical effects of worry; what features affect the worry process; ways to control worry; and the positive and negative aspects of old age. After their participation in the study subjects filled out questionnaires about levels of psychopathology, self-esteem, social support, and constructive thinking.

The findings from this research effort form a comprehensive model of worry in the elderly. Worry is related to anxiety, depression, and obsessive compulsive behaviors. It is related to behavioral rather than emotional coping. Worry is related to low self-esteem. It is not consistently related to social support or age. The content of the worries is diverse, but includes a predominance of health, financial, and family themes. Worry for this population does not include many concerns about social-evaluation, societal issues, or death; it is not related to problem-solving and is not always future-focused. Elderly individuals experience a plethora of physical and psychological effects of worry. They have some control over worry and report a multitude of ways of exercising control. Worry changes over the life span, by content, and intensity. Future measures of worry for the elderly need to take these factors into consideration in their design.

This picture differs from Borkovec's findings with younger individuals in several key ways. Social evaluation fears are not a prime feature of worry in the elderly. Also, although Borkovec defined worry as being related to problem-solving and future-focused, the current research findings do not support those relationships for this population.
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CHAPTER I
INTRODUCTION

Anxiety in the general population is marked by objective physical signs such as rapid heart beat, tremor, sweating, hyperventilation, diarrhea, dilation of the pupils, and increased blood pressure. Anxiety is also often accompanied by subjective signs such as a state of apprehension, panic, restlessness, and tension (Schaffer & Donlon, 1983). It can be free floating, focused on an object, situation, or activity which is avoided, as with phobias, or can occur suddenly and be accompanied by physical symptoms as with panic attacks (Shamoian, 1991). Anxiety differs from fear in that there are no apparent external stimuli for this reaction (Shamoian, 1991).

The literature on anxiety and the elderly is quite small (Carstensen, 1988). Surveys have estimated that 16% of the elderly experience anxiety, which is a lower prevalence rate than any other age group (Blazer, George, & Hughes, 1991). This figure does not include institutionalized elderly, who make up 4% of the elderly population and are significantly more anxious than their community dwelling counterparts (Queen & Freitag, 1978). Women, unmarried individuals, and the poor are all more likely to be anxious (Gurian & Miner, 1991).

According to Carstensen (1988), the most common anxiety disorders in the elderly are phobias, including agoraphobia, social phobia, or simple phobia; anxiety states, including obsessive compulsive disorder, post traumatic stress disorder, panic disorder, and generalized anxiety; and adjustment disorder. These states often appear for the first time after the age of 65, and the main features of these disorders can present as psychological or somatic disturbances.

Although there are a variety of theories about the etiology of anxiety in the elderly, the most popular is based on psychodynamic theory, in which anxiety is viewed as arising from object losses and loss of external support, rather than being related to intrapsychic
conflict (Verwoerdt, 1981). The anxiety results from overwhelming reality-based experiences such as losses in social status, physical health, and financial status, which occur when internal and external resources are curtailed (Verwoedt, 1981). However, since some individuals experience losses but do not develop anxiety, another explanation must be considered.

Based on Erikson's theory of personality development, death anxiety was thought to be common in the elderly (Erikson, 1950) but it is not unique to the elderly and in fact, has not been found a general characteristic of this age group (Wagner & Lorion, 1984).

Behavioral theory focuses on the immediate, observable consequences of stimulus-response contingencies in the environment (Hoyer, 1973). Since behavior is consistent across ages, behaviorists reject a developmental model of aging. According to this theory, behavioral treatments such as exposure, response prevention, and systematic desensitization are most useful for treating anxiety problems in the elderly (Carstensen, 1988). Much of the research on this topic has been done in the form of case studies. However, Deberry (1981-1982, 1982) found muscle relaxation training effective in reducing anxiety in elderly women. Also, Downs, Rosenthal, & Lichstein (1988) used participant and filmed modeling groups to reduce bathing anxiety in a nursing home population.

Turnbull (1989) suggests that it is important to keep in mind several factors in diagnosing anxiety in the elderly. First, although the primary cause for anxiety is psychological, physical causes such as caffeine, organic mental disorders, hypoglycemia, and thyroid disease may play a role in the experience of anxiety. Second, since depression often accompanies anxiety, it is important to investigate problems typically associated with depression, such as sleep patterns, appetite, thoughts about suicide, and loss of pleasure from formerly pleasurable activities. Third, in administering a questionnaire that measures anxiety, the evaluator must be specific in her or his inquiry about the situations in which symptoms occur. Last, it is also important to try to seek additional information from
relatives about the nature of the symptoms. An additional problem in identifying anxiety in the elderly is that some elderly attribute agitation, fears, or aches and pains to the normal aging process and thus under-report symptoms of anxiety (Gurian & Miner, 1991).

Although the incidence of anxiety does not seem to increase with old age (Meyer, Miller, Metzger, & Borkovec, 1990), 17% of elderly outpatients are on anti-anxiety drugs (Allen, 1986). Excess sedation, cognitive impairment, falls, and withdrawal symptoms are all problems linked with anti-anxiety medication (Gurian, Copeland, Kuriansky et al. 1983).

Although 20 to 50% of the elderly may need or benefit from psychotherapy, fewer than 20% will receive such help (MacDonald & Schnur, 1987). One common barrier to getting psychological service is that many older individuals do not define their problems in psychological terms. Many seek treatment from their primary care physicians and are more likely to get pharmacological rather than psychological help (McCarthy, Katz, & Foa, 1991). The mental health field is characterized by a lack of experience with and negative attitudes towards the elderly (Garfinkle, 1975; Ray, McKinney, & Ford, 1987). Lastly, the cost of psychotherapy and a lack of transportation may keep some elderly individuals from receiving psychological services (Cohen, 1980).

According to DSM-III-R, worry is a defining feature of generalized anxiety disorder and a number of anxiety-related disorders, including, agoraphobia, obsessive-compulsive disorder, major depressive episode, and compulsive personality disorder. Although worry is prevalent in the general population, (Vernoff, Douvan, and Kulka, 1981) and the relationship of worry to different neurotic disorders is clearly established (Dow & Craighead, 1982; Rachman & Hodgson, 1979), most of the work on the general phenomenon of worry has been done in the last ten years by Borkovec with a college population. In his initial work on this topic, he and his colleagues found worry to be characterized by tension, apprehension, some somatic cues, and concern for the future rather than the past. Social-evaluative situations such as being rejected or criticized
characterize the life events of greatest concern to college students (Borkovec, Robinson, Pruzinsky, & DePree, 1983). Their working definition of worry was

a chain of thoughts and images, negatively affect-laden and relatively uncontrollable. The worry process represents an attempt to engage in mental problem solving on an issue whose outcome is uncertain but contains the possibility of one or more negative outcomes. Consequently, worry relates to the fear process (p. 10).

Worry works to maintain insomnia (Borkovec, 1979), anxiety, depression, and obsessive-compulsive behavior (Borkovec, Wilkinson, Folensbee, & Lerman, 1983). Borkovec, Robinson et al., (1983) found that chronic worriers engaged in worrying at least 40% of their day or approximately 8 hours a day and stated that worry was a problem to them. These worriers were more anxious, depressed, and hostile, they had more difficulties focusing on a monotonous task, and had more negative thought intrusions. Worry seems to occur most often when activity levels are low.

Consequent research has empirically distinguished the emotional state of worry from depression and somatic anxiety (Andrews & Borkovec, 1988). Most recently, worry has been found to involve a predominance of verbal-linguistic thought rather than imaginal activity, a distinction that is important for theories of anxiety maintenance and modification (Borkovec & Inz, 1990). Uncontrollability seems to be a central feature of worry and intrusive thinking (Borkovec, Shadick, & Hopkins, 1991). There is some indication that college students with Generalized Anxiety Disorder utilize worry as a coping mechanism in order to avoid the aversive arousal associated with certain images (Lyonfields, 1991).

In one study examining an intervention designed to reduce worry (Borkovec, Wilkinson et al., 1983), college students who spent at least 50% of their day worrying and considered worry to be a problem for them were targeted and given a four week trial of stimulus control instructions. They consequently reported significantly less daily worry.
In a study of the content of worries with older individuals aged 31 to 63 (Sanderson & Barlow, 1990), the worries of Generalized Anxiety Disorder (GAD) clients were divided into four domains. In order of commonality of the worries, these domains included Family, Financial, Work, and Illness. Interviewers showed an agreement level of 78.6% on classifying the worries. These four domains were utilized by Craske, Rapee, Jackel, & Barlow, (1989), with the addition of a miscellaneous category, to compare the worries of GAD clients with those of a control group. The two groups were significantly different in the content of worries. The control group had more financial worries while the GAD group had more health concerns. The worries of the GAD clients were classified with 82% agreement and the worries of the control group were classified with 74% agreement. They analyzed the content of the worries of GAD clients from the worries expressed on the Anxiety Disorders Interview Schedule with 91.2% agreement.

