PERSONALITY CHARACTERISTICS AND ATTITUDE TOWARD MENOPAUSE

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CHAPTER I

INTRODUCTION

The promotion and maintenance of wellness in individuals throughout the life cycle is a primary function of professional nursing practice. Assisting individuals in avoiding, minimizing, coping with, or alleviating factors which result in stress is an essential aspect of health promotion and maintenance. To function effectively in this manner, nurses must have knowledge and understanding of the normal life cycle and of the stressful events or factors which operate throughout the cycle.

Nurses involved in the care of women need to know and understand the physiological, psychological and sociological events of the female life cycle. In the midst of a youth oriented society much attention has been given to the developmental and childbearing periods. In reality, the female life cycle extends beyond the childbearing period into middle and old age.

Menopause, the cessation of menstruation and the end of fertility, is a biological event occurring in all women. It occurs during the fourth or fifth decade of life as a result of marked estrogen decline. The menopause has

been identified as a definite stage in the psychosexual development of women. For some women menopause is not a traumatic problem in the life cycle while, for others, menopause is a problem with serious physiological, psychological and social significance.

Knowledge of the factors or events which influence menopause and women's attitudes and responses to menopause is vital to professionals involved in the care of females. Objective examination of these factors is important in the development of a theoretical basis for providing health care to women prior to, during, and after the menopausal period. At the present time, the contribution of a woman's personality characteristics to her attitude toward menopause is unknown. The results of this study provide nurses and other professionals information concerning the relationship of personality factors and the development of attitudes toward menopause. This knowledge can be utilized by professionals in functioning for the promotion and maintenance of health in women throughout the entire life span.

Statement of Problem

The problem for study was to determine the relationship between personality traits and attitudinal disposition toward menopause in women throughout the climacteric.

Statement of Purpose

The purposes of the investigation were the following:

1. To determine the personality traits of climacteric women
2. To determine the attitudinal disposition of climacteric women toward menopause
3. To determine the relationship between personality traits and attitude toward menopause in climacteric women

In addition, if a relationship was found between personality traits and attitude toward menopause, a final purpose was to determine whether or not that relationship was consistent throughout the premenopausal, menopausal and postmenopausal phases of the climacteric.

Background and Significance

Personality is the characteristic pattern of behaving and thinking that constitutes an individual's unique, distinctive manner of responding to the environment (Kagan and Havemann 1968; Pervin 1970; Goldenson 1970; Cattell 1950). It is a complex and multifaceted entity which is determined by many factors: genetic, constitutional, maturational, familial, social, and cultural (Cattell 1965; Goldenson 1970; Pervin 1970). Attitudes are transitory evaluative belief systems and serve as the basis for positive or negative emotional feelings and responses toward a particular object or event (Cattell 1965; Krech,

Crutchfield, and Ballachey 1962). Thus, personality and attitude are important variables in determining behavioral responses to situations. events or objects in the environment of an individual.

Cattell (1950) theorized that personality is composed of a collection of traits or characteristics that predict what a person will do in a given situation. An individual's behavior in a situation depends on the personality traits of the individual, attitudes relevant to the situation, and other transient or situational variables that enter into the situation (Horn 1966). In addition, Cattell (1965) reported that although personality traits, experience, and situational factors are linked to the development of attitudes, it is personality traits that lend a certain degree of stability to attitudes and behavior across situations.

A review of the literature has indicated that while attitude is influenced by a number of variables, personality factors are major determinants in attitudinal disposition and behavioral response. In addition, a number of investigations have found that attitude toward, and response to menopause depend on many of the same variables.

Female menopause occurs naturally between forty-five and fifty-five years of age for the majority of women living in the United States (Rogers 1956; Flint 1975; Mac-

Mahon and Worcester 1966). Sometime around age forty, ovarian estrogen secretion in women begins to decline resulting in decreased fertility and irregular menses. This period of estrogen decline is termed the climacteric and it may last for as long as twenty years (Speroff, Glass, and Kase 1973). Based on the varying levels of estrogen decline and the resulting effects on reproductive function, the climacteric is divided into three phases. The perimenopausal, or premenopausal phase, is the period of time prior to the cessation of menstruation. There is decline in estrogen secretion and both irregularity of menstruation and decreased fertility may be exhibited by women of apparently normal health. When estrogen levels are low enough to cause cessation of menses and complete infertility, the menopausal phase has been reached. This second phase may last for approximately two to three years (Rogers 1956; Crawford and Hooper 1973; Greene 1976). Finally, the period following the cessation of menses, during which the female body adjusts to the newly established low levels of estrogen, is termed the postmenopausal phase of the climacteric. The major physiologic manifestation of estrogen decline, the last menstrual period, marks the menopausal phase as one of great importance to most women (Speroff, Glass, and Kase 1973; Sherman 1971; Prados 1967; Simon 1968).

A wide range of symptoms or responses, both physiological and psychological, have been reported during the menopausal phase of the climacteric. Commonly these responses include hot flushes; sweating and hot flashes; paresthesias; chills; headaches and arthralgia; palpitations; vertigo; fatigue; nervousness; irritability; depression; insomnia; self depreciation; gastro-intestinal imbalances such as nausea, diarrhea, and constipation; and dyspareunia (Wilson 1971; Edwards 1950; Speroff; Glass, and Kase 1973; Jeen 1973; Greenblatt, Mahesh, and McDonough 1974; Crawford and Hooper 1973; Simon 1968; Greene 1976). These symptoms are collectively referred to as menopausal syndrome. Barret (1933) estimated from 1,000 women studied that 16 percent of women are free from menopausal symptoms. Approximately 75 percent experience varying degrees and numbers of symptoms with 10 percent being incapacitated by symptoms at various times during the menopausal phase. Although such a large percentage of menopausal women encounter symptoms of some type, not all of these women seek medical treatment. McKinlay and Jefferys (1974) reported that 20 percent of symptomatic women sought medical treatment. An estimate given by Speroff, Glass, and Kase, (1973) stated that 50 to 60 percent of menopausal women require medical assistance and support for moderately severe symptoms.

Disagreement exists concerning the etiology of the menopausal syndrome. Both physiological and psychological factors have been cited as etiological determinants in the symptomatology of the menopause (Hoskins 1944; Greenblatt, Mahesh, and McDonough 1974; Barret 1933; Crawford and Hooper 1973; Neugarten and Kraines 1965; Simon 1968; Flint 1975; and Greene 1976). Although studies have varied in the emphasis placed on either the physiological or psychological factors, most clinicians include both when diagnosing and treating menopausal women (Rogers 1956; Flint 1975; McNair 1947; Neugarten and Kraines 1965; Speroff, Glass, and Kase 1973; Greenblatt, Mahesh, and McDonough 1974). Regardless of the etiology or number of symptoms experienced, personality and attitude toward the menopause have been referred to and examined as determinants in symptom formation and response to menopause.

McNair (1947) found that the personality and general adjustment of a woman were major determinants of the severity of response to the menopause. Parker (1960) stated that response to menopause, as demonstrated by symptoms experienced, depends on the smoothness of the changes in hormonal balance, the state of a woman's physical health at the time of menopause, and the emotional stability of the woman as she faces the menopausal period. In addition, Benedek (1959) stated that a healthy woman is not severly threatened by

menopause because the total developmental achievement of the personality during the reproductive period sustains the woman during the menopausal period. Edwards (1950) considered response to menopause to be an expression of the total personality of a woman and cited underlying stability as important for a nonproblematical response. Goldenson (1970) pointed out that an individual woman's personality makeup and attitude toward menopause constantly influenced her response to this period.

Eighty-two percent of the women studied by Stern and Prados (1946) experienced a uniform clinical picture of a menopausal depression. This depression was based on a previously existing maladjustment, thus demonstrating that psychic adjustment has some influence on the menopausal syndrome. The influence of personality characteristics on response to menopause is further supported by the findings of Ballinger (1975). A high incidence of symptoms of depression and anxiety in women of menopausal age was found by Ballinger in a survey of British women from the general population. In addition, the researcher suggested that there are certain personality factors which can predispose women to discover or magnify problems at the time of menopause and lead to emotional disturbances (Ballinger (1975).

The previous investigations indicate that general emotional stability and personal predisposition to exhibit symptoms of depression and anxiety are related to adaptation to menopause. However, none of these studies ascertained the contribution of attitudes and other variables to menopausal response.

Researchers have demonstrated that women vary in their attitudes toward, and experiences with menopause (Neugarten, Wood, Kraines and Loomis 1963; Maoz, Dowty, Antonovsky, and Wijsenbeck 1970). Neugarten et al. (1963) found that women in various age groups differed in their attitudes toward menopause. Younger women generally had more negative views of menopause than older women. The investigators also suggested that educational level may be a significant variable in women's attitudes toward menopause. Neugarten et al. (1963) found that more educated women did not fear menopause, though approximately half felt that menopause was unpleasant and disturbing.

Maoz, Dowty, Antonovsky and Wijsenbeck (1970) interviewed women of European, Oriental, and Israeli origin. Eleven variables and their associations with attitudinal disposition to menopause were examined. The one variable which was cited as predictive of a positive attitude was not wanting to have more children. This finding did not support the overall hypothesis of the investi-

gation which was that positive earlier psychosexual experiences are strong predictors of a positive attitude toward menopause (Maoz et al. 1970).

A factor analytic study of menopausal symptoms (Greene 1976), found that symptomatic responses were of three types: (1) somatic, (2) vasomotor, and (3) psychological. Greene (1976) suggested, therefore, that research should be undertaken to examine the relationship between somatic, vasomotor and psychological responses to menopause and certain personality variables.

In summary, the literature has indicated that personality and attitude are predictors of behavior. The development of attitudes is influenced by certain aspects or characteristics of personality. In addition, attitude toward menopause is influenced by several factors such as educational achievement, age, and menopausal status. A factor which has not been extensively studied is the relationship of personality characteristics to attitudinal disposition toward the menopause. Determination of the relationship between menopausal attitude and personality characteristics was the focus of this investigation.

Hypothesis

This investigation tested the following hypothesis: There is no relationship between personality characteristics and attitude toward menopause in climacteric women.

Definition of Terms

The following terms are defined as they were utilized in the investigation:

1. Attitude: an evaluative response having either positive or negative weighting as measured by the Attitude-Toward-Menopause Checklist (Neugarten et al. 1963)
2. Personality characteristics/personality traits (interchangeable terms): the important characteristics that comprise the personality of a woman as measured by the Personality Research Form-E (Jackson 1974a); appendix A contains definitions for each characteristic measured by the Personality Research Form-E.
3. Climacteric woman: any healthy woman aged forty to fifty-five years
4. Healthy woman: a climacteric woman who reported her health status as good to excellent and reported no major medical or psychological problems (any woman that reported artificial menopause due to irradiation or surgical removal of the uterus/ovaries was not included)

5. Premenopausal woman: a climacteric woman who had menstruated within the last three months
6. Menopausal woman: a climacteric woman who had ceased menstruating between three and twenty-four months prior to the investigation
7. Postmenopausal woman: a climacteric woman who had completely ceased menstruating at least two years prior to the investigation.

Limitations

The investigation had the following limitations:

1. The mood of each woman on the day the instruments were completed may have varied
2. Each woman's motivation to complete and return the instruments may have varied

Deliminations

Specific variables affecting the outcome of the investigation were controlled by use of the following criteria for subject inclusion:

1. Caucasian
2. Healthy climacteric women (forty to fifty-five years of age) who were categorized into one of the following groups:
   a. premenopausal women
   b. menopausal women

c. postmenopausal women

3. Attained educational level of graduation from high school or above .
4. No major life crises (death of a loved one, divorce, separation, or serious illness) within the six months prior to the investigation

Summary and Overview

Personality and attitude are determining variables for individual behavioral responses to environmental situations, events, or objects. Although behavior in any situation also depends on certain transient or situational variables, personality characteristics provide a stability to attitude and behavioral responses across situations.

Numerous investigations have indicated that personality traits and attitude toward menopause are important in determining response to menopause. A relationship between personality traits and attitudinal disposition toward menopause has not been delineated clearly or examined in past investigations. This investigation was designed to examine and describe the association of personality characteristics and menopausal attitude.

A more complete survey of the literature in the area of menopause, menopausal attitudes, and the importance of basic personality structure to the menopausal syndrome

is presented in Chapter II: Review of Literature. The method for data collection and treatment is described in Chapter III. Included is information regarding the setting, population, and instruments of the study followed by a description of the collection and treatment of data. The analysis of data presented in Chapter IV describes and interprets results of the statistical analyses performed in the study. In addition, reasons for the acceptance or rejection of the hypothesis of the study are explained in detail. Chapter V provides a summary of the complete study and describes the conclusions derived concerning the importance and relationship of menopausal attitudes and personality traits to female adjustment at the menopause. The implications for health care professionals and women in the areas of anticipatory guidance, education and management are also identified. Suggestions or recommendations for further study conclude Chapter V and the report of the study.

CHAPTER II

REVIEW OF LITERATURE

Personality is a multifaceted entity jointly determined by biology and prior experience with all facets of the environment (Cattell 1965; Goldenson 1970; Pervin 1970; Sarason 1967; Lazarus 1969; Wiggins 1973; Murray 1938). The traits or characteristics of an individuals personality are those attributes, needs, dispositions and tendencies which determine response to the environment (Allport 1937; Cattell 1950; Sarason 1967; Kagan and Havemann 1968). Since much of the variability in overt behavior is a result of the degree or extent to which a given individual possesses certain personality characteristics, the assessment of particular personality traits is important in the forecasting of behavior (Sarason 1967; Lazarus 1969).

Murray (1938, 1951) developed a holistic theory of personality based on the concept of need. The theory stressed the importance of the entire complexity of the individual and emphasized that analysis of behavior is dependent upon the environmental context in which it occurs (Murray 1938; Wiggins 1973). Personality was viewed as the mediator between an individual's psychological forces (needs/traits) and environmental demands (presses).

Murray (1938) developed a taxonomy of needs which distinguished manifest needs, latent needs, internal factors and general traits or attributes. The key to Murray's need concept is that needs are forces which organize all mental processes (perception, appreciation, intellect, conation, and action) in such a way as to change an existing situation and achieve a desired result. Needs are aroused by stimuli or situations called presses. The interaction of an individual's needs and presses produces a characteristic behavior or response to the environment (Murray 1938). Attitude, the readiness or strength of interest to act in a certain way in a given situation (Cattell 1965; Murray 1938; Krech, Crutchfield, and Ballachey 1962), is subsumed under the Murrian need concept. Therefore, the analysis of need-press interactions includes attitudinal disposition and provides a theoretical framework from which to predict behavioral outcomes.

A variety of personality assessment instruments has been developed to identify the traits or need configurations of individuals as defined by Murray's taxonomy (Campbell 1959; Edwards 1959; Stern 1958; Jackson 1974b). The identification of groups of individuals with similar traits or need configurations provides a basis for the prediction of similarities in behavioral responses (Stern 1970).

A common emphasis upon procreation, reproduction and motherhood as the essence of female identity or personality exists among psychological theorists (Freud 1962; Rank 1941; Erikson 1968; Adler 1927). This emphasis upon reproductive functioning as the core to womanhood highlights puberty as a turning point in the development of the female personality in our society. Although the developmental processes involved in female personality or personal identity are described by psychological theorists, the main focus is on the early childhood, pubescent and childbearing years. (Freud 1962; Erikson 1968; Adler 1927; Rank 1941).

The latter portion of the female life cycle is characterized by declining levels of estrogen and highlighted by the cessation of menstruation (menopause) and the end of fertility. This portion of the life cycle, termed the climacterium, has been examined as a period of development and adjustment for women during the middle and later years (Prados 1967; Parker 1960; Benedek 1950; Deutsch 1945; DeBeauvoir 1965; Sherman 1971; Edwards 1950; Simon 1968). Prados (1967) suggested that the maturational or developmental crises of puberty and the climacterium are parallel. The biological processes of puberty are progressive while those of the climacterium are involutional. The parallel exists in the psychological processes involved. During both

phases of the life cycle the woman adjusts to a state of flux in her entire complexity. Thus, the psychological processes are seen as maturational or developmental in that the woman adjusts to a new level of physiological and psychological functioning (Prados 1967).

Although response to the state of flux varies from woman to woman, the menopausal phase of the climacterium has been associated with a number of responses or symptoms. These symptoms are collectively referred to as the menopausal syndrome (Greenblatt, Mahesh, and McDonough 1974; McKinlay and Jeffreys 1974). Common responses include hot flushes, sweating and hot flashes, paresthesias, chills, headaches, and arthralgia, palpitations, vertigo, fatigue, nervousness, depression, irritability, insomnia, self depreciation, gastrointestinal imbalances, and dyspareunia (Wilson 1971; Edwards 1950; Speroff, Glass, and Kase 1973; Jern 1973; Greenblatt, Mahesh, and McDonough 1974; Crawford and Hooper 1973; Simon 1968; Greene 1976).

Both physiological and psychological factors have been cited as etiological determinants of the menopausal syndrome (Hoskins 1944; Greenblatt, Mahesh, and McDonough 1974; Barret 1933; Crawford and Hooper 1973; Neugarten and Kraines 1965; Simon 1968; Flint 1975; and Greene 1976).

Determinants include the physiological factor of estrogen decline, a normal aspect of the aging process in women, and the following psychological factors:

a. Anxiety concerning aging, loss of reproductive functioning and sexual identity
b. Fear of illness and senility
c. Children leaving the home
d. Birth of grandchildren
e. Contraction of the social circle due to the death of friends
f. Fear of approaching social dependence and economic instability

A question persists as to whether the physiological factors (declining estrogen and the aging process) serve as precipitants to the development of the varying emotional reactions to the change in reproductive function or whether, the emotional factors result from social changes in life style which occur at this time in a woman's life (Edwards 1950; Hoskins 1944).

The lifelong association between menstruation and reproductive functioning throughout the physiological and psychological development of women provides a key to the understanding of menopausal response (Fessler 1950; Barret 1933; Edwards 1950). Some evidence has been presented that normal menstruation tends to be followed by normal or non-

problematical menopause while a history of menstruation with dysmenorrhea (painful menstruation) is followed by a more marked menopausal syndrome (Barret et al. 1933). Fessler (1950) stated that feelings concerning menstruation and reproduction are important influences on response to menopause.

Edwards (1950) reported that any symptom or disease is influenced by the total personality of the individual. A study of dysmenorrhea and personality (Bloom, Shelton, and Michaels 1978) found that there were significant differences in personality functioning between women who experience dysmenorrhea and those who do not. The dysmenorrhea sufferers were found to be more similar to a neurotic population. Women with dysmenorrhea were more depressed, anxious, withdrawn, prone to maximize personal safety, and more traditionally feminine. In addition, women with dysmenorrhea were less autonomous, less prone to play or amusement, less self-confident and less active than those who did not report dysmenorrhea. Although similar to the neurotic population, the dysmenorrhea sufferers were within normal limits of personality functioning. The degree of the described personality traits was the important factor differentiating dysmenorrhea sufferers from non-sufferers (Bloom, Shelton, and Michaels 1978). Levitt and Lubin (1967) reported similar findings in that menstrual complaints were

related to neurotic tendencies and unwholesome attitudinal disposition toward menstruation.

The view that personality is a critical factor in determining response and adaptation to the various phases of the life cycle is held by a number of social psychologists (Mass and Kuypers 1977; Kimmel 1974; Hendricks and Hendricks 1977; Neugarten, Havighurst, and Tobin 1961). Neugarten et al. (1961) reported that the coping processes, life-style and personality patterns that an individual adopted throughout early adult life continue through middle and old age and seem to become more clearly delineated.

