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Determinants of Health Promotion in the Elderly

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DETERMINANTS OF HEALTH PROMOTION

IN THE ELDERLY

By

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ABSTRACT

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The purpose of this study was to look at determinants of health promotion in the elderly. Pender's (1982) Health Promotion Lifestyle Profile, Wallston & Wallston's (1979) Health Locus of Control Scale, and demographic variables were included on a questionnaire given to a convenience sample of 47 adults, ages ranged from 60-89. All subjects were Caucasian and 65% were female.

The theoretical framework that was used in this descriptive study was Pender's (1987) Health Promotion Model. Standardized z-scores for the Health Locus of Control subscales classified subjects as either "internal" or "external" locus of control. Thirty-five percent were internal.

Forward Regression was performed to examine the contribution of psychological and demographic variables to the variance in health promoting behavior. Only "perceived health as related to others" entered. A t-test indicated that there was not a significant difference in health behaviors between subjects with internal versus external locus of control.

This is dedicated to all elderly clients and their families in a hope that they will be able to live life to it's fullest.

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CHAPTER ONE

INTRODUCTION

For some people, old age may be a time of dread, not because the chronic pain, debility, and deprivation often associated with it are innate and unavoidable. Healthy aging may ultimately be dependent upon the willingness of individuals to accept responsibility for initiating and maintaining health-promoting activities (Walker, Pender, & Volkan, 1989). Health promotion should be an integral part of all health care throughout the life-span because of it's importance in contributing to a healthy lifestyle. Acute and chronic illness, can be prevented, aging processes delayed, and the impact of existing chronic illness lessened. As health professionals, we must examine our own values and beliefs about aging in order to determine their effect on the care we provide and outcomes we anticipate.

Health promotion is a concept that is assuming increasing importance in the nursing profession. The concepts of health and health promotion have evolved from a historically rich background (Moore & Williamson, 1984). According to Pender (1987), health promotion is defined as those activities directed toward developing resources that maintain or enhance an individual's well-being.

The importance of health promoting activities for the elderly cannot be overemphasized. According to

Field (1982) the traditional population triangle, with a larger number of children at the bottom and a smaller number of elderly at the top is changing drastically. It is now appearing as a population rectangle with similar numbers of people at all ages. Eventually, this triangle may become inverted, with a larger number of elderly at the top and a smaller number of young people at the bottom. This change in age distribution is occurring because the elderly are living longer and the birth rate is declining.

Fowles (1989) reports that the older population, persons 65 years old and older, numbered 28.5 million in 1985 (twelve percent of the U. S. population). By the year 2000, elderly Americans will make history by taking over the top spot as the largest population segment in the nation. The American Association of Retired Persons (Fowles, 1989) reports the percentage may climb to 21.3% by 2030.

Not only are the numbers of elderly increasing but the elderly population themselves are getting older. In 1985, persons age 65 to 74 numbered 17 million, nearly eight times larger than in 1900, age 75-84 (8.8 million) were 11 times larger and those 85 and older (2.7 million) were 22 times larger (Fowles,1989). The increase in the number of elderly persons will have an immense impact on health care costs.

American elderly already use a disproportionatly higher number of health care services than other age groups and account for twenty-nine percent of all health care expenditures (Matteson & McConnell, 1988). This will continue to increase unless we begin to emphasize the importance of health promotion. It is a possibility that the elderly will be needed in the work force because of the absence of younger workers to take their place. They must remain healthy in order to remain productive workers. From a cost-benefit perspective, a healthier and more industrious older population would result in sizable reductions in medical and hospital expense, welfare costs, and social security payments, while at the same time contribute to an increased gross national product and standard of living (Weiler, Chi, & Lubben, 1989). In view of the current economic climate; higher taxes, and a higher budget deficit, the benefits of health promotion cannot be ignored. It must be implemented by every American, including the elderly. Research in this area is needed in order to examine the determinants and practice of health promotion activities in the elderly. The information obtained can then be used by doctors and nurses to help others to adopt activities which promote health. According to Walker, Pender and Volkan (1987) all national health efforts will be hindered unless research breakthroughs are able to

give an understanding about the acquisition and maintenance of health promoting activities.