On an intuitive level, the elderly would seem to be particularly susceptible to worry, since they experience periods of inactivity and several of the problems related to worry such as anxiety, depression (Blazer & Williams, 1980; Gaitz, 1977), and insomnia (Karacan et al., 1976). Also, the elderly are at a time in their lives when many negative changes occur, presumably providing them with material for worry. For example, retirement can have many negative implications, such as the loss of a structure and purpose to life. Fifteen percent of the elderly live below the poverty level; another 9% are classified as near poor. Many of these individuals are living in poverty for the first time (American Association of Retired Persons, 1985). Although there are equivocal data about the severity of the crime problem for the elderly, they have an extremely high fear of crime and spend a lot of time concerned about their personal safety (Lawton, 1985).

Old age is also a time of personal loss, such as the death of a partner. Besides the initial trauma, the remaining partner has to make decisions about dealing with possessions, housing, and eventually developing new social roles (Wisocki, 1984). The loss of a social
network occurs through the death of siblings and friends, leaving those left behind increasingly isolated.

According to Weg (1975), the elderly experience physical declines such as memory loss and weakening of bones and muscles. Also, disease occurs more frequently, since the elderly's immune system is not as strong as it was when he or she was younger. As a result of these declines, cardiovascular failure, cerebrovascular accidents, and cancer occur frequently with old age, along with chronic pain, such as arthritis. These types of problems are stark reminders of one's own eventual mortality, which is another issue the elderly must deal with.

Within the elderly population, there are several populations more susceptible to the problems of old age. First of all, elderly men have smaller, less multi-faceted support systems than elderly women (Handen, 1991). They are also less likely to use social institutions. For example, men attend church less often and report that religion is less important to them than women do (Bengston, Kasschau & Ragan, 1977; Britton & Britton, 1972). Secondly, divorced, separated, or single elderly individuals report less overall life satisfaction (Glenn & Weaver, 1981). This may be due to the smaller social networks common among the unmarried elderly (Hanson & Sauer, 1985). Lastly, lower socioeconomic status, education, and income levels are all related to smaller social networks and less support (Antonucci, 1985), leaving poor elderly more vulnerable. Consequently, one would expect to find that these specific groups of elderly would worry more than other groups.

In order to investigate the worries of the elderly, Wisocki (1988) developed a scale which measures a range of items relevant to that population. This scale has been utilized with several different elderly populations, and findings from these research efforts seem to present a more positive picture of the elderly. (Wisocki, Handen, & Morse, 1986). Surprisingly, both homebound and community active elderly reported few worries overall. Worry correlated with measures of anxiety, but not with measures of depression. There
were no significant sex differences or age differences, except for the homebound sample in which younger subjects expressed significantly more financial, social, and overall worry.

In a study comparing a college student sample with an elderly sample, a similar pattern emerged (Powers, Wisocki, & Whitbourne, 1992). Worry was related to decreased psychological well-being for both age groups. However, the elderly were less worried about social relationships and finances than the college group, and no more worried about their health than the young people. The elderly also showed greater psychological well-being and more of an external locus of control than the young adults. The elderly who did worry were more concerned with possible negative aspects of future events rather than the present events. The non-worried elderly saw the past and present as more positive times than the future. The investigators suggested that this focus on the past may be a coping strategy for the elderly and the data support the idea that worry is a future oriented process.

These studies suggest that the twilight years are a positive time. Other research shows an increase in quality of life as a function of age, with a very slight drop-off occurring after 65 (Borges & Dutton, 1976). A national survey indicated that the majority of elderly individuals have said that they were "just as happy as when I was younger" and that they did not feel lonely (Harris, 1975). Advancing age is not related to a decrease in self-efficacy (Nehrke, Hulicka, & Morganti, 1980). A study by Lewinsohn suggested that the elderly were less stressed, were not more likely to rate themselves as being in poor health, and did not have less of a sex drive than groups of younger people. Although old age is not a time of attitude change, most elderly are able to adapt to major life changes such as retirement, children leaving home, widowhood, moving to new homes, and serious illness (Palmore, 1977). There is evidence to suggest that elderly individuals cope the same way as younger individuals (McCrae, 1982). Despite the difficulties in later life, one study found that psychological symptoms of depression, anxiety, hostility, and interpersonal sensitivity decrease with age, while phobic anxiety was not related to age
Another investigator found that depression and anxiety are not more likely in old age than middle age (Meyer et al., 1984).

Because of the conflicting picture of the place of worry in old age, a study was mounted to investigate how worry is related to the psychological life of the elderly. The study has two distinct parts. In the first part a variety of self-report measures are used to explore relationships between areas and characteristics of the worry process and between worry and measure of psychological symptomatology, coping, self-esteem, and social support. In this part the following hypotheses were presented:

1) There will be a positive correlation between scores on the Worry Scale, the percentage of time spent worrying in a day, the troublesomeness of worry, difficulty in stopping worry, and worry-related physical and psychological problems.

2) Individuals who indicate high worry will have more depression, psychological symptomatology, and less coping responses, self-esteem, and social support.

3) There will be no difference in the number of worries as a function of age within the elderly sample.

4) There will be no differences in depression, psychological symptomatology, coping, self-esteem, or social support as a function of age.

In the second part of the study, various dimensions of the worry process were examined in depth. Research on worry in the elderly in the past has utilized self-report measures and found conflicted results. As the Worry Scale was not based on items the elderly themselves had indicated as being worrisome, it may be biased or incomplete. This study used focus groups which allowed information to be elicited while minimizing conceptual or methodological bias, a method which is particularly useful for older subjects, as their answers have more depth than younger subjects have (Covey, 1985).
The focus group, a tool borrowed from marketing research, has been defined as "the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group" (Morgan, 1988, p.12). The focus group method allows for more detailed questions and clarification of ambiguous information. Information can be gained from the group format about the group's interaction. Also, individuals are less guarded in this situation than they would be in a simple dyad (Goldman & McDonald, 1987: Greenbaum, 1988).
CHAPTER II

METHOD

Subjects

The twenty-eight subjects included in this study were Caucasian. Their mean and median age was 78, with a range from 70 to 94. Seventy-five percent of the sample was female. The mean income level was $14,000 and the median was $12,500 with a range from $5,000 to $40,000. The average number of years of education was 12.6. Eighty-four percent reported themselves to be in fair to good health. Eighty percent were fairly to extremely satisfied with the quality of their social lives. Ninety-six percent said they attend religious services.

Subjects were first recruited for this study in two ways: with advertisements posted at local businesses and senior centers and personal direct appeals at local churches, senior organizations, and senior centers. 500 people were contacted through direct appeals. After introductions to seniors by key members of each organization, the experimenters presented the goals of the study, answered questions, and distributed packets of questionnaires for all participants to complete at home if they met two criteria: 70 years of age and designated themselves as worriers. The experimenters told potential participants to take extra questionnaires for friends or family members who might be appropriate for the study. The potential subjects were told to return the completed questionnaires to the experimenters in a self-addressed, stamped envelope. The experimenters promised to send each participant $5.00 for this effort. The potential participants were also told that they might be later asked to participate in the second part of the study, which would involve discussing their worries in a small group format and filling out some additional questionnaires. Participation in these discussions would earn them an additional $20.00. Two hundred fifty questionnaires were given out in this way, and fifty were returned. Thirty-eight responses were judged to meet the specified criteria.
Most subjects were recruited through Springfield area programs such as Senior Class at Baystate Medical Center, the Elder Sunday program at Providence Hospital, and the Foster Parent's program at the Urban League. Five focus groups were conducted over a period of twelve months. Group size ranged from 3 to 8 participants, with a mean size of 5.

Data Collection Instruments

In the recruitment phase of the study, subjects initially completed a demographic questionnaire about age; sex; race; former occupation; education; marital status; income; health status; status of social relationships; and religiosity which was originally used in the study by Wisocki et al. (1986).