Investigators have pointed out that a woman's personality makeup and general adjustment are major determinants of the severity of response to the menopause (McNair 1947; Stern and Prados 1946; Winokur 1973; Ballinger 1975). Those personality determinants described by McNair (1947) as being characteristic of the menopausal syndrome were a personality which was weak, inadequate, poorly integrated, and rigid, with inability and unwillingness to change patterns of reaction. Other determinants included loss of social security and a plea for sympathy and attention from husband and family.

Dunlop (1968) stated that faulty adaptation in earlier life is the basis for the symptoms of emotional imbalances which occur during a problematic menopause.

Premenopausal women who are tense, depressed, anxious, low in self confidence and ambition, and dominated by narcissistic ego strivings are almost certain to have increased emotional difficulty at the menopause. In addition to the "I" oriented woman, women who through ignorance or superstition, expect to have problematical menopauses are particularly vulnerable to such problems (Dunlop 1968).

Stern and Prados (1946) found a uniform clinical picture of menopausal depression in eighty-two percent of women studied. This depressive response was of a reactive type, seen as an accentuation of a previously existing maladjustment. The causes for the depression were chiefly associated with marriage and reproduction. In addition, no significant correlation was found between intensity of vasomotor symptoms (estrogen deficiency) and severity of emotional disturbance. Despite the fact that this study did not include a control group to determine the influence of age, social class or situational difficulties, the finding that psychic adjustment has some influence on the menopausal syndrome is of significance (Stern and Prados 1946).

A survey of British women (ages forty to fifty-five), from the general population, was carried out to determine the relationship between minor psychiatric illness, the physical changes of the menopause and the life events which are possible factors in the production of psychic symptoms (Ballin-

ger 1975). The findings suggested a high incidence of symptoms of depression and anxiety in women of menopausal age. Changing patterns of relation with children (marriage, leaving home, death), ailing or demanding parents, and marital discord were associated with the increased psychiatric morbidity at this time. Since the pattern of problems mentioned was the same for both psychiatric and nonpsychiatric cases, Ballinger suggested that certain personality factors can predispose women to discover or magnify problems and lead to emotional disturbances. In addition, when psychiatric morbidity was examined in relation to climacteric phase, there was a definite increase in psychiatric illness during the menopausal phase regardless of environmental factors. Thus, the influence of personality characteristics on response to menopause is further supported by this finding.

Winokur (1973) attempted to determine if menopause increased the risk of depression in women who have experienced an affective disorder independent of the menopause. For the seventy-one women who experienced an episode of psychiatric illness either before or after menopause, it was found that menopause was not a significant factor in precipitating a depressive episode. While this study appears to have refuted the finding that some individuals are predisposed to respond to menopause with a serious depression,

serious methodological problems were described by Winokur (1973).

Some women react to the physiological involution occurring during the climacterium as a perceived loss (Adler 1927). Due to the inability to reproduce, which culminates at the menopause, the essence of female identity is feared to be in jeopardy. The result is a perceived loss, grief, and a feeling of depression and/or depersonalization (Benedek 1950; DeBeauvoir 1965; Deutsh 1945; Prados 1967). In some depressed women a preoccupation with bodily functions may exist resulting in a proneness to psychosomatic disorders (Dunlop 1968).

A survey of one hundred patients was undertaken to delineate the psychopathology of climacteric depression (Fessler 1950). Depression at the climacterium was associated with disappointment over diminishing menstruation and fertility. In 80 percent of the cases reviewed a marked character resemblance to hysteria, some kind of phobia, or some type of conversion reaction preceded the climacteric depression. These findings further support the belief that climacteric response, such as depression, is a continuation of the patient's preclimacteric condition.

Fessler (1950) distinguished two main types of depression during the climacterium: overfrustrated and masculine. The overfrustrated depression stems from disap-

pointment and fear concerning menstruation and loss of fertility. The pervasive feelings are of self depreciation and helplessness. In the masculine type of depression, a woman becomes aggressive, arrogant, quarrelsome and domineering. Insistence upon an organic basis for any aches or pains prevails. For these women their disappointment is overcome by this system of denial (Fessler 1950).

Bodnar and Catterill (1972) studied the use of amitriptyline in emotional states during the climacterium. Of the fifty-seven patients (ages 37 to 60 years) admitted to the study, all had shown emotional or mood changes occurring simultaneously with signs and symptoms usually attributed to the climacterium. Depression and anxiety were the predominant mood states, with forty-two percent of the patients exhibiting signs and symptoms of depression and fifty percent exhibiting signs of anxiety. Results of the double blind study utilizing amitriptyline and placebos demonstrated that amitriptyline has a justifiable place in the treatment of emotional disturbances during the climacterium. In addition, the following conclusions were presented by the investigators (Bodnar and Catterill 1972):

1. The emotional mood at the climacterium is an exhaustion reaction to the endocrine, metabolic and psychological changes

2. The emotional changes of the climacterium are an accentuation of a pre-existing emotional insufficiency
3. Somatic vasomotor changes are more effectively treated by use of estrogen compounds
4. Reassurance and advice on a continuous basis by the same health care professional, appears to enhance emotional readjustment.

In a study of case histories of women reporting symptoms of the menopausal syndrome, Donovan (1951) reported that regardless of the presenting symptomatology, the main reason for seeking medical care during the menopause was emotional upset or imbalance. One hundred and ten women were interviewed concerning their experience with menopausal symptoms. Through repeated interviewing, Donovan found that women who were able to discuss their feelings of nervousness or emotional upset reported a relief in somatic symptoms as well as a decrease in nervous feelings. He stated that in the majority of cases the emotional factors which caused the nervousness antedated the menopause. The findings of this case history review demonstrated that sincere understanding and a trusting relationship, in which a nervous woman can vent fears and anxieties, can be helpful in buffering the response to the menopause, on both the psychic and somatic levels (Donovan 1951).

The contribution of personality structure and functioning to menopausal response has been documented. Attitude, also a predictor of behavior, is influenced by life experiences and certain aspects or characteristics of personality. The contribution of attitudes and other variables to menopausal responses has been examined in a number of investigations (Neugarten, Wood, Kraines and Loomis 1963; Maoz, Dowty, Antonovsky, and Wijsenbeek 1970; Crawford and Hooper 1973; McKinlay and Jefferys 1974; Meltzer 1974). Age, educational level, socio-economic class, desire for more children, marriage of a child, the marital relationship and experience with menopause are cited as variables associated with attitude towards and response to menopause. The investigations, which have attempted to examine the complex relationships between the biological event of menopause and the psycho-social life-events of the middle years, provide further information concerning the influence of life events, attitude and personality on menopausal response.

An Attitude-Toward-Menopause Checklist was developed by Neugarten, Wood, Kraines, and Loomis (1963). Seven attitudinal factors were identified by the study: (1) negative affect, (2) post menopausal recovery, (3) extent of continuity, (4) control of symptoms, (5) psychological losses, (6) unpredictability, and (7) sexuality. Neugarten

et al. (1963) found that age has some effect on attitudinal disposition toward menopause. Younger women generally had more negative views of menopause than older women. The investigators offered the suggestion that menopause is relatively far removed and vague for younger women and becomes blended into the process of growing old. These women viewed menopause as distant and unpleasant. The investigators suggested that experience with menopause was an important factor in attitudinal disposition. Menopausal and postmenopausal women realized that there was a recovery from menopause, while younger women did not share this realization. Subjects of this study had higher educational achievement than the general population of American women. The investigators suggested therefore, that educational level may be a significant variable in women's attitudes toward menopause. More educated women indicated that menopause was unpleasant and disturbing, although they did not fear menopause.

Neugarten et al. (1963) did not discuss other factors important in the devleopment of menopausal attitudes; although, the authors suggested that possible relationships exist between biological, psychological, and social variables and the menopause. In a later report on menopause, Neugarten (1967) pointed out that most women express relatively little concern for the process of menopause, as

they are more worried about the adaptations and situational changes occurring in their lives during the climacterium.

Women of European, Oriental, and Israeli origin were interviewed concerning attitudes toward femininity, psychosexual history, menopause, and family and social problems associated with the climacteric period (Maoz, Dowty, Antonovsky and Wijsenbeek 1970). Attitudinal disposition to menopause was examined with respect to eleven variables. The one variable which was cited as predictive of a positive attitude was not wanting to have more children. On the other hand, a negative attitude was associated with the following variables:

1. Menopausal or postmenopausal status
2. Extremely positive feelings toward menstruation or feelings that menstruation is a natural phenomenon
3. Having received information about menstruation prior to its onset
4. A happy adolescence
5. Fertility problems and having had no pregnancy or childbirth problems
6. Dissatisfaction with sexual relations
7. Desire to bear more children
8. No serious current problems
9. Being emotionally disturbed

The two variables found to be unrelated to attitude toward menopause were general behavior of husband and past trauma. Maoz et al. (1970) reported that cultural differences existed for the associations of these variables and menopausal attitudes. These findings did not support the overall hypothesis of this investigation which was that positive earlier psychosexual experiences are strong predictors of a positive attitude toward menopause.

A sample of 638 women aged 45 to 54 was drawn from a population of well women in London (McKinlay and Jefferys 1974). Responses to a postal questionnaire were analyzed with respect to interrelationships among symptoms, associations between symptoms and various sociodemographic variables, association of symptoms with the actual menopause, and attitude toward the cessation of menses and the occurrence of hot flashes. The only symptom found to be clearly and directly associated with menopause was hot flashes. Despite the fact that hot flashes resulted in discomfort and/or embarrassment for three-quarters of the women reporting the symptom, only one-fifth of those women sought medical care. It was found that six other symptoms (headaches, dizzy spells, palpitations, sleeplessness, depression, and weight gain) bore no direct relationship to menopause but appeared to be associated with each other. These six symptoms were reported by 30 to 50 percent of the women

regardless of menopausal status. The sociodemographic variables investigated included (1) employment status, (2) educational level, (3) social class, (4) domestic workload, (5) marital status, and (6) parity. None of these variables was found to be closely associated with either menopausal status or symptom formation. A large proportion of women held the attitude that the change of life would be difficult. In addition, one third of those who were postmenopausal said that menopause actually had been difficult for them in that they experienced both physical and emotional discomforts.

Neugarten et al. (1963) suggested that working-class women are more apt to view the menopause as a natural event, and are less likely to anticipate or experience a problematical menopause. The findings of McKinlay and Jefferys (1974) did not support the hypothesis that social class was associated with attitude toward menopause or hot flashes. In addition, McKinlay and Jefferys (1974) found that marital status and parity were not associated with different menopausal attitudes. Regardless of life situation, few women expressed regret over the menopause, although a larger number held the belief or attitude that they would experience difficulty during or at the menopause, which in fact they did (McKinlay and Jefferys 1974).

The impact of socio-cultural factors on symptom formation during the climacterium was examined in urban, married women in Switzerland (van Keep and Kellerhals 1974). Interviews with 448 women between the ages of 41 and 60 years demonstrated overlap between the biological and socio-cultural spheres in a woman's life. Van Keep and Kellerhals (1974) found that chronological age and nearness of menopause were associated with an increase in symptoms of the menopausal syndrome and a deterioration in subjective adaptation to daily life situations. In terms of social class, the menopause had a more serious impact on behavior in women of the lower social class (workmen or subordinate employees) than in women of the higher social class (professionals). The more profound behavior changes seen in the lower social class included decreases in quality and quantity of sexual relations, a decrease in harmony of opinion and quality of interpersonal relations between husband and wife, and a decreased engagement in hobbies and activities. Although there was a higher peak in symptom formation in the higher social class, a postmenopausal recovery similar to that reported by Neugarten et al. (1963) was found. Such a recovery was not reported in the lower social class studied by van Keep and Kellerhals (1974). Another life situation variable examined in the investiga-

tion was the maternal role. The investigators concluded that having children at home during the time a woman goes through menopause serves to protect her or buffer her from many of the unpleasant phenomena (symptoms and/or behavior changes) which can occur. The investigators also found that the protective or buffering effect is provided by a well established relational integration, i.e. the having of friends and of having frequent contacts with such friends (van Keep and Kellerhals 1974).

Data from 106 British women were collected by Crawford and Hooper (1973) to explore relationships between the physiological event of menopause and various individual and family processes. The sample consisted of women with currently intact marriages. In 43 of these marriages, the first marriage of a child was about to occur. The remaining 63 couples were expecting the arrival of their first grandchild. Postparenthood, particularly the marriage of a daughter, was found to be more stressful than the process of grandparenthood in terms of reported menopausal experience. Psychological menopausal symptoms were more often reported by women experiencing for the first time the loss of a child through marriage, than the women expecting the first grandchild. Crawford and Hooper (1973) argued that for some women the loss of a child through marriage

intensified or resonated with the loss of child rearing capacity. As a result, there was more of an ability to identify positively with a childbearing daughter than a marrying daughter. Thus, the occurrence of menopause at the time of a daughter's marriage may be more stressful and precipitate a stronger psychic and somatic response, dependent upon a woman's attitude toward reproductive capacity. In addition, age identity was not found to be a factor in the association between menopausal state and symptom type or presence. In terms of the marital relationship, an association was found between anxiety concerning the menopause and highly feminine marital role behaviors. In addition, menopausal and postmenopausal women were more likely to play a predominantly feminine role in the home and marital relationship. This role was viewed as a compensatory behavior for the perceived loss of femininity in terms of the actual loss of fertility. The findings of this study indicated that the coincident occurrence of a role loss (marriage of a child) with the menopause, precipitates a more stressful response to the menopause (Crawford and Hooper 1973).

Meltzer (1974) also found an association between more feminine women and distress with regard to feminine functions: menstruation, menopause and postmenopausal

periods. In addition, in the women (ages 30 to 59 years) studied, Meltzer found that the concept "Menopausal Woman" was viewed less favorably than the concepts "Myself," "Women in General," and "Middle Aged Woman." This finding was consistent with the findings of Neugarten et al. (1963) and Maoz et al. (1970) concerning the presence of negative attitudes toward menopause.

In summary, the importance of personality and attitudinal disposition as predictors of response to menopause cannot be ignored. Variables such as age, educational level, social class and various other life-situation events have been demonstrated as influences on attitude toward and response to menopause. The determination of the personality characteristics or need configurations of groups of climacteric women, the attitudinal dispositions of those same women toward the menopause, and the relationship between the personality characteristics and attitudes, can provide additional information concerning the phenomenon of menopausal response.

CHAPTER III

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

Prior to the commencement of data collection, the approval of the Human Research Committee at Texas Woman's University was obtained. A copy of the application to the Human Research Review Committee and the approval letter is contained in appendix B.

Data for the investigation were collected in an organized manner. The investigation was described at meetings of various women's clubs and organizations. Following an oral description of the study (included in appendix B), the informed consent of each woman who volunteered was obtained. Instrument packets were distributed to volunteers and instructions for completing the instrument were given. Subjects completed the instruments in their homes and returned them by mail in stamped, addressed envelopes which were contained in the instrument packets.

Setting

A metropolitan area in the midwestern United States was the setting for the investigation. The area, a major industrial and manufacturing center encompassing a radius of 20 miles, had a population of 536,836 (based on 1970 census).

Subjects received a description of the study and the instruments at the meeting place of their club or organization. Meeting places included large rooms in restaurants, hotels or motels, church halls, community centers, and single family homes. Subjects completed the instruments in their own homes.

Population

The sample consisted of volunteers from women's clubs, charitable organizations, church groups and hospital personnel. Subjects included 102 healthy, Caucasian, climacteric women between the age of 40-55 years, with a minimum educational level of graduation from high school. Only Caucasian women were included due to documented personality differences between varying races (Cross et al. 1978; Jones 1978; Gynther 1972; and Waldron and Kreuchauf 1979). Any subject who reported surgical menopause or a recent major life crisis was eliminated from the study. Each of the subjects was classified according to climacteric phase based on the established definitions (see Chapter I, page 11).

Instruments

Each subject completed three instruments: (1) demographic questionnaire, (2) Attitude Toward Menopause Checklist (Neugarten et al. 1963), and (3) Personality Research

Form E (PRF-E) (Jackson 1974a). Packets of instruments and oral instructions were administered in group settings. In addition to the three instruments, each packet contained a written description of instructions in the form of a letter and a stamped, addressed envelope for return mailing. A total of 240 packets were distributed; of these 169 or 70.4 percent were returned. The 67 test packets not used in the study were eliminated because the subjects did not meet the criteria of the study (over or under age limits, life crisis, hysterectomy, score of 3 or more on infrequency and/or 15 or more on desirability scale of PRF-E). Anonimity was assured by use of a code number for identification purposes. The code number also served the purpose of ensuring that the three instruments for each subject remained grouped together for data analysis.

Demographic Questionnaire

Developed by the researcher, in consultation with a state licensed psychologist, this twenty item questionnaire (appendix C) was designed to elicit specific demographic information from subjects: age, religion, marital status, occupation, educational level, number and ages of children, health status, and climacteric status. Items 1, 2, 12, 14, 18, and 19 provided information necessary to determine if a

subject met criteria for inclusion. Responses to all items were numerically coded for statistical analysis.

Attitude-Toward-Menopause Checklist

The Attitude-Toward-Menopause (ATM) Checklist is a thirty-five item instrument developed by Neugarten et al. (1963) to elicit menopausal attitudes. Respondents were asked to check, for each item, 1) disagree strongly; 2) disagree somewhat; 3) agree to some extent; or 4) agree strongly. The response to each item was assigned a score from 1-4 respectively. The thirty-five scores for each of the 102 ATM Checklists were used to determine the factor pattern of menopausal attitudes. A copy of the ATM Checklist appears in appendix D.

Neugarten et al. (1963) developed the checklist through a series of interviews with menopausal women and administration of a preliminary draft of the checklist. Folowing the pre-testing of the preliminary checklist, certain items "were eliminated because they drew stereotyped responses; others, because of overlap" (Neugarten et al. 1963, p. 143). Factor analysis was performed using the principal component method of factor extraction with a varimax rotation. Seven factors emerged, accounting for 85 percent of the variance. Neugarten et al. named these factors "negative affect", "postmenopausal recovery", "extent

of continuity", "control of symptoms", "psychological losses", "unpredictability", and "sexuality".

Personality Research Form-E

The Personality Research Form-E (PRF-E) was designed to measure twenty specific personality traits or need configurations (Jackson 1974b). Developed to yield a set of scores for personality traits relevant to the functioning of individuals in a variety of situations, the primary focus of the PRF-E is upon areas of normal functioning. The PRF-E is a copyrighted instrument (Jackson 1974a); information concerning a copy of the PRF-E may be obtained from Research Psychologists Press, Incorporated. The instrument consists of 352 true/false items, requiring thirty to forty-five minutes to complete (Jackson 1974b).

The Personality Research Form was validated by Jackson with 1,000 females and 1,000 males in a stratified random sample across the United States. Validity coefficients for the PRF-E ranged from 0.3 to 0.8. Reliability coefficients for the PRF-E range from 0.6 to 0.9. In addition, the PRF-E has been factored with various other personality tests such as the MMPI and Differential Personality Inventory (Trott and Morf 1972) and the Edwards Personal Preference Schedule (Edwards, Abbott, and Klockars 1972).