Theory and literature related to health promotion was examined to identify factors which might be related to participation in health promoting behaviors. A model was developed that included these factors. The diagram is in the form of a wheel. The center of the wheel consists of health promotion activities, the spokes of the hub include factors that can influence activities that promote health. Education, perceived social support, physiological factors, attitudes, stress, gender, self-esteem, income, habit, perceived role/ identity, perceived health status, a long-term negative dependency role, perceived social support, self-efficacy, locus of control, and grief and loss are included as influencing factors. Institutional attitudes, family attitudes, and social influences are other factors which may have an impact on health promoting activities (see Appendix A). Pender's (1987) model of health promotion was selected as a framework for this study because of it's comprehensiveness in including these influencing factors (see Appendix B).

The purpose of this study was to describe health promotion activities among the elderly and to examine variables which potentiate these activities. The following questions were considered: 1.) In what health promotion activities do the elderly participate in?

2.) What is the relationship between health locus of control health and promotion activities in the elderly?

3.) What is the relationship between specific demographic variables and health promotion activities?

CHAPTER TWO

REVIEW OF LITERATURE

Research related to the health promotion activities of the elderly is limited, so studies that have examined health promotion in various populations will be included. Variables believed to influence a healthy lifestyle will be looked at first.

In reviewing the literature, health locus of control and perceived health were mentioned frequently. Several studies (James, Woodruff, & Werner, 1986; Pender, 1982; Speake, Cowart, & Pellet, 1989; Walker, Sechrist, & Pender, 1987; Weitzel, 1989) have looked at locus of control in predicting and explaining specific health-related activities. Studies done by James (1965) have shown that subjects whose scores indicate that they have an internal locus of control are more likely to engage in behaviors that facilitate physical well-being. He found that nonsmokers were more likely to have an internal locus of control than smokers. In addition, male subjects who believed the Surgeon General's Report and quit smoking were more likely to have an internal locus of control than those who believed the report but did not quit smoking. Evidence suggests that it may be useful to tailor treatments to individual differences in locus of control (Wallston & Wallston, 1978).

Several studies have examined some of the other variables believed to influence a healthy lifestyle

(Duffy, 1988; Walker, Pender, & Volkan, 1987; Weitzel, 1989). In a descriptive study Duffy (1988) identified the relationship between health locus of control, self-esteem, perceived health status and a health promoting lifestyle in mid-life women. She found that subjects who had higher scores on self-esteem and internal health locus of control, lower on chance health locus of control, and who reported their current health status as high (good) were those who had high scores on the self-actualization, nutrition, exercise, and interpersonal subscales included in Pender's Health Promotion Lifestyle Scale. This study also suggested that subjects who were older and had high health worry/concern scores also reported poorer past health status. Chance health locus of control scores were correlated with high scores on the health responsibility, nutrition, and stress management subscales. One criticism of this study is the fact that this group of subjects were all very well educated. More than fifty percent had graduate degrees or higher and all subjects were women.

Weitzel (1989) studied the relationship between perceived importance of health, perceived health locus of control, perceived health status, self-efficacy, demographics and a health promoting lifestyle in blue-collar workers. She found that subjects who perceived themselves to be in better health and who held stronger beliefs in their own abilities to successfully perform

behaviors, engaged in more health-promoting behaviors than their counterparts. A limitation of this study is the fact that these male blue-collar workers were not typical of the population. They were all employed at a university so may have been exposed to more health promotion information.

Speake, Cowart, and Pellet (1987) looked at the relationship between demographic variables, health locus of control, and health promoting activities in a group of well-elderly at health fairs and senior centers. They used tools similar to those in the Duffy (1988) study. The sample consisted of 297 elderly volunteers from four counties in northern Florida. Subjects ranged from 55 to 93 with a mean age of 71.9 (SD = 7.3): 40 percent of the subjects were aged 55 to 69 and 60 percent were age 70 or older. Seventy-one percent of the subjects were Caucasian and 29 percent were black. No other ethnic group was represented. Educational levels ranged from 2 to 25 years. Approximately, 53 percent reported more than a high school education and half had incomes of more than $15,000 a year. Health locus of control was measured by the Multidimensional Health Locus of Control Scale (MHLC) Form A developed by Wallston, Wallston, and and DeVellis (1978). It has 3 subcategories: internal locus of control, and two external locus of control categories powerful others, and chance. This questionnaire was designed to determine how different

people view certain important health-related issues. Each item is a belief statement with which the subject may agree or disagree (see Appendix C).