They also completed the Daily Worry Questionnaire for seven consecutive days, which was adapted from the work of Borkovec, Robinson et al., (1983) and Borkovec et al., (1991). With this questionnaire, subjects were asked to indicate the percentage of each day spent worrying, and how troublesome and difficult it was to stop the worry on a five point Likert scale and to what degree the worry was related to any of the following: an experience in the past, present, future, solving a problem, or an unrealistic or realistic change he or she wanted to make. The experimenters added a question asking subjects to list what they worried about that day, starting with the most severe worry.

The experimenters created an additional worry questionnaire to measure physical and psychological symptomatology that may have accompanied worry during the previous week and was completed at the end of a seven day period. This measure, called the Weekly Worry Questionnaire, utilizes a checklist format.

Subjects also filled out the SCL-90R (Derogatis, Rickels, & Rock, 1976) as an indicator of psychological symptomatology. It is a 90 item self-report measure that uses a five point measure of distress ranging from "not at all" to "extremely". The items are divided into nine primary symptom dimensions including Somatization, Obsessive-
Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. Alpha coefficients for these scales range from .77 to .90 and test-retest correlations range from .78 to .90. The SCL-90R has high convergent validity with the MMPI.

After participating in the focus group, subjects completed five additional measures. The first measure, the Constructive Thinking Inventory (Epstein & Meier, 1989) is a 108 item scale that provided a self-report measure of constructive and destructive thoughts in everyday life. It uses a Likert format ranging from 1 (definitely false) to 5 (definitely true). The subscales of Emotional and Behavioral coping were utilized for this research effort as measures of coping. Emotional coping deals with the inner world of emotions and thoughts and includes items that refer to worry, to taking things personally, and to being sensitive to failure and disapproval. The Behavioral Coping scale deals with the outer world of events and includes items that refer to thinking in ways that facilitate effective action. Alpha coefficients for the Emotional scale was .78 and .70 for the Behavioral scale.

The second measure was the Worry Scale (Wisocki, 1988), a 35 item self-report measure of worry designed specifically for elderly subjects. Ratings are made on a five point scale ranging from 0 (never) to 5 (much of the time). It is divided into three categories of worries: Health, Finance, and Social. Although there are no reliability data on this measure, it correlates significantly with the anxiety scale on the SCL-90 (Derogatis et al., 1976) and the Multiple Affective Adjective Checklist (Zuckerman, 1960).

The third measure, the Geriatric Depression Scale (Yesavage et al., 1982), is a 30 item self-rating scale with a yes/no format designed specifically for the elderly. It has demonstrated construct validity as well as a split-half reliability and internal consistency of .94.

The fourth measure was the Rosenberg Self-Esteem Scale (Rosenberg, 1965) a ten item self-report measure of basic feelings of self-worth. Although originally used with
high school students, it has been used with individuals over age 60 (Atchley, 1976; Ward, 1977). It utilizes a four-point continuum from strongly agree to disagree. Higher scores on this scale are related to lower self-esteem. It has demonstrated construct validity, test-retest reliability of .85, and an internal consistency of .74.

The final measure, the Inventory of Social Support Behaviors (ISSB), was designed by Barrera, Sandler, and Ramsey (1981). It has 40 items that sum to an overall score. The ISSB is a behaviorally oriented measure of social support that focuses on helping behaviors that are relatively independent of subjective appraisal. In designing the scale, emphasis was placed on behavioral specificity without subjective inferences, wording generalizable to any population, and no specific references to psychological adjustment. It has demonstrated test-retest reliability of .80 over two days and an internal consistency of .93.

**Experimenters and Assistants**

The group moderator was an experienced clinician from the University of Massachusetts's psychology department. Two graduate psychology students assisted with the groups. They took notes during the group to augment the information recorded, using two tape recorders placed at either end of the table. The graduate students were also involved in the post-group processing session. Three psychology undergraduate research assistants worked on this research effort for course credit. Each attended at least one focus group to observe the groups. The three main experimenters and the three research assistants are female.

**Procedure**

Subjects were invited to attend a focus group if they indicated a high frequency of worry on the Daily Worry Questionnaire (over 5% of at least four days out of seven spent worrying). Groups met at the Providence Hospital in Holyoke, MA. The experimenters
provided transportation for most subjects. Subjects were assured that their anonymity would be protected. Their permission was sought for the taping, and they verbally consented to the process. Subjects were seated around a rectangular table with the discussion leader at the head in clear sight. The other two experimenters sat off to the side, in an unobtrusive spot. Groups began with refreshments and a general discussion to encourage a relaxed atmosphere. The experimenters told the subjects that they were there to talk about topics related to worry and that everyone's opinion was important. Subjects were told that they were the "experts" for this group experience and that the experimenters were there to learn from them. This was done in compliance with the directive that a hierarchical relationship is not as productive as a lateral one at drawing out complex, internal information, according to Goldman & McDonald (1987). The experimenters started the discussion with a general question about what is difficult about being older these days. The following questions were introduced in the course of discussion:

1) What kinds of things do you worry about?
2) Is this worry common to people your age?
3) How can you tell when you are worried?
4) Can you differentiate between worry and anxiety and worry and depression?
5) Has the focus and frequency of your worry changed over your lifetime?
6) What kinds of things contribute to your worry?
7) What are the effects of worry on you?
8) What do you do to not worry and how do you stop it when it happens?
9) How would you define worry?

The order of the presentation of these questions was dependent on the content of the discussion. Most of the group discussions lasted an hour and a half. At the end of the focus group participants spent an additional hour completing questionnaires. Then subjects read a debriefing form and filled out an evaluation of their experience in the study.
Names and addresses of subjects who wanted a report of the results were retained. Subjects were also asked for the names and telephone numbers of anyone they know who might be interested in participating in the study. Lastly, subjects were thanked and given checks for $20.00.

The three experimenters orally processed their impressions of the group for approximately one hour after the group meeting. This discussion included any thoughts and feelings about the group, as well as how each of the experimenters believed the subjects answered the research questions. This post-group discussion was audio taped as well. The focus group sessions were transcribed and checked for accuracy by at least two undergraduate or graduate research assistants.
CHAPTER III
RESULTS

Design and Analysis

The quantitative measures in this study were analyzed by Pearson's Correlation Coefficient. The focus group information was analyzed by content analysis.

Descriptive Statistics

Responses to the questions on the Daily Worry Questionnaires were averaged over the sampled week. On average, subjects reported spending 28% of their day in worry, with a range between 6% to 77%. The average responses to questions about the troublesomeness of worry (2.9) and difficulty in stopping worry (2.8) were moderate. In rating the relationship of worry to time perspective, the average responses from subjects indicated a moderate relationship to present experiences (2.5) and future events (2.4). Past experiences were infrequently noted (1.6). Subjects also indicated that on average, worry for them was somewhat related to solving a problem (2.2) and a realistic change they wanted to make (2.1). They infrequently indicated a relationship between worry and an unrealistic change they wanted to make (1.5).

In relating psychological conditions to the experience of worry, subjects indicated the following: anxiety (63%), depression (52%), upsetting thoughts (48%), frustration (41%), inability to make decisions (37%), lack of concentration (33%), worthlessness (26%), hopelessness (26%), increased sensitivity to other people (22%), inferiority (22%), self-consciousness (18%), resentment (15%), self-hatred (7%), hostility (7%), suspiciousness (7%). Subjects reported an average of 4.9 of these symptoms.

Subjects reported the following physical conditions associated with worry: sleeplessness (52%), back pain (52%), memory problems (44%), heart palpitations (37%), dryness of mouth (33%), stomach upset (26%), dizziness (26%), headaches (22%).
muscle soreness (22%), muscle tension (18%), blurred vision (18%), high blood pressure (15%), diarrhea (15%), clenched jaw (11%), hot/cold spells (11%), hair loss (7%), other changes (7%), poor appetite (4%), skin problems (4%), and faintness (0%). Subjects reported an average of 4.6 of these symptoms.

Coefficient alphas were calculated as a measure of internal consistency of the instruments employed in this research effort. These are presented in Table 1.
Table 1. Means and Coefficient Alphas for Measures Employed

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These coefficients indicated that the measures in the study possess sufficient degrees of reliability for use in the study. The only marginal measures were phobic anxiety from the SCL-90R, Behavioral Coping on the Constructive Thinking Inventory and the finance subscale of the Worry Scale.