Subjects recorded their responses to each item by placing an X in either the true or false column on the answer sheet provided with the instrument. The scoring method described by Jackson (1974b) in the Personality Research Form Manual was utilized. Responses were hand scored using a scoring template. The number of X's in the two vertical columns corresponding to each personality dimension (scale) were tallied and recorded at the bottom of each answer sheet in the space provided. Subjects who scored 3 or more on the infrequency scale and/or 15 or more on the desirability scale of the PRF-E were eliminated from the study due to the possible invalidity of their responses (Jackson 1974b). The raw scores for each scale were used in the factor analysis of the 102 subjects. A licensed psychologist supervised the administration, scoring, and interpretation of the PRF-E.

Collection of Data

The researcher attended meetings of various women's groups to describe the study concerning female adjustment to middle age. Women were then asked to volunteer to participate in the investigation. Confidentiality was assured and subjects signed consent forms (appendix B). Packets containing the three instruments were distributed to the volunteers and instructions for use of the instru-

ments were orally reviewed. Subjects were asked to complete the instruments independently and within one week. Completed instruments were returned to the researcher in the stamped, addressed envelopes contained in the instrument packets. Data were collected from August 1978 through January 1979.

Subjects were informed that their individual results would be available upon request. In addition, an abstract of the completed investigation was supplied to each women's group that participated in the study.

Treatment of Data

Upon completion of data collection, responses to all questionnaires were numerically scored. Scores were submitted to the Statistical Package for the Social Sciences (Nie et al. 1975) for analysis. Personality dimension scores for the twenty personality variables measured by the PRF-E were reduced by a varimax rotated principal axis factor analysis. Factor scores were computed for each subject on each of the factors that emerged. The factor scores were split at the mean, yielding two groups of subjects for each personality factor. One group scored low on the dimension considered, while the other scored high. In addition, the 35 items of the Attitude Toward Menopause Checklist and the 17 symptoms of the symptom checklist (item 15) on the Demo-

graphic Questionnaire were reduced by use of a principal axis, varimax rotated factor analysis. In this manner, the factor patterns were determined for personality dimensions, attitudes, and symptoms or responses.

Using the menopausal attitudinal factors as the dependent variables, a 2 personality (high, low) X 3 climacteric classification (premenopausal, menopausal, postmenopausal) analysis of variance was conducted for each personality factor. Menopausal symptom factors were also submitted to a 2 personality X 3 climacteric classification analysis of variance for each personality factor.

In summary, data were collected from August 1978 through January 1979. During that time, instrument packets were distributed to subjects, completed by them, and returned to the investigator. Scoring was completed and scores were submitted to the Statistical Package for the Social Sciences (Nie et al. 1975). Results of the statistical factor analyses and analyses of variance are presented in Chapter IV and discussed in Chapter V.

CHAPTER IV

ANALYSIS OF DATA

Socio-Demographic Composition of All Subjects

The 102 subjects included in the study ranged in age from 40-55 years with a mean of 48.1 years. The distribution of subjects by age is shown in table 1.

TABLE 1

DISTRIBUTION OF SUBJECTS BY AGE*

AGE	N**	CUM. PCT.	AGE	N**	CUM. PCT.
40	7	7	48	9	55
41	1	8	49	4	59
42	7	15	50	9	68
43	3	18	51	5	73
44	3	21	52	7	79
45	10	30	53	5	84
46	9	39	54	6	90
47	7	46	55	10	100

*Range = 40-55 years
**Total N = 102
Mean age = 48.1 years

The majority of subjects (83 percent) were married (table 2). All of the subjects had graduated from high school and 40 percent reported having attended some college (table 3). The mean educational level was 13.2 years. Ninety-one percent of the subjects reported having one or more children with a mean of 2.9. Christianity (Catholicism or Protestantism) was the religious affiliation of the majority of subjects (93 percent) as is demonstrated in table 4. When husbands occupational level was used as an indicator of social status, 62 percent of subjects were classified as middle classs. In addition, of the 64 women who reported a personal occupation, other than housewife, 45 percent could be classified as middle class workers. All subjects reported their general health status as good or excellent.

TABLE 2

MARITAL STATUS OF SUBJECTS

STATUS	N	PERCENT
Married	85	83
Divorced	6	6
Widowed	6	6
Single	5	5
TOTAL	102	100

TABLE 3

EDUCATIONAL LEVEL OF SUBJECTS

LEVEL	N	PERCENT
Less than 12 years	0	0.0
High School Graduate	62	60.5
Some College	16	15.5
College Graduate	5	5.0
Other (Professional/Grad.)	19	19.0
TOTAL	102	100.0

TABLE 4

RELIGION OF SUBJECTS

RELIGION	N	PERCENT
Catholic	48	47
Protestant	47	46
Jewish	1	1
Other	1	1
None	5	5
TOTAL	102	100

Although 87 percent of the 102 subjects reported that they felt their sexual partner found them attractive, 33 percent of the 102 subjects reported a change in their pattern of sexual relations over the past two years. The types of changes reported range from a decrease due to personal lack of interest to more frequent and improved relations. Table 5 shows the types of changes reported.

TABLE 5

FREQUENCY AND TYPES OF CHANGES IN SEXUAL RELATIONS

FREQUENCY AND TYPE OF CHANGE	N	PERCENT
Less frequent/satisfying due to:		
Personal lack of interest	23	24
Partner's lack of interest/ability	6	6
Less frequent but more loving	1	1
More frequent and improved	2	2
TOTAL	32	33

As a group, subjects may be described as healthy, married, middle class, Christian, Caucasian women with an educational level somewhat higher than the general population of American women. Each of the 102 subjects was classified according to climacteric phase (premenopausal, menopausal, postmenopausal) as displayed in table 6. Of

those women in the menopausal and postmenopausal phases, the mean age of reaching menopause was 48.5 years.

TABLE 6

CLIMACTERIC CLASSIFICATION

PHASE	N	PERCENT
Premenopausal	56	54.9
Menopausal	19	18.6
Postmenopausal	27	26.5
TOTAL	102	100.0

Socio-Demographic Composition of Subjects According to Climacteric Phase

Specified demographic characteristics of subjects according to climacteric classification are depicted in table 7. Age was the one variable with significant differences between the 3 phases. In general, subjects in each of the three climacteric phases were similar in composition to the total sample: married, middle class, Christian women with a mean educational level of 13.2 years.

Of the 33 percent of the 102 subjects who reported a change in their pattern of sexual relations over the past two years, 14 percent were in the premenopausal phase, 8 percent in the menopausal phase, and 11 percent in the post-

menopausal phase. According to each phase of the climacterium, 25 percent of the 56 premenopausal women reported a change in the pattern of sexual relations, while 42 percent of the 19 menopausal women and 41 percent of the 27 postmenopausal women reported changes. The major type of change reported by premenopausal and menopausal women was a decrease in sexual relations due to a personal lack of interest. Postmenopausal women reported a decrease due to lack of a partner/partner's lack of interest as the major type of change. One menopausal woman reported an improvement in the quality of sexual relations despite a decrease in the frequency of relations. Dyspareunia was reported by 15.8 percent of the menopausal women and 11.1 percent of the postmenopausal women in contrast to 5.4 percent of the premenopausal women. Overall, dyspareunia was reported by 9 percent of the 102 subjects.

TABLE 7

DEMOGRAPHIC CHARACTERISTICS OF SUBJECTS ACCORDING TO CLIMACTERIC CLASSIFICATION

CHARACTERISTICS	PHASE PRE	MENO	POST	F	CHI SQUARE
Mean Age*	45.6	49.5	52.2	34.33***	
Mean Years* Education	13.3	12.9	13.4	0.41	
Marital Status:**		PERCENT			4.81
Married	89.3	78.9	74.1		
Divorced	5.4	5.3	7.4		
Widowed	1.8	10.5	11.1		
Single	3.6	5.3	7.4		
Religion:**		PERCENT			1.26
Catholic	37.5	57.9	59.3		
Protestant	53.5	36.8	37.0		
Jewish	1.8				
Other	1.8				
None	5.4	5.30	3.7		

*Analysis of variance
**Chi Square
***$p < 0.05$

Factor Analysis of PRF-E, ATM Checklist and Symptoms

The personality characteristics measured by the PRF-E and the mean score for all subjects on each characteristic appear in appendix D. Individual scores from the 20 personality variables were submitted to a varimax rotated principal axis factor analysis (Nie et al. 1975). Seven personality factors were extracted (table 8). The seven factors in the order of the largest percent of variance accounted for were: 1) insecurity, 2) rigidity, 3) sociability, 4) self-righteousness, 5) social achievement striving, 6) submissive caring, and 7) sensitivity. High scores on the succorance scale and low scores on the autonomy scale of the PRF-E were major determinants of the insecurity personality factor. The rigidity personality dimension was defined by high scores on the order and cognitive structure scales. Major determinants of the sociability factor were exhibition and affiliation. Defendence and aggression defined the self-righteousness personality factor, while achievement needs and dominance defined the social achievement striving factor. High scores on the abasement and nurturance scales contributed to the definition of the submissive caring personality dimension. Sensuality and understanding were the personality characteristics used to define the sensitivity personality factor.

TABLE 8

FACTOR ANALYSIS: PERSONALITY CHARACTERISTICS

PERSONALITY CHARACTERISTICS	FACTORS* I	II	III	IV	V	VI	VII
Succorrance	.72						
Autonomy	-.68						
Harmavoidance	.49		-.25				
Social Recognition	.35			.27			
Change	-.34		.27				
Order		.86					
Cognitive Structure		.64					
Impulsivity		-.58		.34	-.30		
Exhibition			.66				
Affiliation	.32		.62				
Play			.42				
Defendence				.69		-.34	
Aggression				.64			
Achievement	-.27				.77		
Dominance					.69		.27
Endurance	-.31		.25		-.59		
Abasement		-.30				.81	
Nurturance						.45	
Sentience							.73
Understanding	-.31				.31		.59

* I Insecurity
II Rigidity
III Sociability
IV Self-Righteousness
V Social Achievement Striving
VI Submissive Caring
VII Sensitivity

Factor scores were computed for each subject on each of the personality factors. Each of the seven personality factors was used as the dependent variable in seven analyses of variance conducted to determine if there were personality differences between subjects in the three climacteric phase groups. There were no significant ($p < 0.05$) personality differences between the three groups (table 9).

TABLE 9

MEAN PERSONALITY FACTOR SCORES ACCORDING TO CLIMACTERIC PHASE

PERSONALITY FACTOR	PHASE PRE	PHASE MENO	PHASE POST	F*
Insecurity	-0.11	0.27	0.04	1.42
Rigidity	0.02	0.00	-0.04	0.03
Sociability	0.07	-0.21	-0.01	0.80
Self-Righteousness	0.08	-0.15	-0.06	0.63
Social Achievement Striving	0.07	-0.13	-0.06	0.42
Submissive Caring	-0.04	0.17	-0.04	0.41
Sensitivity	-0.07	0.12	0.06	0.45

*Denotes significant ($p < 0.05$) F value

The personality factor scores were split at the mean. In this manner, two groups of subjects were formed for each personality factor. One group scored low on the dimension considered while the other group scored high.

Prior to submission of the subjects' menopausal attitudes (appendix E) to a 2 personality (high, low) X 3 climacteric classification (premenopausal, menopausal, postmenopausal) analysis of variance, data from the 35 item attitude checklist were reduced. A varimax rotated principal axis factor analysis was used for reduction. Five major menopausal attitudinal dimensions were extracted from the 35 items (table 10). These attitudinal dimensions indicate that the women as a group maintained evaluative beliefs or feelings with respect to 1) postmenopausal recovery, 2) negative affect/anticipation, 3) feminine discontinuity, 4) extent of personal control, and 5) sexuality. Factor scores were computed for each woman on the attitudinal factors. There were no significant ($p < 0.05$) attitudinal factor differences between the 3 climacteric phase groups (table 11). Each of the five attitudinal factors was used as the dependent variable in the seven different analyses of variance that were conducted (one for each of the personality factors for a total of 35 analyses).

TABLE 10

FACTOR ANALYSIS: ATTITUDES TOWARD MENOPAUSE

ATTITUDE TOWARD MENOPAUSE CHECKLIST ITEMS REGROUPED	FACTORS*				
	I	II	III	IV	V
27. A woman gets more confidence in herself after the change of life.	.83				
23. Life is more interesting for a woman after the menopause.	.76				
26. A woman has a broader outlook on life after the change of life.	.71				
31. After the change of life, a woman has a better relationship with her husband.	.66				
24. Women generally feel better after the menopause than they have for years.	.65				
17. After the change of life, a woman feels freer to do things for herself.	.61				
16. Women are generally calmer and happier after the change of life than before.	.60				.37
21. After the change of life, a woman gets more interested in community affairs than before.	.47				
35. Many women think menopause is the best thing that ever happened to them.	.43				
29. Women often get self-centered at the time of the menopause.	.30	.27	.30		
28. Menopause is an unpleasant experience for a woman.		.64	.32		
32. It's not surprising that most women get disagreeable during the menopause.		.63			
20. It's no wonder women feel "down in the dumps" at the time of the menopause.		.63	.29		
30. Menopause is a disturbing thing which most women naturally dread.	.27	.58	.41		
13. Menopause is one of the biggest changes that happens in a woman's life.		.52			
6. A woman in menopause is apt to do crazy things she herself does not understand.		.50			
5. A woman should see a doctor during the menopause.		.46			
11. A woman is concerned about how her husband will feel toward her after the menopause.		.37			
8. The thing that causes women all their trouble at menopause is something they can't control - changes inside their bodies.		.37			
34. Women should expect some trouble during the menopause.		.35			

*I Post Menopausal Recovery
II Negative Affect
III Feminine Discontinuity
IV Extent of Personal Control
V Sexuality

TABLE 10 Continued

ATTITUDE TOWARD MENOPAUSE CHECKLIST ITEMS REGROUPED	FACTORS*				
	I	II	III	IV	V
25. After the change of life, women often don't consider themselves "real women" anymore.			.58		
22. Women think of menopause as the beginning of the end.			.55		
33. In truth, just about every woman is depressed about the change of life.		.47	.52		
15. The only difference between a woman who has not been through the menopause and one who has, is that one menstruates and the other doesn't.			-.46		
3. If the truth were really known, most women would like to have themselves a fling at this time in their lives.			.44		
18. Women worry about losing their minds during the menopause.			.41		
10. Menopause is a mysterious thing which most women don't understand.			.36		
14. A woman's body may change in menopause, but otherwise she doesn't change much.				.63	
4. Women who have trouble with the menopause are usually those who have nothing to do with their time.			.30	.51	
12. Going through the menopause really does not change a woman in any important way.		-.32		.45	
7. Women who have trouble in the menopause are those who are expecting it.				.43	.40
2. Unmarried women have a harder time than married women do at the time of the menopause.				.27	
9. A good thing about the menopause is that a woman can quit worrying about getting pregnant.				.26	.54
1. Women often use the change of life as an excuse for getting attention.			.42		.49
19. After the menopause, a woman is more interested in sex than she was before.	.40				.43

*I Post Menopausal Recovery
II Negative Affect
III Feminine Discontinuity
IV Extent of Personal Control
V Sexuality

TABLE 11

MEAN ATTITUDINAL FACTOR SCORES
ACCORDING TO CLIMACTERIC PHASE

ATTITUDINAL FACTOR	PHASE PRE	MENO	POST	F*
Post menopausal recovery	-0.04	0.11	0.00	0.17
Negative affect	-0.07	-0.17	0.26	1.64
Feminine discontinuity	-0.06	0.11	0.05	0.32
Extent of personal control	0.05	0.04	-0.13	0.44
Sexuality	0.08	0.12	00.26	1.78

*Denotes significant ($p < 0.05$) F value

The 17 symptoms included on the symptom checklist (item 15) of the Demographic Questionnaire were also factor analyzed by use of a varimax rotated principal axis factor analysis. Dyspareunia was the one symptom which did not have a significant loading on any of the three factors. Three symptom factors emerged from the remaining 16 symptoms (table 12): 1) somatic, 2) psychological, and 3) vasomotor. The major symptoms used to define the somatic symptom factor were dizziness, paresthesias, and palpitations. Feelings of self-depreciation and symptoms of insomnia and nausea contributed to the definition of

the psychological symptom factor. The symptoms of hot flashes, sweating, and hot flushes defined the vasomotor symptom factor.

TABLE 12

FACTOR ANALYSIS: MENOPAUSAL SYMPTOMS

SYMPTOMS	FACTORS*		
	I	II	III
Dizziness	.63		
Paresthesias	.58		
Palpitations	.55		
Fatigue	.50	.31	
Irritability	.46		
Chills	.45	.35	
Body Aches/Pains	.40		
Headaches	.31		
Self-Depreciation		.59	
Upset Stomach/Nausea	.25	.56	
Insomnia	.28	.54	
Bowel Problems		.52	
Depression	.28	.45	
Nervousness	.36	.43	
Hot Flashes and Sweating			.61
Hot Flushes			.48

* I Somatic
II Psychological
III Vasomotor

Vasomotor symptoms were reported significantly ($p < 0.05$) more often by the menopausal and postmenopausal women than the premenopausal women (table 13). The three symptoms were used as dependent variables in the seven different 2 personality X 3 climacteric classification analyses of variance conducted (one for each personality factor for a total of 21 analyses).

TABLE 13

MEAN SYMPTOM FACTOR SCORES
ACCORDING TO CLIMACTERIC PHASE

SYMPTOM FACTOR	PRF	PHASE		F*
		MENO	POST	
Somatic	0.05	-0.05	-0.07	0.22
Psychological	-0.08	0.13	0.07	0.59
Vasomotor	-0.20	0.24	0.24	4.83*

*Denotes significant ($p < 0.05$) F value

To test the hypothesis that personality characteristics are not related to attitude toward menopause in climacteric women, the data were analyzed in a series of 2 (personality) X 3 (climacteric classification) analyses of variance. The levels for the personality variables were (1) low (below the mean on the personality factor considered) and (2) high (above the mean on the personality

factor considered). The three levels of climacteric classification were (1) premenopausal, (2) menopausal, and (3) postmenopausal. Each of the 5 menopausal attitudinal factors was used as a dependent variable for each of the 7 personality dimensions.

Results of the Analyses of Variance

A 2 (personality) X 3 (climacteric classification) analysis of variance design was used to test the hypothesis that personality characteristics are not related to attitudinal disposition toward menopause. The analyses of variance which were statistically significant ($p < 0.05$) are displayed in appendix F, figures 1-6.

Results of the significant analyses, which used menopausal attitudes as the dependent variables, demonstrated that women who scored low on social achievement striving have more negative affect or negative anticipation of the menopause than high social achievement strivers. While the attitude of both high and low social achievement strivers improves during menopause; the low social achievement striving women develop a stronger negative affect after the menopause (appendix F, figure 1). Social achievement striving is also a significant contributor to the feminine discontinuity attitude (appendix F, figure 2). High social achievement strivers hold the

belief that their feminine continuity will be more adversely affected by menopause than low social achievement strivers. Feelings concerning femininity return to the premenopausal level for high scorers during the postmenopausal period. Low social achievement strivers develop a somewhat stronger view that their feminine continuity is disrupted as they progress through the climacteric. Self-righteous women also tend to express the attitude that feminine continuity will be adversely affected by the menopause (appendix F, figure 3). In addition, women who scored high on sensitivity have a stronger view that menopause will disrupt their femininity than less sensitive women (appendix F, figure 4). An interaction between sensitivity, climacteric classification and the extent of personal control attitude was found. The attitude of sensitive women with respect to personal control decreases as they proceed through the climacteric while more insensitive women's personal control increases (appendix F, figure 6). Premenopausal sensitive women have a less positive attitude toward the anticipation of sexuality in menopause than do insensitive women. During the menopause the sensitive woman's sexual attitude becomes positive while the insensitive woman's attitude becomes negative.

