

Development of the Menopausal Attitude Tool:  
Content Validity & Reliability

By  
Evonne M. Anasis R.N., B.S.N.

A Master's Thesis

Presented to  
Oregon Health Sciences University  
School of Nursing  
in partial fulfillment of  
the requirements for the degree of  
Master of Science

May 19, 1995


Running head: MENOPAUSAL ATTITUDES

APPROVED:



---

Jane Harrison-Hohner, RN, MSN, WHCNP, Assistant Professor, Research Advisor



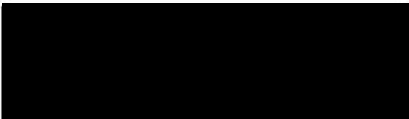
---

Susan Cooksey, RN, PNP, WHCNP, PhD, Instructor, Committee Member



---

Mary Ann Curry, RN, DNSc, FAAN, Professor, Committee Member



---

Jane Kirschling, RN, DNS, Associate Dean for Graduate Studies

## ACKNOWLEDGMENTS

My deepest thanks to the following people who played a vital role in the creation of this thesis:

My research committee: Jane Harrison-Hohner, Susan Cooksey, and Mary Ann Curry for their patience, enthusiasm and support throughout this project. They instilled in me a greater understanding and appreciation for research. Without their guidance, this project would not have become a reality.

Jonathan Fields for all of his assistance with data entry and statistical analysis. His expertise was critical in assisting me with evaluating the data.

The focus group participants for their candidness in discussing their experiences, and for their tremendous energy and excitement in contributing to the instrument development.

My family for their love, support, and encouragement over the years with all of my personal and professional endeavors.

My sister, Argero, for taking the time and having the patience to help me with data verification.

Finally, a special thanks to my mom, Angeliki, for sharing all of her wisdom and for always giving of her love and support.

## Abstract

Title: DEVELOPMENT OF THE MENOPAUSAL ATTITUDE TOOL: CONTENT VALIDITY & RELIABILITY

Author: Evonne Anasis, RN, BSN

Research Advisor:

Jane Harrison-Höhner, RN,MSN, WHCNP

In the literature there is no single, well accepted menopausal attitudinal scale available. Three instruments currently exist to measure menopausal attitudes including: Neugarten's Attitudes Towards Menopause scale, Bowle's Menopausal Attitude Scale, and Leiblum's Menopausal Attitude Questionnaire. It was also found that Polit & Hungler have comprised a list of 20 menopausal attitude statements. The purpose of this study is to develop a more comprehensive tool that measures specific attitudes about menopause.

A convenience sample of 10 female clinical/academic experts and 35 lay women all between the ages of 40 to 63 participated. The research was conducted in 3 phases: (1) instrument development using focus groups, (2) instrument pilot for content validity, and (3) instrument reliability. In Phase 1, two focus groups were used to develop items for the Menopausal Attitude Tool (MAT) by reviewing the 3 current tools along with the 20 other menopausal attitude statements. One group was comprised of five experts and the other of five lay women. The suggestions from the focus groups were then synthesized to form the 33 items for the MAT. Item statements were constructed to form a 6-point Likert scale.

Phase 2 piloted the MAT and assessed its content validity using the index of content validity (CVI). Each statement was evaluated for fit, clarity, and uniqueness. Participants included: the 10 members from the focus groups, 6 other lay women, and 4 other clinical/academic experts. Finally, Phase 3 evaluated instrument's reliability using internal consistency as measured by Cronbach's alpha. Twenty-five other lay women completed the MAT. Their results along with the results from the participants in Phase 2 were used to measure reliability.

The overall results of the MAT showed that the pre-menopausal women tended to have more negative attitudes towards menopause than the peri- or post-menopausal women. The women responded to the instrument based on their experience with menopause.

All of the CVI scores were greater than 70% except for 5 which included 1 in the area of clarity and 4 in the uniqueness category. These results demonstrated that the statements appeared to encompass the same domain, and were clearly stated, but had some repetition amongst themselves. Comments were made by the participants on how to rephrase some statements to make them clearer and less ambiguous, and recommendations were made as to which statements should be omitted. The alpha reliability for the MAT was .74, which is considered an acceptable value for a newly developed instrument. The reliability score identifies an association between all of the statements in that they are measuring and representing the concept domain.

These findings suggest that the MAT meets the minimum criteria for an instrument in the early stages of development. Refinement of the instrument is necessary to more fully and completely identify the areas of the conceptual domain. More research will then be needed to enhance the instrument's content validity and reliability.

## TABLE OF CONTENTS

CHAPTER		PAGE
1	INTRODUCTION . . . . .	1
2	REVIEW OF THE LITERATURE . . . . .	3
	Neugarten's Attitudes Toward Menopause Scale . . . . .	3
	Bowles' Menopause Attitude Scale . . . . .	6
	Leiblum's Menopause Attitude Questionnaire . . . . .	11
	Polit & Hungler's Statements . . . . .	13
	Use of Tools in Studies . . . . .	14
	Attitudes Toward Menopause . . . . .	14
	Menopause Attitude Scale . . . . .	17
	Menopause Attitude Questionnaire . . . . .	18
	Polit & Hungler statements . . . . .	18
	Instrument Development and Psychometrics . . . . .	19
	Measurement framework . . . . .	19
	Instrument design . . . . .	20
	Validity testing . . . . .	21
	Reliability testing . . . . .	24
	Analysis of variance . . . . .	25
3	METHODOLOGY . . . . .	26
	Design . . . . .	26
	Sample . . . . .	26

	Procedure . . . . .	27
	Phase 1: Instrument development . . . . .	27
	Phase 2: Instrument pilot with content validity . . . . .	28
	Phase 3: Instrument reliability . . . . .	29
4	RESULTS . . . . .	30
	Sample Characteristics . . . . .	30
	General Findings . . . . .	32
	Menopausal Attitude Tool statements . . . . .	32
	Menopausal Attitude Tool results . . . . .	33
	Psychometric Findings . . . . .	45
	Content validity results . . . . .	45
	Reliability results . . . . .	47
	Analysis of variance results . . . . .	47
5	DISCUSSION/RECOMMENDATIONS . . . . .	49
	Sample Limitations . . . . .	49
	MAT Responses . . . . .	50
	Validity . . . . .	51
	Reliability . . . . .	51
	Recommendations . . . . .	52
	Implications for Nursing . . . . .	54
	BIBLIOGRAPHY . . . . .	55

## APPENDICES

A. Instruments Measuring Menopausal Attitudes: ATM, MAS, MAQ, and Polit & Hungler statements . . . . .	59
B. Content Validity Index . . . . .	65
C. Human Subjects Approval . . . . .	74
D. Consent Forms . . . . .	76
E. Demographics Form . . . . .	83
F. Menopausal Attitude Tool . . . . .	85
G. Demographic Data Tables 1 & 2 . . . . .	90
H. Source of MAT Statements . . . . .	95
I. Frequency Distribution, CVI & Reliability, Mean & Standard Deviations Tables 3 - 5 . . . . .	98
J. CVI Comments . . . . .	110
K. Cover Letters . . . . .	116
L. Permission for Reproduction . . . . .	120



## Chapter 1

### Introduction

Menopause is a universal event that occurs in mid-life to all women that survive into their fifth decade. While the physiological aspects of menopause are well defined in the literature, our understanding of women's attitudes towards menopause is extremely limited.

Menopause is medically defined as the cessation of menses for one year. The meaning of the physiological event varies from woman to woman. Its significance is based on the woman's beliefs from what she has been told by her health care provider, her mother, her peers and/or what she has read. Her experience will also be influenced by her sociocultural background and different life events (Estok & O'Toole, 1991).

The literature on attitudinal scales to measure women's attitudes with menopause was surveyed. Three instruments were most often cited: Neugarten's Attitudes Toward Menopause scale (Neugarten, Wood, Kraines, & Loomis, 1963), Bowles' Menopausal Attitude Scale (Bowles, 1986), and Leiblum's Menopausal Attitude Questionnaire (Leiblum & Swartzman, 1986). While each of the 3 instruments has been used to a varying extent, there did not appear to be a single, well accepted instrument which measured women's attitudes about menopause. In addition, these 3 instruments are from 9 to 32 years old.

The purpose of this study was to develop an instrument to better measure women's attitudes about menopause. Items for the new instrument were generated from the 3 previous instruments, focus groups of lay menopausal women and clinical experts, review of the literature, and clinical experience. The initial psychometric properties of content validity and internal consistency reliability were evaluated as well as participant responses to the new instrument.

This study is important to nursing as it will provide information about women's feelings and fears of this universal transition. Results of this study may assist practitioners to develop educational and health promotion strategies to assist and support women through the menopausal experience.

## Chapter 2

### **Review of the Literature**

Limited research exists on menopausal attitudes with most utilizing one of the following three instruments: Neugarten's Attitudes Towards Menopause scale (Neugarten et al, 1963), Bowles' Menopausal Attitude Scale (Bowles, 1986), and Leiblum's Menopausal Attitude Questionnaire (Leiblum & Swartzman, 1986). Each of the instruments will be examined and their use in the literature evaluated. A listing of menopausal attitudes was found in Polit & Hungler's (1991) and while not portrayed as an instrument, is included in this review.

Following the review of the literature on menopausal attitudes scales, a review of instrument development and psychometrics will be presented. The topics that will be discussed include: measurement framework, instrument design, validity testing, reliability testing and Analysis of Variance

#### Neugarten's Attitudes Toward Menopause Scale

The most commonly used instrument to measure menopausal attitudes is the Attitudes Towards Menopause scale (ATM) developed by Neugarten et al (1963) (see Appendix A). The instrument began as a checklist, and was developed from exploratory interviews where women were asked to assess the following: their own menopausal status, any symptoms experienced, what anticipations of menopause they had and why, what was the worst and best aspects, and what if any life changes they attributed to

menopause. Statements about menopause were developed from the interviews. Each statement had a 4-point response range including: “agree strongly”, “agree to some extent”; “disagree somewhat”, or “disagree strongly”. The instrument was then pre-tested on an initial group of 50 women ranging from age 40 to 50. After the responses from the pre-test were analyzed, the tool was revised and reduced to 35 items.

The revised ATM was then administered to a second sample of 100 women aged 45 to 55, who were mothers of graduates from two public high schools in the Chicago metropolitan area. Neugarten et al (1963) mentioned that none of the women had artificial or surgical menopause, and that most were in relatively good health. These women were also interviewed about their feelings towards menopause and expressed that the worst aspect of menopause was “not knowing what to expect”.

Once the data from the second sample was analyzed, Neugarten et al began to examine differences in menopausal attitudes based on age. The ATM was administered to a third sample of 167 women, ages 21 to 65, the majority of whom had some college education. This sample was obtained from business firms and women’s clubs. All of the women were married with children, and the majority of them were living with their husbands.

The subjects from the second and third samples were divided into 4 groups according to age for analysis of the results. The groups were distributed into the

following age sections: 21-30, 31-44, 45-55, and 56-65. The 45-55 age group was the second sample, referred to as the Criterion group.

The responses were evaluated using factor analysis. Seven subgroups emerged from the analysis including: negative affect, post-menopausal recovery, extent of continuity, control of symptoms, psychological losses, unpredictability, and sexuality. Three items on the ATM were ungrouped. Results from each of the groups of subjects were examined and compared to the Criterion group.

In general, the study showed that the younger women's attitude pattern differed from those of the middle-aged women. The most significant differences were between the Criterion group and the women ages 21-30; followed by differences between the Criterion group and the subjects ages 31-44. Very few differences were present between the Criterion group and the women ages 56-65. Not only was age a factor, but the women's experience with menopause influenced their attitudes as well, with post-menopausal women having the most positive attitudes toward menopause.

No significant differences between age groups were seen in the "negative affect" subgroup of statements. With the "post-menopausal recovery" statements, the groups of women ages 45-55 and 56-65 viewed the post-menopausal woman as freer and more confident while the majority of the younger women strongly disagreed. Again a varying in responses by the age groups appeared for the statements in the subgroups "extent of continuity" and "control of symptoms". The middle-aged women had a more positive

view of menopause and felt that they had some control over their physiological symptoms. For the remaining clusters of statements including the ungrouped items, responses were scattered in relation to age differences and inconsistent in direction.

While Neugarten's ATM continues to be used in research, it contains several limitations. Because the instrument was developed in the early 1960's, it tends to have statements or phrases that are dated by today's standards. Glazer and Rozman (1991) stated that the ATM is heterosexist, using the term "husband" rather than "partner", and assumes all heterosexuals are married. Neugarten et al also interchange the terms "menopause" and "change of life", which could have different meanings for some women. The ATM has statements about menopause and post-menopause and, therefore, mixes the attitudes towards the two concepts (Glazer & Rozman, 1991). Finally, Neugarten et al failed to include a report of validity or reliability for the instrument.

#### Bowles' Menopause Attitude Scale

A second instrument to measure menopausal attitudes is the Menopause Attitude Scale (MAS) (Bowles, 1986) (see Appendix A). Bowles' developed the MAS in order to produce an instrument with demonstrable reliability and validity, which the ATM lacked, and to allow for replication and cross comparisons. In contrast to Neugarten's lengthy multidimensional instrument, Bowles' goal was to develop a short instrument that could make a general assessment of menopausal attitude. It was felt that a general assessment

of attitude could be more easily utilized in conjunction with assessing other variables related to menopause.

The MAS originally was a semantic differential instrument consisting of 45 items, each rated on a 7-point scale. Each item was composed of bipolar adjectives such as: passive-active, dumb-intelligent, worthless-valuable, and unattractive-attractive. The response options were identified as “extremely”, “quite”, “slightly”, and with a center position indicating neutrality toward the polar adjectives. The concept of menopause was presented by the lead-in phrase: “During menopause a woman feels . . .”. Subjects were asked to indicate the degree to which they felt each group of adjectives related to the lead-in phrase.

The adjective groups used in the MAS were developed from many sources including other semantic differential scales, and a review of the literature of women’s experiences in anticipation of or during the menopausal period. Content validity was assessed by two experts in the field of menopause. The appropriateness of the adjective groups to the concept, and the adequacy of coverage of the concept domain were evaluated by the content validity experts.

The MAS was piloted on a convenience sample of 923 predominantly white, educated, employed women from northern Illinois. Bowles indicated the ages of the women were 18 years or older without providing specific information, and that 66% were

pre-menopausal, 6% were menopausal, and 28% were post-menopausal. They were selected from a variety of sources including: church groups, senior citizens' centers, hospital volunteer services, women's fraternal and business organizations, social clubs, and a large state university. Of those who were menopausal, all had experienced a natural menopause. An equal number of women were married or single.

Two samples were used in the initial psychometric evaluation of the instrument. The first sample of 504 women was used for the pilot testing of the tool. After the initial validity testing, the instrument was revised. A second group of 419 women was used to validate the revised instrument.

The pilot study focused on clarity of instructions and scale items, and the women were asked to evaluate the relevancy of the scales to the concept. Factor analysis was used to determine which factor accounted for the variance for the 45 items. Twenty adjective groups of the original 45 items had a factor loading of .71 or greater. A second factor analysis using the same data was performed on the 20 adjective groups to verify the findings from the first factor analysis. The 20 adjective groups were then selected to be used on the revised instruments. The Cronbach alpha estimate of internal consistency reliability was .96 for the 20 adjective groups.