To put these in perspective, these mean scores may be compared with scores from subjects in other studies using similar scales. These subjects scored lower on the Worry Scale than elderly subjects in previous studies (Wisocki, 1988). These subjects also scored lower on the Rosenberg Self-Esteem Scale than those subjects in a study by Simons (1985) and higher on the Geriatric Depression Scale than subjects in a study by Yesavage et al. (1982).

**Tests and Hypotheses**

Table 2 presents of a correlation matrix for the variables in the study. Correlational analysis was used to assess the hypothesized relationships between the measures.
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* p < .05  
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Hypothesis One predicted that there will be a positive correlation between the Worry Scale and the following measures: percentage of time spent worrying in a day, troublesomeness of worry, difficulty in stopping worry, and the relationship between worry and physical and psychological problems. This hypothesis was confirmed by analysis. Higher total worry scale scores were positively correlated with all five measures. When the individual subscales were examined, however, the results varied. Greater worries on the Finance subscale were related to a greater average percentage of daily worry and more troublesome worry. Higher scores on the Health worries subscale were related to more troublesome and difficult to stop worry and more physical conditions. Higher scores on the Social subscale were related to difficulty in stopping worry and more physical conditions.

Hypothesis Two predicted that the subjects with more worries on the total scale and subscales of the Worry Scale who indicated spending a greater average percentage of time spent in worry each day and reported that worry was more troublesome and more difficult to stop, and expressed a greater number of physical and psychological conditions related to their worry will have higher scores on the Geriatric Depression Scale, show greater symptomatology on the SCL-90R subscales, and score lower on the Emotional and Behavioral Coping scales on the Constructive Thinking Inventory, on self-esteem scores on the Rosenberg Self-Esteem Scale, and on perceived social support on the Inventory of Socially Supportive Behaviors. The data do indeed show that an increase in all measures of worry is related to increased depression. Eight of the measures of worry are significantly positively correlated with the anxiety subscales of the SCL-90R. Seven of these measures are positively correlated with the somatization and obsessive compulsive behaviors subscales. Six of these measures are positively correlated with the depression subscale and five with the psychoticism subscale. Four are significantly positively correlated with the phobic anxiety subscale. Three of these measures of worry are significantly positively correlated with the interpersonal sensitivity and hostility subscales. One measure of worry, the number of physical conditions related to worry, is significantly positively correlated with the interpersonal sensitivity and hostility subscales.
positively correlated with the paranoid ideation subscale. Number of worry-related physical conditions correlated with low scores on the Emotional and Behavioral Coping scales of the CTI. Higher scores on the Social subscale of the Worry Scale were related to lower scores on the Emotional Coping scale of the CTI, whereas worries on the Health, Social, and Total scales of the Worry Scale were related to lower scores on the Behavioral Coping scale. Worries on the Finance and Social subscales were related to lower self-esteem. None of the measures of worry correlated significantly with social support.

Hypothesis Three predicted that increased age would not be a factor in the number of worries indicated on the Worry Scale, worry time spent each day, troublesomeness, difficulty in stopping, and the number of somatic conditions related to worry. As illustrated in Table 2, this hypothesis was supported.

Hypothesis Four predicted no relationship between increased age and higher levels of depression on the Geriatric Depression Scale, symptomotology on the SCL-90R subscales, a decrease in levels of coping on the Constructive Thinking Inventory, self-esteem on the Rosenberg Self-Esteem Scale and perceived social support on the Inventory of Socially Supportive Behaviors. As anticipated, age was not significantly related to depression, psychological symptomotology, coping, self-esteem, or social support.
Qualitative Findings

Data from transcripts of the focus groups were organized around the ten topical questions introduced into each group for discussion. Responses were then categorized in such a way as to demonstrate different meanings within each category in an effort to reflect the substance and range of information provided. Each of these worries had various elements to them, which shaded each category in particular directions. The question about what it is like to be elderly was divided into two categories, the negative and positive aspects of getting old. An additional category was created to define old age. A second investigator independently categorized the data from two groups as an inter-rater reliability check with a 70% agreement rate. This percentage represents the number of points of information categorized in the same way by both investigators. All of the discrepancies from this check were discussed and re-categorized in a way that was agreed upon by the two raters.

This final document was then used to present the focus group information in this section. Each of the twelve topics will be presented, along with their subcategories, various characteristics of each category, and pertinent quotes from the transcripts which illustrate the topical elements.

What Do You Worry About? Twelve sub-categories of worry were formed from the information from this question. Next, the categories were grouped into levels of worry based on frequency. Level 1 contained the most common concerns and included Family, Physical Decline/Health, and Finances. Level 2 included Being Alone, Loss of Independence, Crime, Leaving Things in Order After Death, Making Decisions, and Driving. Level 3 contained the least frequent worries including Social Issues, Social Evaluative Judgments, and Miscellaneous Worries.
Level 1 Worries

Family. The elements which comprised this category of worry include the following:

- Helping to raise grandchildren.

Well, there are some people that aren't as involved. They feel they raised theirs and now the burden is entirely on their sons and daughters to raise theirs. Let them raise their own. That's really something that I can't do.

- The health of their children and grandchildren.

One of my sons had Hodgkin's disease and I had to take him to Boston every day for three months of treatment. I worry about him all the time.

- The happiness of their children and grandchildren.

I worry about my daughter; she's divorced and I'd like to see her happy and meet the right person.

- The society that their grandchildren are growing up in and their safety in it.

I would like to have my grandchildren have a good, safe world. I think about the holocaust...that it should never be repeated..that they didn't learn enough to know that it shouldn't ever happen again.

- The education of grandchildren and their preparation to deal with the future.

He's a smart kid. He came home and said to his mother, "I'm not going back to school." And this bothers me terribly. What is a kid going to do without a college education?
-The behavior of family members.

The behavior of people in my family. And I know I can't do anything about it, but I worry about it because it looks to me like it's inherited. That they are a carbon copy of someone else.

-Financial status of their family.

I got to tell you what worries me and I don't like to talk about it. My two children are married. They both work but they don't like, I don't know how to say it, I think they spend too much. They don't save. So I should mind my own business.

-Taking care of their parents.

I hope to stay well to take care of my mother because you have to watch them (the aides) everyday when you go to... the nursing home. She (my mother) would be home, but she lost the use of her bladder...and she has to be catheterized three times a day...and had to go to a nursing home...It takes two nurses to put her in and out of bed. I think that's my biggest worry.

Physical Decline/Health. Many subjects had health worries about others and themselves. For instance, one subject noted that instead of the golden years, they were living in the rusty years. These worries will be listed in turn.

-Disease and illness of spouses, siblings, and friends.

Health, like my husband has glaucoma, and so I was thinking about it the other day...what would we do about it. I try not to show him because I don't want him to worry. But I do worry about his health.
-Vigilance about maintaining their health.

My health only, I'm trying to take care of that very carefully, with the best of everything I can find and do.

-Loss of independence that comes with declining health and potentially being a burden.

I'm afraid of old age, of course, and the possibility that you're going to be handicapped by some injuries or sicknesses that will stop you from working. So you worry about sicknesses and injury.

-Concerns about needing help to die.

Worry is a terrible habit. And the things I worry about are real things. I'm not dreaming nonsensical things. We won't be around to face it, but it's our body and mind and everything. We have no say so. We're almost begging a friend to help you when you die. That's a pretty hard thing to ask anyone.

*Financial Conditions.* This worry had several elements. The first element had to do with simply having enough money to maintain oneself and pay rent, insurance on the car, food, health insurance, clothing, and utility bills. Other worry elements in this category included the following:

- Unforeseen expenses which might emerge for themselves or their children.

A true worry is.. going bankrupt, or not having money to pay bills, or your kids having some catastrophe, like an accident or some debt they have.

-The need to work to support the family.

We're not too economically set. I retired about five years ago and ever since my retirement I seem to have to supplement the income of our
household and I went through so many jobs that it's causing me some apprehension about work. It seems like I shouldn't be working, but I feel that I have to get some kind of income for the family. The pain that I have to go through, to have to work--it troubles me; it worries me.

-The relationship of money and good health.

Money will buy health, without money you can't afford to go to the hospital, to live; you can't afford to die.

-Government support.

I worry will my money last? What if I'm one of these people who live until 90? Will I be able to stay in my building? My money won't last. But then I say to myself, why worry about it? Fifty million people are on welfare, so I figure now that its no shame to be on welfare or ask for charity. So my attitude is kind of changing.

Level 2 Worries

Being Alone. Many individuals expressed feelings of loneliness and isolation. The elements of this category include:

Abandonment by family members.