Perceived health status, how the individual perceives his/her own health, is an integrative concept that reflects an individual's evaluation of their own general health. Perceived health status and health promoting activities were measured by responses to the Health Promoting Lifestyle Profile (HPLP) (see Appendix D). Pearson Product-Moment correlation coefficients were used to examine the relationships between the demographic variables and the MHLC subscales. Race and education were the only demographic variables significantly associated with the internal subscale. Caucasians and individuals with higher educational levels had higher internal locus of control scores than other subjects. Higher chance and powerful others subscale scores were associated with being older, female, unmarried, black, and having fewer children. Subjects indicated positive perceptions of health: 30 percent rated their health as excellent, 40 percent rated their health as good, 20 percent rated their health as fair, and 10 percent rated their health as poor.

The relationships between the perceptual-cognitive factors, locus of control, and perceived health status, and the HPLP were studied by using multiple regression analysis to control for the effects of age, gender,

marital status, race, education, and income. Only two demographic variables, race and education were significant predictors of any of the HPLP subscales. Finally, a stepwise multiple regression was also conducted to determine the best predictors of the HPLP composite score. Four variables: compared health, past health, chance locus of control, and internal locus of control explained twenty-four percent of the variance in the composite scores. This study was chosen for replication because further research needs to be done with the elderly concerning determinants of health promotion.

Walker, Pender, and Volkan (1987) conducted a descriptive correlational study to determine the extent to which selected cognitive/perceptual factors and demographic characteristics were in congruence with Pender's (1987) model. One of the variables that they looked at was self-motivation. This cognitive/perceptual factor was evaluated for it's relevance to the model as an influencing factor in explaining health-promoting activities. The sample was composed of 364, predominantly Caucasian subjects, aged 55-91 recruited from various community settings. Approximately half followed a regular exercise program. Educational level ranged from less than eighth grade to graduate degrees. Median family income was between $20,000 and $40,000. Analysis of responses on the Health Promoting Lifestyle Profile

revealed considerable variation in the nature and frequency of health promoting activities. The activity subscale mean scores ranged from 1.88 to 3.96 (M = 2.93, SD = 40) and the exercise mean subscale scores ranged from 1 to 4 (M = 2.5, SD = .83). Multiple regression analyses were conducted for total health-promoting lifestyle scores and for exercise subscale scores with cognitive/perceptual variables entered first followed in a stepwise fashion by demographic variables. Thirty-five percent of the variance in health-promoting activities was explained by definition of health, perceived control of health, self-motivation, employment status, gender and family income. While 31 percent of the variance in exercise was explained by perceived benefits of exercise, perceived barriers to exercise, perceived health status, definitions of health, perceived control of health and family income.

It was concluded that there is support for some, but not all, of the variables in the Health Promotion Model. Perceived health, a psychological variable, seems to be supported in most of the studies reviewed. However, there is controversy over the effect of demographic variables and their effect on activities promoting health.

Theoretical concepts

Pender's (1987) theory of health promotion provided a framework for this study because it included the same

influencing factors as the model developed by the author. Secondly, it is specifically a nursing model and research needs to be done with nursing models. The health promotion model is derived from social learning theory, which emphasizes the importance of cognitive mediating processes in the regulation of behaviors. Determinants of health promoting activities are categorized into cognitive-perceptual factors or primary motivational mechanisms for acquisition and maintenance. Each factor is proposed as exerting a direct influence on the likelihood of engaging in these activities. Cognitive-perceptual factors which have been identified with the model are perceived importance of health, perceived control of health, perceived self-efficacy, an individual's definition of health, perceived health status, perceived benefits of health-promoting activities, and perceived barriers to health-promotion.

A number of modifying factors are proposed in Pender's model as influencing patterns of health behavior. These modifying factors include: demographic characteristics, biological characteristics, inter-personal influences, situational factors, and behavioral factors. According to Pender (1987), modifying factors exert their influence through the cognitive-perceptual mechanisms that directly affect behavior (see Appendix B).

Cognitive/perceptual factors examined in this study

included perceived health status (past health, health as compared to others, and present health) and perceived control of health or locus of control. Modifying factors looked at in this study included the demographic variables: age, gender, and education.

Hypotheses

The Health Locus of Control Scale (Wallston, Wallston, and DeVellis, 1979), the Health Promotion Lifestyle Scale (Pender, 1987), and three questions concerning perceived health status were used to measure locus of control and health promoting activities. The following hypotheses were explored in this study:

1.) Subject's whose scores indicate an internal locus of control engage in more frequent health promoting activities than those whose scores indicate an external or chance locus of control.
2.) Income, education, and gender are positively related to health promotion activities.
3.) Subject's who perceived their health as better than other's their age will also indicate a higher score on the HPLP.