The revised 20 item MAS was given to the second sample of 419 subjects. Total scores ranged from 20 to 140 with a mean of 82.31 and a standard deviation of 23.46.



The Cronbach alpha reliability coefficient was .96; the mean inter-item correlation was .59 with a minimum correlation of .40 and a maximum of .84. Test-retest reliability was conducted six weeks later on thirty-nine subjects from the sample of 419. A reliability correlation of .87 was reported.

Construct validity was also assessed for the MAS. The 419 subjects used in the original reliability testing of the MAS were randomly divided into 3 subsamples. Each group was asked to complete another instrument: the ATM, the Attitudes Towards Old People Scale, or the Attitudes Toward Women Scale. The first subsample comprised of 138 subjects completed the MAS and the ATM. The correlation of the scores for the MAS and the ATM was Pearson's  $r = .63$  showing significant convergence. According to Polit & Hungler (1991) a correlation coefficient of .60 is considered reasonably substantial for construct validity. The internal consistency reliability was assessed for the ATM resulting in a Cronbach alpha of .80.

The second subsample of 135 subjects completed the MAS and the Attitudes Toward Old People (OP) Scale to assess discriminant validity. According to Bowles (1986), the OP scale has been shown to have good content validity due to significant correlations between its scores and attitudes toward ethnic minorities and handicapped groups. The Pearson's  $r = .42$  for the two scales, indicating a significantly lower correlation for convergence than that obtained with the ATM.

The third subsample of 146 subjects completed the MAS and the Attitudes Towards Women Scale (AWS) as a second assessment of discriminant validity. The Pearson's  $r = -.04$  for the MAS and the AWS, indicating no relationship between menopausal attitudes and attitudes towards women's social role.

Data from the 419 women were used for a multiple regression analysis to assess the instrument's ability to differentiate attitudes toward menopause among the subjects with regard to demographic variables. The analysis identified age, marital status, number of children, family income, and menopausal status as possible variables for the variance of the MAS scores. A second analysis was then performed using a forced-entry format for the identified variables from the first analysis to determine the most significant variables. Age and menopausal status were found to highly correlate with each other and were apparent in being the two significant explanatory variables. These results were similar to Neugarten's findings. The women who were younger than 35 years old and pre-menopausal had more negative feelings about menopause and had more positively skewed scores than the older post-menopausal women.

The MAS has continued to be used despite its limitations. The original sample used to evaluate the tool was predominantly younger pre-menopausal women. Bowles did not provide statistics about the ages of these women. It would seem feasible that middle-age, peri-menopausal and menopausal women would be best able to describe

what the concept of menopause is like, yet they were not strongly represented in the development of or in the testing of the instrument.

#### Leiblum's Menopause Attitude Questionnaire

The third instrument that measures menopausal attitudes is Leiblum's Menopause Attitude Questionnaire (Leiblum & Swartzman, 1986) (see Appendix A). The purpose of the authors' research was to examine differences in attitudes of women towards menopause based on varying menopausal status and educational background. They were particularly interested in the extent to which these women viewed menopause as a deficiency disease or as a developmental stage. Other research questions explored attitudes toward estrogen replacement therapy and peri- and post-menopausal sexuality.

The Menopause Attitude Questionnaire (MAQ) consisted of 10 statements about menopause rated on a 7-point scale ranging from "strongly agree" to "strongly disagree" with the midpoint being neutral. Three statements were adapted from Neugarten's ATM (items #1, #6 & #9) The others were developed by the authors and focused on the topics of hormone replacement and sexuality.

A convenience sample of 244 women completed the MAQ. The ages of the participants ranged from 15 to 74 with a mean age of 44.7. There were 120 pre-menopausal, 39 peri-menopausal, 64 post-menopausal and 21 hysterectomized women. The majority of the women were employed professionals with at least a college

education. It was not mentioned if the menopausal women had experienced artificial or natural menopause.

The results found that the majority of women agreed with a medical model view of menopause in that menopause is a medical condition and should be treated as such. They preferred, however, a natural treatment approach to menopausal problems. The sample was divided in their opinion on estrogen replacement therapy with 1/3 favoring it, 1/3 disagreeing with it and 1/3 undecided. The authors also concluded that post-menopausal women continued to maintain a strong sense of sexuality and felt desirable to their partners.

Significant differences in response to the statements on the MAQ were found between the pre-menopausal and the peri-or post-menopausal, and hysterectomized (PPH) women as measured by the Wilcoxon 2-sample test. The PPH women were more likely to support the medical model view of menopause than the pre-menopausal women. In addition, the PPH women were more likely to favor the natural approaches for menopausal complaints. It was also found that college educated women were more likely to endorse the medical model view of menopause than non-college educated women.

Inter-item correlations suggested consistency in responses. Items 1, 6 & 9 of the MAQ were also compared to the ATM's findings. The MAQ showed that the results for

statement 1, “The thing that causes women all of their trouble at menopause is something they can’t control -- changes inside their bodies”, and statement 6, “Women who have trouble in the menopause are those who are expecting it” were less polarized than in Neugarten’s study. For statement 9, “A woman feels like less of a woman following the menopause”, there was no major shift in responses from the ATM.

The MAQ has several limitations. While Leiblum states that the purpose of the instrument is to measure attitude about menopause, the instrument includes statements which measure other content areas such as attitudes towards hormone replacement therapy. Another limitation is that the sample used for the study was skewed primarily toward more educated, middle to upper-middle class women. Also women who had hysterectomies were included. Different attitudes and perceptions may exist for those women, especially depending upon their age at the time of surgery. Finally, no reliability or validity was reported for the MAQ.

#### Polit & Hungler’s Statements

A set of 20 attitudinal statements that relate to attitudes towards menopause were found as an exercise at the end of a chapter on scales and methods of scaling psychosocial traits in the methodology text book by Polit & Hungler (1991) (see Appendix A). No information surrounding the origin of these statements was provided. It is also unclear if these statements were part of a developed instrument or were merely a

listing of items. No measurement scale for scoring was evident. These statements were phrased in the “I” format and appeared to follow similar concepts to Neugarten’s ATM.

#### Use of Tools in Studies

Attitudes Toward Menopause. Neugarten’s ATM scale, the oldest of the 3 tools, has been used and cited the most throughout the literature. Researchers have used either the entire ATM scale, or like Leiblum and Swartzman (1986), used portions of it along with their own original statements.

Frey (1982) utilized the 63-item ATM questionnaire and included a section on physical symptoms as well as attitudinal items. The purpose of Frey’s study was to analyze the relationships between middle-aged women’s attitudes toward menopause, physical symptoms and selected demographic variables. The results support Neugarten’s findings that women between the ages of 40 to 60 with varying menopausal status perceive menopause as a natural progression of age. In addition, it was noted that the subjects in this study had a high wellness-orientation. The most frequently noted symptom was feeling tired.

Millette (1981) surveyed mostly pre-menopausal, married, college educated women with a mean age of 41 regarding their attitudes and knowledge of menopause. The instrument used consisted of 22 attitudinal statements derived from the ATM along with a few from LaRocco and Polit (1980) and some created by the author. Internal

consistency was .71. In general the women in this limited sample had a moderately positive attitude toward menopause. This is consistent with Neugarten's original study which found that the worst aspect of menopause is "not knowing what to expect". Over 40% of the women expected some trouble in menopause and were concerned about how their husbands would feel towards them. No correlation was found between menopausal attitudes and demographic data such as age, educational level, and number of children. Women's knowledge of menopause was not found to significantly correlated with attitude. Millette (1980) attributes the lack of correlation to the attitude items and speculates that an improvement in the attitudinal scale might improve the correlation.

Flint and Samil (1989) examined menopause cross-culturally by evaluating urban and rural Indonesian women's feelings about menopause. The mean age of the subjects was 51 years. The investigators used Neugarten's ATM scale and menopausal symptom checklist along with a self-image test. The results showed that fatigue was the most commonly reported symptom, which is consistent with other studies. The urbanized, more educated Indonesian women complained of more menopausal symptoms and had similar attitudes to women in western society. The rural and less educated women complained of fewer menopausal symptoms and in general had positive feelings about this event in their life.

Bareford (1991) analyzed the role of menopausal attitudes on the incidence of menopausal symptoms. Three subscales of the ATM were used including negative

affect, post-menopausal recovery, and psychological loss. Recent stressful life changes and individual coping strategies were also measured. Women with a high score on the negative affect subgroup were significantly more likely to report a greater number and frequency of menopausal symptoms. Women who also had high scores on the post-menopausal recovery subgroup tended to have a more positive attitude towards menopause and a significant decrease in the number and frequency of menopausal symptoms. No significant correlation between attitude toward menopause and method of coping were noted. The sample used for this study was not specified. In critiquing the ATM, Bareford concurs with Bowles (1986) describing that the ATM provides a great deal of information about women's attitudes on menopause, but is a rather lengthy instrument and respondents are at risk of being oversurveyed.

The purpose of Glazer and Rozman's (1991) study was to perform psychometric testing on four instruments: Spanier's Dyadic Adjustment Scale (DAS), Norbeck's Life Event Questionnaire (LEQ), Neugarten's ATM checklist and Neugarten's Menopause Symptom Checklist (MSC). The authors evaluated the content validity and internal consistency and stability of these tools. Sixty-one women participated in the study. The participants had varying menopausal status and their ages ranged from 39 to 59 with a mean age of 53.24 years. Over half of the women were Caucasian, married homemakers. Each woman completed all 4 instruments.

The subscales of the ATM measure positive and negative attitudes, therefore, a



total score is meaningless (Glazer & Rozman, 1991). The authors completed reliability for the subscales. The internal consistency of the subgroups varied by the women's menopausal status. They ranged from .00 for "control of symptoms" described by the menopausal women to .96 for "negative affect" by the pre-menopausal women. Overall it was found that "negative affect" and "post-menopausal recovery" were the only subscales with sufficiently high alpha coefficients. The authors of this study question the use of the ATM and recommend using Bowles' (1986) MAS because of its strong reliability and accepted validity.

Menopause Attitude Scale. Theisen, Mansfield, Seery, and Voda (1991) used the MAS to evaluate women's responses towards menopause. The authors commented that the women experienced some difficulty understanding the instructions. The participants generally held positive attitudes towards menopause. Several factors weakly correlated to their positive attitudes: ease of talking to others (0.25), good physical health (0.23), and good emotional health (0.34). Women's menopausal attitude was found to negatively correlate with the number of menopausal changes reported. As with Bowles' study, these authors found that younger women and those not experiencing menstrual changes held more negative attitudes about menopause.

Standing and Glazer (1992) used the MAS and the attitude segment of Millette's (1981) survey to analyze the menopausal attitudes of 66 low income women. The sample primarily consisted of African-American women whose ages ranged from 18 to 55 and

whose yearly income was below \$10,000. Most of these women agreed with the statement originally from the ATM, “menopause is a mysterious thing which most women don’t understand”. The Student t test was used to perform age group comparisons between the data from this study to that of Bowles’. They found the youngest group of this study had significantly higher scores on the MAS than Bowles’ corresponding age group. No other significant differences between the other age groups were found. There also was no significant correlation between attitudinal scores and income level or educational level. Standing and Glazer comment that while work is being done to develop good tools to measure menopausal attitudes, the classic statements by Neugarten et al (1963) can provide solid information and insights into patterns of societal changes (Standing & Glazer, 1992).

Menopausal Attitude Questionnaire. No studies were found that utilize the Menopausal Attitude Questionnaire constructed by Leiblum and Swartzman (1986). It is cited in several articles as another tool that can measure menopausal attitudes, however, few comments have been made regarding its theoretical usefulness.

Polit & Hungler statements. LaRocco & Polit (1980) was the only citation found in the literature that used the list of statements found in Polit & Hungler’s text (1991). The purpose of this study was to gather information about women’s knowledge of various aspects of menopause, to investigate women’s attitudes towards communication

about menopause and the perceived need for more information, and to examine the relationship between a woman's knowledge about menopause and her background characteristics. Two instruments were used for this study. One instrument was a 12-item true-false test assessing knowledge about menopause, and the other instrument contained 6 items relating to perceived need for information on menopause. The six items were scored on a 4-point Likert scale from strongly agree to strongly disagree. Three of the 20 statements from Polit & Hungler, 1 statement from the ATM, and 2 undetermined statements constituted the 6 items in the second instrument. LaRocco & Polit did not indicate from where the statements originated.

The participants consisted of 167 women (mean age 51.5) most of whom were married, had two children, were employed full-time, and had high school as the highest level of education. Over half of the subjects were post-menopausal. The findings from this study indicated that the majority of respondents were comfortable in discussing the topic of menopause with others, with little difference in responses between the age groups or the menopausal status of the subjects.

#### Instrument Development and Psychometrics

Measurement framework. According to Waltz, Strickland and Lenz (1991), it is important to identify a measurement framework to guide the design of an instrument. The major frameworks are: norm-referenced and criterion-referenced. A norm-referenced measurement framework is used in evaluating the performance of a subject relative to the

performance of others in a well-defined comparison group (Waltz et al., 1991). It is also used to construct a device that measures a specific quality in such a manner that it discriminates among subjects possessing varying amounts of that characteristic.

Criterion-referenced measurement framework is used in comparing measurements based on a reasonably reliable and valid criterion (Polit & Hungler, 1991). The norm-referenced approach will be utilized in the research and development of the Menopausal Attitude Tool (MAT) in this study.

Instrument design. Instruments that measure affect attempt to determine interests, values, and attitudes. Attitude is defined as the degree of positive or negative feeling associated with a psychological object, such as a symbol, phrase, slogan, person, institution, ideal or idea (Edwards, 1957). When developing an affective measure it is often difficult to differentiate between the concepts of interest, values and attitudes. Frequently they are encompassed under the term acquired behavioral disposition and are identified as tendencies to respond in a consistent manner to a certain stimulus (Waltz et al., 1991).

According to Polit and Hungler (1991) Likert scales, also known as summated rating scales, are the most common method of attitude measurement. They consist of several declarative statements expressing a point of view on a topic. Waltz et al. (1991) describe the summated rating scale as a device composed of: (1) a stem, a statement relating to the attitude being rated by the subjects; (2) a series of scale steps; and (3)

anchors that define the scale steps. Respondents indicate the degree to which they agree or disagree with the statement.

An approximately equal number of positively and negatively worded statements should be used to avoid biasing the responses (Edwards, 1957 & Waltz et al., 1991). Edwards (1957) states that a well-constructed attitude scale contains a number of items that have been carefully selected to fit certain criteria and statements must represent the “universe of interest”. It is important that the instrument be specific and focus on assessing one “universe of interest” or domain (Waltz et al., 1991).

Polit and Hungler (1991) and Waltz et al. (1991) recommend using 10 to 15 statements and 5 or 6 scale steps. Using an odd number of steps provides the subjects with an opportunity to neutrally respond to a statement, however the inclusion of this option may encourage them to avoid taking sides (Polit & Hungler, 1991). By not having a neutral response option, subjects may be unwilling to commit to a response and not answer the statement at all.

Validity testing. A newly developed instrument must demonstrate that it is a valid and reliable measure of a specified domain (Waltz et al., 1991). Validity is the extent to which a tool measures the purpose for which it is intended (Polit & Hungler, 1991). Three types of validity are classified: (1) content, (2) criterion-related, and (3) construct validity. Content validity, the focus for this research project, is described by Waltz et al. (1991) as a determinant of whether items of an instrument adequately

represent the content domain.