To determine if the personality dimensions also influenced the expression of menopausal symptoms, a second series of analyses were conducted. A 2 (personality) X 3 (climacteric classification) analysis of variance design was used with each of the 3 symptom factors as the dependent variables. Significant ($p < 0.05$) results are displayed in appendix F, figures 7-16.

Results of the significant analyses, which used menopausal symptoms as the dependent variables, demonstrated that women who scored low on the rigidity personality dimension reported more somatic symptoms during the premenopausal and menopausal phases of the climacteric (appendix F, figure 7). In addition, less rigid postmenopausal women had a decline in the reporting of somatic symptoms while the highly rigid postmenopausal women reported an increase in somatic symptoms. The lowest level of somatic symptoms reported was in rigid menopausal women. Rigidity was also a significant contributor to the psychological symptoms reported (appendix F, figure 8). More flexible, impulsive women (low rigidity scorers) reported more psychological symptoms in all phases of the climacteric than did those women who scored high on rigidity. The reporting of psychological symptoms was highest in less rigid postmenopausal women. Psychological symptoms were also reported more often by sensitive women (appendix F,

figure 9). Menopausal sensitive women scored highest overall on the psychological symptom factor while the insensitive women showed an increase in psychological symptoms in the postmenopausal phase.

Climacteric classification was a significant contributor to the vasomotor symptom factor regardless of personality dimensions (appendix F, figures 10 through 16). For women of all personality types, except self-righteousness, the reporting of vasomotor symptoms increased at the menopausal phase of the climacteric for both high and low personality dimension scorers. In addition, high scorers on insecurity, rigidity, self-righteousness, and submissive caring showed an increase in vasomotor symptoms from the menopausal to the postmenopausal phase (appendix F, figures 10, 11, 13, and 15 respectively). The personality dimensions of sociability and self-righteousness were significant contributors to the vasomotor symptom factor even when classification was not considered. Less sociable women reported more vasomotor symptoms overall than did sociable women, with the postmenopausal, low sociability scorers reporting the highest level of vasomotor symptoms (appendix F, figure 12). Self-righteous women reported a decrease in vasomotor symptoms at the menopause, with an increase in symptoms in the postmenopausal period. Low scorers on self-righteousness reported a large increase in vasomotor symptoms at the

menopause, with a decline in symptoms in the postmenopausal period (appendix F, figure 13).

Summary

The sample included 102 healthy, Caucasian, climacteric women between 40-55 years of age. The majority of subjects were middle class, married, Christian women with a mean educational level of 13.2 years. A total of 56 different analyses of variance were conducted. The sources of data for the analyses were the personality dimension factor scores, the climacteric classification of each subject, the attitudinal dimension factor scores, and the symptom factor scores. Significant results ($p < 0.05$) were found in 16 of the analyses of variance. The summary, conclusions, implications, and recommendations of the investigation are discussed in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The problem for study, was to determine the relationship between personality characteristics and attitudinal disposition toward menopause in women throughout the climacteric. The purposes of the investigation were the following:

1. To determine the personality traits of climacteric women
2. To determine the attitudinal disposition of climacteric women toward menopause
3. To determine the relationship between personality traits and attitudes toward menopause in climacteric women
4. To determine the consistency of a relationship between personality traits and attitude toward menopause

The sample consisted of volunteers from women's clubs, charitable organizations, church groups and hospital personnel in a metropolitan area of the midwestern United States. Subjects included 102 healthy, Caucasian, climacteric women, 40-55 years of age. In general, subjects may be described as married, middle class, Christian women with an educational level somewhat higher than the general population of American women.

The 102 subjects were classified according to climacteric phase by use of the following criteria:

1. Premenopausal women were those who had menstruated within the last 3 months
2. Menopausal women were those who had ceased menstruating between 3 and 24 months prior to the investigation
3. Postmenopausal women were those who had ceased menstruating at least 2 years prior to the investigation

Each subject completed 3 instruments: (1) demographic questionnaire, (2) Personality Research Form E (PRF-E) (Jackson 1974), and (3) Attitude Toward Menopause Checklist (Neugarten et al. 1963). Data were factor analyzed and analyses of variance were conducted using climacteric classification, the 7 personality factors, 5 attitudinal factors and 3 symptom factors as the variables.

The results of the investigation indicated that there are specific personality characteristics or need configurations that influence attitudinal disposition toward menopause. In addition, the influence of personality was consistent throughout the climacteric, with high and low scorers on specific personality factors expressing different patterns of attitudinal dispositions throughout the 3 phases of the climacteric. Interactions of specific personality traits and climacteric classification with attitude toward menopause also were found, indicating that experience with

menopause may be a factor in attitudinal disposition. In addition, it was found that personality characteristics and climacteric classification have an influence on the expression of symptoms at the climacteric. The conclusions, implications, and recommendations are discussed in the following sections.

Conclusions

Any event is likely to have different significance for those persons who differ in their characteristic pattern of behavior or response (Stern and Prados 1946; Ballinger 1975; McNair 1947; Winokur 1973; Bloom, Shelton, and Michaels 1978; Mass and Kuypers 1977). Therefore, it may be anticipated that women with specific personality characteristics have different views of menopause.

From the results of the investigation, it can be concluded that the major personality need configurations of climacteric women are the following: (1) insecurity, (2) rigidity, (3) sociability, (4) self-righteousness, (5) social achievement striving, (6) submissive caring, and (7) sensitivity. Five attitudinal dimensions, similar to the 7 attitudinal factors found by Neugarten et al (1963), were derived from the ATM Checklist. The 5 attitudinal dimensions found, indicate that the subjects held evaluative beliefs or feelings concerning (1) postmenopausal recovery,

(2) negative affect or anticipation of menopause, (3) feminine discontinuity, (4) extent of personal control, and (5) sexuality. In addition, the 3 symptom factors (somatic, psychological, vasomotor) found by Greene (1976), also were derived from the data of the present investigation.

Although the findings of the present investigation lend support to previous research which indicated or hypothesized a relationship between personality characteristics and attitude toward menopause in climacteric women (Dunlop 1968; McNair 1947; Ballinger 1975; Stern and Prados 1946), the past investigations did not use objective personality measures to ascertain specific personality traits and their relationship to attitudinal disposition. The present findings indicated that women viewed menopause negatively when their major personality traits were social achievement striving, self-righteousness or sensitivity. Each of these types of women held attitudes reflecting that they felt menopause was disturbing, unpleasant, and/or a threat to their feminity. In addition, highly sensitive women realized a loss of personal control concerning the effects of menopause as they progressed through the climacteric. The sensitive women also expressed a peak feeling with respect to sexuality or sexual functioning at the menopause while less sensitive women developed a more negative

attitude toward sexuality as they progressed through the climacteric. For sensitive, self-righteous, and social achievement striving women, the menopause itself was a critical period concerning increased feelings of altered femininity.

The postmenopausal recovery found by Neugarten et al. (1963) and by van Keep and Kellerhals (1974) in the higher social class subjects, was not found to be significantly affected by personality characteristics. In the present investigation, although both personality traits and experience with menopause influenced attitudinal disposition, the result of the influence was not one of an improved attitude in all instances.

Personality factors also were found to have an influence on the expression of menopausal symptoms. McNair (1947) described a weak, inadequate, poorly integrated and rigid, unchanging personality as being characteristic of the menopausal syndrome. In addition, Dunlop (1968) stated that premenopausal women who are tense, depressed, anxious, low in self confidence and ambition, and "I" oriented are almost certain to have increased emotional difficulty at the menopause. The present study found that specific symptoms of the menopausal syndrome were affected by specific personality need configurations. It was found that somatic and psychological symptoms were reported more

frequently by less rigid or more flexible women. In addition, sensitive, aware women reported more psychological symptoms, while both sociable women and self-righteous women reported vasomotor symptoms less frequently than the "I" oriented and less opinionated women. The findings of Dunlop (1968) were supported by the present investigation, while the present findings differed from those of McNair (1947). Climacteric classification was a significant variable in the reporting of vasomotor symptoms regardless of personality characteristics. The relationship between vasomotor symptoms and the menopause has been suggested by previous research (Green 1976; McKinlay and Jefferys 1974). The present finding that more vasomotor symptoms were reported by menopausal and postmenopausal women than by premenopausal women supports the hypothesis that vasomotor responses can be clearly associated with menopause and estrogen decline.

Implications

Implications concerning the comprehensive health care of women can be derived from the results of the present investigation. Health assessments must include assessment of a woman's major personality need configurations or characteristics. Basic personality assessments can be made by physicians, nurses, and other health pro-

fessionals through observation of the woman in various situations, interaction with the woman, and possibly objective personality measurements. In this manner, women at risk for problematic menopausal experiences can be identified.

Although education and anticipatory guidance concerning menopause may assist women in their adjustment to menopause, women at risk for problems must receive special attention. Women whose major personality characteristics are social achievement striving, self-righteousness, or sensitivity should receive anticipatory guidance during the premenopausal period which stresses the normalcy of the menopause and discounts myths concerning the loss of womanhood at the menopause. During the menopausal period, these women should be able to ventilate their feelings concerning altered femininity and should be encouraged that the critical feelings (physical and emotional) are temporary and possibly due to the physiological state of flux.

The fact that sensitive women tend to be aware of themselves and their environment may account for the attitudinal shifts concerning sexuality that are experienced. To prepare the sensitive woman for these attitudinal responses, counseling and education throughout the climacteric with respect to sexual fears, feelings, and practices

is important. Education should include realistic information concerning the inevitability and normalcy of estrogen decline with the accompanying physical changes. In addition, the fact that women can and do remain active sexual beings should be stressed. Education should include helpful hints concerning sexual relations such as the use of lubricants. Because the less sensitive women developed a more negative attitude toward sexuality as they progressed through the climacteric, special attention regarding sexual counseling and education concerning the effects of menopause may be necessary. Health care professionals should be alert for sexual problems in these women.

Health education for all women should stress the importance of reporting and discussing fears, feelings and symptoms experienced throughout the climacteric. Knowledge concerning the effects of estrogen on the body, throughout the life cycle, will help women to understand the climacteric changes resulting from estrogen decline. This knowledge can assist women in identifying symptoms which can clearly be associated with menopause from those that may be due to concurrent illness or stress.

In summary, implications for women's health care include assessment, education, anticipatory guidance and counseling.

Recommendations

Research is recommended to support the present findings and further examine the interactions between personality, attitude and symptoms in climacteric women. The following recommendations were made.

Studies be conducted to determine:

1. If low "social achievement striving" women use the menopause as a reason for their low achievement striving; i.e., "I can't do "x" because of what menopause did to me"
2. Whether the physiological changes and stresses of the menopause cause "self-righteous" women to become less defensive
3. If there is a relationship between environmental and personal characteristics and the "sensitive" woman's perceptions of the loss of personal control during the climacteric
4. If the personality characteristics and attitudinal dispositions toward menopause in less educated women are similar to those found in more educated women
5. If there are relationships between other socio-demographic variables (number of children, postparenthood, grandparenthood, etc.) and personality characteristics with respect to manopausal attitudes

6. If the level of physiologic estrogen decline has an effect on basic personality need configurations, attitudes toward menopause, and the expression of menopausal symptoms
7. If there is a relationship between negative attitudes toward menopuase and the actual experience of psychological, somatic and vasomotor symptoms

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APPENDIX A

DEFINITIONS FOR PERSONALITY RESEARCH FORM SCALES

(adapted from Jackson 1974b, pp. 6-7)

SCALE	DESCRIPTION OF HIGH SCORER
Abasement	Shows a high degree of humility; accepts blame and criticism even when not deserved; exposes himself to situations where he is in an inferior position; tends to be self-effacing.
Achievement	Aspires to accomplish difficult tasks; maintains high standards and is willing to work toward distant goals; responds positively to competition; willing to put forth effort to attain excellence.
Affiliation	Enjoys being with friends and people in general; accepts people readily; makes efforts to win friendships and maintain associations with people.
Aggression	Enjoys combat and argument; easily annoyed; sometimes willing to hurt people to get his way; may seek to "get even" with people whom he perceives as having harmed him.
Autonomy	Tries to break away from restraints, confinement, or restrictions of any kind; enjoys being unattached, free, not tied to people, places or obligations; may be rebellious when faced with restraints.
Change	Likes new and different experiences; dislikes routine and avoids it; may readily change opinions or values in different circumstances; adapts readily to changes in environment.

appendix A continued

SCALE	DESCRIPTION OF HIGH SCORER
Cognitive Structure	Does not like ambiguity or uncertainty in information; wants all questions answered completely; desires to make decisions based upon definite knowledge, rather than upon guesses or probabilities.
Defendence	Readily suspects that people mean him harm or are against him; ready to defend himself at all times; takes offense easily; does not accept criticism readily.
Dominance	Attempts to control his environment, and to influence or direct other people; expresses opinions forcefully; enjoys the role of leader and may assume it spontaneously.
Endurance	Willing to work long hours; doesn't give up quickly on a problem; perservering, even in the face of great difficulty; patient and unrelenting in his work habits.
Exhibition	Wants to be the center of attention; enjoys having an audience; engages in behavior which wins the notice of others; may enjoy being dramatic or witty.
Harmavoidance	Does not enjoy exciting activities, especially if danger is involved; avoids risk of bodily harm, seeks to maximize personal safety.
Impulsivity	Tends to act on the "spur of the moment" and without deliberation; gives vent readily to feelings and wishes; speaks freely, may be volatile in emotional expression.

appendix A continued

SCALE	DESCRIPTION OF HIGH SCORER
Nurturance	Gives sympathy and comfort; assists others whenever possible, interested in caring for children, the disabled, or the infirm; offers a "helping hand" to those in need; readily performs favors for others.
Order	Concerned with keeping personal effects and surroundings neat and organized; dislikes clutter, confusion, lack of organization; interested in developing methods for keeping materials methodically organized.
Play	Does many things "just for fun:" spends a good deal of time participating in games, sports, social activities, and other amusements; enjoys jokes and funny stories; maintains a light-hearted, easy-going attitude toward life.
Sentience	Notices smells, sounds, sights, tastes, and the way things feel; believes that they are an important part of life; is sensitive to many forms of experience; may maintain an essentially hedonistic or aesthetic view of life.
Social Recognition	Desires to be held in high esteem by acquaintances; concerned about reputation and what other people think of him; works for the approval and recognition of others.
Succorance	Frequently seeks the sympathy, protection, love, advice, and reassurance of other people; may feel insecure or helpless without such support; confides difficulties readily to a receptive person.

appendix A continued

SCALE	DESCRIPTION OF HIGH SCORER
Understanding	Wants to understand many areas of knowledge; values synthesis of ideas, verifiable generalization, logical thought, particularly when directed at satisfying intellectual curiosity.
Desirability	Describes self in terms judged as desirable; consciously or unconsciously, accurately or inaccurately, presents favorable picture of self in responses to personality statements.
Infrequency	Responds in implausible or pseudo-random manner, possibly due to carelessness, poor comprehension, passive-non-compliance, confusion, or gross deviation.

APPENDIX B

APPLICATION TO HUMAN RESEARCH COMMITTEE

Subject: Research and Investigation Involving Humans.

This abbreviated form is designed for describing proposed programs in which the investigators consider there will be justifiable minimal risk to human participants. If any member of the Human Research Review Committee should require additional information, the investigator will be so notified.

One copy of this statement and a specimen Statement of Informed Consent should be submitted at least two weeks before the planned starting date to the chairman or vice chairman on the appropriate campus.

Title of Study: PERSONALITY CHARACTERISTICS AND ATTITUDE TOWARD MENOPAUSE

Chairman of Thesis Committee: Dr. Jean Stair

Thesis Committee Members: Estelle Kurtz

Cheryl Anderson

Graduate Student: Carol A. Armbrecht

Estimated beginning date of study: August, 1978

Estimated duration: Seven weeks (August, 1978 - Oct., 1978)

Address where approval letter is to be sent:

Carol A. Armbrecht

6621 Lockwood Blvd. Apt. 60

Youngstown, Ohio 44512

appendix B continued

1. Brief description of the study (use additional pages or attachments, if desired, and include the approximate number and ages of participants, and where they will be obtained).
   The proposed study will determine the relationship between personality traits and attitude toward menopause in women throughout the climacteric. This information will be helpful to nurses in providing anticipatory guidance and assistance to climacteric women so they may achieve a positive adjustment to this period. Volunteers will be sought from various women's clubs in an area in midwestern United States. Two hundred healthy climacteric women (ages 40-55) who meet the criteria of the investigation will be included as subjects. Personality traits will be assessed by use of the Personality Research Form-E, menopausal attitude will be assessed by use of Attitude-Toward-Menopause Checklist, and a demographic questionnaire will assess social variables.

2. What are the potential risks to the human subjects involved in this research or investigation? "Risk" includes the possibility of public embarrassment and improper release of data. Even seemingly nonsignificant risks should be stated and the protective procedures described in 3. below.
   Potential risks include:
   a. Public embarrassment
   b. Improper release of data
   c. Arousal of anxiety

3. Outline the steps to be taken to protect the rights and welfare of the individuals involved.
   a. Instruments will be coded with a subject identification number. No names are used on any instrument. Subjects may withdraw at any time. Consent will be obtained at a group meeting prior to distribution of instruments. Thus, further assuring anonymity and confidentiality.
   b. Results will be utilized only in reporting of the proposed study.
   c. Instruments are designed so as not to elicit strong emotional reactions. In addition, a licensed psychologist will review results of personality instrument with subjects if requested.

appendix B continued

4. Outline the method for obtaining informed consent from the subjects or from the person legally responsible for the subjects. Attach documents, i.e., a specimen informed consent form. These may be properly executed through completion of either (a) the written description form, or (b) the oral description form. Specimen copies are available from departmental chairmen. Other forms which provide the same information may be acceptable. A written description of what is orally told to the subject must accompany the oral form.
   a. Description of study will be given to potential subjects.
   b. Questions will be answered.
   c. Informed consent form will be explained to subjects.
   d. Informed consent forms will be signed by participants and witness. See attached informed consent form (oral description form) and description of what is orally told to subjects.
   e. After consent forms have been signed and retrieved by the researcher, instrument packets will be distributed and instructions will be given.

5. If the proposed study includes the administration of personality tests, inventories, or questionnaires, indicate how the subjects are given the opportunity to express their willingness to participate. If the subjects are less than the age of legal consent, or mentally incapacited, indicate how consent of parents, guardians, or other qualified representatives will be obtained.
   As stated previously, all subjects are volunteers. Following an oral description of the study and the instruments, subjects may volunteer to participate and are asked to sign a consent form. Subjects may withdraw at any time. All subjects will be over the age of legal consent. A licensed psychologist will supervise administration, scoring, and interpretation of the personality instrument.

appendix B continued

Signed _____ Date _____

Program Director

Signed _____ Date _____

Graduate Student

Signed _____ Date _____

Dean, Department Head,
Director

Date received by committee chairman: _____

appendix B continued

TEXAS WOMAN'S UNIVERSITY

Consent to Act as a Subject for Research and Investigation:

I have received an oral description of this study, including a fair explanation of the procedures and their purpose, any associated discomforts or risks, and a description of the possible benefits. An offer has been made to me to answer all questions about the study. I understand that my name will not be used in any release of the data and that I am free to withdraw at any time.

_____ _____

Signature Date

_____ _____

Witness Date

Certification by Person Explaining the Study:

This is to certify that I have fully informed and explained to the above named person a description of the listed elements of informed consent.