Operational Definitions

Health Promoting Activities:

Activities or behaviors directed toward sustaining or increasing an individual's level of well-being, self-

actualization, and fulfillment of a given individual or group. Continuing activities that must be an integral part of an individual's lifestyle include: physical exercise, maintenance of optimum nutrition, stress management, self-actualization, health responsibility, and social support (Pender, 1987). Health promoting activities are defined as a score on the Health Promotion Lifestyle Profile Scale (see Appendix C).

Health locus of control

A measure of belief that a person's health is determined by his/her own behaviors or is dependent upon luck, chance, or powerful others. Measured by a score on the Health Locus of Control Scale (Wallston, Wallston, & Devellis, 1979) and separated into one of three categories as listed below.

Internal health locus of control (IHLC):

A belief that a person's health is determined by his or her own behavior and that they are in control of that behavior.

External health locus of control (EHLC):

A belief that a person's health is not under their own control but rather under the control of chance or powerful others.

Powerful other health locus of control (PHLC):

The degree to which an individual feels that their health is under the control of powerful others.

CHAPTER THREE

METHODOLOGY

Research Design

This study utilized a descriptive correlational design to study the relationships between health locus of control, perceived health status, demographic variables, and health promoting activities. The demographic variables included age, gender, and income. The dependent variable of health promoting activities included the areas of nutrition, exercise, self-actualization, stress management, interpersonal support, and health responsibility.

Setting and sample

A sample was recruited at a free blood pressure screening clinic, which was held at a pharmacy. During this clinic, individuals have their blood pressure taken and if appropriate, are given instruction on ways to decrease their blood pressure such as increasing exercise or reducing sodium intake. Referrals to doctors are made as needed. Sample selection criteria included that each subject had to be sixty years of age or older, able to read and write using the English lanquage, and there was an assumption of health because they were able to come to the blood pressure clinic.

Instruments

The Multidimensional Health Locus of Control Scale: Form A (MHLC-A) which was developed by Wallston, Wallston, and DeVellis (1978), was used to measure health locus of control. It is a health specific measure of an individual's independent locus of control dimensions which include: internality, powerful others externality, and choice externality. These subscales are based on an earlier work with the general Health Locus of Control Scale (HLS) which, in turn, was developed from Rotter's Social Learning Theory (Wallston, Wallston, Kaplan, & Maides, 1976). The scales can be used with either healthy or nonhealthy adults with at least an eighth grade reading level. This self-report measure consists of statements to which participants respond on a six-point Likert-type rating scale which includes: 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = slightly agree, 5 = moderately agree, and 6 = strongly agree. Alpha reliability coefficients in the study conducted by Speake, Cowart, and Pellet (1989) were .75 for the internal subscale, .76 for the powerful others subscales, and .81 for the chance subscale.
In this study to determine perceived health locus of

Health promoting activities were measured by the use of the Health Promotion Lifestyle Profile (HPLP) developed by Pender (1987). It is a forty-eight item questionnaire, with a four-point response which measures the frequency (never, sometimes, often, and routinely) of engaging in health promoting activities. Total possible score for the HPLP could have been 192. A score of 96 or above indicated positive health promotion activities. The HPLP contained six subscales: nutrition, stress management, interpersonal support, health responsibility, and self-actualization.

The HPLP was found to have high internal consistency, with an alpha coefficient of .92 for the entire scale. Sets of items assigned to each of the six factors were examined for their reliability as subscales in a study done by Walker, Sechrist, and Pender (1987) and were found to have alpha coefficients ranging from .70 to .90. Alpha coefficients for the subscales were as follows: self-actualization (a = .90), health responsibility (a = .81), exercise (a = .81), nutrition (a= .76), interpersonal support (a = .80) and stress management (a = .76). Alpha reliabilities for the Speake, Cowart, & Pellet (1987) study ranged from .66 to .79. Content validity of the Health Promotion Lifestyle Profile was evaluated by four nursing faculty familiar with health promotion literature. From their recommendations, several items were added and items

.79. Content validity of the Health Promotion Lifestyle Profile was evaluated by four nursing faculty familiar with health promotion literature. From their recommendations, several items were added and items concerned with the prevention or detection of specific diseases were deleted. Factor analysis provided the initial assessment of the construct validity. The 48-items were entered into a factor analysis with principle axis factoring extraction (PAF) and oblique rotation. All items loaded on expected factors at a level of .35 or higher: three of the 48 items also loaded at the same or a slightly higher level on a factor other than that expected (Walker, Sechrist, & Pender, 1987).