Lynn (1986) describes a two-stage process to determine content validity of an instrument. These two stages include: the development stage and the judgment-quantification stage.

In the development stage, content validity assessment should begin as an instrument is being initially developed. There are 3 steps to the development of content validity: (1) domain identification, (2) item generation, and (3) instrument formation (Lynn, 1986). Domain identification for affective measures involves a thorough review of the literature on the topic to identify all conceptual dimensions. During item generation, the dimensions identified are then synthesized for formulate items which reflect the domain. In the third step the items are assembled into a usable form creating the instrument.

Judgment-quantification is the second stage of content validity. Two steps are involved in this stage. The first utilizes experts in the domain to assure that the items on the instrument are relevant and appropriate for inclusion (Lynn, 1986). According to Davis (1991) experts can be defined by certain characteristics. "An expert has documented clinical experience with the target population; achieved professional certification in a related topic area at state, regional, and/or national professional meetings; published papers on the topic area in regional or national resources; or initiated research on the topic area" (Davis, 1991, p. 194). The number of experts used for

content validity tends to vary in practice, but a minimum of 5 experts “provides sufficient level of control for chance agreement” (Lynn, 1986, p. 383). A maximum number of experts to be used has not been identified, but 10 is rarely exceeded (Lynn, 1986).

The second step is to determine that the entire instrument has content validity. This step involves having the experts use a structured procedure to evaluate content validity. According to Lynn (1986) the index of content validity (CVI) is the most widely used quantification of content validity. The CVI rates the content relevance of the instrument items based on fit, clarity and uniqueness. The CVI used to evaluate the MAT was an instrument modified by Cooksey from a 4-point ordinal rating scale to a “Yes” or “No” response option (see Appendix B). If the respondent answered “No”, then they were to explain their rationale. As part of the content validity assessment, participants were to identify areas of omission and to suggest areas of item improvement or modification. The CVI for the entire instrument is determined by the proportion of total items judged by the experts as valid. Scores for fit, clarity, and uniqueness are calculated based on percentage agreement. According to Topf (1986) the CVI is a percentage of interrater agreement derived from the following formula:

$$\% \text{ agreement} = \frac{\# \text{ of raters in agreement}}{\text{total \# of raters}} \times 100$$

When considering the criteria for interrater agreement, Topf (1986) recommends that an average of 70% is necessary, 80% is adequate, and 90% is good. The CVI acceptance level for each of the statements on the MAT was set at 70% or greater.

Reliability testing. Reliability is the degree to which an instrument consistently measures the desired attribute (Polit & Hungler, 1991). It is an essential component of research and indicates that results are repeatable and consistent. According to Ferketich (1990) reliability provides important information regarding one portion of the soundness of an instrument. "A measure must have good reliability before validity can be inferred" (Shelley, 1984, p. 354).

Reliability is usually estimated by using one or more of the following methods: test-retest, parallel form, and/or measures of internal consistency (Waltz et al., 1991). Internal consistency is most often used with psychosocial scales to determine homogeneity among all of the items and is "based on the average correlation among items within a test and the number of items" (Shelley, 1984, p.333). Cronbach's alpha is the preferred index for internal consistency reliability because it provides one value for a set of data and is the average of the distribution of all possible split-half coefficients for a set of data (Waltz et al., 1991). Reliability coefficients range between 0.0 and 1.00. The higher the coefficient, the greater the likelihood that all items come from the same domain. An alpha coefficient of at least .70 is considered adequate for an instrument in early stages of development and a coefficient of at least .80 is accepted for a more



developed instrument (Nunnally, 1978). Since the MAT is in the immature stages of instrument development, a Cronbach's alpha of .70 was designated as the criteria for acceptance.

Analysis of variance. An Analysis of Variance (ANOVA) tests the significance of differences between means. It evaluates these differences by dividing the total variability of a set of data into two groups: (1) variability due to the independent variable and (2) all other variability, such as individual differences (Polit & Hungler, 1991). The ANOVA was used to examine the differences between participants based on their menopausal status. The independent variable is menopausal attitudes. A probability level of .05 is considered a statistically acceptable value and indicates that in 5 samples out of 100 a difference in the mean would be obtained by chance alone (Polit & Hungler, 1991).

## Chapter 3

### Methodology

#### Design

This was an instrument development study aimed at evaluating the content validity and internal consistency of the new measure entitled the “Menopausal Attitude Tool” (MAT). Responses on the MAT were also examined based on participants’ menopausal status. The research was conducted in 3 phases: (1) instrument development using focus groups, (2) instrument pilot with content validity, and (3) instrument reliability.

#### Sample

A convenience sample of nursing and non-nursing professionals from the greater Portland metropolitan area was used to develop the MAT and measure its content validity and reliability. In addition, responses on the MAT from this sample were evaluated. Nine female clinical/academic experts on menopause and 36 lay women all who were between the ages of 40 to 65 were asked to participate. All participants were either a personal or professional contact of the researcher or the research advisors. The sample members all had English as their main language and had at least a 9th grade education. This information was assessed from a demographics questionnaire. The age range of 40 to 65 years was selected because it encompasses women in all stages of the menopausal transition. It included pre-, peri-, and post-menopausal women who could provide input on the varying stages of menopause.

### Procedure

Written permission was obtained from Bowles to use the Menopausal Attitude Scale and verbal permission was given by Leiblum to use the Menopausal Attitude Questionnaire. The study was reviewed and approved by the Committee on Human Research (see Appendix C). All forms used throughout the study were coded by identification number and kept in a locked file drawer. A list with participants' names and corresponding identification numbers were stored and locked separately from other forms.

Phase 1: Instrument development. Instrument development using focus groups was the first phase in the research process. Initially, query letters were given and/or phone calls were made to experts and lay women who met the above criteria requesting their participation in the focus groups. Ten participants comprised the two focus groups used to develop items for the MAT, 5 clinical/academic experts and the 5 lay women. Each group met independently.

Prior to the focus group meetings, each participant was given a packet with copies of Neugarten's Attitudes Towards Menopause, Bowles' Menopausal Attitude Scale Leiblum's Menopausal Attitude Questionnaire, and Polit & Hungler Statements (Appendix A). At the meeting an informed consent form and a confidential demographics questionnaire were given to each participant to complete (see Appendices D& E). The focus groups met with the researcher and discussed the three instruments and the Polit &

Hungler statements to determine items to be included or revised for inclusion in the MAT. The groups also developed their own statements which they felt described women's menopausal attitudes.

Discussions were audio taped with permission from the participants. These tapes were kept locked until the completion of the study. No identifying information was transcribed or shared, and the tapes were destroyed upon completion of the study.

The suggestions and recurrent themes from the focus groups were then synthesized to form the items for the MAT (see Appendix F). The items statements were constructed to form a 6-point Likert scale with responses including: strongly agree, moderately agree, slightly agree, slightly disagree, moderately disagree, & strongly disagree.

Phase 2: Instrument pilot with content validity. In the second phase, the MAT was piloted and assessed for content validity using three groups of participants. One group consisted of the 5 experts and the 5 lay women from the focus groups. The other 2 groups included: 6 new lay women and 4 new clinical/academic experts. All of the participants in this phase signed an informed consent form, and those who had not previously done so also filled out the demographic questionnaire (see Appendix D & E). Each subject answered the MAT and then completed the Content Validity Index (CVI) modified after Cooksey (see Appendix B). Using the CVI, participants assessed each statement of the MAT for fit, clarity and uniqueness as described by Lynn (1986) and

Waltz et al. (1991). Subjects also commented on which statements should be omitted and what should be added or revised.

Phase 3: Instrument reliability. The third phase of this study focused on evaluating the reliability of the MAT. A new group of 25 lay women, who were consented as the other participants, only completed the demographics questionnaire and the MAT. Their responses along with those from the 9 expert participants and the 11 lay participants in Phase 2 were used to measure reliability. This provided a complete sample size of 45 participants which was enough to evaluate reliability.

All of the data including: demographics, MAT responses and CVI responses were evaluated. The data from each participant was coded and verified, and the CRUNCH statistical packet was used to analyze the results.

## Chapter 4

### Results

The results of the development of the Menopausal Attitude Tool (MAT) will be discussed. The MAT was developed, piloted and evaluated for content validity and reliability. A summary of the sample characteristics, instrument development results, and psychometric findings including content validity and reliability will be discussed.

#### Sample Characteristics

A sample size of 45 was obtained. The majority of the participants, 87%, were Caucasian; 4% were African American; 4% were Native American; 2% were Asian; and 2% were Hispanic. Seventy-three percent of the participants were Christian, 23% identified no religious affiliation, 5% were non-Christian, and 5 participants did not respond. Forty-nine percent had less than a college and 51% had completed a Bachelor degree or greater. Over half (51%) were professionals and 40% held clerical or office management positions. Sixty-nine percent were employed full-time. Yearly family income ranged from \$10,000 to more than \$60,000, with the majority (60%) of the participants earning an annual income of \$30,000 and above. Forty-two percent indicated an income of \$60,000 or greater. The next most frequent income bracket was from \$20,000 to \$29,000 with 26% of the subjects indicating this level of income.

The 45 respondents ranged from 41 to 63 years of age with a mean age of 50.

Nine were pre-menopausal, 14 were peri-menopausal, and 22 were post-menopausal who by definition of menopause have had their periods stop for at least one year. Sixty percent were married and 36% were divorced or single. The majority of the participants lived either with their spouse and at least one child (38%), or lived only with their spouse/partner (31%).

Over half (N = 24) of the women reported having stopped their periods, including 2 women whose periods have stopped for less than 1 year. Twelve reported irregular periods and 9 reported no changes in their periods. Fifty-four percent of the post-menopausal women experienced a natural menopause while 46% had hysterectomies. Of the women who had undergone a hysterectomy, seventy-four percent still had their ovaries. Four of the peri-menopausal women mentioned that they were taking medroxyprogesterone, but the number of post-menopausal women who were taking hormone replacement therapy was undetermined.

Among the 23 pre- and peri-menopausal participants, 27% had bilateral tubal ligations, 9% used a barrier method, 7% had husbands with vasectomies, 5% used oral contraceptives, and 2% did not respond. The 22 post-menopausal women indicated that they were not using any method of contraception or they were not sexually active. Sixteen percent of all of the women had never been pregnant. Eleven of the participants had at least one spontaneous or therapeutic abortion. Nine women had no living

children with the remaining having 1 to 5 living children. Refer to Appendix G, Table 1 for characteristics of the participants based on menopausal status. Table 2 in Appendix G describes some of the menstrual and reproductive demographic data.

### General Findings

A total of 57 instruments were distributed. Forty-five were returned resulting in an 80% response rate. Of the 45 instruments, 9 (20%) were completed by experts and 36 (80%) were completed by lay women. Twenty-eight CVI forms were distributed with nineteen returned, resulting in a 68% response rate.

Menopausal Attitude Tool statements. The Menopausal Attitude Tool (MAT) contains 33 statements about attitudes towards menopause (refer to Appendix F). Respondents are asked to give a personal opinion on what they believe are women's attitudes. Scoring is on a scale of 1 to 6 with (1) representing strongly agree, (2) moderately agree, (3) slightly agree, (4) slightly disagree, (5) moderately disagree, (6) strongly disagree. The statements were derived from Neugarten's Attitudes Towards Menopause (ATM) scale (Neugarten et al., 1963), Bowles' Menopausal Attitude Scale (MAS) (Bowles, 1986), Leiblum's Menopausal Attitude Questionnaire (MAQ) (Leiblum & Swartzman, 1986), Polit and Hungler's menopausal statements (1991), and items generated from the expert and lay women's focus groups.

Several of the statements that originated from other instruments were revised by the focus groups and included in the MAT. Twenty-one statements were taken from the



ATM with 14 of them having been revised by the focus groups. Eight items were used from the MAS with 4 of them altered by the lay women's focus group. One statement was from the MAQ and one statement was from Polit and Hungler's list. Two items were originally constructed by the lay women focus group. Refer to Appendix H for a summary of the derivation of the MAT statements.

Menopausal Attitude Tool results. The results of the MAT were evaluated by total responses. In addition, participants' responses were analyzed based on menopausal status. The majority of the statements were answered by all of the participants. Some participants indicated that they did not answer a particular statement because they did not know what their attitude was towards that item. Refer to Appendix I, Table 3 for a complete listing of MAT results for each statement.

The first statement, "During menopause a woman feels self-confident", was based on a semantic differential item from Bowles' MAS (1986). Of the 45 respondents, 16 answered slightly agree or higher, while 20 answered slightly disagree. The overall mean for this statement was 3.53 with the means for the pre-menopausal (PRE) women being 3.33, peri-menopausal (PERI) 3.36, and post-menopausal (POST) 3.73.

Statement #2, "A woman in menopause is apt to experience feelings she does not understand", was taken from Neugarten's ATM (1963) and revised by the focus groups. The respondents predominantly answered in the "agree" range with 36% "strongly

agree”, 29% “moderately agree”, and 27% “slightly agree”. The overall mean was 2.22 with the PRE = 2.11, PERI = 2.29 and POST = 2.23.

Statement #3, “After menopause, a woman feels freer to do the things she has always wanted to do”, was derived from the ATM and revised by the focus groups. Eighty-two percent of the subjects responded in the “agree” range with 40% answering “slightly agree”. There was some variability in the mean amongst the various menopausal groups. The PRE group had a mean of 3.33, the PERI group was 2.86, and the POST group was 2.50. The average mean was 2.78.

“During menopause a woman feels unneeded” was statement #4 which came from the MAS. Eighty percent of the participants responded in the “disagree” range with 34% answering “strongly disagree”, 30% “moderately disagree”, and 20% “slightly disagree”. The mean score for this statement was 4.66. The mean score for the PRE was 4.21, the PERI was 4.93, and the POST was 4.68. One participant failed to respond to this statement.

Statement #5 “After menopause a woman should expect to take hormone replacement therapy”, was constructed by the lay focus group. Seventy-three percent of all respondents answered fairly equally in number to each of the “agree” categories. Eleven percent answered “slightly disagree”, 9% “moderately disagree”, and 7% “strongly disagree”. The overall mean for this statement was 2.71. The PRE group mean was 3.11 indicating answers averaging within the slightly agree/slightly disagree range.

The PERI group mean was 2.79, scores being more in agreement than the PRE, and the POST group mean was 2.50 indicating even more agreement.

Statement #6, “Menopause is one of the biggest changes that happens in a woman’s life”, was directly used from the ATM. Fifty percent of the scores were either “strongly” or “moderately agree”, 32% were either “slightly” or “moderately disagree”, and 18% were evenly split between “slightly agree” and “strongly disagree”. The overall mean was 2.98 with a large variability between the 3 menopausal groups. The PRE group mean was 3.00 indicating slightly agree, the PERI group mean was 2.29 leaning more towards moderately agree, and the POST group mean was 3.41 with a tendency towards moderately disagree.

Another semantic differential item from the MAS was the basis for statement #7, “During menopause a woman feels insecure”. Forty-eight percent of the respondents equally answered either “slightly agree” or “slightly disagree”, 36% answered either “moderately” or “strongly disagree”, and the remaining 15% responded “moderately agree” or greater. The mean for this statement was 3.93. In general, the means decreased in agreement the further along the menopausal continuum the respondents were: the PRE group mean was 3.22, the PERI group 3.93, and the POST group 4.23.