I have a mother who is 89 and had a stroke and I try to visit her all the time, help her out and it seems that the children are so busy with their lives that you find yourself kind of lonely.

Losing spouses, and the devastation it causes.

Worst part is when you plan with your spouse for retirement and all of a sudden he dies.. what do you do alone?
Having to get new friends.

When my husband died, my friends left. I had to make a new set of friends because of a fear that you're going to steal their husbands.

Particular times that are hard.

Evenings and weekends are difficult, that's is what I worry about.

*Loss Of Independence.*  Worries in this category are typified by the following statements:

Losing independence is my chief worry. I had those two admission which I'll say I took pretty well as far as the recovery was concerned, as far as being over the trauma. But of course, it shook me up because that was my first serious illness. And it changed my whole picture. In other words, how long can I remain independent? How long can I continue to live alone?

Being independent is the most important thing. When I give a couple of hours to the nursing home and I look at these people and I see the mothers of doctors, and lawyers and they have grandchildren and they are just...I think they are just dead somehow. And I think I don't...that would be my number one worry.

Other concerns about independence include the following:

To remain independent, one needs control over finances.

If you don't have control over money, it's as if you can't think for yourself.
Staying active and not being a burden.

I worry about staying active, not being a burden. I want my children to love me to the end, not to say "Oh, dear God, what a burden". I want to be completely independent at all times.

Crime. The categories for crime include the following components:

Fear of becoming victims of crime at home.

The women in my apartment building are worried about getting new windows put in their apartments. They haven't gotten them yet, it's been several months and they're worried, afraid that these men who are working in the building are going to come into their apartments.

Fear of crime in public situations.

You read about seniors afraid to go out; they're going to be raped. So you don't go alone. They take your pocketbook away. Sometimes I think I don't want to go to the mall by myself; I'll go with someone else. Should I go by myself and just take a credit card and go or what?

This fear is worse at certain times of the day.

You're afraid all the time at night.

Leaving Things In Order After Death. This category included the following:

Preparation for death so that they would not be a burden to someone else.

We all get older and we want to leave things not. I don't know how to put it..not leaving responsibility to someone else..leaving things in order.
Having something left for children after death.

If I should have to go into a nursing home, what would happen to my house? Would I have to sell it for nursing care? We built up all our life and built this home to give our kids when we leave.

*Help With Decisions.* This category included the following elements.

Learning to make decisions for the first time in their lives after their spouses died.

I'm not accustomed to making decisions. My mother made them since my father died when I was two. Then you have your husband helping you, then friends.

Family members can be disrespectful in helping to make life decisions.

I have a son-in-law. You ask him a question and he will say, what do you want to know that for? It makes you feel defeated, like you're not smart enough to know what to do. It's really difficult to make these decisions.

*Driving.* This category had a variety of elements.

Following directions and avoiding accidents.

A couple of weeks ago, I had to visit the doctor and I came out of the parking lot and went right instead of left and ended up in Chicopee and it was late in the afternoon and it was pouring. There's no turnoffs really and all I said, if I get out of this alive. I'm not used to driving on the main highways, and that day I had to stop at a gasoline station and they gave me which way to get back to Springfield. But driving is not easy. There are drivers who don't stop at red lights and they come out of these side streets and they're beyond the street and in your way.

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Other drivers.

...sometimes I say, oh, these crazy people driving cars worry me terribly

Maintaining faculties.

the fear of getting out and driving. And when I'm driving, (I worry) about getting into accidents. My faculties are still good, but this worries me too, (especially at high speeds and at night).

Driving at night.

No seniors go out at night, or very few seniors can drive at night. Either they can't see that well or what. I don't know.

Level 3 Worries
The worries expressed at this level occurred infrequently. Generally, these worries were mentioned only once by a participant. They were not concerns commonly shared by the groups.

Societal-Evaluative Issues. This category included tangential concerns about nuclear power, the ozone layer, AIDS, drugs, the war, social security, and the economy. The main issue was:

The plight of our society and what it will mean for grandchildren.

These children 13 and 14, the young having babies out of wedlock and things like that. We didn't do things like that in our days (I don't worry about it, but I think about it). What is happening to this world? What is going to happen with all these drugs and all these AIDS and all these
things? After all, I have grandchildren and now a great-grandchild. What is going to happen to these people going up into space and seeing what is going to happen? This is a different kind of worry.

*Social Judgments.* This category focused on what other people think and if one is liked by others. It included the following components:

Who will come to my funeral.

When the time comes, there will be no one at my funeral. When my husband passed away...we had so many people there. I have friends, but not that many, and that always bothered me, not for myself, but for my daughters. I always visualize...that was always on my mind.

Embarrassment brought on by distressing others.

We went to Saratoga Springs for the first time. We were coming out of the ballet and I had to go to the ladies room. And my husband saw me going up the hill and he lost me in the crowd. And we couldn't find him. That was a worry. It was embarrassing because everybody was worried and I was worrying that I was worrying everybody.

Concern about relationships.

Relationships: does somebody like me? A fella mostly (when I was young) not so much now. I want people to like me, but I don't worry about it. If I'm not their cup of tea, I'm not their cup of tea. I worry that they will come to often to my house and I let them in. I can't say no to anyone that comes to my door.

*Miscellaneous Worries.* This category includes things that did not fit into any of the other categories. It included losing one's temper, losing an important document, volunteerism, the house, other people, putting oneself first, meeting deadlines, and "everything". One example of these worries is the following:
Also, losing an important document.

My daughter called me up and said, "You know, it's due, I think you've got to pay it. It's around this time of year, get the paper, we'll take care of it." I can't find it. If I call her up, she'll swear I'm getting Alzheimer's. The whole apartment, I tore it, they couldn't find it. I worried all night. I walked the floor. I figured maybe I put it in a drawer, I couldn't. So I said, I'm not going to tell her about this one." I called up the man who had something to do with it, and I said to him, "I didn't sleep all night, I'm sweating, I'm so nervous. I need this paper." Anyways he says to me, "Don't worry, come on down." So he had a Notary Public to sign for me.

The Definition of Worry. The participants defined worry as an involuntary process, which is repetitious and creates constant pressure.

You don't sit down and say, well, I'm going to worry about this and that. It's just something that comes in...like a broken record that is in your head all the time.

It's a nagging of your mind.

Worry is considered to be an unnecessary and destructive process.

It's a part of you...it's the negative...it's wearing you down.

It is concern for something that might happen.

Worry is worrying about the things that happen and nine times out of ten they don't happen; you worry all day for nothing.

It can happen without one knowing it.

Sometimes you don't even know you're worrying.
Worry is related to insecurity.

Worry is insecurity; when people worry they are insecure.

It requires distraction to eliminate it.

Means that you can't get it off your mind until you have something new coming into your life of take (over).

Worry is different than a concern.

Distinguish between worry and concern; worry has to do with something big (a catastrophe), or is done by an obsessive person.

It is believed to occupy a central part of one's mental life.

You don't think about other things...just what is bothering you.

Some subjects felt that worries had to do with trivial events, while others believed that "real worries" were about something big and important things.

Worry is if you go to the doctor and you are going to get an X-Ray result. That's a worry. You go to Weight Watchers and you worry that the scale didn't go down. That's not a real worry.

Still others felt that worry is a common, meaningless term.

It's an expression I heard when I was sitting and mourning for my husband. Everybody came to me and said, "don't worry about it...". Do they mean that they are going to take over? Should I bring my bills to them? Don't worry about it. I think it's more or less an expression.
Effects of Worry. Worry immobilizes one and makes one inefficient.

It prevents you from doing things. It hinders you, occupies your mind from doing something else constructive.

It creates cognitive difficulties in decision-making and increases errors.

You can't make proper decisions. All your mind is on the worry.

Other psychological effects include insecurity, depression, anxiety, sadness, loneliness.

It creates such health problems as fatigue, heart disease, high blood pressure, gastrointestinal difficulties, and insomnia.

I can't sleep. They doctor tells me that my foot is getting worse, and that my circulation is poor. I don't know if they are going to cut the foot, or what they are going to do. You get up in the morning and try to walk, but you can't walk too far. So I don't know. Night it hits you the most.

Worry suppresses or increases appetite.

I can't eat because it won't go down.

If I get nervous I like to eat everything in the refrigerator and then I feel better.

Worry affects social relationships as some withdraw from people and others become more irritable.

I have a tendency to hibernate and stay away from people when I'm worried.
Sometimes it affects relationships with people. It comes out. You're so preoccupied with worry that you don't say hello or you're crabby or annoyed.