_____ _____

Signature Date

_____

Position

_____ _____

Witness Date

appendix B continued

Application To Human Research Committee-Attachment

Description of Oral Presentation

Your assistance is requested for a research study being conducted as part of the requirements for a master's degree in Community Health Nursing at Texas Women's University in Denton, Texas. The study will examine characteristics and adjustment of women to middle age. The information gained from this study may be helpful to nurses and other health care professionals in providing guidance to women as they approach middle age and assistance to those who may be experiencing problems at this time in their lives. Participation in the study is entirely voluntary and once you have volunteered you may withdraw at any time.

Those of you who choose to volunteer will be given a packet containing three instruments or questionnaires. The questionnaires may be completed at your convenience, although I ask that you try to return them to me within one week from today. A stamped, addressed envelope will be supplied. Your name will not appear on any of the questionnaires. The questionnaires in the packet will have an identification number. Only you will know this number. Thus, you can be assured that all responses will be confidential. The first questionnaire requests information such as your age; marital status; sex, number, and ages of

appendix B continued

children; and health status. The second questionnaire consists of a list of statements about women to which you are asked to either agree or disagree. The final questionnaire consists of a variety of statements which measure twenty personality characteristics. Instructions for the personality instrument will be given when the instrument packets are distributed. It is anticipated that completion of the three questionnaires will require one and one half hours.

Your individual results may be obtained, when the study is completed, by contacting me and requesting your results by the identification number of the instrument packet. The results will be summarized and used, by myself, for reporting this study only. As names do not appear on any of the questionnaires, no names will be used at any time in the reporting of results.

Feel free to ask any questions you may have now or at any time concerning this study. Those of you who wish to volunteer need to sign a consent form stating that you have received this description of the study and study procedures.

I will now distribute the consent forms and instrument packets to those of you who wish to volunteer. When

appendix B continued

the consent forms have been collected, I will review the instructions for each of the questionnaires and answer any further questions you may have.

appendix B continued

TEXAS WOMAN'S UNIVERSITY

Human Research Committee

Name of Investigator: Carol A. Armbrecht Center: Dallas

Address: 6621 Lockwood Blvd., Apt. 60

Youngstown, Ohio 44512

Dear Ms. Armbrecht:

Your study entitled Personality Characteristics and Attitudes Toward Menopause has been reviewed by a committee of the Human Research Review Committee and it appears to meet our requirements in regard to protection of the individual's rights.

Please be reminded that both the University and the Department of Health, Education and Welfare regulations require that written consents must be obtained from all human subjects in your studies. These forms must be kept on file by you.

Furthermore, should your project change, another review by the Committee is required, according to DHEW regulations.

Sincerely,

Geraldine M Green

Chairman, Human Research Review Committee at Dallas.

APPENDIX C

INSTRUMENTS

appendix C continued

c.c.D.
1-4_ _ _ _

DEMOGRAPHIC QUESTIONNAIRE

DIRECTIONS: Please answer each of the following questions as honestly and completely as you can by writing the answer or placing a check mark in the spaces provided.

5-6_ _ 1. Age _____

2. Race _____

7-7 _ 3. Religion _____

8-8 _ 4. Marital Status (check one):

_____ Single
_____ Married
_____ Separated
_____ Divorced
_____ Widowed

9-10 _ _ 5. Occupation _____

11-12 _ _ 6. Husband's Occupation _____

13-13 _ 7. Years of Education (check one):

_____ Less than 12 years
_____ High School Graduate
_____ Some College
_____ College Graduate
_____ Other (specify)

14-15 _ _ 8. Number of Children _____

If you have no children skip questions 9 and 10.

16-18 _ _ _ 9. Ages of Children by sex:

Males _____
Females _____

10. Have any of your children done any of the following within the past six months? (Check those that apply.)

19-19 _ _____ Been Married: Son
20-20 _ _____ Daughter
21-21 _ _____ Gone away to school/college
22-22 _ _____ Graduated from school/college
23-23 _ _____ Had a child
24-24 _ _____ Had a serious illness
25-25 _ _____ Had a major problem other than illness
26-26 _ _____ Moved out of your home

27-27 _ 11. Would you like to become pregnant/have a child at this time in your life?

_____ Yes
_____ No

appendix C continued

12. Have you ever had an operation on your female organs?
_____ Yes What kind (if known)? _____
_____ No

26-28 _ 13. What is your General Health Status (check one):
_____ Excellent
_____ Good
_____ Average
_____ Fair
_____ Poor

14. Have you had any major life crises within the past six months such as death of a loved one or close friend, a divorce, a separation or a serious illness:

29-29 _
30-32 _ _ _ _____ Yes Explain _____
_____ No _____

15. Have you experienced any of the following during the past two years (check those that apply)?

33-33 _ _____ Hot flushes
34-34 _ _____ Hot flashes and sweating
35-35 _ _____ Chills
36-36 _ _____ Tingling in hands or feet
37-37 _ _____ Headaches
38-38 _ _____ Body aches or pains
39-39 _ _____ Dizziness
40-40 _ _____ Fatigue
41-41 _ _____ Times when your heart beats faster (heart flutters)
42-42 _ _____ Nervousness
43-43 _ _____ Irritability
44-44 _ _____ Depression
45-45 _ _____ Insomnia (difficulty sleeping)
46-46 _ _____ Feelings of uselessness and worthlessness
47-47 _ _____ Painful intercourse
48-48 _ _____ Bowel problems
49-49 _ _____ Upset stomach and nausea

16. Has your pattern of sexual relations changed over the past two years?

50-50 _
51-53 _ _ _ _____ Yes In what way? _____
_____ No _____

54-54 _ 17. Do you feel that your sexual partner finds you attractive?

_____ Yes
_____ No

18. Have you had a menstrual period within the past three months?

55-55 _ _____ Yes
_____ No

56-61 _ _ _ _ _ _ 19. When was your last menstrual period?
_____/_____/_____

62-62 _ 20. Would you say that you (check one):
_____ have not yet reached menopause
_____ are in menopause
_____ are past menopause

appendix C continued

ATTITUDE TOWARD THE MENOPAUSE CHECKLIST *

Directions: These are some things other women have said about the menopause or change of life. Check each statement to show if you agree or disagree with it. If none of the possible answers seem to fit exactly the way you feel, select the one that comes closest to the way you feel. CHECK ONE BOX FOR EACH STATEMENT. All replies are confidential.

	AGREE STRONGLY	AGREE TO SOME EXTENT	DISAGREE SOMEWHAT	DISAGREE STRONGLY
1. Women often use the change of life as an excuse for getting attention.				
2. Unmarried women have a harder time than married women do at the time of the menopause.				
3. If the truth were really known, most women would like to have themselves a fling at this time in their lives.				
4. Women who have trouble with the menopause are usually those who have nothing to do with their time.				
5. A woman should see a doctor during the menopause.				
6. A woman in menopause is apt to do crazy things she herself does not understand.				
7. Women who have trouble in the menopause are those who are expecting it.				
8. The thing that causes women all their trouble at menopause is something they can't control - changes inside their bodies.				
9. A good thing about the menopause is that a woman can quit worrying about getting pregnant.				
10. Menopause is a mysterious thing which most women don't understand.				
11. A woman is concerned about how her husband will feel toward her after the menopause.				
12. Going through the menopause really does not change a woman in any important way.				
13. Menopause is one of the biggest changes that happens in a woman's life.				
14. A woman's body may change in menopause, but otherwise she doesn't change much.				

* Neugarten et al. 1963

appendix C continued

	AGREE STRONGLY	AGREE TO SOME EXTENT	DISAGREE SOMEWHAT	DISAGREE STRONGLY
15. The only difference between a woman who has not been through the menopause and one who has, is that one menstruates and the other doesn't.				
16. Women are generally calmer and happier after the change of life than before.				
17. After the change of life, a woman feels freer to do things for herself.				
18. Women worry about losing their minds during the menopause.				
19. After the menopause, a woman is more interested in sex than she was before.				
20. It's no wonder women feel "down in the dumps" at the time of the menopause.				
21. After the change of life, a woman gets more interested in community affairs than before.				
22. Women think of menopause as the beginning of the end.				
23. Life is more interesting for a woman after the menopause.				
24. Women generally feel better after the menopause than they have for years.				
25. After the change of life, women often don't consider themselves "real women" anymore.				
26. A woman has a broader outlook on life after the change of life.				
27. A woman gets more confidence in herself after the change of life.				
28. Menopause is an unpleasant experience for a woman.				
29. Women often get self-centered at the time of the menopause.				
30. Menopause is a disturbing thing which most women naturally dread.				
31. After the change of life, a woman has a better relationship with her husband.				

appendix C continued

	AGREE STRONGLY	AGREE TO SOME EXTENT	DISAGREE SOMEWHAT	DISAGREE STRONGLY
32. It's not surprising that most women get disagreeable during the menopause.				
33. In truth, just about every woman is depressed about the change of life.				
34. Women should expect some trouble during the menopause.				
35. Many women think menopause is the best thing that ever happened to them.				

APPENDIX D

TABLE 14

PERSONALITY CHARACTERISTICS MEAN SCORES: ALL SUBJECTS

	MEAN SCORE
Abasement	7.68
Achievement	10.11
Affiliation	9.38
Aggression	6.21
Autonomy	4.65
Change	6.68
Cognitive Structure	9.93
Defendence	5.90
Dominance	5.49
Endurance	9.63
Exhibition	4.82
Harmavoidance	14.41
Impulsivity	5.13
Nurturance	11.68
Order	10.30
Play	6.25
Sentience	8.37
Social Recognition	8.25
Succorance	8.09
Understanding	7.60

APPENDIX E

TABLE 15

ATTITUDES TOWARD MENOPAUSE: ALL SUBJECTS

	ATM CHECKLIST ITEMS	PERCENT WHO AGREE*	MEAN SCORE
1.	Women often use the change of life as an excuse for getting attention.	70	2.67
2.	Unmarried women have a harder time than married women do at the time of the menopause.	30	2.07
3.	If the truth were really known, most women would like to have themselves a fling at this time in their lives.	35	2.02
4.	Women who have trouble with the menopause are usually those who have nothing to do with their time.	60	2.66
5.	A woman should see a doctor during the menopause.	89	3.57
6.	A woman in menopause is apt to do crazy things she herself does not understand.	42	2.29
7.	Women who have trouble in the menopause are those who are expecting it.	52	2.46
8.	The thing that causes women all their trouble at menopause is something they can't control - changes inside their bodies.	72	2.90
9.	A good thing about the menopause is that a woman can quit worrying about getting pregnant.	51	2.43
10.	Menopause is a mysterious thing which most women don't understand.	62	2.70
11.	A woman is concerned about how her husband will feel toward her after the menopause.	54	2.39
12.	Going through the menopause really does not change a woman in any important way.	75	3.07

appendix E, table 15 continued

ATTITUDES TOWARD MENOPAUSE: ALL SUBJECTS

ATM CHECKLIST ITEMS	PERCENT WHO AGREE*	MEAN SCORE
13. Menopause is one of the biggest changes that happens in a woman's life.	67	2.76
14. A woman's body may change in menopause, but otherwise she doesn't change much.	77	3.04
15. The only difference between a woman who has not been through the menopause and one who has, is that one menstruates and the other doesn't.	53	2.54
16. Women are generally calmer and happier after the change of life than before.	56	2.61
17. After the change of life, a woman feels freer to do things for herself.	48	2.48
18. Women worry about losing their minds during the menopause.	39	2.13
19. After the menopause, a woman is more interested in sex than she was before.	46	2.41
20. It's no wonder women feel "down in the dumps" at the time of the menopause.	51	2.50
21. After the change of life, a woman gets more interested in community affairs than before.	35	2.28
22. Woman think of menopause as the beginning of the end.	23	1.89
23. Life is more interesting for a woman after the menopause.	37	2.23
24. Women generally feel better after the menopause than they have for years.	36	2.32
25. After the change of life, women often don't consider themselves "real women" anymore.	23	1.67
26. A woman has a broader outlook on life after the change of life.	47	2.42
27. A woman gets more confidence in herself after the change of life.	42	2.27
28. Menopause is an unpleasant experience for a woman.	47	2.35
29. Women often get self-centered at the time of the menopause.	54	2.42

appendix E, table 15 continued

ATTITUDES TOWARD MENOPAUSE: ALL SUBJECTS

	ATM CHECKLIST ITEMS	PERCENT WHO AGREE*	MEAN SCORE
30.	Menopause is a disturbing thing which most women naturally dread.	49	2.40
31.	After the change of life, a woman has a better relationship with her husband.	61	2.57
32.	It's not surprising that most women get disagreeable during the menopause.	62	2.63
33.	In truth, just about every woman is depressed about the change of life.	43	2.78
34.	Women should expect some trouble during the menopause.	44	2.35
35.	Many women think menopause is the best thing that ever happened to them.	55	2.50

*Those subjects who checked "agree strongly" or "agree to some extent".

APPENDIX F

STATISTICALLY SIGNIFICANT ANALYSES OF VARIANCE

appendix F continued

ANALYSIS OF VARIANCE

Source	SS	Df	MS	F	P<
Class	3.163	2	1.582	2.177	NS
Social Ach. Striving	4.381	1	4.381	6.031	0.05
Error	69.729	96	0.726		
Class X Soc. Ach. Striving	4.021	2	2.010	3.026	NS
Error	80.718	101	0.799		

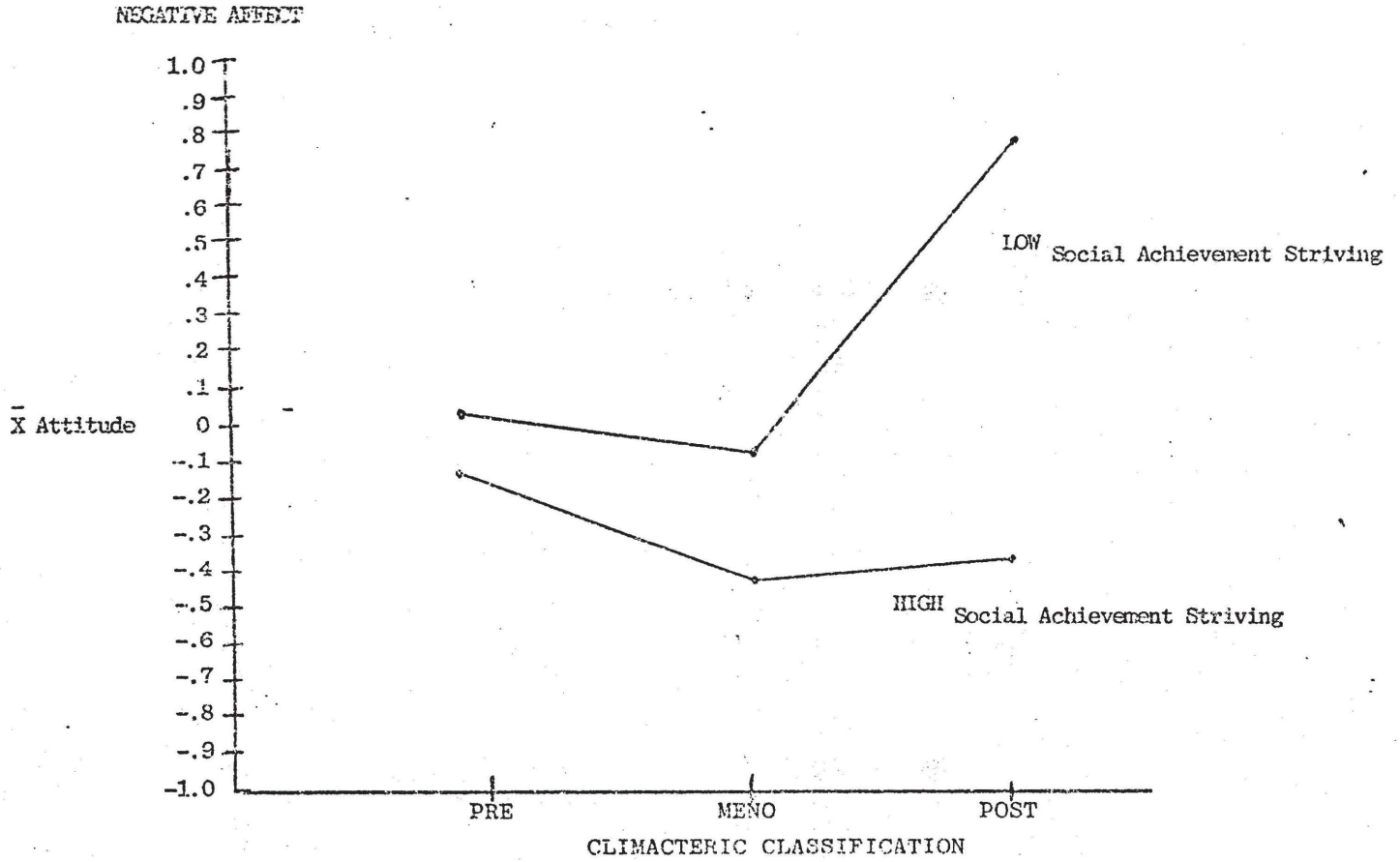

Figure 1. Interactions of Social Achievement Striving and Climacteric Classification with Negative Affect Attitude.