The concept for statement #8, “A woman should feel comfortable in seeing a health care provider about menopause”, originally came from the ATM. Ninety-six percent of respondents answered in agreement with 87% scoring “strongly agree”. These

results were highly reflective in the mean for this statement , 1.29. Therefore, the mean scores among the 3 groups varied little: PRE 1.22, PERI 1.29, and POST 1.32.

Statement #9, “After menopause, a woman has a better relationship with her partner”, was derived from Neugarten’s ATM. Sixty-six percent of the participants responded in agreement with this statement with 46% of them answering “slightly agree”. Twenty-two percent of the subjects answered “slightly disagree”. The overall mean was 3.22 indicating most of the results were near the middle of the agreement continuum. As the menopausal status increased, so did the level of agreement with this statement with the PRE = 3.78, PERI = 3.23, and POST = 2.95. Four subjects failed to respond.

“Women who have trouble in the menopause are those who are expecting it”, was directly taken from the ATM for statement #10. An equal number of subjects answered “moderately agree” and “strongly disagree”, representing 46% of the total responses. Twenty-eight percent answered either “slightly agree” or “slightly disagree” and 14% responded “moderately disagree”. The large number of disagreement with this statement was evident with the mean of 3.89. The means for each of the menopausal categories also reflected a trend towards disagreement with PRE = 3.78, PERI = 3.29, POST = 4.33. The POST group indicated the greatest disagreement with this statement. One participant did not respond.

“During menopause a woman feels unattractive”, statement #11, came from the MAS. Thirty-three percent answered “slightly disagree”, 31% answered “slightly agree”, and 18% responded “strongly disagree”. No responses included “strongly agree”. Due to the trend towards disagreement, the mean for this statement was 3.96. The PRE group mean was 3.67, the PERI group mean was 3.50 and the POST group mean was 4.36, with the POST group having a stronger tendency to disagree.

Statement # 12, “Women dread menopause”, conceptually came from the ATM. The most frequent response (24%) was “slightly agree”. “Strongly agree” and “slightly disagree” were equally indicated, each representing 18% of the responses. Sixteen percent of the subjects answered “moderately agree”, 13% answered “moderately disagree” and 5 answered “strongly disagree”. The mean for this statement was 3.27. The degree of agreement decreased as the subjects menopausal status progressed. The PRE group was in moderate to slight agreement with a mean value of 2.67. The PERI group had a mean of 3.00 indicating slight agreement, and the POST group mean was 3.68 showing some disagreement.

Statement #13, “The worst aspect about menopause is not knowing what to expect”, originally came from Neugarten’s ATM. Sixty-nine percent responded “moderately agree” or higher, with 44% answering “strongly agree”. Thirteen percent of the subjects answered “slightly agree”. “Moderately disagree” and “slightly disagree” represented 17% of the responses. No responses for “strongly disagree” were given. The

mean of 2.18 represents the high level of agreement with this statement. The PRE group mean was 1.89 indicating that women who have not gone through menopause have a fear of the unknown. The PERI group mean was 2.36, and the POST group mean was 2.18 indicating that these women also felt that they did not know what to expect during the menopausal period.

Another statement derived from the ATM was statement #14, “Just about every woman is depressed about the menopause”. Sixty-six percent of the subjects disagreed at some level with this statement. Thirty percent of the total number of respondents indicated “moderately disagree” and 23% “slightly disagree”. Another 23% answered “slightly agree”. The mean for this statement was 4.05 with the means for each of the groups being: PRE = 3.44, PERI = 4.21, and POST = 4.19. These means were indicated a general disagreement with the statement. One subject failed to respond to this statement.

Statement #15, “The problem with menopause is not being able to control the physical changes”, was created from the ATM and the lay women focus group. Fifty-one percent of the subjects responded either “strongly” or “moderately agree”, and 20% answered “slightly agree”. Of those who disagreed, 13% stated slight disagreement, 9% posited moderate disagreement, and 7% strong disagreement. The mean for this statement was 2.73. The means for each of the groups decreased in agreement as the

women were further along in their menopausal status. The PRE group mean was 2.00, the PERI group mean was 2.36, and the POST group mean was 3.27.

Statement #16, “A woman is concerned about how her partner will feel towards her after menopause”, came from Neugarten’s ATM. Fifty-three percent of the respondents answered in the “agree” range with most of them responding either “moderately” or “strongly agree”. Eighteen percent answered “moderately disagree”, 16% answered “strongly disagree”, and 13% answered “slightly disagree”. The overall mean was 3.60 with the PRE = 3.11, PERI = 3.71, and POST = 3.73. The PERI and POST means were very similar indicating that women in that menopausal status may feel more comfortable with themselves and their partners.

Also from the ATM was statement #17, “ Going through menopause really does not change a woman in any important way”. The most frequent response (32%) was “slightly disagree”. The remaining scores ranged from 14% to 18% across the other options, except for a 7% response on “slightly agree”. The mean for this statement was 3.61 with a fair amount of variability amongst the menopausal groups: PRE = 2.75, PERI = 4.21, and POST = 3.55. One subjects data for this statement was missing.

Statement #18, “During menopause a woman feels unproductive”, was derived from the MAS and revised by the lay women focus group. Eighty-seven percent of the respondents answered within the “disagree” range with the most frequent response 33% being “strongly disagree”. The mean was 4.67. Very little difference existed in the mean

scores between the groups. The PRE group mean was 4.78, and the PERI and POST means were both 4.64.

From the ATM and the expert focus group, statement #19, “Menopause means no longer having the fear of pregnancy” was constructed. “Strongly agree” was the most frequent response (53%) with 80% of the total responses indicated in the “agree” range. “Slightly disagree” and “strongly disagree” were evenly represented with a total of 18%. The mean for the 45 subjects was 2.22. The PRE group mean was 1.78, the PERI group was 2.21, and the POST group was 2.41. All seemed to indicate agreement.

Statement #20, “Women think of menopause as the beginning of the end”, came directly from the ATM. Sixty-six percent of the total responses was in the “disagree” range with 30% of the participants responding “slightly disagree”, 18% answering “moderately disagree” and another 18% “strongly disagree”. Twenty-three percent indicated “slightly agree”, 9% “moderately agree”, and 2% “strongly agree”. The overall mean was 4.07. The means for the menopausal groups were leaning towards the “slightly disagree” to “moderately disagree” responses with PRE = 3.67, PERI = 4.07, and POST = 4.24. One participant did not respond.

“After menopause, women often feel less feminine”, statement #21, was originally from the ATM and used in Leiblum’s MAQ. “Slightly disagree” was the response given by 37% of the subjects, “strongly disagree” represented the attitudes of 33% of the subjects and “moderately disagree” was indicated by 16%. The mean of 4.58



represented the tendency of respondents towards the disagreement range. The PRE group mean was mid-scale at 3.50, the PERI group mean was 4.77, and the POST group mean was 4.86 showing an increase in disagreement as the women progressed through menopause. Two pieces of data were missing for this statement.

Statement #22, "A woman has a broader outlook on her life after menopause", came from Neugarten's ATM. Seventy-nine percent of the women responded in the "agree" range with the most frequent answer being "slightly agree". Twenty-one percent responded with disagreement, with slight disagreement being the most frequent choice.. The mean was 2.79. The PRE group responded mid-scale with a mean score of 3.50. The PERI and POST groups were more positive in their responses and had mean scores of 2.54 and 2.67. Three subjects did not respond to this statement.

Statement #23, "During menopause a woman feels needed", was directly from the MAS. Sixty-four percent of the responses were fairly evenly distributed between "moderately agree" (20%), "slightly agree" (23%), and "slightly disagree" (23%). "Moderately disagree" received 16% of the responses and "strongly agree" and "strongly disagree" each obtained 10%. The mean for this statement was 3.43 with PRE = 3.56, PERI = 3.71 and POST = 3.19. One subject did not respond.

The concept for statement #24, "Women often seek attention at the time of menopause", came from the ATM, but the statement was really developed by the focus groups. The most frequent response was "slightly agree" representing 33% of the

subjects. The majority of subjects disagreed with this concept. Twenty-two percent responded with “slightly disagree”, 18% answered “moderately disagree” and 18% “strongly disagree”. The mean was 3.96. The means for the menopausal groups tended to be in the “slightly disagree” range with PRE = 4.00, PERI = 3.57, and POST = 4.18.

Statement #25, “Partners of menopausal women regard them as less sexually desirable following the menopause”, was directly from Leiblum’s MAQ. Eighty-nine percent responded in the “disagree” range, with 40% of the women answering “strongly disagree”, 35% answering “slightly disagree”, and 14% “moderately disagree”. The overall mean was 4.77 indicating the bias towards disagreement. Evident distinctions were present between the means of the menopausal groups, with the scores indicating stronger disagreement as the women progressed through the menopausal stages. The mean for the PRE group was 3.50, the PERI group was 4.75 and the POST group was 5.38. Two subjects failed to respond to this statement.

“Women get irritable during the menopause”, statement #26, was derived from the ATM. Eighty-four percent of the women responded in the “agree” range with the two most frequent responses being “slightly agree” (33%), and “moderately agree” (31%). The mean was 2.47 with the PRE = 2.22, PERI = 2.43, and POST = 2.59.

Statement #27, “A woman’s body may change in menopause, but otherwise she does not change much”, came from the ATM. One fourth of the subjects answered “slightly agree”, 20% answered “strongly agree” and 20% “moderately agree”. Thirty-

four percent responded in disagreement. The mean for 44 participants was 3.02. One subject failed to respond. The three menopausal groups responded nearly identically with mean scores for each of the groups including: PRE = 3.00, PERI = 3.07, and POST = 3.00. One piece of data for this statement was not provided.

“During menopause a woman feels attractive”, statement #28, was another item taken from the MAS. Responses were widely spread across the 6 options. Twenty-nine percent indicated slight agreement, 16% moderate agreement, and 11% strong agreement. Twenty percent indicated slight disagreement, 13% moderate disagreement, and 11% strong disagreement. The scores were very broad, therefore, the mean was 3.42. Scores for the menopausal groups ranged from 3.89 for the PRE, 3.79 for the PERI and 3.00 for the POST.

Neugarten's ATM provided statement #29, “Women should expect some problems during the menopause”. With 66% total agreement, 48% responded “slightly agree”. The mean was 3.23 for this statement. Scores decreased in agreement across the menopausal status with PRE = 2.67, PERI = 3.07, and POST = 3.57. Forty-four of forty-five participants responded.

Statement #30, “When women reach menopause, they are considered old”, was the only statement taken directly from Polit and Hungler's list (1991). Thirty-eight percent of the subjects answered “moderately disagree”, 27% “strongly disagree”, and 13% “slightly disagree”. Twenty-two percent answered in the “agree” range. The mean

score was 4.47. A large variability existed between the mean scores of the groups. The PRE group mean was 4.44, the PERI group was 3.43, and the POST group was 5.14.

“Menopause means women have a tendency to gain weight”, was developed by the lay women focus group for statement #31. Seventy-eight percent of the women agreed with this statement, mostly in the range of “moderately” to “slightly”. The mean score was 2.87 with PRE = 3.22, PERI = 2.71, and POST = 2.82.

Statement #32, “During menopause a woman feels productive”, was taken from the MAS and revised by the focus groups. Sixty-four percent of the subjects agreed, with 31% of the participants moderately agreeing, and 20% agreeing slightly. Twenty percent conveyed a slight disagreement. The mean for the 45 subjects was 3.02. Group scores tended to become more in agreement with the statement as the women matured through menopause: PRE = 3.89, PERI = 3.07, and POST = 2.64.

The final statement, “Many women think menopause is one of the best things that has happened to them”, was derived from the ATM. Two subjects did not respond to this statement. Of the 43 respondents, 60% indicated agreement, with 23% “strongly agree”, 21% “moderately agree”, and 16% “moderately agree”. Of the disagreeing subjects, 28% stated slight disagreement. The mean score for this statement was 2.93 with PRE = 3.22, PERI = 3.21, and POST = 2.60.

### Psychometric Findings

Content validity results. A total of 20 expert and lay participants completed the Content Validity Index (CVI). Overall, the majority of the scores were above 70%. Five scores were between 63% and 68% with one score low on clarity and the other four on uniqueness. Seventy-nine random pieces of missing data were found in evaluating the CVI which may be attributed to the length of the instrument and to the time and thought required to adequately and thoroughly complete the form. Appendix I, Table 4 lists each of the MAT statements with the CVI scores for fit, clarity and uniqueness along with comments made by the respondents.

All 33 statements met the criteria for conceptual fit with 16 achieving a score of 100%, 9 reaching 95%, and 8 with scores between 84% to 94%. Thirty-two statements met the criteria for item clarity. Nine had a score of 100%, 6 had scores between 90% and 95%, 8 had scores between 85% and 89%, 4 had scores of 80% to 84%, and 5 had with scores between 70% and 79%. Statement #7, "During menopause a woman feels insecure", had a CVI score for clarity of 63%.

Twenty-nine of the 33 statements achieved the criteria for item uniqueness. Nine statements had a score of 100%, 4 had a score of 95%, 4 had scores between 85% and 89%, 10 had scores of either 83% or 84%, 2 had a score of 74%, and 4 items had scores between 63% and 68%. Statement #28, "During menopause a woman feels

attractive”, received a score of 68%. Statement #18, “During menopause a woman feels unproductive”, and statement #23, “During menopause a woman feels needed” each obtained a CVI score for uniqueness of 65%. “During menopause a woman feels productive”, statement #32, scored 63%. All 5 of the statements that received a CVI score less than 70% in one of the three criteria were from Bowles’ Menopausal Attitude Scale.

Three statements on the MAT obtained a score of 100% in all three CVI categories. These statements include: #6, “Menopause is one of the biggest changes that happens in a woman’s life”; #19, “Menopause means no longer having the fear of pregnancy”; and #26, “Women get irritable during the menopause”. Nine statements had 90% for 2 out of the 3 categories, including statements #1, #4, #9, #14, #20, #22, #24, #25, and #30. In evaluating each statement across all three CVI categories, four statements had scores of less than 90% in each category. These statements were #7, #18, #23, and #32, and all included one category with a score less than 70%.

The CVI also evaluated participants’ opinions on the MAT as an entire instrument by critiquing the following: (1) adequate range of questions assessing menopausal attitudes, (2) statements to be omitted, (3) general instrument format, (4) spacing of words/phrases, (5) response scale adequacy, and (6) clarity of instructions. Ninety-four percent of the respondents indicated that the MAT adequately covered the domain of menopausal attitudes. Fifty-three percent responded that all of the statements should be kept in the instrument, but an equally large percentage, 46%, indicated that

some of the statements should be omitted due to redundancy or to potentially ambiguous responses. All of the respondents felt that the format was suitable and that the spacing of words and phrases was adequate for the instrument. Eighty-two percent indicated that the 6-point Likert response scale was adequate, but 18% commented on preferring a 7-point scale with a neutral response option. Finally, 88% responded that the instructions on the instrument were clear and 12% indicated that they were not, but no specific comments were made.

Reliability results. The alpha reliability for the MAT was .74, an acceptable score for an instrument in this phase of development. Alpha's for all of the 33 statements were above .70 and ranged from .71 to .78. Sixteen statements if eliminated would decrease the overall alpha to .71 or .72. Conversely eliminating 10 statements would increase the overall alpha from .75 - .78. Two statements, #2 and #6, if removed from the MAT, would raise the alpha to .77 and .78. Appendix I, Table 4 lists the alpha reliability for each statement of the MAT.