Worry leads to wrinkles as well.

They're character lines, signs of things that I went through in life. Each lines tells a story.

Worry Differentiated from Anxiety. Worry was generally perceived to be more serious than anxiety, something that a doctor treats you for.

Worry is connected to anxiety, but anxiety can make you pass out; have to take medication for it; you're so anxious about something..it's beyond your control.

Some felt that anxiety is present focused and worry is future oriented. Some felt just the opposite.

Anxiety is something you expect...anticipate, but worry is something that's always there.

Anxiety leads to worry.

They're very close. You start by being anxious about something and then you end up- you're really worried about it. It's happened to me many times: when I had to go to the hospital for my husband and I never drove in inclement weather before; he always was the one that drove. Believe me, you know you had to forget anxiety when you have to do it.

Some felt that worry and anxiety are very closely related; others felt that they are not related at all.
Worry Differentiated from Depression. Depression was also perceived as deeper and more serious than worry, something that means one is sick, feeling like one doesn't want to do anything, see anyone, talk to anyone.

You feel suicidal with depression; you wonder what you are here for.

Some felt depression is the result of worrying; others felt that depression leaves no room for worry.

Depression is an entirely different state of mind. When you're depressed, you're not worried. When I start thinking I get very depressed. I'm not worried about anything. I don't have time.

Depression a state that is avoidable and they do not allow themselves to fall in to it.

You can make up your mind not to be depressed. I have just said, "I won't". There's a lot of things that I sort of do worry about, but I will not allow myself to be depressed.

The Worry Process over Time. Some individuals felt that the worry process had not changed much over time for them.

It's something you're born with. Even as a child you worry about you parents: are they good? Or as you lose a pet, you worry about it.

However, most felt that their worry is more intense now that they are older. People have different worries throughout the life span.

It's almost a punishment when you worry when you're older because you are worrying about something that can be serious and sad and deep. When you're younger and you're worried its usually something trivial.
Worries are different now. Children are grown up. You worry about them always, and the grandchildren. You worry about your health. It's not the same as when you were younger.

You worry in different stages. You first worry about getting promoted, then about the kids marrying nice people. Now you worry about the grandchildren. being well, atomic energy, the war.

Subjects felt that the change in worry is due to the changes in society and that there is more going on today to worry about. Negative attitudes towards senior citizens is one reason that elderly individuals experience more worries.

I think society makes you worry more. People are living longer and society has not yet adjusted to how to react to older people. You go into a store and when they see a woman with gray hair and rather old, they immediately change their personalities. They are so very caring to the younger person. to you they are kind of gruff in the manner. I've even tried to say hello to young people on the street to see how they would react, and there is no reaction at all. I think people haven't gotten used to elderly people, but they better because they are living longer and we're here to stay.

Having fewer people in your life is another reason that elderly individuals are more worried.

There are these people in your life when you are younger. And then you feel that you can say something to them and you're not lonely. And I think many times worry comes from loneliness. When things crop up in you head and another one comes in and you get a little confused and your normalcy seems to leave you.

Typicalness Of These Worries To Someone Your Age. Half of the elderly individuals felt that their worries were different than those of most people their age.
They worry about different things. They're worried about getting old, and I worry about three or four other things. They all seem to talk about getting old and sickness, which they worry about more than I do.

My husband never took anything seriously. If we didn't have enough money, he didn't worry. And I would get another job to make ends meet. I had two and three jobs when I was raising my children.

The other half felt that they are "all in the same boat" and their worries were the same as other adults.

(If they you asked 100 seniors, they would) be thinking of their health, and being a burden to someone. They they'd be thinking of finances too, whether they have enough. How long are their finances going to last.

**Things that Contribute to Worry.** Spouses, children, and grandchildren affect the worry process.

I think if my husband goes, I'd be devastated

I think about my older daughter, her two daughters and so forth. I just think about how they are going to come out. How are they going in college and what is going to be there when one gets out in two years.

Money problems lead to worry.

Financially, we're going to be sort of strapped. We could get by, but it seems that there is always a shortage.

Being alone affects the worry process.

The knawing feeling that someone may not call me for 3 days.

Seniors have an increased amount of time.

I think we have more time on our hands maybe to think about things more.
Stage of life can affect the worry process.

At 40, 50, 60, I never thought of things like that, but suddenly I started thinking about them.

Gender affects worry.

Men can shrug of worry in a different way and women kind of carry it within themselves and they hold onto it and it takes a lot out of the person

Men don't talk about it..keep it inside. Don't want to worry anybody else about their worries, so they keep it to themselves.

Social problems also affect the worry process.

You worry, you hear these terrible stories and you say gee, it shouldn't happen to my kids. My know all the news and stuff. Oh, I hope that doesn't happen...just putting yourself or you children in that position and hoping.

Some individuals felt that major things caused worry, and some felt that something little could do it.

It doesn't start, it just, something will, anything out here, it will make me think of it, oh what we can do, and what can be and I try to push it out of my mind but it's with me all the time. It really is.

Health problems in the family contribute to worry.

My sister's now in the hospital. She's 86, and she's very sick and she's been on my mind a lot. At the same time I have a nephew who is 52. He had a heart attack, he had angioplasty, I really worried about him.
Responsibilities of life lead to worry.

The house is a big worry and I hope to stay well to take care of my mother because you have to watch them (the aides) everyday when you go to... the nursing home.

**Controlling Worry.** There were two distinct opinions about the controllability of worry. Some felt that since it's so difficult to control, one just needs to accept it as a fact of life.

I don't know, there is some saying, somebody once told me, I'm stupid, I cannot remember it, "Don't worry about things you cannot control". There's a saying I've got at home on paper, something about worry. You just drive yourself nuts, you're thinking and worrying and you can't change worry. So you can't change it.

Others felt that they had more control over worry, and had a multitude of ways that they mitigate it. The following are examples of control methods expressed by the participants:

**Making downward social comparisons.**

I think one can control it to some extent. For example, you are worried about your health and you have good reason to worry about it. If you look around you, you find so many people worse off than you, you say to yourself, "what do I have to worry about".

**Keeping busy with hobbies, sports, and an active social life are the key to forgetting worry.**

Stamp collecting, coin collecting, and I deal in it at the same time. If you want to get the world around you, pick up stamps. Shut the damn TV off and immerse yourself in the countries of the world. You learn history; you learn geography, and it occupies you mind and before you know it, time has gone by. Hobbies are the greatest thing in the world.
Do a little exercise. See the girl on TV. - if only I had her outfit, maybe I could do as well.

Do something. Got to the movies or go shopping, or see somebody. Don't sit around and think about it. Get out and don't think about it.

I try to push worries away from me. When I'm home and alone at night, I have some friends that stay up late like I do and if they don't call me, I call them and we have nice chats on the phone. Finding a buddy is very important.

I try to find some distracting things to do. I'll read; I'll try to read because I'm not a good reader but I'm trying to improve on it. I'll try to get into sports, which is very good.

Being around positive people and being positive oneself was important.

Always be on the move, go places, do things with people who want to do things, are peppy, and full of life and want to reciprocate. If you just sit around and moan and groan and expect them to come to your door and say, "here I am," that's ridiculous.

In particular, making others feel good was an important strategy.

Try to make someone else happy and your sad feeling will disappear. Sometimes you can and sometimes you can't.

Writing worries down was helpful.

You should be Japanese and tie it on the trees at the temples; then the wind will blow away your worries.

Having children and grandchildren makes a difference.
Having nine grandchildren who care about you and think of you...it helps, makes you feel better. And if they don't you wonder why. I have a son and daughter and my son just married a second time, and he's got a new wife, and I don't see him because of her. And he will take me if I have to go somewhere or do something. He'll come take me.

Talking to yourself or reasoning with yourself was helpful. Minimizing the importance of the worry was particularly helpful.

Have to reason with ourselves...I'm being anxious about something that is really not that important...not that fatal...not that vital. Not so important that I have to make myself sick about it.

Pushing the worry away and forgetting it was helpful, but this strategy does not work indefinitely. The worries eventually come back. Taking a drink was suggested as a good way to push away a worry. Changing your eating and sleeping patterns was helpful. Having a sense of humor, thinking young, and meditation were suggested. Participants felt that it is hard work to stop worrying.

**Negative Aspects of Getting Old.** This category had the following components. Old age is about uncertainty over the future and difficulties in coping with the effects of old age. Getting older means being confined, lonely, and living quietly, especially at night.