Additional information was obtained by adding questions concerning the following to the self-report questionnaire: age, gender, marital status, race, income, education, rating of health in last six months, rating of health compared to others the same age, hospitalization within the last six months, and illnesses currently being treated by a physician.

Procedure

A description of the study was given to the pharmacist, along with an explanation of the study. His approval and the approval of the Human Subject Review Committee of Grand Valley State University was granted.

As individuals attended the blood pressure clinic, they were asked to participate in the study. A brief explanation of the study, purpose, and subject's rights were explained. If subjects agreed to participate, they were asked to read an introductory cover letter and were given the questionnaire to complete. All questionnaires were completed at the blood pressure clinic and returned in a sealed envelope. Appreciation was expressed for participating in the study and subjects were asked if they would like to receive a summary of the results of this study. Two subjects did request a copy of the summary.

CHAPTER FOUR

RESULTS

Data was collected during a three month period. During this period forty-seven subjects agreed to participate in the study. Fifty subjects were approached but of those who agreed to participate, three were not included for the following reasons: two did not meet age requirements and one chose not complete the questionnaire. Eleven subjects did not complete the MHLOC scale (n = 38). All analysis was computed using the Statistical Package for the Social Sciences (SPSSx) software.

Characteristic of subjects

Demographic characteristics:

All subjects were Caucasian between the ages of 60-89 years old (M = 71, SD = 7.3) and fifty percent had a high school education or better (see Table 1). The majority (69%) were married and 65% were female. Ninety- two percent had not been hospitalized within the last six months, however, 35% reported that they were currently being treated for hypertension.

Locus of control

The Multidimensional Health Locus of Control Scale (MHLOC) contains three subscales which enable subjects to be classified according to the predominance of their locus of control: either internal locus of control

TABLE 1 Distribution of subjects by age (N = 47)

Age	Number	Percent
60-64	10	24.5
65-70	13	27.5
71-74	9	18
75-80	10	20
81-84	4	8
85-90	1	2

(ILOC), powerful others health locus of control (PLOC) or chance health locus (CHLC). Powerful others health locus of control and chance health locus of control both indicate an external locus of control. Raw scale scores for the health locus of control scales were converted into standard Z scores so that they could be compared and the highest locus of control determined. Subjects were then classified depending on which of the subject's three standardized scores was the highest. Seventeen subjects (17/38 = 45%) were found to have an internal locus of control. Of those who had an external locus of control, (n = 21), Ten had indicated a powerful others health locus of control and eleven were classified as having a chance health locus of control. Thirty- eight subjects were included in the analysis because nine questionnaires contained missing data. Subjects were fairly well distributed between the internal and external locus of control groups.

Coefficient Alpha Reliabilities were .71 for the internal health locus of control subscale (IHLC), .54 for the chance health locus of control subscale (CHLC), and .70 for the powerful others health locus of control scale (PHLC). The number of items in each of these subscales was six. CHLC was found to be the least reliable.

Health Promotion Lifestyle Profile

Pender's (1982) health promotion lifestyle profile is a 48-item questionnaire. These questions were from categories of health promotion behaviors: self-actualization, health responsibility, exercise, nutrition, interpersonal support, and stress management. A total score was computed for each subject. Reliability analysis for the total HPLP scale was .92.

Health as related to others

An individual's perception of their past and present health status and their health as they perceive it is related to the health of others their age were included in the demographic data. Perceived health as it is compared to others their age revealed that 57% see their health as better than others their age.

TABLE 2: Distribution of scores: Health as related to others

Categories	Number	Percent
Worse	2	4
About the same	17	35
Somewhat better	15	31
Much better	13	26

Hypotheses

Hypothesis 1

It was hypothesized that people with an internal locus of control will engage in more health promoting behaviors than those with an external locus of control. The t-test was used to compare the mean health promotion lifestyle profile scores of the internal locus of control and the external locus of control groups (powerful others and chance health locus of control). Seventeen subjects with internal locus of control and 21 subjects with external locus of control were included in the analysis. The internal locus of control group had a lower mean score ($M = 26.61$, $SD = 5.29$)) on this variable than those with an external locus of control ($M = 42.25$, $SD = 12.21$). For the t-test, a pooled formula was used, since the assumption of homogeneity of variance was met ($F = 1.06$, $p = .958$). There was no significant difference in the health promotion activity scores

between the two groups (t = 1.35, df = 36, one- tailed p = .09). Therefore, this hypothesis was not supported.