Analysis of variance results. The Analysis of Variance (ANOVA) was used to evaluate differences between the PRE, PERI, and POST menopausal groups. Three of the 33 statements had a significant p value of less than .05. These statements were: statement #21, "After menopause a woman often feels less feminine", ( $p < .02$ ); statement #30, "When women reach menopause, they are considered old", ( $p < .003$ ); and statement # 25, "Partners of menopausal women regard them as less sexually

desirable following menopause", ( $p < .0001$ ). Each of these statements had a broad variability between the means of the 3 menopausal groups of women indicating a true difference in attitude between the groups.



## Chapter 5

### **Discussion/Recommendations**

A discussion of the study results will be presented. Sample limitations, Menopausal Attitude Tool (MAT) responses, Content Validity Index (CVI) responses, and reliability data will be discussed followed by recommendations for refining the MAT and implications for nursing.

#### Sample Limitations

A convenience sample of 45 participants was used for the development and psychometric evaluation of the MAT. Experts, which were required for the instrument development and for the CVI evaluation, by virtue of their profession as clinicians within the field, skewed the overall sample towards a more educated, professional, and higher income sample.

The sample included a broad range of lay women participants. Overall, the subjects were mostly Caucasian, Christian, post-menopausal, married women with children. They were primarily college educated professionals in a higher income bracket. This type of a sample limits the generalizability of the study. A broader, more universal population that more evenly represents all socioeconomic classes, races, marital status and religion would have been ideal. Results were analyzed only by menopausal status.

### MAT Responses

As Appendix 1, Table 5 indicates, significant attitudinal differences appeared between the three menopausal groups, PRE, PERI, and POST. Seventeen of the 33 statements on the instrument were worded more negatively, such as “Women dread menopause”, which revealed some trends in responses based on the wording of the statements.

Women’s experience with menopause seemed to be an influencing factor when responding to the MAT. Over half of the statements were answered with stronger agreement by the PRE group, which seemed to reflect a more negative menopausal attitude by these women possibly due to fear of the unknown and loss of control during this period. The POST group tended to more strongly agree with the positively phrased statements that describe women after menopause. Neugarten et al (1963) found similar results with the ATM, and determined that post-menopausal women identified a “recovery” following menopause after which they felt better than before.

Overall, responses to the MAT tended to be in the middle of the scale, “slightly agree” or “slightly disagree”. A few statements generated more polar responses by all subjects. Statement #8, “A woman should feel comfortable in seeing a health care provider about menopause”, was the most strongly agreed upon item. The most disagreed upon statement was #25, “Partners of menopausal women regard them as less sexually desirable following the menopause”.

### Validity

Overall, the MAT appeared to demonstrate content relevance of the statements. As shown in Table 4 (see Appendix I), all but five statements scored above the accepted criteria of 70% in each of the categories: fit, clarity, and uniqueness. Comments made by respondents regarding these statements primarily indicated that the items were not clearly stated. Rewording may be necessary to more clearly convey the concept. Removing them altogether is another option.

### Reliability

The internal consistency reliability for the 33 item MAT was .74. There are 10 statements that if eliminated, would each increase the alpha score. Refer to Appendix I, Table 4. Removal of statement #6, "Menopause is one of the biggest changes that happens in a woman's life" would give the MAT the highest increase in reliability with a score of .78. This same statement, however, received a perfect score for fit, clarity, and uniqueness on the CVI. All of the alpha scores were greater than the criteria of .70, implying that the statements have some connectedness to each other. The MAT is in a stage of early development and, therefore, it is expected that the statements would have some variability in their reliability scores.

The reliability of the MAT was also examined by grouping statements into two subscales: positive affect and negative affect. The alpha score for each subscale was then defined to determine if the reliability would increase within each separate subscale.

made to improve the MAT based on all of the information and results gathered from participants' comments, CVI scores and reliability data.

Subscales on specific domains may help to improve the reliability and ensure all concepts related to menopausal attitudes are clearly represented. The subscale "negative affect", as mentioned above, is adequately defined with some of the statements also fitting in other subscales. The subscale "postmenopausal recovery" from Neugarten et al (1963) would fit well with several statements including, #3, #9, #22 and #33. A subscale on physical changes needs to be enhanced, as well as a subscale on sexuality and partner relationship. Ultimately the statements within each subscale need to be cohesive without being redundant.

Specific statements need to be rephrased in a clearer, less ambiguous form with the concepts more specifically defined. These statements include: #1, #4, #7, #18, #23, and #32. All are reverse stated items, which is a method that should be maintained for psychometric purposes, but may have contributed to the ambiguity. Even though the alpha reliability would decrease with the elimination of any of these six statement, the content validity and participant responses indicated changes were necessary.

Statements #2 and #6 if eliminated would significantly increase the reliability, however, both of these items scored high on the CVI, especially #6. Because these two statements represent unique concepts, it is strongly recommended they be maintained. The remaining statements were psychometrically solid but require minor changes in

wording. Refer to Appendix J for a listing of item comments from participants.

The MAT is an instrument that has potential to be utilized for further research on the concept of menopausal attitudes. It needs to be tested using participants of varying age, socioeconomic backgrounds, and races. In addition, the MAT could be utilized to study menopausal attitudes of men, of mother/daughter dyads, and of couple dyads. A longitudinal study of women's attitudes towards menopause could also be evaluated by the MAT. The use of the MAT may expand as the instrument becomes further refined conceptually and psychometrically. With continued use and evaluation the MAT may develop sound psychometric properties, and be a valuable tool in research or in the clinical setting as a basis for intervention and education.

#### Implications for Nursing

The MAT has potential to be very useful in nursing practice. Once the instrument is refined and tested, criteria may be set to determine what a score on the MAT would mean. If a respondent's score indicates a low menopausal attitude, then certain interventions, such as education, could be implemented. A pre-test/post-test design may be used to evaluate the efficacy of the intervention. This type of format may be utilized in the clinical setting or in a menopausal support group for short-term or long-term evaluation. The MAT may become a useful instrument in practice for evaluating patients' attitudes towards menopause and be a determinant for intervention.

### Bibliography

Bareford, C. (1991). An investigation of the nature of the menopausal experience: Attitude toward menopause, recent life changes, coping method, and number and frequency of symptoms in menopausal women. In D. Taylor & N. F. Woods (Eds.), Menstruation, health and illness (pp. 223-235). New York: Hemisphere Publishing Corporation.

Bowles, C. (1986). Measure of attitude toward menopause using the semantic differential model. Nursing Research, 35 (2), 81-85.

Buck, M. & Gottlieb, L. (1991). The meaning of time: Mohawk women at midlife. Health Care for Women International, 12, 41-50.

Davis, L. (1992). Instrument review: Getting the most from a panel of experts. Applied Nursing Research, 5(4), 194-197.

Edwards, A. (1957). Techniques of attitude scale construction. New York: Appleton-Century-Crofts, Inc.

Estok, P. & O'Toole, R. (1991). The meaning of menopause. Health Care for Women International, 12, 27-39.

Ferketich, S. (1990). Focus on psychometrics internal consistency estimates of reliability. Research in Nursing & Health, 13(6), 437-440.

Flint, M. & Samil, R.S. (1989). Cultural and subcultural meanings of the menopause. Annals New York Academy of Sciences, 134-148.

Flynn, J. & Garber, H. (Eds). (1967). Assessing behavior: Readings in educational and psychological measurement. Reading, MA: Addison-Wesley Publishing Company.

Frey, K.A. (1982). Middle aged women's experience and perception of menopause. Women and Health, 6, 25-36.

Ghiselli, E., Campbell, J., & Zedeck, S. (1981). Measurement theory for the behavioral sciences. San Francisco: W. H. Freeman and Company.

Glazer, G. & Rozman, A.S. (1991). Marital adjustment, life stress, attitudes toward menopausal symptoms in premenopausal, menopausal and postmenopausal women. In D. Taylor & N. F. Woods (Eds.), Menstruation, health and illness (pp. 273-244). New York: Hemisphere Publishing Corporation.

Kaiser, K. (1989). Cross-cultural perspectives on menopause. Annals New York Academy of Sciences, 430-432.

Koster, A. (1991). Change-of-life anticipations, attitudes, and experiences among middle-aged Danish women. Health Care for Women International, 12, 1-13.

LaRocco, S. & Polit, D. (1980). Women's knowledge about the menopause. Nursing Research, 29 (1) 10-13.

Leiblum, S. & Swartzman, L. (1986). Women's attitudes towards the menopause: An update. Maturitas, 8, 47-56.

Lynn, M. (1986). Determination and quantification of content validity. Nursing Research, 35 (6), 382-385.

Millette, B. (1981). Menopause: A survey of attitudes and knowledge. Issues in Health Care of Women, 3, 263-276.

Mishel, M. (1989). Methodological Studies: Instrument development. In P. Brink & M. Wood (Eds.), Advanced design in nursing research. (pp. 238-284). Newbury Park, CA: Sage Publications

Neugarten, B. (1967). A new look at menopause. Psychology Today, 1(7), 42-45, 67-69.

Neugarten, B. Wood, V., Kraines, R., & Loomis, B. (1963). Women's attitudes toward the menopause. Vita Humana, 6, 140-151

Nunnally, J. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill Book Company.

Polit, D. & Hungler, B. (1991). Nursing research: Principles and methods (4th ed.). Philadelphia: J.B. Lippincott Company.

Schall, F. M. (1989). Knowledge of menopause and attitude toward menopause in nurses and non-nurses. In A. Voda & R. Conover (Eds.), The proceedings from the society for menstrual cycle research, 8th conference, 264-278.

Shelley, S. (1984). Research methods in nursing and health (pp. 332-333, 354-363). Boston: Little, Brown & Company.



Standing, T. & Glazer, G. (1992). Attitudes of low-income clinic patients toward menopause. Health Care for Women International, 13, 271-280.

Theisen, S.C., Mansfield, P., Seery, B., & Voda, A. (1991). Predictors of attitudes toward menopause among midlife women. In The proceedings from the society for menstrual cycle research, 9th conference, 205-211.

Topf, M. (1986). Three estimates of interrater reliability for nominal data. Nursing Research, 35, 253-255.

Waltz, C., Strickland, O., & Lenz, E. (1991). Measurement in nursing research (2nd ed.). Philadelphia: F.A. Davis Company.

APPENDIX A

INSTRUMENTS MEASURING MENOPAUSAL ATTITUDES:

ATM, MAS, MAQ, AND POLIT & HUNGLER STATEMENTS

## NEUGARTEN'S ATTITUDES TOWARD MENOPAUSE CHECKLIST

Using the following scale, rate the extent to which you agree or disagree with each statement about menopause --

1	2	3	4	
Agree Strongly	Agree To Some Extent	Disagree Somewhat	Disagree Strongly	
				Rating (1-4)

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 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. ...
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 get 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. ....
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. ....

### **BOWLES' MENOPAUSE ATTITUDE SCALE**

Indicate to what degree you feel each adjective scale relates to the lead in phrase.

**During menopause a woman feels:**

extremely   quite   slightly   neutral   slightly   quite   extremely

Important	:	:	:	:	:	:	:	Unimportant
Passive	:	:	:	:	:	:	:	Active
Clean	:	:	:	:	:	:	:	Dirty
Fresh	:	:	:	:	:	:	:	Stale
Dumb	:	:	:	:	:	:	:	Intelligent
Sharp	:	:	:	:	:	:	:	Dull
Unsure	:	:	:	:	:	:	:	Confident
Worthless	:	:	:	:	:	:	:	Valuable
High	:	:	:	:	:	:	:	Low
Strong	:	:	:	:	:	:	:	Weak
Unattractive	:	:	:	:	:	:	:	Attractive
Pessimistic	:	:	:	:	:	:	:	Optimistic
Full	:	:	:	:	:	:	:	Empty
Pleasant	:	:	:	:	:	:	:	Unpleasant
Ugly	:	:	:	:	:	:	:	Beautiful
Needed	:	:	:	:	:	:	:	Unneeded
Useful	:	:	:	:	:	:	:	Useless
Interesting	:	:	:	:	:	:	:	Boring
Unsuccessful	:	:	:	:	:	:	:	Successful
Alive	:	:	:	:	:	:	:	Dead

## LEIBLUM'S MENOPAUSAL ATTITUDE QUESTIONNAIRE

Below are a number of statements expressing various attitudes about the menopause. Please rate the extent to which you agree or disagree with each statement using the following scale:

1	2	3	4	5	6	7
Strongly agree	Moderately agree	Slightly agree	Neither agree not disagree	Slightly disagree	Moderately disagree	Strongly disagree

	Rating (1-7)
1. The thing that causes women all their trouble at menopause is something they can't control -- changes inside their bodies.	_____
2. Because the menopause is brought on by diminished estrogen levels, it should be viewed as a medical condition and treated as such.	_____
3. The risks of estrogen replacement outweigh the potential benefits.	_____
4. A woman who experiences distressing menopausal symptoms (e.g. severe hot flashes) should be on estrogen replacement.	_____
5. Psychological problems that women experience around the menopause are more greatly affected by life changes at that time (i.e., children leaving home, death of parents) than by hormonal changes.	_____
6. Women who have trouble in the menopause are those who are expecting it.	_____
7. Natural approaches (i.e., attending to nutritional requirements, vitamin supplements, exercise programs, etc.) for menopausal problems are better than estrogen replacement.	_____
8. Sexual interest and comfort increase following the menopause because of lack of worry about pregnancy or the necessity to use contraception.	_____
9. A woman feels like less of a woman following the menopause.	_____
10. Male partners of menopausal women regard them as less sexually desirable following the menopause.	_____

Below are 20 attitudinal statements taken from Polit and Hunglar (1991) that relate to attitudes toward menopause.

1. Menopause is simply a normal period of biological development.
2. I look forward to menopause as a relief from the nuisance of menstruation.
3. I resent the thought of menopause.
4. Menopause to me means the opportunity for greater freedom of sexual expression.
5. I am ashamed to talk about the subject of menopause.
6. I am indifferent to the thought of menopause.
7. The idea of menopause frightens me a little.
8. I dread the loss of my ability to reproduce.
9. Menstruation makes me feel womanly, and I will regret its cessation.
10. I am annoyed that menopause is a process over which I have no control.
11. I am frightened by the stories I have heard about menopause.
12. When I reach the menopause, I will consider myself an old woman.
13. Menopause is a process about which I know very little.
14. Menopause will give me a feeling of kinship with women of my age group.
15. The thought of menopause revolts me.
16. I am sure that when I reach the menopause I will not feel abnormal or peculiar.
17. To me, menopause means that I will have reached a new level of maturity.
18. I will want a lot of sympathy during the menopause.
19. My life will probably change very little, if at all, because of menopause.
20. I can talk freely about menopause with my friends or family.

APPENDIX B

CONTENT VALIDITY INDEX



Code # \_\_\_\_\_

**MENOPAUSAL ATTITUDE TOOL CONTENT VALIDITY INDEX****Part 1: Questions About the Tool**

For each statement on the instrument, "Menopausal Attitude Tool", please answer the following questions concerning: A) Item Relevancy (Fit), B) Item Clarity, and C) Item Uniqueness.

A) **Item Relevancy or Fit:** Does this item belong in the domain of questions relevant to the topic of attitudes towards menopause? Respond by **circling** "NO" or "YES".

B) **Item Clarity:** Do you understand this item? Respond by **circling** "NO" or "YES".