During the day I'm on the go, so my mind is at ease, but it's at night when you're sitting alone in the house and have no one to talk to, that's the difficulty.

Being old means a greater chance of physical illness and more ailments. It is a time of trying to find out what is wrong with you. There are more people to take care of as well, such as relatives and friends with illnesses.
I've had a little bit of sickness... heart surgery; I have high blood pressure; I've just had a hand operation... poor circulation in the legs which makes it difficult to walk, so it's not much fun.

My husband had a simple accident, just falling off a chair, and he became handicapped... my mother went into the home at her request because she had the Parkinson's and my sister got... a rare disease and it was incurable. So between the three of them, I was going home to see my mother; at weekends I would go to Boston to see my sister, and my husband had to retire at 55.

It also means potentially depending on others at a time in life when there may be no one.

You worry about getting this or getting that, such as Alzheimer's disease or what's that other one? I hate the thought of losing my mind, not being able to do things... you are burdening other people.

Positive Aspects of Getting Old. Many participants saw older age as a time in life when they are able to be productive. Freedom from the responsibilities associated with other life stages gives them the opportunity to do enjoyable things. Seniors have no set schedule.

I go out with friends and I am quite busy, no responsibilities like I had when I was younger and raising children.

Activities available to them include traveling, exercising, games, classes, cooking, dancing, crocheting, volunteering, clubs, and socializing.

I play Mahjongg, bridge, canasta; I go dancing; I joined the Seniors. I didn't want to be a burden and have my children feel sorry for me.

I have friends that frequently visit me. In turn I visit them. We sit around and chat and I'll pick up a pizza, make coffee and tea, whatever. We eliminate that loneliness for the day and we plan for the following day.
Definition of Old Age. Old age was defined simply in numerical terms (e.g. "when you're 100"). It was also defined in physical and psychological ways. Being old is when a person is confined and unable to do things. It means inaccessibility to friends. Old age comes on suddenly.

When you're young, you think that old age is so far away. It's today that you're youthful and everything seems to be going well and you have your worries, yes, but everything is going well. And then tomorrow everything piles up quickly, especially if you are a busy person.

Some don't feel old and think that it is important to think young.

I don't feel old until I look in the mirror. My spirits are very young. My way of looking at myself in the mirror tells me I'm 40. Then one morning I really looked and I said, no, I'm not 40. But then I forgot about it afterwards.

But sometimes I think it's the way you think. If you think old, you feel old. Sometimes my kids tell me, "sometimes you act like a teenager yourself."

Some felt differently.

I feel old and I hope I don't get much older. I don't want to live to be much older. I believe in euthanasia because I've seen too much suffering.

I don't really mind being considered old. Who am I fooling?

It is important to accept age related changes.

Sometimes we have to learn to accept things. When I lost my hearing...I went for a hearing aid and (the doctor) said...you're never going to hear again the way you did before. Well, I was very sad. Couldn't hear the telephone...but then I said to myself, I'm glad I can hear you. I can speak to you one on one.
DISCUSSION

Summary of Quantitative Findings

As for the first hypothesis, the Total Worry Scale score and the Health subscale score correlated with all measures of worry except the percentage of time spent in worry in a day. The Social Worry subscale was correlated with all worry variables except the percentage of time spent in worry in a day and the troublesomeness of worry, whereas the Financial subscale was correlated with only these variables. The Total Worry Scale and Health subscale were related to four worry variables, the Social subscale to three, and the Finance subscale to two.

As for the second hypothesis, higher amounts of worry were positively related to higher scores on the Geriatric Depression Scale. Worry was most highly related to the anxiety subscale of the SCL-90R, followed by subscales for somatization, obsessive compulsive behaviors, depression, psychoticism, phobic anxiety, interpersonal sensitivity, hostility, and paranoid ideation. The psychological symptom pattern according to the SCL-90R for the high worriers in this study showed some similarities and differences to those of Generalized Anxiety Disorder clients, although this group is younger. They both had elevations on anxiety, obsessive compulsive behaviors, and depression with secondary features of psychoticism. However, GAD clients typically also have primary elevations on phobic anxiety. Also, these subjects had higher somatization scores than most GAD clients. The worriers in this study had less irrational and persistent fears to a certain person, place, object, or situation and more distress arising from perceptions of bodily dysfunctions.

Scores on the Behavioral Coping scale of the CTI were related to worry, but scores on the Emotional Coping scale were less related to it. Subjects with low self-esteem expressed more financial and social worries. Social support was not related to amount of worries on the Worry Scale.
As for the third and fourth hypotheses, increased age was not related to amount of worries, depression, psychological symptomatology, coping, self-esteem, or social support.

**Comparison of Quantitative Findings to Other Research Evidence**

This relationship of depression and anxiety to worry is consistent with other research that has found worry to be a mixture of anxious and depressive emotional experiences (Andrew & Borkovec, 1988). Worry among this group was also highly related to obsessive compulsive behaviors, a link which was substantiated by several researchers with other populations (Borkovec, Robinson et al., 1983; Gross, Oei, and Evans, 1989).

Worry has been found to be related to negative coping strategies such as self-blame, wishful thinking, and problem avoidance (Meyer et al., 1990) as well as scores on the Behavioral and Emotional Coping subscales (Epstein & Meier, 1989). In this study a similar relationship was found between worry and scores on the Behavioral Coping subscale but less so for the Emotional Coping subscale. Problem-focused coping changes the individual's person-environment relationship, whereas emotion-focused coping changes, through realistic or defensive appraisal, the way a situation is viewed or reacted to and consequently the emotional reaction to it. Adaptation to health worries in this study, which includes negative possibilities without opportunity for control, did not occur through problem-focused coping, a finding which is consistent with other research (Billings & Moos, 1981; Cappeliez, 1988; Folkman, Lazarus, Dunkel-Schetter, Delongis, & Gruen, 1986).

The general relationship of low self-esteem to worry is consistent with work by Meyer et al. (1990). In this study specific relationships were found between worry about social and financial items and self esteem. Perhaps the threat of loss of familiar social and financial-provider roles leads to feelings of ineffective functioning and leads to a
consequent loss of self-esteem. Indeed, Kuypers & Bengtson (1973) have found support for the relationship of loss of social roles to feelings of social incompetency in the elderly.

The lack of a relationship between worry and social support was also found by Wisocki et al. (1986) with a community active sample of elderly. Social support was also unrelated to psychological symptomotology, with the exception of the Obsessive-Compulsive and Paranoid Ideation subscales on the SCL-90R, coping, and self-esteem. The lack of relationship between social support and well-being has support in the literature (Baltes, 1984; Fiore, Becker, & Coppel, 1983). Although social support can be helpful for some elderly individuals, for others it can be detrimental. For instance, DiMatteo and Hays (1981) detailed reasons that social support is counterproductive after a serious illness. Social support may undermine self-esteem since he or she is perceived as an impaired individual and a burden.

The lack of age effects supports a positive picture of aging. Getting older does not mean more worries, psychological difficulties, decreasing self worth, being less able to cope with problems, or having less support to help one cope. The individuals in this study ranged in age from 70 to 92 and were still active and mobile. With a greater range in age or with a homebound or institutionalized sample of elderly, age might have been a significant factor.

Asking the subjects to provide an estimate about the average percentage of the day spent in worry yielded insignificant effects. While all the worry variables correlated with each other, this variable did not correlate with physical and psychological conditions related to worry. This daily average correlated with the Finance subscale of the Worry Scale only. It was not related to measures of psychological symptomotology, coping, self-esteem, or social support. However, this measure of worry has been used extensively by Borkovec and his colleagues to measure worry. It could be that worry with the elderly needs to be measured differently than it does with young adults. It is also possible that an alternative to this worry variable needs to be found. Another possibility is that the low
percentage of time spent in worry in comparison to Borkavec's 40% is responsible for the insignificant results.

**Summary of Qualitative Findings**

Worry in this study was defined by subjects as an involuntary process that is repetitious and creates constant pressure. It was not future oriented or related to problem solving, unlike previous findings by Borkovec and colleagues with younger subjects and findings from a comparison study of elderly and college students by Powers, Wisocki, & Whitbourne (1992). Subjects worried most about their health/physical decline, families, and finances. They worried somewhat about being alone, loss of independence, crime, leaving things in order after death, making decisions, and driving. They worried seldom about social issues and social-evaluative judgments.