ANALYSIS OF VARIANCE

Source	SS	Df	MS	F	P <
Class	1.037	2	0.518	0.675	NS
Social Ach. Striving	2.985	1	2.985	3.886	0.05
Error	73.738	96	0.768		
Class X Soc. Ach. Striving	1.032	2	0.531	0.691	NS
Error	78.288	101	0.775		

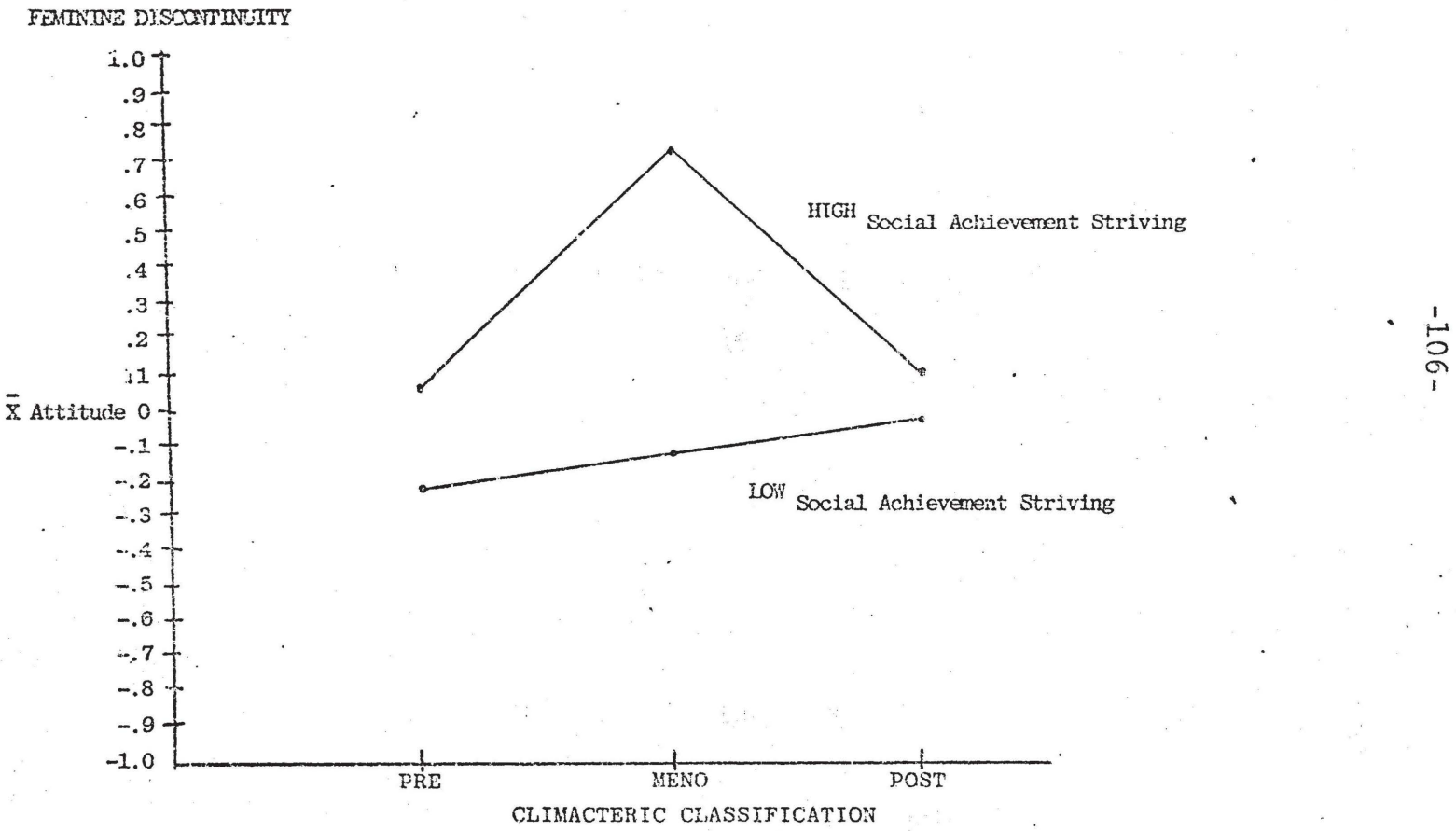

Figure 2. Interactions of Social Achievement Striving and Climacteric Classification with Feminine Discontinuity Attitude.

appendix F continued

ANALYSIS OF VARIANCE

Source	SS	Df	MS	F	P<
Class	0.690	2	0.345	0.454	NS
Self Righteouness	2.784	1	2.784	3.661	0.05
Error	72.993	66	0.760		
Class X Self-Righteousness	2.008	2	1.004	1.320	NS
Error	78.288	101	0.775		

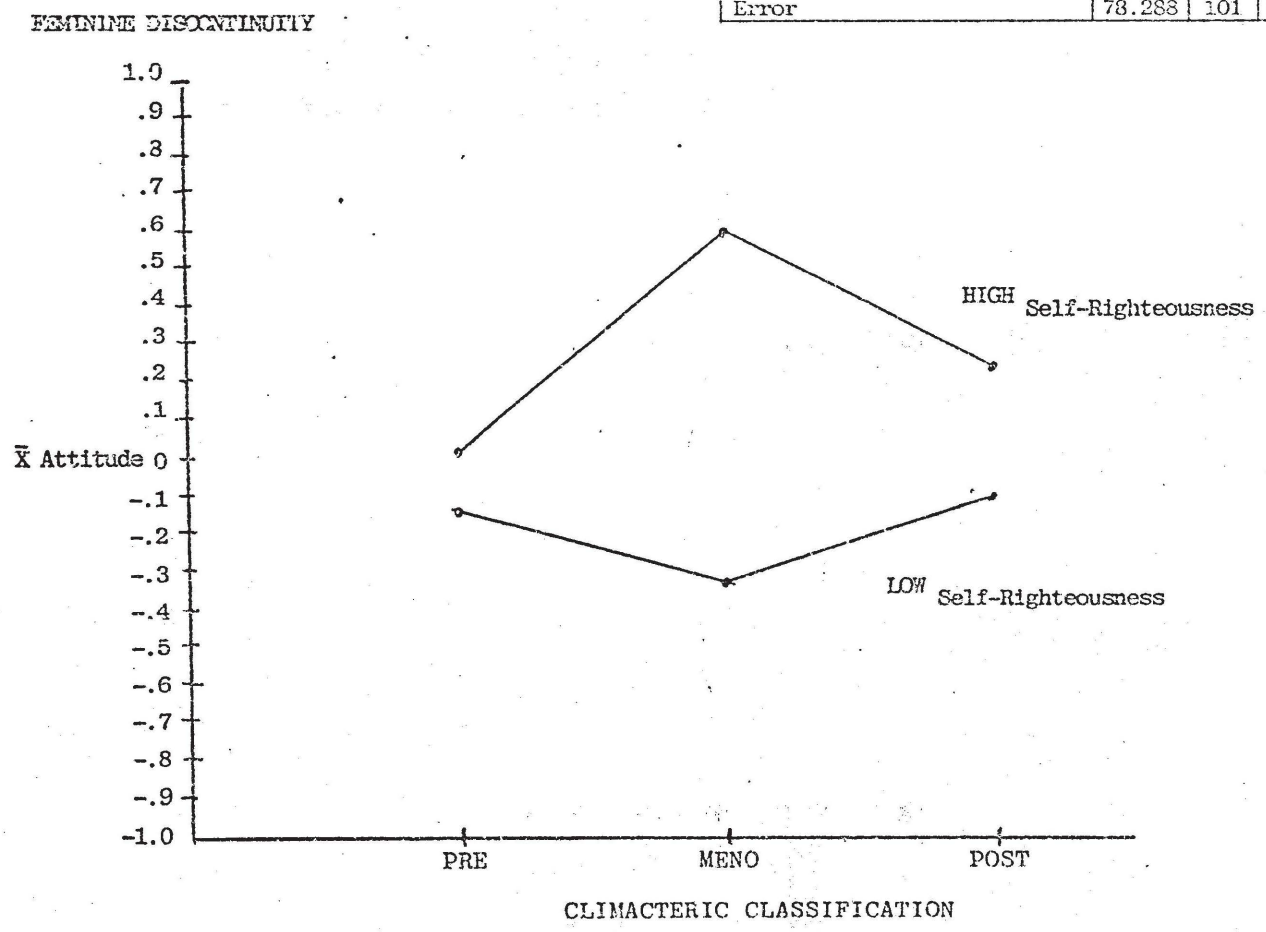

Figure 3. Interactions of Self-righteousness and Climacteric Classifications with Feminine Discontinuity Attitude.

appendix F continued

ANALYSIS OF VARIANCE

Source	SS	Df	MS	F	P <
Class	0.396	2	0.198	0.262	NS
Sensitivity	3.805	1	3.805	5.043	0.05
Error	72.442	96	0.755		
Class X Sensitivity	1.538	2	0.769	1.019	NS
Error	78.288	101	0.775		

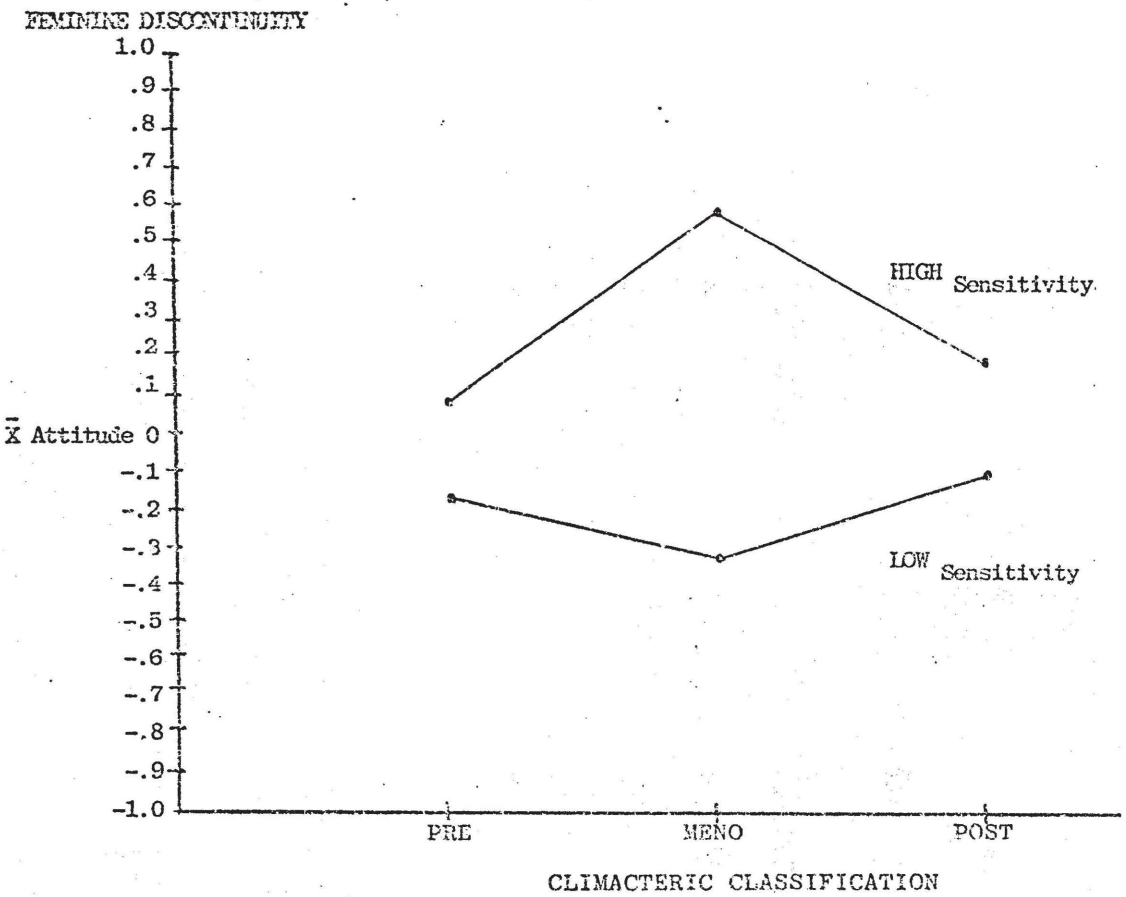

Figure 4. Interactions of Sensitivity and Climacteric Classification with Feminine Discontinuity Attitude.

appendix F continued

ANALYSIS OF VARIANCE

Source	SS	Df	MS	F	P <
Class	0.599	2	0.300	0.442	NS
Sensitivity	0.108	1	0.108	0.159	NS
Error	65.078	96	0.678		
Class X Sensitivity	5.432	2	2.716	4.006	0.05
Error	71.250	101	0.705		

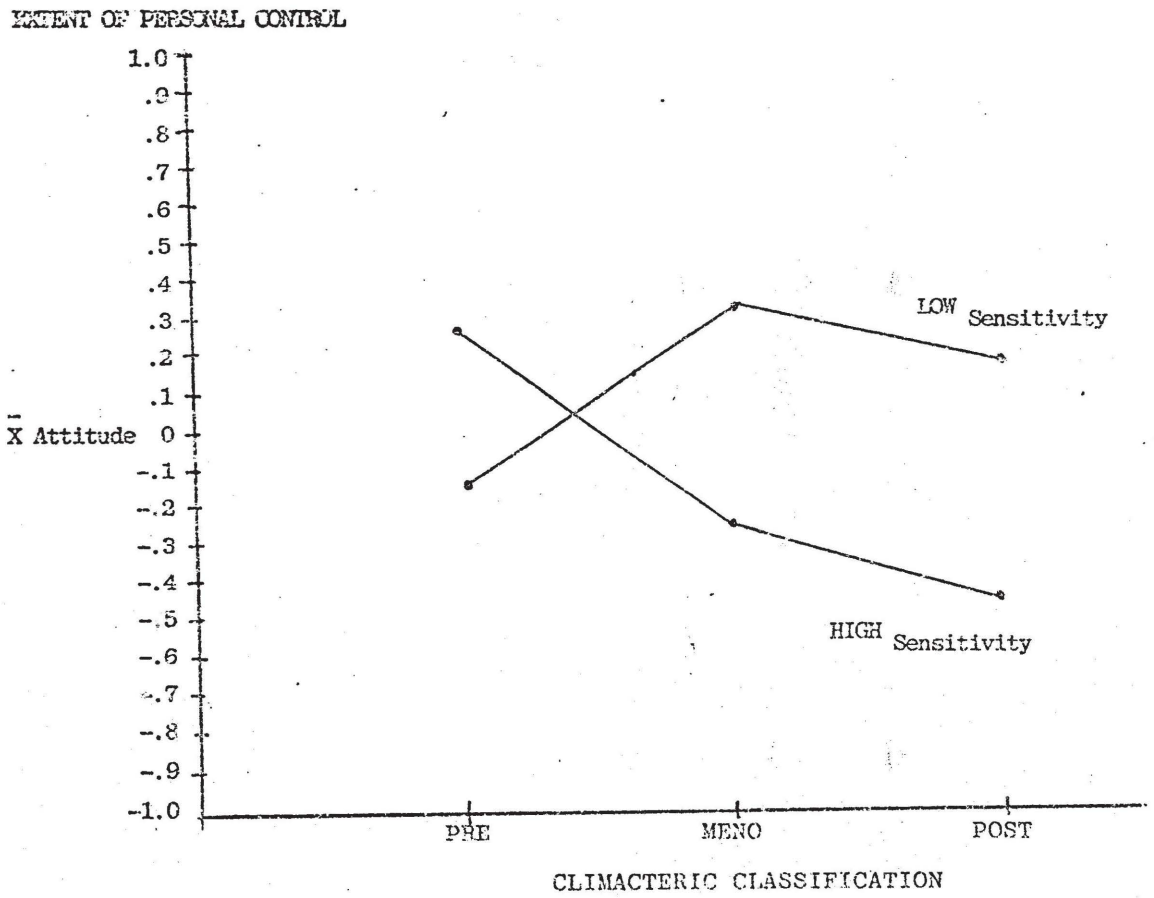

Figure 5. Interactions of Sensitivity and Climacteric Classification with Extent of Personal Control Attitude.

appendix F continued

ANALYSIS OF VARIANCE

Source	SS	Df	MS	F	P <
Class	2.437	2	1.219	1.819	N
Sensitivity	0.000	1	0.000	0.000	N
Error	64.311	96	0.670		
Class X Sensitivity	3.900	2	1.950	2.911	0.05
Error	70.658	101	0.700		

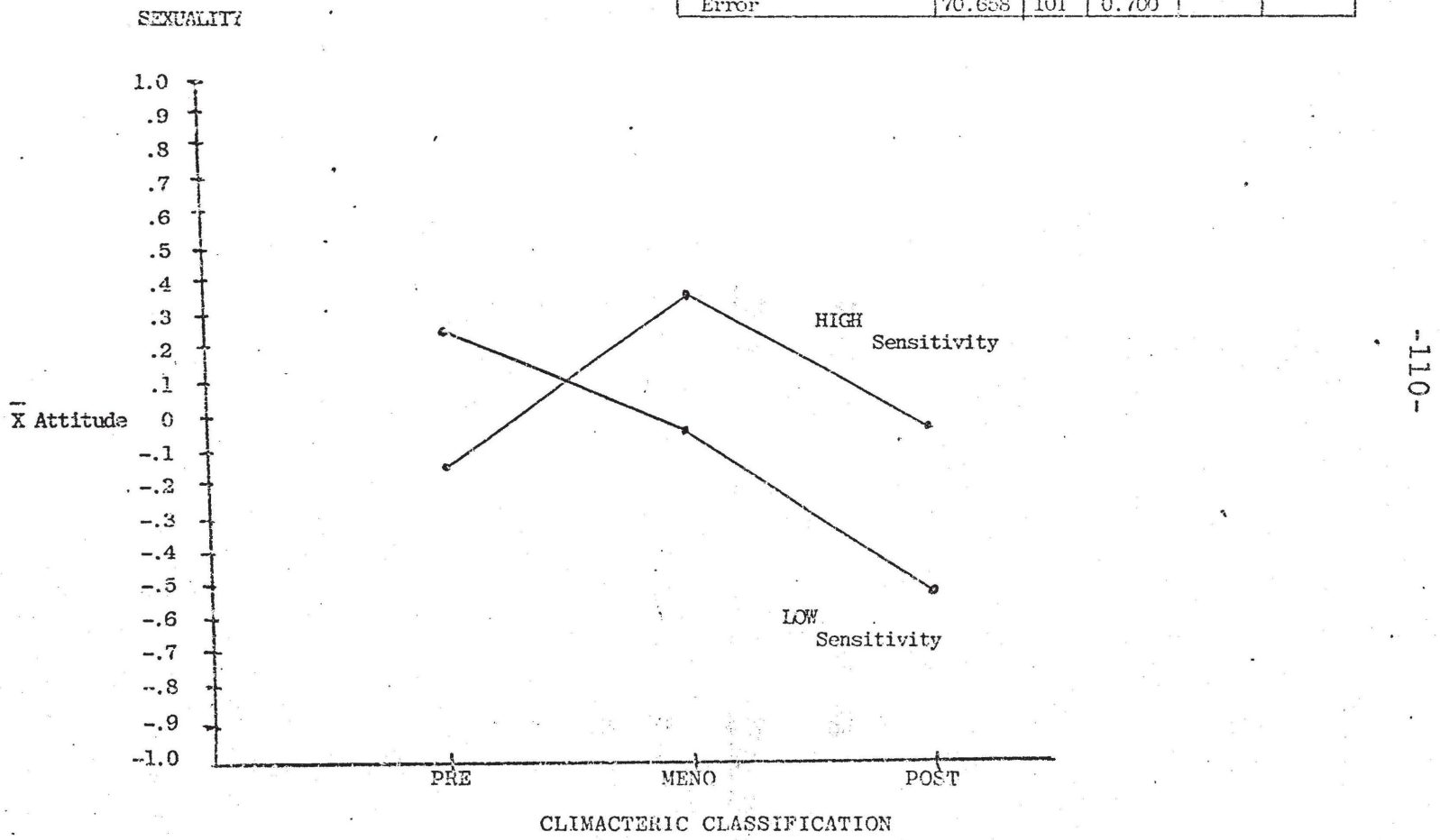

Figure 6. Interactions of Sensitivity and Climacteric Classification with Sexuality Attitude.

appendix F continued

ANALYSIS OF VARIANCE

SOURCE	SS	Df	MS	F	P<
Class	0.341	2	0.170	0.250	NS
Rigidity	2.585	1	2.585	3.798	0.05
Error	65.350	96	0.681		
Class X Rigidity	3.049	2	1.525	2.240	NS
Error	71.300	101	0.706		