C) **Item Uniqueness:** \* Save this question until you finish A) and B). Is this item different from other items? Respond by **circling** "NO" or "YES".

***Note: If you mark NO on any section, answer the question below that part.***

Item #	A. Is this item relevant (fit)?	B. Is the item clearly stated?	C. Is this item unique?
1.	<b>NO YES</b> Why not? _____ _____ _____	<b>NO YES</b> What part? _____ _____ _____	<b>NO YES</b> Same as? _____ _____ _____
2.	<b>NO YES</b> Why not? _____ _____ _____	<b>NO YES</b> What part? _____ _____ _____	<b>NO YES</b> Same as? _____ _____ _____
3.	<b>NO YES</b> Why not? _____ _____ _____	<b>NO YES</b> What part? _____ _____ _____	<b>NO YES</b> Same as? _____ _____ _____

*Note: If you mark NO on any section, answer the question below that part.*

Item #	A. Is this item relevant (fit)?	B. Is the item clearly stated?	C. Is this item unique?
4.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
5.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
6.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
7.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
8.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
9.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____

*Note: If you mark **NO** on any section, answer the question below that part.*

Item #	A. Is this item relevant (fit)?	B. Is the item clearly stated?	C. Is this item unique?
10.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
11.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
12.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
13.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
14.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
15.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____

*Note: If you mark **NO** on any section, answer the question below that part.*

Item #	A. Is this item relevant (fit)?	B. Is the item clearly stated?	C. Is this item unique?
16.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
17.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
18.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
19.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
20.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
21.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____

*Note: If you mark **NO** on any section, answer the question below that part.*

Item #	A. Is this item relevant (fit)?	B. Is the item clearly stated?	C. Is this item unique?
22.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
23.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
24.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
25.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
26.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
27.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____

*Note: If you mark **NO** on any section, answer the question below that part*

Item #	A. Is this item relevant (fit)?	B. Is the item clearly stated?	C. Is this item unique?
28.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
29.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
30.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
31.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
32.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____
33.	<b>NO</b> <b>YES</b> Why not? _____ _____ _____	<b>NO</b> <b>YES</b> What part? _____ _____ _____	<b>NO</b> <b>YES</b> Same as? _____ _____ _____

Part 2: General Questions About the Entire Instrument

34. In your judgment, does, the instrument represent the range of questions necessary to assess attitudes towards menopause?

Yes \_\_\_\_\_

No \_\_\_\_\_

35. If no, what items do you think should be added?

---

---

---

---

36. Are there items that should be omitted?

Yes \_\_\_\_\_

No \_\_\_\_\_

37. If yes, which items should be omitted?

---

---

---

38. Any comments? \_\_\_\_\_

---

---

---

**Part 3: Questions About Instrument Format**

39. **Format (layout, appearance) of the instrument** (check one)

\_\_\_\_\_ Suitable

\_\_\_\_\_ Unsuitable

40. **Comments About Format:**

---

---

---

41. **Spacing of Words and Phrases** (check one)

\_\_\_\_\_ Adequate

\_\_\_\_\_ Inadequate

42. **Comments on Spacing of Words & Phrases:**

---

---

---

43. **Response Scale with choices ranging from strongly agree to strongly disagree (1, 2, 3, 4, 5, 6)** (check one)

\_\_\_\_\_ Adequate

\_\_\_\_\_ Inadequate

44. **Comments on Response Scale:**

---

---

---

45. **Clarity of the Instructions** (check one)

\_\_\_\_\_ Clear

\_\_\_\_\_ Unclear

46. **Comments on Clarity of Instructions:**

---

---

---



APPENDIX C

HUMAN SUBJECTS APPROVAL



OREGON  
HEALTH SCIENCES UNIVERSITY

3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098  
Mail Code L106, (503) 494-7887 Fax (503) 494-7787

*Institutional Review Board/Committee on Human Research*

DATE: March 21, 1995

TO: Evonne Anasis, BSN  
Jane Harrison-Hohner SN-FAM

FROM: Heidi Moore, Administrative Assistant *H. Moore*  
Committee on Human Research, OHSU L-106

RE: Project Title: Development of the Menopausal Attitude Tool:  
Content Validity and Reliability.

This confirms receipt of the above mentioned research study proposal. It is my understanding that this study involves interview or survey procedures that will be recorded in such a manner that subjects may be identified, but that these records will be treated as any other medical record and kept strictly confidential throughout the research and thereafter. It therefore falls under category #3 of the federal regulations (45 CFR Part 46.101 (b)) and is considered to be exempt from review by the Committee on Human Research.

As an exempt study, the requirement to use consent forms may be waived. The consent forms you have submitted are exceptional, however, and it is recommended that these be used. The Committee has only two comments for you to consider:

- 1) In the Phase 2 & 3 Consent Form you state that the questions may "create feelings" but it is felt this was better phrased in the Focus Group Consent (i.e. "emotional discomfort").
- 2) For those women who do experience "emotional discomfort" or wish to explore this topic further, you may wish to refer them to a professional who specializes in this area and would welcome new clients (or other community resources).

These comments are for your consideration only and do not affect the status of this study.

This study has been put into our exempt files, and you will receive no further communication from the Committee concerning this study. However, if the involvement of human subjects in this study changes, you must contact the Committee on Human Research to find out whether or not those changes should be reviewed. If possible, please notify the Committee when this project has been completed.

Thank you for your cooperation.

APPENDIX D

CONSENT FORMS

# **OREGON HEALTH SCIENCES UNIVERSITY**

## **Consent Form**

TITLE. Development of the menopausal attitude tool: Content validity and reliability

PRINCIPAL INVESTIGATORS. Evonne Anasis, RN, BSN 494-3870

Jane Harrison-Hohner, WHCNP, MSN 494-3870

### PURPOSE.

You have been invited to participate in this research study because of your knowledge of the menopausal transition period. The purpose of this study is to develop an instrument that measures women's attitudes towards menopause. This study is important to health professionals as it will provide information about women's feelings and fears of menopause. Results of this study may assist practitioners to develop strategies to educate and support women through the menopausal experience.

### PROCEDURES.

This study will be conducted in 3 phases including: (1) instrument development using focus groups; (2) instrument pilot for content, clarity, and uniqueness; and (3) final instrument testing. All participants in this study will be asked to complete a confidential demographics questionnaire and to participate in Phase 2 or Phase 3.

As a member in Phase 2 you will be asked to complete the developed Menopausal Attitude Tool and evaluate its content, clarity and uniqueness. Participation in this phase will take approximately 30 to 60 minutes.

As a member in Phase 3 you will be asked to only complete the Menopausal Attitude Tool. This instrument will require 15 minutes or less to complete.

### RISKS & DISCOMFORTS

The instrument may take time to fill out, and some of the questions asked may create feelings as you answer them. If this occurs, you may discontinue participation in the study.

### BENEFITS

You may or may not personally benefit from participating in this study. However, by serving as a subject, you may contribute new information on women's attitudes of menopause which may benefit patients in the future.

### CONFIDENTIALITY

Neither your name nor your identity will be used for publication or publicity purposes. If at any time the issue of child or elder abuse is suspected, it is required by Oregon law that the abuse be reported to appropriate authorities.

### COSTS

There will be no cost to you for your participation in this research.

### LIABILITY

The Oregon Health Sciences University, as an agency of the state, is covered by the State Liability Fund. If you suffer any injury from this research project, compensation would be available to you only if you establish that the injury occurred through the fault of the University, its officers, or employees. If you have further questions, please call the Medical Services Director at (503) 494-8014.

## PARTICIPATION

You are free to ask any questions concerning any aspect of the research study that you may have at any time. You should contact Evonne Anasis, RN or Jane Harrison-Hohner, Assistant Professor School of Nursing, WHCNP, MSN at 494-3870. If you have any questions regarding your rights as a research subject, you may contact the Oregon Health Sciences University Institutional Review Board at (503) 494-7887.

You may refuse to participate, or you may withdraw from this study at any time without affecting your relationship with or treatment at the Oregon Health Sciences University.

Your signature below indicates that you have read the foregoing and agree to participate in this study. You will receive a copy of this form.

\_\_\_\_\_  
Signature of Subject

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Principal Investigator

\_\_\_\_\_  
Date

# **OREGON HEALTH SCIENCES UNIVERSITY**

## **Focus Group Consent Form**

TITLE. Development of the menopausal attitude tool: Content validity and reliability

PRINCIPAL INVESTIGATORS. Evonne Anasis, RN, BSN 494-3870

Jane Harrison-Hohner, WHCNP, MSN 494-3870

### PURPOSE.

You have been invited to participate in this research study because of your knowledge of the menopausal transition period. The purpose of this study is to develop an instrument that measures women's attitudes towards menopause. This study is important to health professionals as it will provide information about women's feelings and fears of menopause. Results of this study may assist practitioners to develop strategies to educate and support women through the menopausal experience.

### PROCEDURES.

This study will be conducted in 3 phases including: (1) instrument development using focus groups; (2) instrument pilot for content, clarity, and uniqueness; and (3) final instrument testing. All participants in this study will be asked to complete a confidential demographics questionnaire. As a member of the focus groups in Phase 1 of this study you will be asked to meet once with a group of peers and the principal investigator to discuss your feelings about menopause. This session will take approximately one to two hours. Discussions will be audio taped with the permission of the participants. The ideas that come from the groups will be used to construct statements for the development of the Menopausal Attitude Tool.

### RISKS & DISCOMFORTS

As a member of the focus groups, you may experience some emotional discomfort as you discuss the topic of menopause. If this occurs you are free to leave the group at any time and discontinue participation in the study.

### BENEFITS

You may or may not personally benefit from participating in this study. However, by serving as a subject, you may contribute new information on women's attitudes of menopause which may benefit patients in the future.

### CONFIDENTIALITY

Neither your name nor your identity will be used for publication or publicity purposes. Audio tapes will be secured in a locked file during the course of the study. No identifying information will be transcribed or shared, and tapes will be destroyed upon completion of the study. If at any time the issue of child or elder abuse is suspected, it is required by Oregon law that the abuse be reported to appropriate authorities.

### COSTS

There will be no cost to you for your participation in this research.

### LIABILITY

The Oregon Health Sciences University, as an agency of the state, is covered by the State Liability Fund. If you suffer any injury from this research project, compensation would be available to you only if you establish that the injury occurred



through the fault of the University, its officers, or employees. If you have further questions, please call the Medical Services Director at (503) 494-8014.

### PARTICIPATION

You are free to ask any questions concerning any aspect of the research study that you may have at any time. You should contact Evonne Anasis, RN or Jane Harrison-Hohner, Assistant Professor School of Nursing, WHCNP, MSN at 494-3870. If you have any questions regarding your rights as a research subject, you may contact the Oregon Health Sciences University Institutional Review Board at (503) 494-7887.

You may refuse to participate, or you may withdraw from this study at any time without affecting your relationship with or treatment at the Oregon Health Sciences University.

Your signature below indicates that you have read the foregoing and agree to participate in this study. You will receive a copy of this form.

\_\_\_\_\_  
Signature of Subject

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Principal Investigator

\_\_\_\_\_  
Date

APPENDIX E

DEMOGRAPHICS FORM

Code # \_\_\_\_\_

### DEMOGRAPHIC DATA

1. Birth date: month \_\_\_\_\_ day \_\_\_\_\_ year \_\_\_\_\_
2. Is English your main language? 0. No 1. Yes
3. Marital Status (circle one):
  1. Single
  2. Married
  3. Separated
  4. Divorced
  5. Widowed
4. Are you currently living with a spouse/partner? 0. No 1. Yes
5. Who lives at home with you now? (circle all that apply)
  1. Live alone
  2. Spouse/partner
  3. Children
  4. Parent(s)
  5. Brother or sister
  6. Roommate(s)
  7. Other (specify) \_\_\_\_\_
6. Menstrual Status (circle one):
  1. No change in periods.
  2. Periods are now irregular.
  3. Periods have stopped. If yes: - For how long? \_\_\_\_\_  
- Did they stop naturally or due to a hysterectomy?  
\_\_\_\_\_  
- Do you still have your ovaries? 0. No 1. Yes

7. If you are sexually active, what kind of contraception do you use? \_\_\_\_\_
8. Total number of pregnancies \_\_\_\_\_
9. Number of term births \_\_\_\_\_
10. Number of premature births \_\_\_\_\_
11. Number of miscarriages or abortions \_\_\_\_\_
12. Number of living children \_\_\_\_\_
13. Ethnic/Cultural Identification (circle one):
- |                     |                          |
|---------------------|--------------------------|
| 1. African American | 4. Hispanic              |
| 2. Asian            | 5. Native American       |
| 3. Caucasian        | 6. Other (specify) _____ |
14. Religious Affiliation \_\_\_\_\_
15. List highest level of education completed \_\_\_\_\_
16. Please Specify Your Occupation \_\_\_\_\_
17. Employment status (circle one):
1. Working full-time
  2. Working part-time
  3. Homemaker
  4. Temporarily laid off
  5. Unemployed
18. Yearly Family Income (check one):
1. Less than \$10,000 \_\_\_\_\_
  2. \$10,000 - \$19,000 \_\_\_\_\_
  3. \$20,000 - \$29,000 \_\_\_\_\_
  4. \$30,000 - \$39,000 \_\_\_\_\_
  5. \$40,000 - \$49,000 \_\_\_\_\_
  6. \$50,000 - \$59,000 \_\_\_\_\_
  7. \$60,000 - over \_\_\_\_\_

APPENDIX F

MENOPAUSAL ATTITUDE TOOL

Code # \_\_\_\_\_

### MENOPAUSAL ATTITUDE TOOL

Using the scale below, rate the extent to which you agree or disagree with each statement about menopause. Circle the number after each statement which best describes your attitude.