The primary defining feature of worry with younger individuals is its uncontrollability (Borkovec, et al., 1991). However, in this study subjects reported a plethora of control methods, including staying active, being positive, making downward social comparisons, reasoning with yourself, and distracting yourself. It is not known if subjects actually used these methods, only that they knew about them.

The worries of the subjects in the study did not include many concerns about being evaluated by society in a negative way. This is in contrast to younger individuals, with whom social-evaluative fears are a major component of worry (Borkovec et al., 1991). The comparatively few worries on this topic that were mentioned once included fears about the grass being too long, being too nice to others, the turnout for one's funeral, and worrying others during a crisis.

The subjects worried about factors that directly impacted their lives on an individual level. There were few reported concerns about societal issues such as politics, the environment, nuclear power, etc.. When they did worry about these issues, it was in the context of what these changes would mean for their children and grandchildren.
The effects of worry mentioned in the context of group discussion included physical problems such as insomnia, fatigue, high blood pressure, gastrointestinal difficulties, and heart disease. In comparison, the question in the worry questionnaire on worry-related physical changes elicited the following complaints: sleeplessness, back pain, memory problems, heart palpitations, and dryness of mouth. Psychological effects mentioned in the context of group discussion included anxiety, depression, insecurity, sadness, and decision-making. In comparison, the question in the worry questionnaire on worry-related psychological changes included anxiety, depression, frustration, upsetting thoughts, inability to make decisions, and a lack of concentration. These physical and psychological problems form a picture of the difficulties that are associated with worry and illustrate which problems are most common.

Some individuals in this study felt that worry did not change over their life span and that once a worrier, always a worrier. However, more than twice as many felt that worry had changed over time. Many felt that worry was more intense now and noted that they had experienced worry differently as they aged. Their reasons for these changes included the following:

1) Older individuals worry more about serious issues whereas when they were younger they worried about more trivial things.

2) Health problems and grandchildren are new worries for elderly individuals.

3) Ageist attitudes give elderly individuals more to worry about.

4) Elderly individuals have fewer people in their lives at a time in life when their friends and family members are dying and they become less mobile. They worry more because they are alone and have no one to mitigate the worry process.

Comparison of Qualitative Findings to Other Research Evidence

The definition of worry as an involuntary process that is repetitious and creates constant pressure was consistent with Borkovec's definition. However, the subjects did
not perceive worry to be future oriented, which is an important aspect of worry among college populations. As research has found the elderly to be more oriented towards the past and present than the future than younger individuals (Powers et al., 1992), perhaps this orientation prohibits the more serious effects of worry. The subjects also did not perceive worry to be related to problem solving, which is another defining feature of worry with college students. Perhaps since the elderly had less future and more past oriented worry, their worries could not be related to solving a problem since that is a present or future worry.

The lack of concern about social evaluation is in contrast to the concerns of a college population, with whom social-evaluative fears have been a defining component of worry (Borkovec, Robinson et al., 1983). Feeling self-conscious, making mistakes, and meeting someone for the first time were the most common worries for these younger individuals. It seems that these older individuals have developed a strong sense of self and are not concerned about their place in society.

Contradictions arise when information from the focus groups is compared with the information obtained from the Worry Scale. The subjects in the focus group discussions stated that they worried most about physical decline/illness, financial conditions, and family. These worries are included in the Finance and Health subscales of the Worry Scale. However, the responses on the Social subscale, which was utilized infrequently (Wisocki et al., 1986) did not correspond well with the topics presented in the focus group discussion. Family-related worries make up only 20% of the Worry Scale, but in the group discussion family was mentioned in 45% of the worries. This is consistent with work with younger anxious and nonanxious individuals for whom family worries are the first or second most common worry area (Borkovec, et al., 1991; Craske, et al., 1989; Sanderson & Barlow, 1990). Given the lack of social evaluative concerns that make up the social subscale and the predominance of family worries, the Worry Scale may warrant revision.
social subscale and the predominance of family worries, the Worry Scale may warrant revision.

We were unable to find individuals that worried at the 40% daily rate expressed by the college students in Borkovec's studies. Despite massive recruitment efforts which included addressing 500 elderly individuals, we were unable to find a substantial number of elderly who reported worrying at more than 28% of a day. There are three possible reasons for this difficulty in finding elderly worriers. First, there could be greater range for the amount of time spent worrying for younger individuals than older ones so that there are more younger individuals who worry at a higher rate. Second, the older individuals may be less worried overall. Lastly, it may be that true elderly worriers were unwilling to participate in the research project.

These individuals experienced worry about physical decline, as well as leaving things in order after their death. However, few individuals talked about their own death as a major worry. This is consistent with work by Wagner and Lorian (1989) who found that death anxiety was not a general characteristic of this age group.

**Strengths/Limitations of the Study**

This research effort explored the worries of the elderly in a many different formats including focus groups and a variety of quantitative ways. This allowed for a comprehensive picture of worry and elder life.

One of the strengths of this study was also its weakness. Whereas flexible method research allows for rich and diverse data, it is biased by the experimenter. The use of two experimenters in putting together the focus group data was an attempt to address this concern.

Another limitation of this study was its population. It consisted of all community active, Caucasian and mostly middle class women. Since there were so few men in this study, gender effects were not explored. Also, more subjects would have been better for
Conclusions/Future Research

The findings from this research effort form a comprehensive model of worry in the elderly. Worry is related to anxiety, depression, and obsessive compulsive behaviors. It is related to behavioral rather than emotional coping. Worry is related to low self-esteem. It is not consistently related to social support or age. The content of the worries is diverse, but includes a predominance of health, financial, and family themes. Worry does not include many concerns about social-evaluation, societal issues, or death. Worry is not related to problem-solving and is not always future-focused. Elderly individuals report a plethora of physical and psychological effects of worry. They believe they have some control over worry and know a multitude of ways of exercising control. Worry changes over the life span, in content, and intensity. Future measures of worry for the elderly need to take these factors into consideration in their design. In designing these measures, themes of health, financial, and family need to predominate.

This picture differs from Borkovec's findings with younger individuals in several key ways. Although Borkovec defined worry as being related to problem-solving, social-evaluation, uncontrollability, and being future-focused, the current research findings do not support those relationships for this population.

As for future research directions, the same study including focus groups on worry with a similar format for a variety of age groups so that the results can be compared with this elderly population would add a lot to our picture of worry over the lifespan.

Although the original intent of this research effort was to learn about worry in the elderly, so much more came from this study. In talking about their worries, subjects in this study demonstrated a slice of what life is like for seniors. Although later life may have its difficulties, there are many positive parts about it as well. Many felt that this period of life offers a freedom from responsibilities that permits them to enjoy a variety of sports, hobbies, and an active social life. What we heard were many stories of happy, active, and
rich lives, told with humor and insight that left us with the sense that there are many auspicious aspects of elder life that we can all hope and strive for.
APPENDIX A: INFORMED CONSENT FORM

Title of Study: Worry in the Elderly

Principal Investigators: Patricia Wisocki, Ph.D., Silaine Meeks, B.A., Julia Hunt, B.A.

Department of Psychology, University of Massachusetts

Days: (413) 545-1359 - Amherst

Nights: (413) 567-6721 - Longmeadow

I agree to participate in this research project. It has been explained to me as follows:

This study's major purpose is to understand how and why elderly people worry, and variables that are related to worry. This study involves filling out the enclosed questionnaires and sending them back to the experimenter within a week after I receive them in the mail in the enclosed envelope. The experimenter will then send me $5.00. If I am then chosen for further participation, the experimenter will call me in a few weeks. We will set up a time for me to participate in a small group discussion on the topic of worry and fill out some additional questionnaires. The group will meet for 2 hours. I will spend another 1 hour completing questionnaires relevant to the study and I may be contacted by phone for further discussion about worry. I will be reimbursed and additional $20.00 for my participation.

I am not obligated to participate in the study and I may withdraw at any time. Only the researchers will know their identity.

Any questions or concern I have can be addressed to the above investigators.

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Your Signature
APPENDIX B: DEBRIEFING FORM

Debriefing Statement

This study was designed to investigate the experience of "worry" among elderly citizens, using a group format which allowed participants to freely discuss the topic of worry. We are interested in investigating whether the elderly worry, which concerns are worrisome to them (e.g., physical, financial, or social), and how they manage their worries. We anticipate that your participation will allow us to better understand the experience and impact of worry on the everyday life of senior citizens. We thank you for your participation. If you wish to find out about the results of this study, please leave your name and address.
REFERENCES