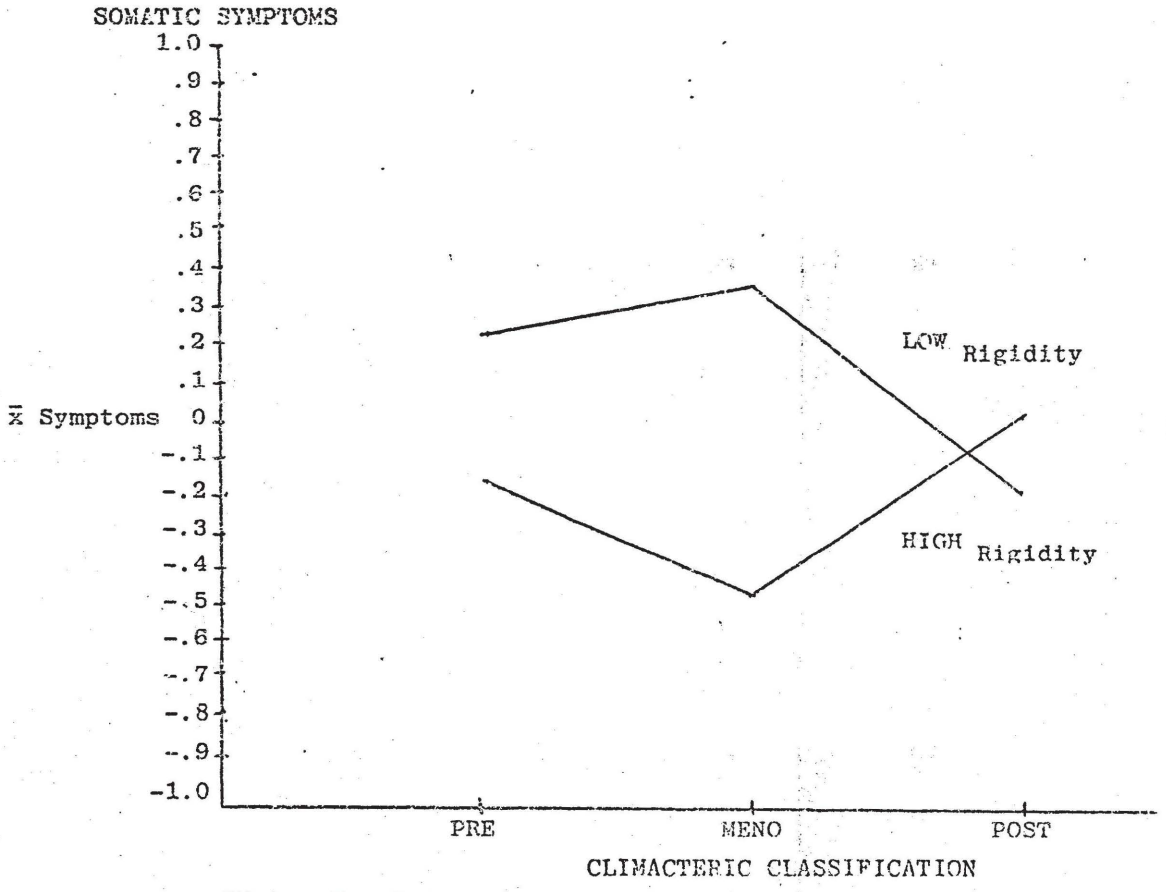

Figure 7. Interactions of Rigidity and Climacteric Classification with Somatic Symptoms.

appendix F continued

ANALYSIS OF VARIANCE

SOURCE	SS	Df	MS	F	P <
Class	0.764	2	0.382	0.604	NS
Rigidity	2.672	1	2.672	4.223	0.05
Error	60.747	96	0.633		
Class X Rigidity	3.412	2	1.706	2.696	NS
Error	67.631	101	0.670		

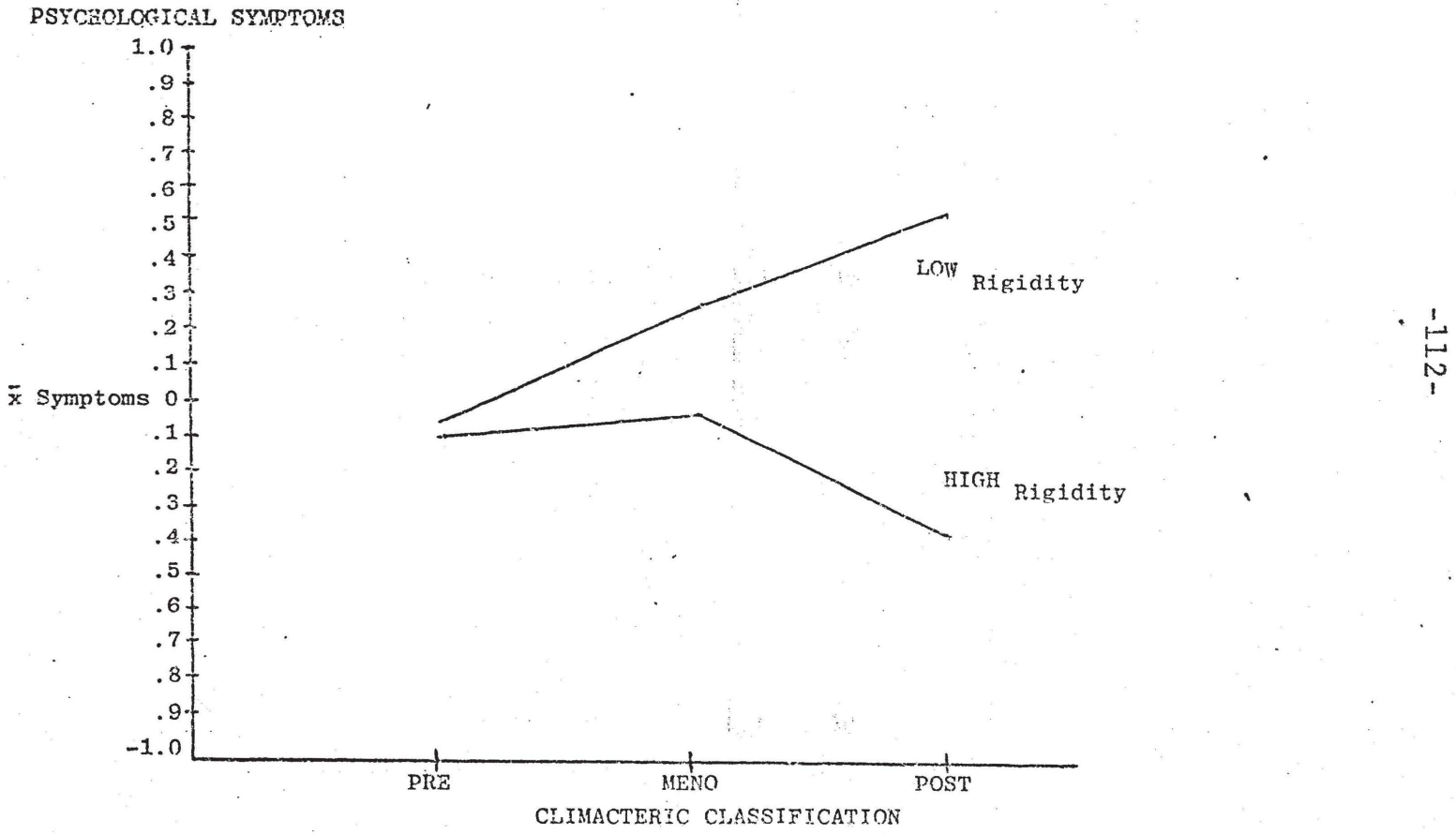

Figure 8. Interactions of Rigidity and Climacteric Classification with Psychological Symptoms.

appendix F continued

ANALYSIS OF VARIANCE

Class	SS	DF	MS	F	P <
Rigidity	0.677	2	0.339	0.539	NS
Error	2.631	1	2.631	4.147	0.05
Class X Rigidity	60.859	96	0.634		
Error	3.301	2	1.657	2.602	NS
	67.632	101	0.670		

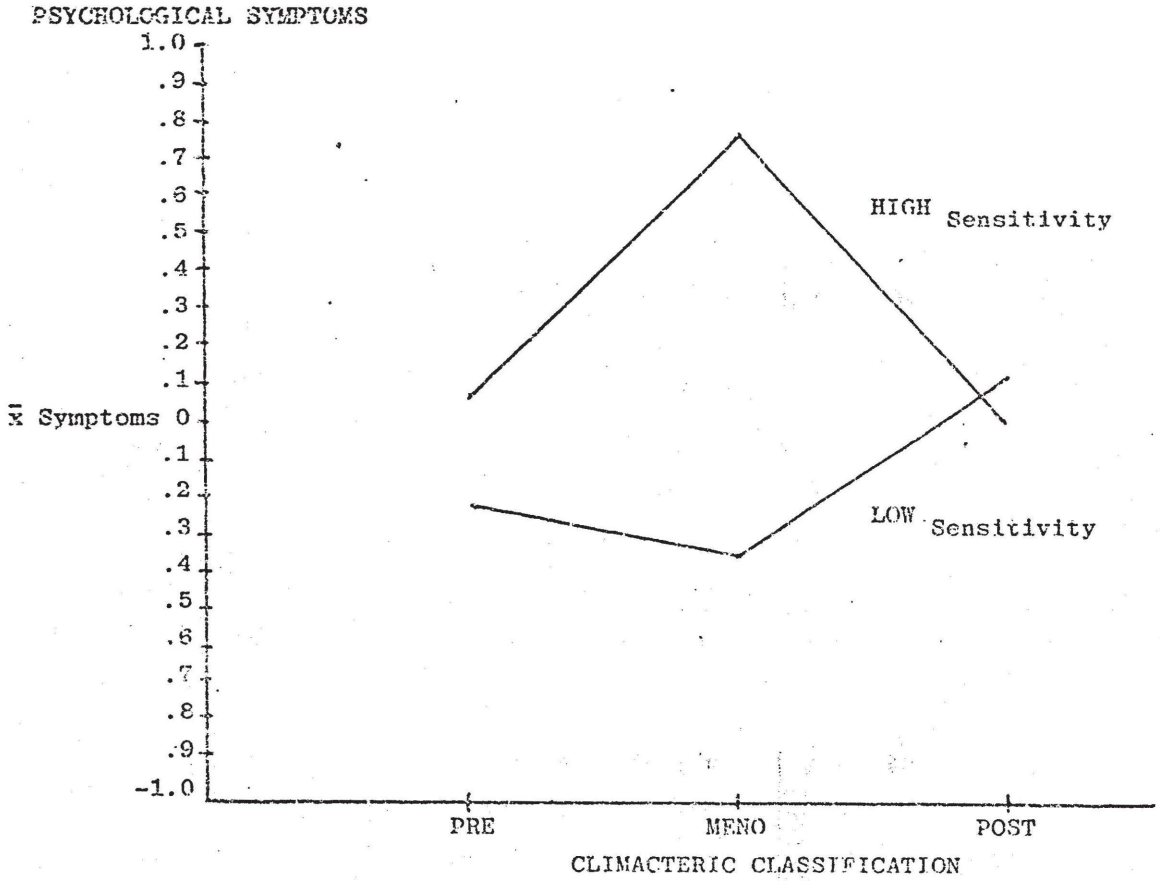

Figure 9. Interactions of Sensitivity and Climacteric Classification with Psychological Symptoms.

appendix F continued

ANALYSIS OF VARIANCE

SOURCE	SS	Df	MS	F	P <
Class	4.644	2	2.322	4.790	0.05
Insecurity	0.008	1	0.008	0.018	NS
Error	46.535	96	0.485		
Class X Insecurity	2.669	2	1.335	2.753	NS
Error	54.022	101	0.535		

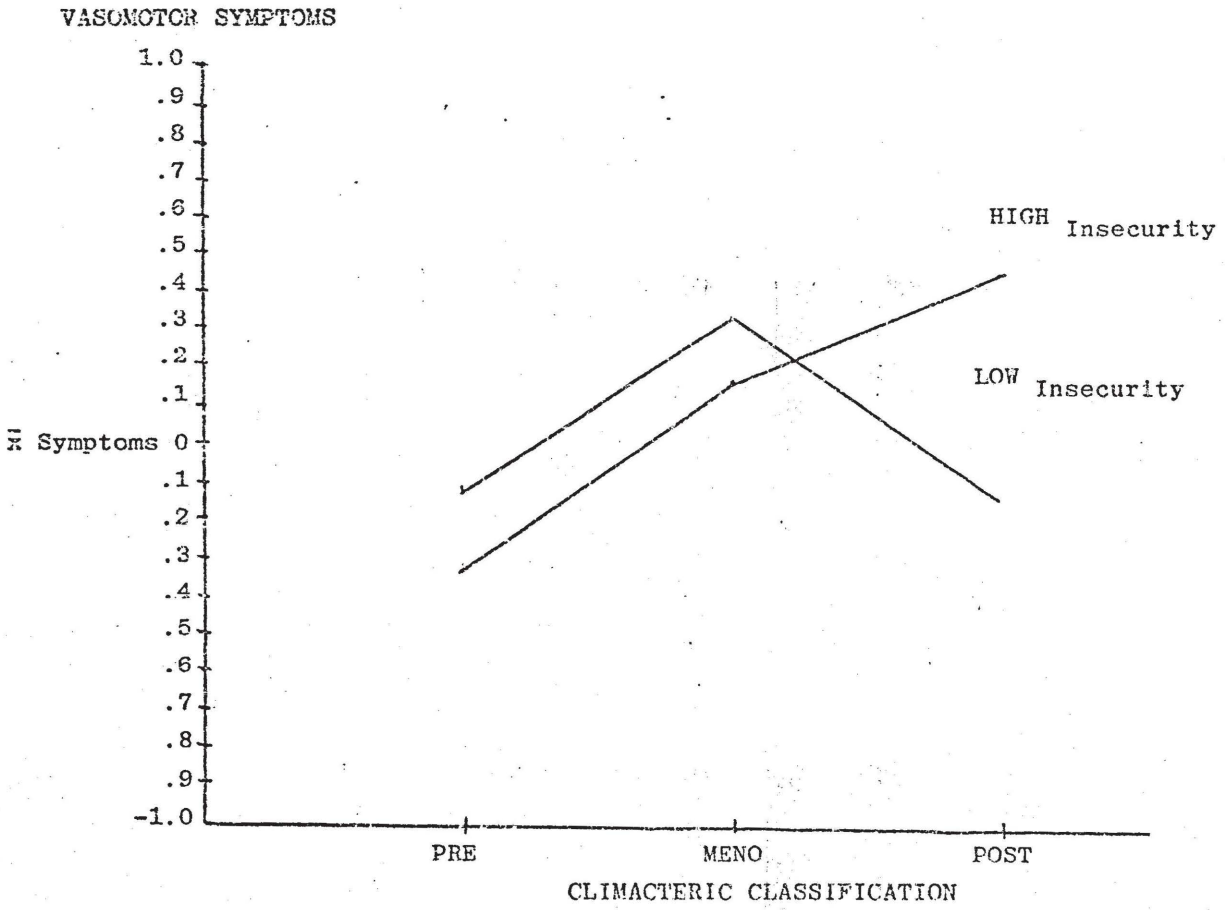

Figure 10. Interactions of Insecurity and Climacteric Classification with Vasomotor Symptoms.

appendix F continued

ANALYSIS OF VARIANCE

SOURCE	SS	Df	MS	F	P <
Class	4.755	2	2.377	4.860	0.05
Rigidity	0.753	1	0.753	1.539	NS
Error	46.954	96	0.459		
Class X Rigidity	1.503	2	0.752	1.537	NS
Error	54.022	101	0.535		

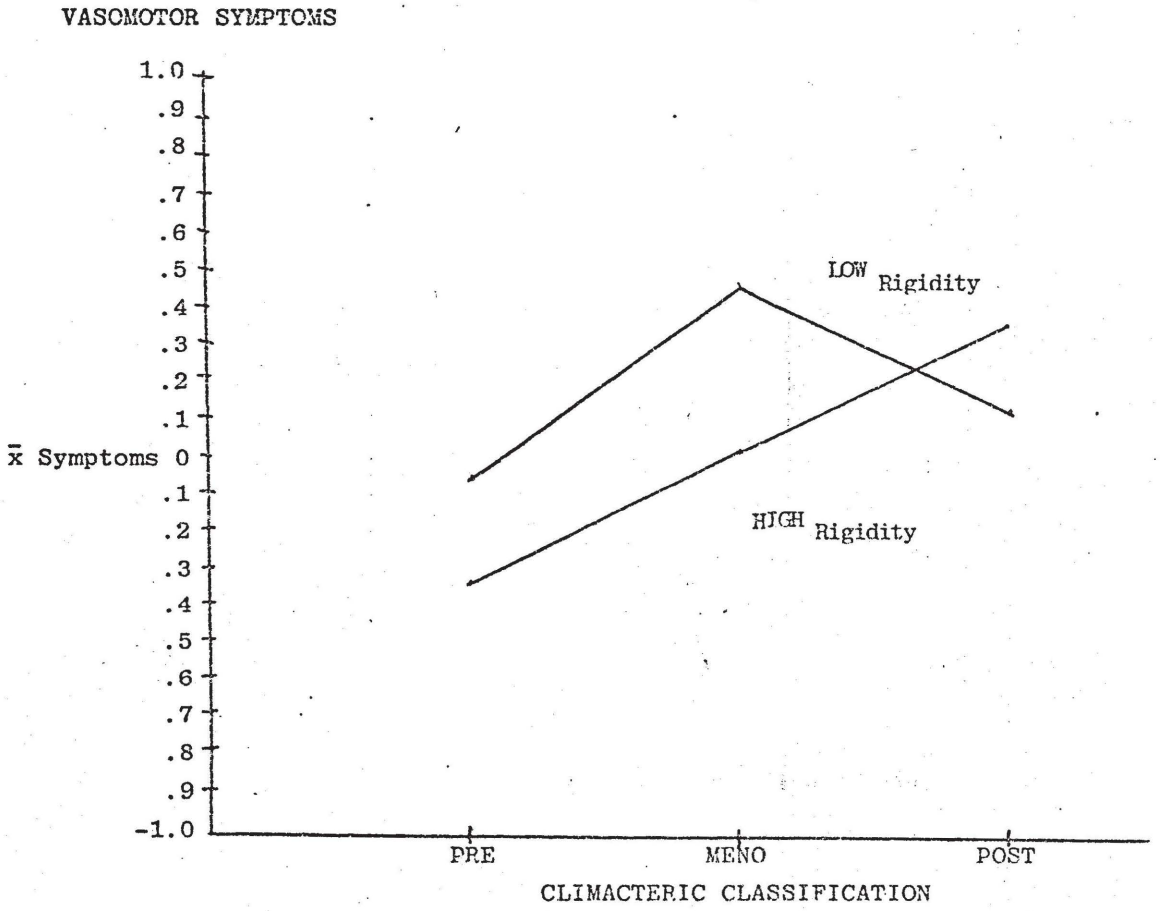

Figure 11. Interactions of Rigidity and Climacteric Classification with Vasomotor Symptoms.

appendix F continued

ANALYSIS OF VARIANCE

SOURCE	SS	Df	MS	F	P <
Class	3.973	2	1.986	4.076	0.05
Sociability	1.807	1	1.807	3.708	0.05
Error	46.787	96	0.487		
Class X Sociability	0.620	2	0.310	0.636	NS
Error	54.022	101	0.535		