1	2	3	4	5	6
Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree

1. During menopause a woman feels self-confident. . . . . 1---2---3---4---5---6
2. A woman in menopause is apt to experience feelings she  
does not understand. . . . . 1---2---3---4---5---6
3. After menopause, a woman feels freer to do the things  
she has always wanted to do. . . . . 1---2---3---4---5---6
4. During menopause a woman feels unneeded. . . . . 1---2---3---4---5---6
5. After menopause a woman should expect to take  
hormone replacement therapy. . . . . 1---2---3---4---5---6
6. Menopause is one of the biggest changes that happens  
in a woman's life. . . . . 1---2---3---4---5---6
7. During menopause a woman feels insecure. . . . . 1---2---3---4---5---6
8. A woman should feel comfortable in seeing a health care  
provider about menopause. . . . . 1---2---3---4---5---6
9. After menopause, a woman has a better relationship  
with her partner. . . . . 1---2---3---4---5---6
10. Women who have trouble in the menopause are those  
who are expecting it. . . . . 1---2---3---4---5---6
11. During menopause a woman feels unattractive. . . . . 1---2---3---4---5---6
12. Women dread menopause. . . . . 1---2---3---4---5---6
13. The worst aspect about menopause is not knowing  
what to expect. . . . . 1---2---3---4---5---6

1	2	3	4	5	6
Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree

14. Just about every woman is depressed about the menopause. . . . . 1---2---3---4---5---6
15. The problem with menopause is not being able to control  
the physical changes. . . . . 1---2---3---4---5---6
16. A woman is concerned about how her partner will feel  
towards her after menopause. . . . . 1---2---3---4---5---6
17. Going through menopause really does not change a woman  
in any important way. . . . . 1---2---3---4---5---6
18. During menopause a woman feels unproductive. . . . . 1---2---3---4---5---6
19. Menopause means no longer having the fear of pregnancy. . . . . 1---2---3---4---5---6
20. Women think of menopause as the beginning of the end. . . . . 1---2---3---4---5---6
21. After menopause, women often feel less feminine. . . . . 1---2---3---4---5---6
22. A woman has a broader outlook on her life after menopause. . . . . 1---2---3---4---5---6
23. During menopause a woman feels needed. . . . . 1---2---3---4---5---6
24. Women often seek attention at the time of menopause. . . . . 1---2---3---4---5---6
25. Partners of menopausal women regard them as less sexually  
desirable following the menopause. . . . . 1---2---3---4---5---6
26. Women get irritable during the menopause. . . . . 1---2---3---4---5---6
27. A woman's body may change in menopause, but otherwise  
she does not change much. . . . . 1---2---3---4---5---6
28. During menopause a woman feels attractive. . . . . 1---2---3---4---5---6
29. Women should expect some problems during the menopause. . . . . 1---2---3---4---5---6
30. When women reach menopause, they are considered old. . . . . 1---2---3---4---5---6
31. Menopause means women have a tendency to gain weight. . . . . 1---2---3---4---5---6

1	2	3	4	5	6
Strongly agree	Moderately agree	Slightly agree	Slightly disagree	Moderately disagree	Strongly disagree

32. During menopause a woman feels productive. . . . . 1---2---3---4---5---6

33. Many women think menopause is one of the best things  
that has happened to them. . . . . 1---2---3---4---5---6



APPENDIX G

TABLES 1 & 2

DEMOGRAPHIC DATA

Table 1

Characteristics of Participants by Menopausal Status

Characteristic	Menopausal status		
	PRE	PERI	POST
<b>Age:</b>	(N = 9)	(N = 14)	(N = 21)
Range	41 - 47	41 - 53	44 - 63
Mean	44	48	54
<b>Education:</b>	(N = 9)	(N = 14)	(N = 22)
< 12 yrs	--	1 (7%)	1 (5%)
High school	2 (22%)	1 (7%)	2 (9%)
Some college	2 (22%)	4 (29%)	9 (41%)
Bachelors	3 (33%)	2 (14%)	5 (23%)
Masters	2 (22%)	5 (36%)	3 (14%)
Ph.D.	--	1 (7%)	2 (9%)
<b>Occupation:</b>	(N = 9)	(N = 14)	(N = 22)
Professional	5 (56%)	8 (57%)	10 (45%)
Clerical/Office Mgmt	3 (33%)	4 (29%)	11 (50%)
Blue collar	1 (11%)	1 (7%)	1 (5%)
None	--	1 (7%)	--
<b>Yearly Income:</b>	(N = 9)	(N = 13)	(N = 21)
\$10,000 - \$19,000	1 (11%)	--	1 (5%)
\$20,000 - \$29,000	3 (33%)	3 (23%)	5 (24%)
\$30,000 - \$39,000	--	1 (8%)	3 (14%)
\$40,000 - \$49,000	1 (11%)	2 (15%)	3 (14%)
\$50,000 - \$59,000	1 (11%)	--	1 (5%)
\$60,000 - Over	3 (33%)	7 (54%)	8 (38%)

Table 1 (Continued)

Characteristics of Participants by Menopausal Status

Characteristic	Menopausal status		
	PRE	PERI	POST
<b>Marital status:</b>	<b>(N = 9)</b>	<b>(N = 14)</b>	<b>(N = 22)</b>
Single/Separated	1 (11%)	2 (14%)	2 (10%)
Married	6 (67%)	10 (71%)	11 (50%)
Divorced	2 (22%)	2 (14%)	8 (36%)
Widowed	--	--	1 (5%)
<b>Who live with:</b>	<b>(N = 9)</b>	<b>(N = 14)</b>	<b>(N = 22)</b>
Spouse/Partner	2 (22%)	3 (21%)	9 (41%)
Children	2 (22%)	1 (7%)	2 (9%)
Spouse & Children	5 (56%)	8 (57%)	4 (18%)
Live alone	--	2 (14%)	6 (27%)
Grandchild	--	--	1 (5%)
<b>Total # of Pregnancies:</b>	<b>(N = 9)</b>	<b>(N = 14)</b>	<b>(N = 22)</b>
Range	0 - 3	0 - 5	0 - 6
Mean	2	3	3
<b># of Living Children:</b>	<b>(N = 9)</b>	<b>(N = 14)</b>	<b>(N = 22)</b>
Range	0 - 2	0 - 5	0 - 4
Mean	1	2	2

Table 2

Menstrual & Reproductive Demographic Data

	Frequency	% of Sample
Menstrual status	N = 45	
No change in periods	9	20.00%
Periods are irregular	12	26.67%
Periods have stopped	24*	53.33%
Length of time periods have ceased	N = 22 (2 missing data)	
<1 yr	3	13.65%
1 - 5 yrs	6	27.30%
6 - 10 yrs	7	31.85%
11 - 15 yrs	3	13.65%
20 - 25 yrs	3	13.65%
How periods stopped	N = 24	
Naturally	13	54.17%
Hysterectomy	11	45.83%

\* two subjects, who by definition of menopause are still PERI, indicated that their periods have stopped.

Table 2 (Continued)

Menstrual & Reproductive Demographic Data

	Frequency	% of Sample
# of Term births	N = 45	
0	8	17.78%
1 - 3	32	71.11%
4 - 5	5	11.11%
# of Preterm births	N = 44 (1 missing data)	
0	42	95.45%
1	2	4.55%
# of Miscarriages/abortion	N = 45	
0	34	75.56%
1 - 2	10	22.22%
5	1	2.22%

APPENDIX H

SOURCE OF MAT STATEMENTS

# **SOURCE OF MAT STATEMENTS (cont.)**

<b>KEY:</b> BOWLES	= B	POLIT & HUNGLAR	= P&H
NEUGARTEN	= N	EXPERT FOCUS GROUP	= EFG
LEIBLUM	= L	LAY FOCUS GROUP	= LFG

<u>Statement #</u>	<u>Original Source</u>	<u>Revised By</u>
18.	B-#8, LFG	--
19.	N-#9	EFG
20.	N-#22	--
21.	N-#25	L-#9, EFG
22.	N-#26	EFG
23.	B-#16	--
24.	N-#1	LFG
25.	L-#10	--
26.	N-#32	LFG
27.	N-#14	--
28.	B-#11	--
29.	N-#34	LFG
30.	P&H	--
31.	LFG	--
32.	B-#8, LFG	--
33.	N-#35	LFG

## SOURCE OF MAT STATEMENTS

<b>KEY:</b> BOWLES	= B	POLIT & HUNGLAR	= P&H
NEUGARTEN	= N	EXPERT FOCUS GROUP	= EFG
LEIBLUM	= L	LAY FOCUS GROUP	= LFG

<u>Statement #</u>	<u>Original Source</u>	<u>Revised By</u>
1.	B-#1, N-#27	LFG
2.	N-#6	EFG, LFG
3.	N-#17	EFG, LFG
4.	B-#16	--
5.	LFG	--
6.	N-#13	--
7.	B-#1	LFG
8.	N-#5	EFG, LFG
9.	N-#31	EFG
10.	N-#7	--
11.	B-#11	--
12.	N-#30	EFG
13.	N-#10	LFG
14.	N-#33	EFG
15.	N-#8	LFG
16.	N-#11	--
17.	N-#12	--



APPENDIX I

Tables 3 - 5

FREQUENCY DISTRIBUTION, CVI & RELIABILITY,  
MEAN & STANDARD DEVIATIONS

Table 3

MAT Frequency Distribution of Responses

Statement No.	Frequency of responses						# of Responses	Missing Data
	Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree		
1.	5 (11%)	7 (16%)	4 (9%)	20 (44%)	6 (13%)	3 (7%)	45	--
2.	16 (36%)	13 (29%)	12 (27%)	0	2 (4%)	2 (4%)	45	--
3.	6 (13%)	13 (29%)	18 (40%)	4 (9%)	2 (4%)	2 (4%)	45	--
4.	1 (2%)	3 (7%)	5 (11%)	7 (16%)	13 (30%)	15 (34%)	44	1
5.	12 (27%)	11 (24%)	10 (22%)	5 (11%)	4 (9%)	3 (7%)	45	--
6.	11 (24%)	12 (27%)	4 (9%)	7 (16%)	7 (16%)	4 (9%)	45	--
7.	2 (4%)	5 (11%)	11 (24%)	11 (24%)	8 (18%)	8 (18%)	45	--
8.	39 (87%)	3 (7%)	1 (2%)	1 (2%)	0	1 (2%)	45	--
9.	4 (10%)	4 (10%)	19 (46%)	9 (22%)	3 (7%)	2 (5%)	41	4

Table 3 (Continued)

MAT Frequency Distribution of Responses

Statement No.	Frequency of responses							# of Responses	Missing Data
	Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree			
10.	1 (2%)	10 (23%)	8 (18%)	9 (20%)	6 (14%)	10 (23%)	44	1	
11.	0	4 (9%)	14 (31%)	15 (33%)	4 (9%)	8 (18%)	45	--	
12.	8 (18%)	7 (16%)	11 (24%)	8 (18%)	6 (13%)	5 (11%)	45	--	
13.	20 (44%)	11 (24%)	6 (13%)	2 (4%)	6 (13%)	0	45	--	
14.	3 (7%)	2 (5%)	10 (23%)	10 (23%)	13 (30%)	6 (14%)	44	1	
15.	12 (27%)	11 (24%)	9 (20%)	6 (13%)	4 (9%)	3 (7%)	45	--	
16.	3 (7%)	10 (22%)	11 (24%)	6 (13%)	8 (18%)	7 (16%)	45	--	
17.	6 (14%)	8 (18%)	3 (7%)	14 (32%)	6 (14%)	7 (16%)	44	1	

Table 3 (Continued)

MAT Frequency Distribution of Responses

Statement No.	Frequency of responses						# of Responses	Missing Data
	Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree		
18.	2 (4%)	1 (2%)	3 (7%)	13 (29%)	11 (24%)	15 (33%)	45	--
19.	24 (53%)	5 (11%)	7 (16%)	4 (9%)	1 (2%)	4 (9%)	45	--
20.	1 (2%)	4 (9%)	10 (23%)	13 (30%)	8 (18%)	8 (18%)	44	1
21.	0	4 (9%)	2 (5%)	16 (37%)	7 (16%)	14 (33%)	43	2
22.	6 (14%)	10 (24%)	17 (41%)	6 (14%)	2 (5%)	1 (2%)	42	3
23.	4 (9%)	9 (20%)	10 (23%)	10 (23%)	7 (16%)	4 (9%)	44	1
24.	3 (7%)	1 (2%)	15 (33%)	10 (22%)	8 (18%)	8 (18%)	45	--
25.	0	2 (5%)	3 (7%)	15 (35%)	6 (14%)	17 (40%)	42	2
26.	9 (20%)	14 (31%)	15 (33%)	6 (13%)	1 (2%)	0	45	--

Table 3 (Continued)

MAT Frequency Distribution of Responses

Statement No.	Frequency of responses						# of Responses	Missing Data
	Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree		
27.	9 (20%)	9 (20%)	11 (25%)	6 (14%)	5 (11%)	4 (9%)	44	1
28.	5 (11%)	7 (16%)	13 (29%)	9 (20%)	6 (13%)	5 (11%)	45	--
29.	4 (9%)	4 (9%)	21 (48%)	9 (20%)	5 (11%)	1 (2%)	44	1
30.	3 (7%)	4 (9%)	3 (7%)	6 (13%)	17 (38%)	12 (27%)	45	--
31.	4 (9%)	15 (33%)	16 (36%)	5 (11%)	3 (7%)	2 (4%)	45	--
32.	6 (13%)	14 (31%)	9 (20%)	9 (20%)	3 (7%)	4 (9%)	45	--
33.	10 (23%)	7 (16%)	9 (21%)	12 (28%)	3 (7%)	2 (5%)	43	2

Table 4

Content Validity Index & Reliability Data

<u>Statement</u>	<u><math>\alpha</math> with item deletion</u>	<u>Fit</u>	<u>Clarity</u>	<u>Uniqueness</u>	<u>Similar to</u>	<u>Comments</u>	<u>Key:</u>
1.	.73	85%	80%	95%	28, 32	A, C, F, G, I	A. Too general/vague
2.	.77	95%	89%	100%	13	A, D, F, H	B. Rephrase
3.	.75	95%	85%	100%		A, B, H	C. Meaning/context unclear
4.	.71	95%	75%	89%	7, 11, 18, 21, 23, 32	C, G, I	D. Does not fit domain
5.	.75	100%	89%	100%		A, B, H	E. Too negative
6.	.78	100%	100%	100%			F. Measuring experience vs attitude
7.	.73	89%	63%*	74%	1, 2, 4	C, G, I	G. Measures more psychological health
8.	.75	95%	85%	100%		B, D, I	H. Good statement
9.	.76	95%	70%	84%	9, 16, 25	A, B, C, F, I	I. Omit
10.	.75	100%	85%	100%		A, B, C	* item falls below criteria of 70%

Table 4 (Continued)

Content Validity Index & Reliability Data

<u>Statement</u>	<u><math>\alpha</math> with item deletion</u>	<u>Fit</u>	<u>Clarity</u>	<u>Uniqueness</u>	<u>Similar to</u>	<u>Comments</u>	<u>Key:</u>
11.	.72	100%	95%	84%	4, 7, 21, 25, 28	C, G, I	A. Too general/vague
12.	.71	100%	100%	95%	10, 14		B. Rephrase
13.	.73	95%	100%	85%	2, 10, 12	F, H	C. Meaning/context unclear
14.	.72	95%	80%	84%	12	A, B, C, E	D. Does not fit domain
15.	.72	95%	90%	100%	4, 11, 27	B, F	E. Too negative
16.	.72	100%	100%	84%	9, 11, 25		F. Measuring experience vs attitude
17.	.72	100%	94%	84%	6, 27	B	G. Measures more psychological health
18.	.72	84%	74%	65%*	4, 23, 32	A, G, I	H. Good statement
19.	.75	100%	100%	100%		B, H	I. Omit
20.	.72	90%	80%	84%	12, 14, 30	A, B, C, I	* item falls below criteria of 70%
21.	.73	100%	95%	84%	11	B	
22.	.75	89%	83%	95%	3	A, C, D	

Table 4 (Continued)

Content Validity Index & Reliability Data

<u>Statement</u>	<u><math>\alpha</math> with item deletion</u>	<u>Fit</u>	<u>Clarity</u>	<u>Uniqueness</u>	<u>Similar to</u>	<u>Comments</u>	<u>Key:</u>
23.	.72	85%	79%	65%*	4	A, C, G, I	A. Too general/vague
24.	.72	94%	85%	89%		A, B	B. Rephrase
25.	.73	100%	89%	84%	9, 16, 28	C, E, F	C. Meaning/context unclear
26.	.73	100%	100%	100%		B	D. Does not fit domain
27.	.72	100%	100%	74%	11, 15, 17		E. Too negative
28.	.71	95%	100%	68%*	11, 16, 17, 21, 25	G, I	F. Measuring experience vs attitude
29.	.72	100%	95%	84%	10, 11	E, F	G. Measures more psychological health
30.	.74	100%	89%	83%	20	C	H. Good statement
31.	.75	100%	100%	95%			I. Omit
32.	.71	84%	74%	63%*	4, 18, 23	A, C, G, I	* item falls below criteria of 70%
33.	.72	100%	95%	89%	3	B	



Table 5

MAT Mean & Standard Deviation Based on Menopausal Status

Statement	PRE			PERI			POST			Overall	
	N	Mean	SD	N	Mean	SD	N	Mean	SD	Mean	SD
1.	9	3.33	0.87	14	3.36	1.39	22	3.73	1.58	3.53	1.39
2.	9	2.11	1.36	14	2.29	1.33	22	2.23	1.34	2.22	1.31
3.	9	3.33	0.87	14	2.86	1.61	22	2.50	1.10	2.78	1.26
4.	9	4.21	1.64	14	4.93	0.92	22	4.68	1.49	4.66	1.36
5.	9	3.11	1.17	14	2.79	1.58	22	2.50	1.65	2.71	1.53
6.	9	3.00	1.73	14	2.29	1.38	22	3.41	1.79	2.98	1.70
7.	9	3.22	1.20	14	3.93	1.33	22	4.23	1.51	3.93	1.42
8.	9	1.22	0.44	14	1.29	0.83	22	1.32	1.13	1.29	0.92
9.	9	3.78	0.67	13	3.23	1.48	19	2.95	1.13	3.22	1.19

Table 5 (Continued)

MAT Mean & Standard Deviation Based on Menopausal Status

Statement	PRE			PERI			POST			Overall	
	N	Mean	SD	N	Mean	SD	N	Mean	SD	Mean	SD
10.	9	3.78	1.20	14	3.29	1.38	21	4.33	1.68	3.89	1.54
11.	9	3.67	1.32	14	3.50	0.85	11	4.36	1.29	3.96	1.22
12.	9	2.67	1.41	14	3.00	1.62	22	3.68	1.62	3.27	1.60
13.	9	1.89	1.45	14	2.36	1.50	22	2.18	1.37	2.18	1.40
14.	9	3.44	1.59	14	4.21	1.31	21	4.19	1.33	4.05	1.38
15.	9	2.00	1.12	14	2.36	1.28	22	3.27	1.70	2.73	1.54
16.	9	3.11	1.69	14	3.71	1.38	22	3.73	1.64	3.60	1.56
17.	8	2.75	1.83	14	4.21	1.37	22	3.55	1.65	3.61	1.65
18.	9	4.78	1.48	14	4.64	0.84	22	4.64	1.53	4.67	1.31

Table 5 (Continued)

MAT Mean & Standard Deviation Based on Menopausal Status

Statement	PRE			PERI			POST			Overall	
	N	Mean	SD	N	Mean	SD	N	Mean	SD	Mean	SD
19.	9	1.78	1.72	14	2.21	1.53	22	2.41	1.71	2.22	1.64
20.	9	3.67	1.32	14	4.07	1.54	21	4.24	1.18	4.07	1.32
21.	8	3.50	1.31	13	4.77	0.93	22	4.86	1.25	4.58*	1.26
22.	8	3.50	1.07	13	2.54	1.13	21	2.67	1.15	2.79	1.16
23.	9	3.56	1.33	14	3.71	1.59	21	3.19	1.44	3.43	1.45
24.	9	4.00	1.12	14	3.57	1.55	22	4.18	1.40	3.96	1.40
25.	8	3.50	1.07	14	4.57	0.94	21	5.38	0.97	4.77***	1.19
26.	9	2.22	0.97	14	2.43	1.02	22	2.59	1.10	2.47	1.04
27.	9	3.00	1.87	14	3.07	1.38	21	3.00	1.64	3.02	1.58

Table 5 (Continued)

MAT Mean & Standard Deviation Based on Menopausal Status

Statement	PRE			PERI			POST			Overall	
	N	Mean	SD	N	Mean	SD	N	Mean	SD	Mean	SD
28.	9	3.89	1.54	14	3.79	1.31	22	3.00	1.51	3.42	1.48
29.	9	2.67	1.00	14	3.07	0.92	21	3.57	1.25	3.23	1.14
30.	9	4.44	1.59	14	3.43	1.50	22	5.14	1.13	4.47**	1.52
31.	9	3.22	1.39	14	2.71	1.27	22	2.82	1.14	2.87	1.22
32.	9	3.89	1.17	14	3.07	1.00	22	2.64	1.71	3.02	1.47
33	9	3.22	1.72	14	3.21	1.37	20	2.60	1.39	2.93	1.45

\* indicates  $p = .02$ \*\* indicates  $p = .003$ \*\*\* indicates  $p = .0001$

APPENDIX J

CVI COMMENTS

### CVI Participants' Comments on the MAT

Statement	Comments
1.	<ul style="list-style-type: none"><li>-Confident about what? In general, or a specific part of her life</li><li>-More a measure of underlying psychological health vs menopausal attitudes.</li><li>-Measuring feelings or subjective experience?</li></ul>
2.	<ul style="list-style-type: none"><li>-Great statement</li><li>-Does not fit because measuring feelings &amp; experience</li><li>-“feelings” is too general</li></ul>
3.	<ul style="list-style-type: none"><li>-Great statement</li><li>-Too general. Reword: “...freer to do the things she always wanted to do, but never did.” (would specifically target postmenopausal women)</li></ul>
4.	<ul style="list-style-type: none"><li>-Unclear in what role; related to reproduction?</li><li>-May be more a measure of underlying psychological health vs menopausal attitudes.</li></ul>
5.	<ul style="list-style-type: none"><li>-Very clearly stated</li><li>-Remove “should”, has double meaning</li><li>-Broad statement; when expected to take it depends on physical self</li><li>-May be biased</li></ul>
7.	<ul style="list-style-type: none"><li>-Unclear about what “feels insecure” means; insecure about what?</li><li>-Uncertain if fits; Is this about feelings or attitude?</li><li>-More a measure of psychological health</li></ul>
8.	<ul style="list-style-type: none"><li>-Reword to “A woman should see a health care provider about menopause”.</li><li>- Remove “should”</li><li>-Incongruent; does not fit with women’s expected experience with menopause.</li></ul>

CVI Participants' Comments on the MAT (Continued)

Statement	Comments
9.	<ul style="list-style-type: none"><li>-Better expressed by #16.</li><li>-Unclear as to context of "relationship"</li><li>-Rephrase to "...can have a better relationship..."</li><li>-“better” is too broad</li><li>-Unclear of fit; is it experience or attitude?</li><li>-Too vague</li></ul>
10.	<ul style="list-style-type: none"><li>-Reword to "...who usually are expecting it."</li><li>-Unsure of what "trouble" means</li><li>-poorly stated</li></ul>
11.	<ul style="list-style-type: none"><li>-Unclear</li><li>-Change to "...a woman may feel unattractive."</li><li>-Measures more psychological health.</li></ul>
13.	<ul style="list-style-type: none"><li>-Good statement</li><li>-Fits more for experience vs attitude</li></ul>
14.	<ul style="list-style-type: none"><li>-Remove "Just about every...", has double meaning</li><li>-Unsure of what it is saying</li><li>-Too vague</li><li>-Too negative</li></ul>
15.	<ul style="list-style-type: none"><li>-Reword to "A problem with menopause...", not "The problem..."</li><li>-Does this fit more for experience vs attitude?</li></ul>
17.	<ul style="list-style-type: none"><li>-Poorly written</li><li>-Confrontational statement</li></ul>
18.	<ul style="list-style-type: none"><li>-Unclear about "unproductive" of what -- work, fertility?</li><li>-Measures more psychological health</li></ul>

CVI Participants' Comments on the MAT (Continued)

Statement	Comments
19.	<ul style="list-style-type: none"><li>-Clearest question</li><li>-May be better to say, "For women who have not had a tubal ligation or whose partner has not had a vasectomy, means no longer having the fear of pregnancy".</li></ul>
20.	<ul style="list-style-type: none"><li>-What does "the end" mean? end of what?</li><li>- Complex; reword to "Menopause is the beginning of the end".</li></ul>
21.	<ul style="list-style-type: none"><li>-Remove the word "often".</li></ul>
22.	<ul style="list-style-type: none"><li>-Too vague</li><li>-Is this related to menopause or to the aging process?</li><li>-Unclear as to meaning of "broader outlook"</li></ul>
23.	<ul style="list-style-type: none"><li>-Too vague, dumb question</li><li>-"needed" as what or by what</li><li>-More a measure of psychological health</li></ul>
24.	<ul style="list-style-type: none"><li>-Rephrase to state what type of attention, or from whom (family, medical group)</li></ul>
25.	<ul style="list-style-type: none"><li>-Unclear &amp; questionable fit if attitude or experience</li><li>-Too negative</li></ul>
26.	<ul style="list-style-type: none"><li>-Rephrase to "Women can be irritable..." or "Women may be irritable..."</li></ul>
27.	<ul style="list-style-type: none"><li>-Better worded than #17</li></ul>
28.	<ul style="list-style-type: none"><li>-Menopause unfounded with aging</li><li>-More a measure of psychological health</li></ul>
29.	<ul style="list-style-type: none"><li>-Fit uncertain; experience vs attitude</li><li>-"problems" is unclear; what kinds of "problems"; too negative</li></ul>



CVI Participants' Comments on the MAT (Continued)

Statement	Comments
32.	-“productive” of what? -More a measure of psychological health
33.	-Remove the word “many”
General comments	

- The instrument gets at multidimensions of menopause.
- Good to have reverse stated/duplicate responses for psychometrics.
- Define “attitudes” in instructions (e.g. Attitudes are beliefs a person has about self or others. It may be based on personal experiences or knowledge or not.)
- Good balance of general and specific statements
- Range of topic: Attitude relates to appearance, diet, & physical activity. Healthy body leads to a healthy mind which increases attitude. Need a statement on exercise.
- Statements worded in general about “women”. Difficult for individual self-perception.
- Reword or omit lead in statements.
- Scale is awkward going from positive to negative.

CVI Participants' Comments on the MAT (Continued)

---

General comments

---

-Prefer a Likert scale for the CVI.

-Items #1, #4, #7, #11, #18, #23, #26, and #28 seem to measure more self-esteem issues vs menopausal attitudes.

---

APPENDIX K

COVER LETTERS

March, 1995

Dear Focus Group Participant,

Thank you very much for agreeing to participate in the initial phase of the Masters Research Project entitled: "Development of the Menopausal Attitude Tool: Content Validity & Reliability". The principal investigator is Evonne Anasis RN, BSN and Jane Harrison-Hohner, OHSU Assistant Professor School of Nursing, WHCNP, MSN is the advisor.

As we have discussed, the purpose of this study is to develop a more useful tool to measure women's menopausal attitudes. Your involvement in this study includes meeting once with a group of peers and the principal investigator to review attitudinal tools currently present in the literature, and to discuss your feelings about menopause.

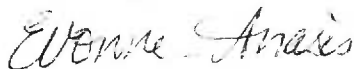
Prior to the group meeting, please review the 3 enclosed tools: Bowles' Menopausal Attitude Scale, Neugarten's Attitudes Towards Menopause Checklist and Leiblum's Menopausal Attitude Questionnaire. Critique the statements as to how well they reflect menopausal attitudes and as to their clarity, and comment on the overall format of each of the tools. Enclosed are also 20 statements to be critiqued that describe menopausal attitudes and 5 general open ended questions to be answered.

Please bring your comments and suggestions to the group meeting. The discussion session will take approximately 1 1/2 hours and will be audio taped with the approval of all participants. You will also be asked to complete a consent form and a demographics form at the meeting. **All information will remain confidential.**

Once the new Menopausal Attitude Tool is developed from the suggestions of the group participants, you will be asked to complete the tool and to analyze it for its content validity. This will only require about 30 to 60 minutes of your time and can be completed at your convenience.

Thank you again for your participation. Your input is very valuable to the development of this tool. If you have any questions feel free to call Evonne Anasis at 281-1354.

Sincerely,



Evonne Anasis



# OREGON HEALTH SCIENCES UNIVERSITY

3181 S.W. Sam Jackson Park Road, Portland, Oregon 97201-3098  
Mail Code: SN FAM, Fax (503) 494-3878

*Family Nursing Cluster*  
(503) 494-8382

*School of Nursing*

*Nurse Midwifery/Women's Health Cluster*  
(503) 494-3831

April, 1995

Dear Participant,

Thank you very much for agreeing to participate in the pilot phase of the Masters Research Project entitled: "Development of the Menopausal Attitude Tool: Content Validity & Reliability". The principal investigator is Evonne Anasis RN, BSN and Jane Harrison-Hohner, OHSU Assistant Professor School of Nursing, WHCNP, MSN is the advisor.

The purpose of this study is to develop a more useful tool to measure women's menopausal attitudes. Your involvement in this study includes answering a confidential demographics questionnaire, completing the Menopausal Attitude Tool (MAT), and then critiquing each of the statements on the MAT for relevancy, clarity and uniqueness using the Content Validity Index form. This will only require about 30 to 60 minutes of your time and can be completed at your convenience.

Enclosed you will find: (1) a consent form for participation in this portion of the study, (2) a demographics questionnaire (only if you have not already filled one out), (3) the Menopausal Attitude Tool, and (4) the Menopausal Attitude Tool Content Validity Index. Please return all of the enclosures to me no later than April 14, 1995.

I apologize for the rapid return of these forms, but this phase of the research was delayed by the slow response from the OHSU Research Review Board. My entire research project must be completed by mid-May because I will be graduating in June. I greatly appreciate you taking the time to help me with this project.

Thank you again for your participation. Your input is very valuable to the development of this tool. If you have any questions feel free to call Evonne Anasis at 494-3870.

Sincerely,

A handwritten signature in cursive script that reads "Evonne Anasis".

Evonne Anasis



# OREGON HEALTH SCIENCES UNIVERSITY

3181 S.W. Sam Jackson Park Road, Portland, Oregon 97201-3098  
Mail Code: SN FAM, Fax (503) 494-3878

*Family Nursing Cluster*  
(503) 494-8382

*School of Nursing*

*Nurse Midwifery/Women's Health Cluster*  
(503) 494-3831

April, 1995

Dear Participant,

Thank you very much for agreeing to participate in the final testing phase of the Masters Research Project entitled: "Development of the Menopausal Attitude Tool: Content Validity & Reliability". The principal investigator is Evonne Anasis RN, BSN and Jane Harrison-Hohner, OHSU Assistant Professor School of Nursing, WHCNP, MSN is the advisor.

The purpose of this study is to develop a more useful tool to measure women's menopausal attitudes. Your involvement in this study includes answering a confidential demographics questionnaire and completing the Menopausal Attitude Tool. This will only require about 15 minutes of your time and can be completed at your convenience.

Enclosed you will find: (1) a consent form for participation in this portion of the study, (2) a demographics questionnaire, and (3) the Menopausal Attitude Tool. Please return all of the enclosures to me no later than April 14, 1995.

Thank you again for your participation. Your input is very valuable to the development of this tool. If you have any questions feel free to call Evonne Anasis at 494-3870.

Sincerely,

Evonne Anasis

APPENDIX L

PERMISSION FOR REPRODUCTION

PERMISSION FOR REPRODUCTION

I hereby grant Evonne M. Anasis permission to use the revised Content Validity Index in the bound version of her Master's Thesis entitled, Development of the Menopausal Attitude Tool: Content Validity & Reliability.

Susan M. Corty PhD RN  
Signature

1 March 95  
Date