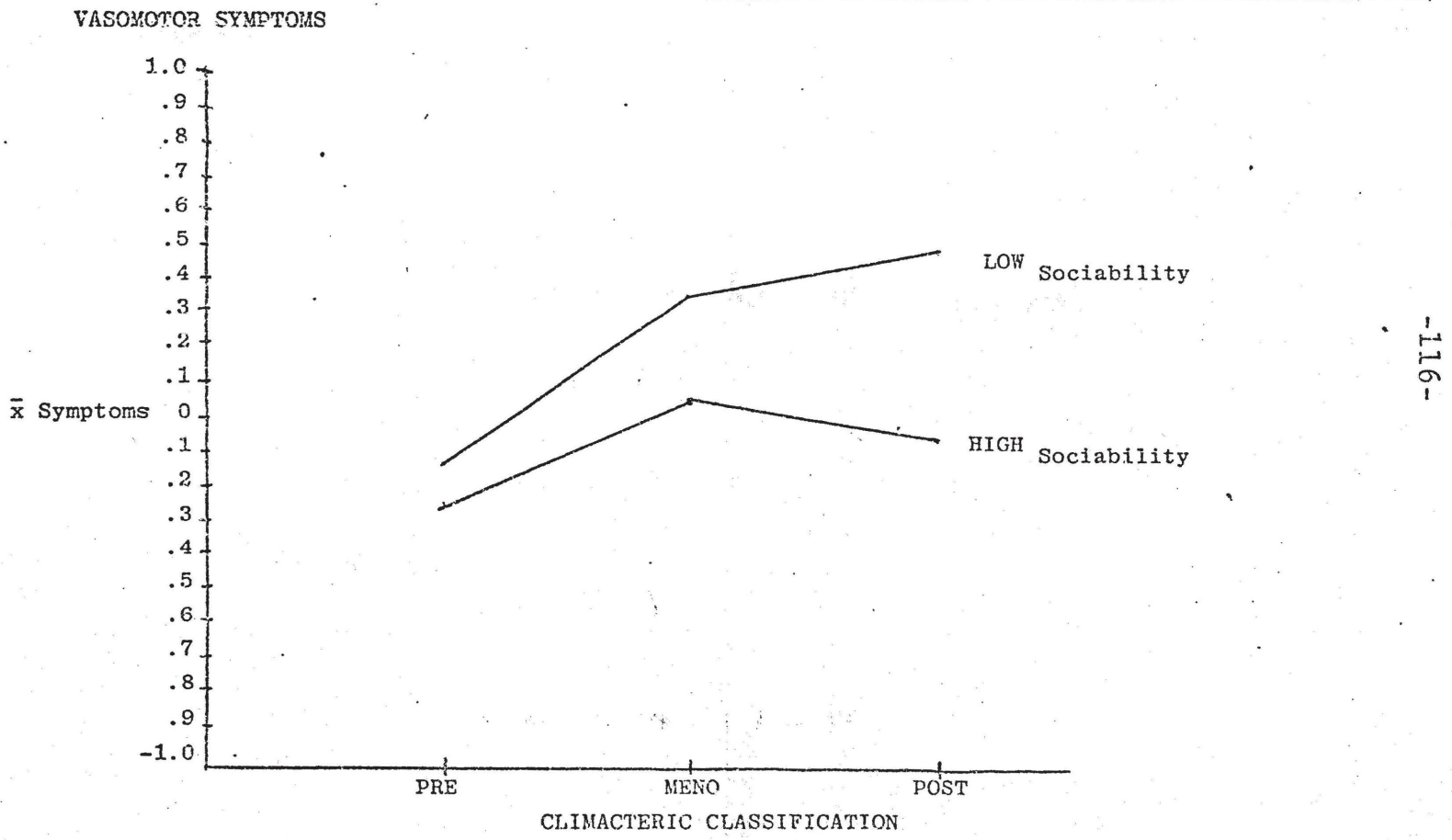

Figure 12. Interactions of Sociability and Climacteric Classification with Vasomotor Symptoms.

appendix F continued

ANALYSIS OF VARIANCE

SOURCE	SS	Df	MS	F	P<
Class	4.332	2	2.166	4.516	0.05
Self-Righteousness	1.920	1	1.970	4.331	0.05
Error	43.176	96	0.450		
Class X Self-Right.	4.067	2	2.033	4.521	0.05
Error	54.022	101	0.535		

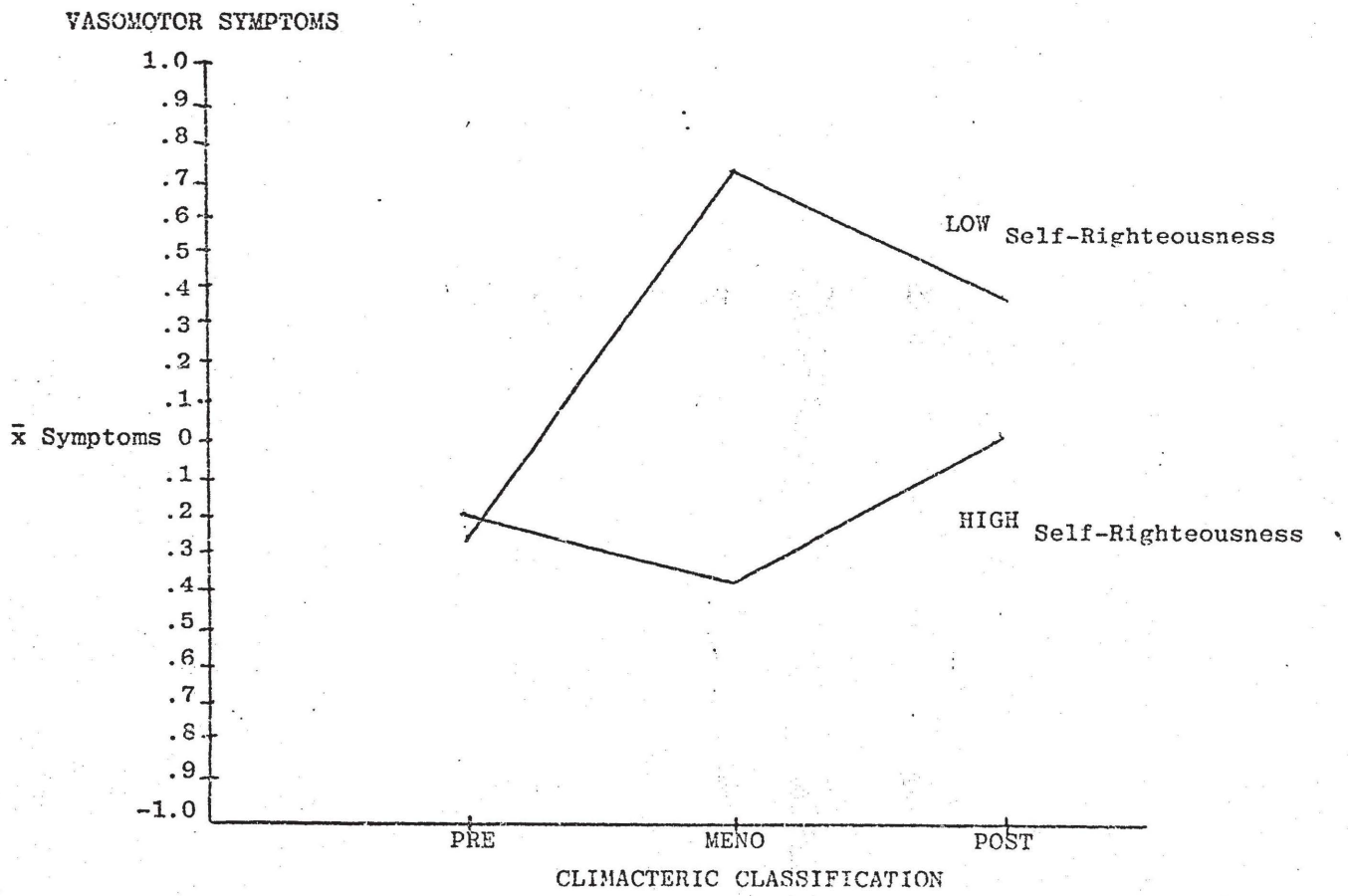

Figure 13. Interactions of Self-Righteousness and Climacteric Classification with Vasomotor Symptoms.

appendix F continued

ANALYSIS OF VARIANCE

SOURCE	SS	Df	MS	F	P <
Class	4.637	2	2.315	4.526	0.05
Social Ach. Striv.	0.014	1	0.014	0.028	NS
Error	48.179	96	0.512		
Class X Soc. Ach. Str.	0.020	2	0.010	0.020	NS
Error	54.022	101	0.535		

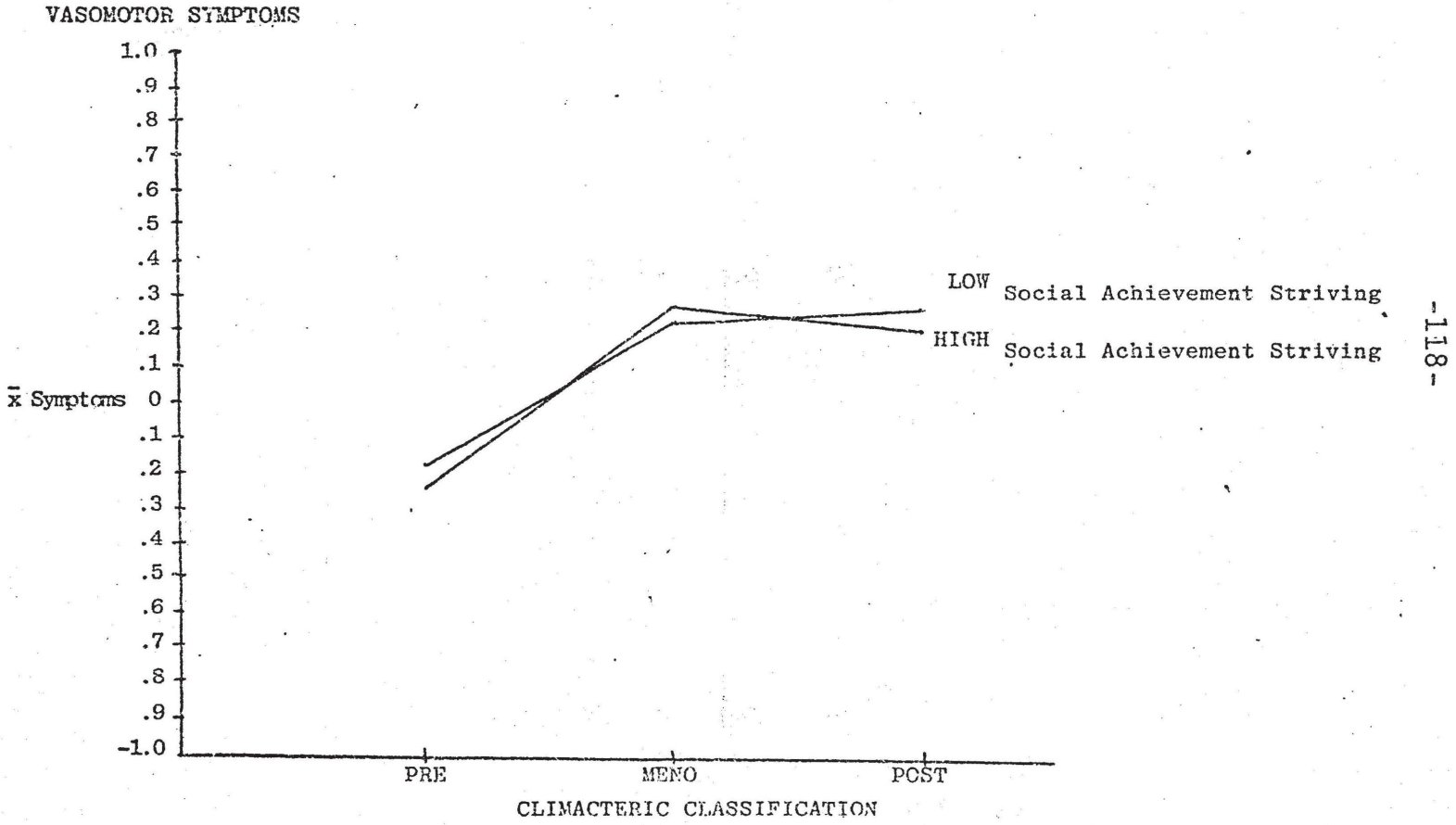

Figure 14. Interactions of Social Achievement Striving and Climacteric Classification with Vasomotor Symptoms.

appendix F continued

ANALYSIS OF VARIANCE

SOURCE	SS	Df	MS	F	P ≤
Class	4.839	2	2.420	4.846	0.05
Submissive Caring	1.276	1	1.276	2.556	NS
Error	47.931	96	0.499		
Class X Subm. Caring	0.006	2	0.003	0.006	NS
Error	54.022	101	0.535		

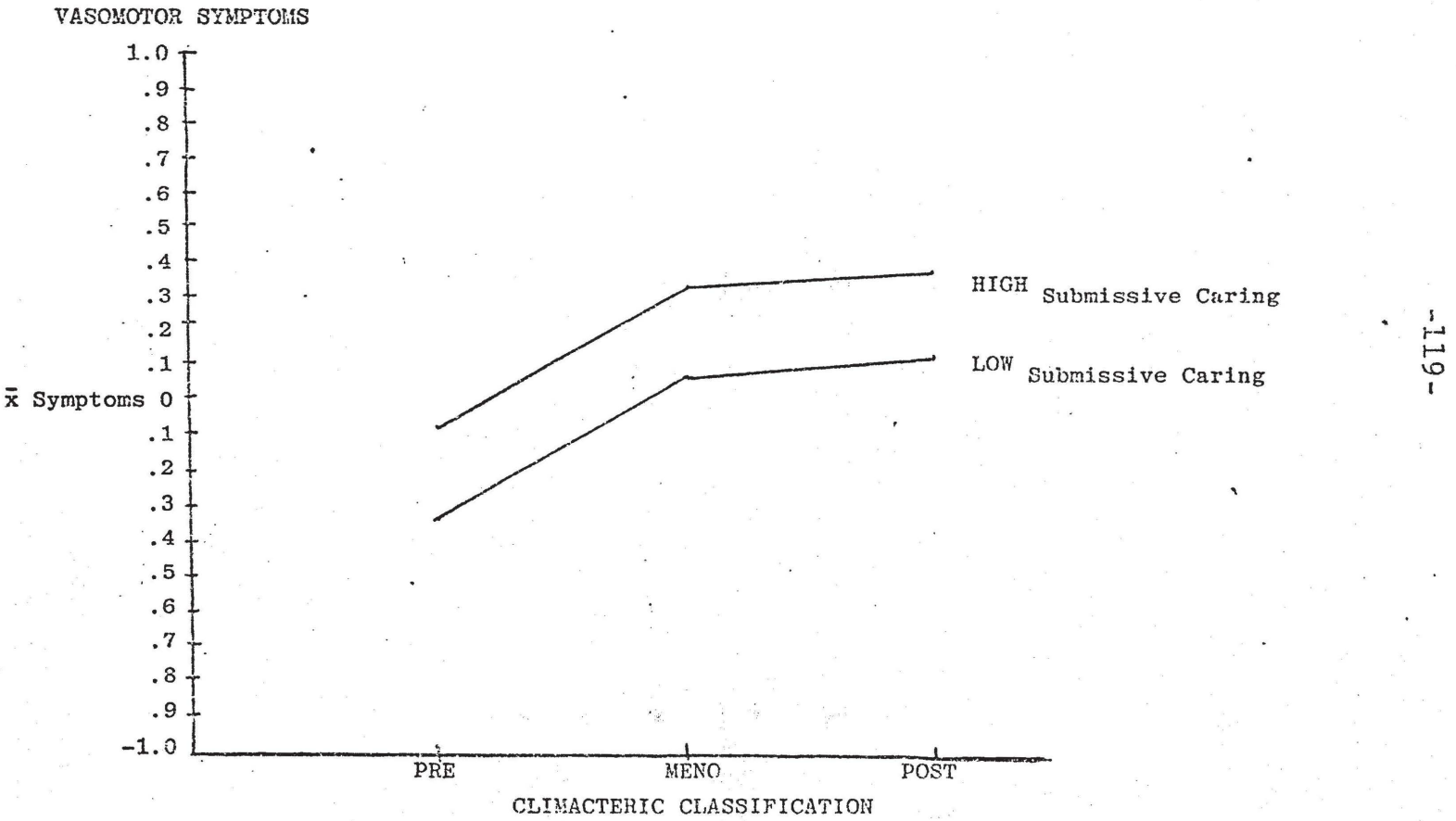

Figure 15. Interactions of Submissive Caring and Climacteric Classification with Vasomotor Symptoms.

ANALYSIS OF VARIANCE

SOURCE	SS	Df	MS	F	P <
Class	4.966	2	2.483	4.894	0.05
Sensitivity	0.522	1	0.522	1.030	NS
Error	48.652	96	0.507		
Class X Sensitivity	0.039	2	0.019	0.035	NS
Error	54.022	101	0.535		

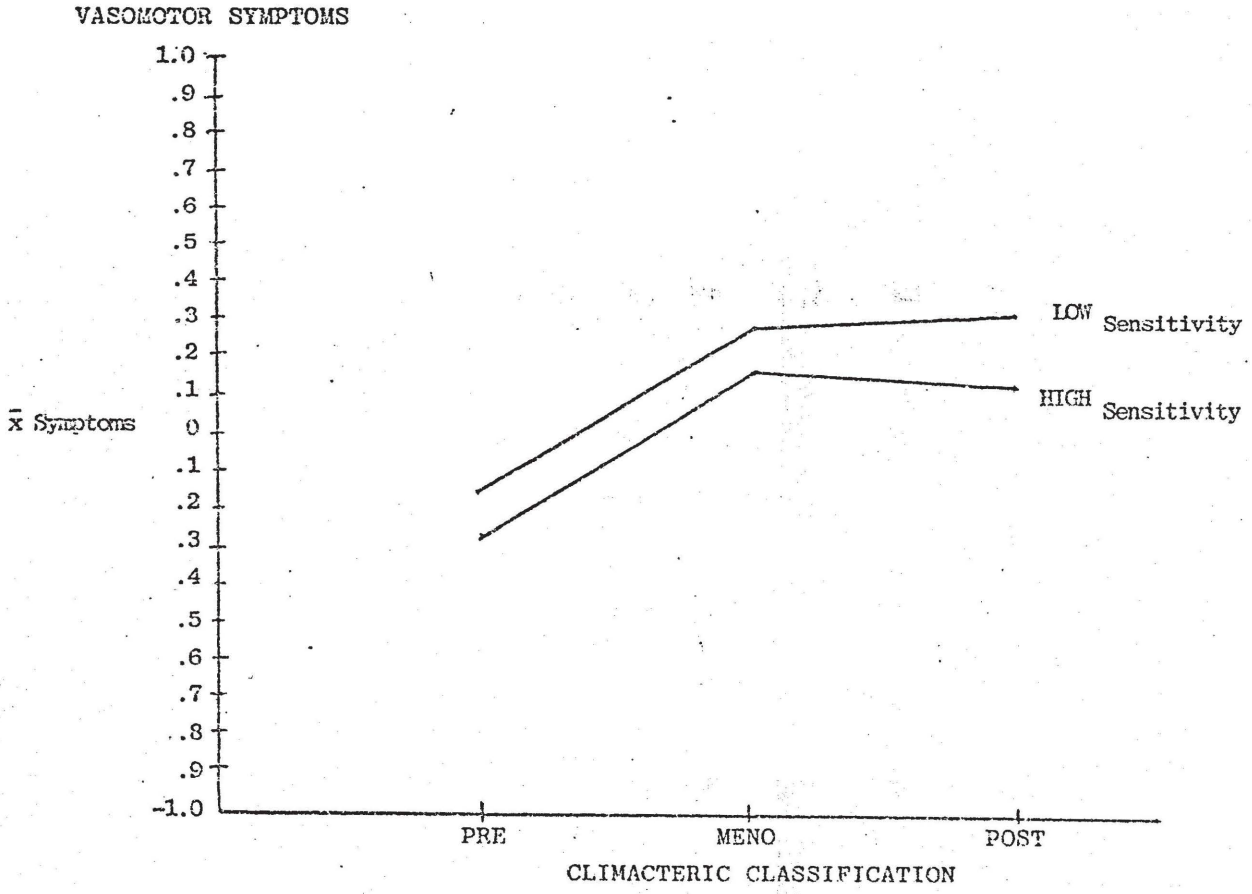

Figure 16. Interactions of Sensitivity and Climacteric Classification with Vasomotor Symptoms.