Hypothesis 2

Income, education, and gender were hypothesized to be positively related to health promoting behaviors. A forward regression analysis was done. The total HPLP score was the criterion variable. The criterion for entry for each predictor variable was that the F to enter value was .05. None of the variables entered the regression; therefore, this hypothesis was not supported. None of the three variables income, education, or gender were significantly related to health promoting behaviors.

Hypothesis 3

It was further hypothesized that subjects who report that their health is better than others their age will have a more positive health promoting lifestyle. A regression analysis revealed that only one variable - health related to others - was correlated at a significant level with health promoting activities (r = .49, df = 45, p = .002).

Locus of control, health related to others and the added variables of income, education, age, gender, past health within the last six months, and present health were entered into a stepwise forward regression with the total HPLP as the criterion variable. The criterion for entry of each predictor variable was that the F to enter

value was .05. The person's view of their health in relation to others explained 24% of the variance in health promotion lifestyle. The other variables did not explain a significant portion of the variance (see Table 3).

Table 3: Regression analysis including health as related to others and the HPLP

	Dependent variable: HPLP (total score) Final step/cumulative					
Variable	B-WT	SE	Mult R	R2	F Value	P
Health related to others	.4872	.1472	.4872	.237	10.89	.002

Other characteristics of interest

Correlation analysis revealed a relationship between chance health locus of control and age: as age increased, so did an individual's belief that their health was a matter of chance ($r = .42$, $df = 36$, $p = .004$). Chance health locus of control and powerful others health locus of control, subcategories of the external locus of control were also related ($r = .43$, $df = 36$, $p = .003$). It also revealed that the higher they scored on internal locus of control ($r = .34$, $df = 36$, $p = .015$), the less likely they were to believe that health was a matter of chance ($r = .-31$, $df = 36$, $p = .027$) and the more positively they viewed their health.

Other interesting findings were noted in relation to the Health Promotion Lifestyle Profile (HPLP). Fifty percent of the respondents reported that they choose foods without preservatives, but only 60% reported that they plan meals using the basic food groups. Seventy-six percent reported that they were aware of stress in their life but only 57% reported that they take time to relax and only 44% use specific methods of relaxation.

Having a positive outlook on life is so important. It was interesting that 84% reported that they were enthusiastic about life. Fifty-one percent reported that they were growing and changing personally. Seventy-nine percent reported that they feel happy and content and 68 percent reported that they were working toward long-term goals in their lives.

Subjects engaged in a number of health promoting activities. Response options on the HPLP that indicated healthy behavior were "routinely" and "often". Respondents scored the highest on nutrition related health promoting activities (see Table 4). Seventy-eight percent reported that they eat breakfast regularly or often. The same percent also included roughage or fiber in their diet, and planned meals to include the basic four food groups.

Table 4: Percent of behaviors related to nutrition:

Item	Percent
Eat breakfast	78
Select foods to include the basic four food groups	78
Include roughage and fiber in diet	78
Eat at least three meals a day	71
Read labels for nutrients	71
Choose foods without preservatives	51

When looking at exercise as a health promoting activity it was revealed to be the least engaged in behavior. Sixty-seven percent reported that they engaged in vigorous exercise at least weekly. Several verbal responses were made such as "I carry out the trash." or "I clean apartment." The term vigorous needed to be defined more clearly. Thirty percent reported they did stretching exercises at least weekly. Only 16% participated in supervised exercise programs and 16% check their pulse after exercising.

Table 5: Percent of behaviors related to exercise

Item	Percent
Vigorous exercise	67
Stretching exercises	30
Participated in supervised exercise programs	16
Check pulse after exercising	16

In summary, perceived health as related to others was significantly related to health promotion activities. Health promotion activities related to nutrition were practiced most, while exercise related health promotion activities were practiced least.

CHAPTER 5

DISCUSSION/LIMITATIONS

The purpose of this study was to look at the relationship between health locus of control and health promoting activities. The most powerful predictor of a health-promoting lifestyle for these subjects, who were all sixty years old or older, was their perception of their health as it compared to the health of others their age. In a study done by Weitzel (1989), the strongest and most significant predictors of health-promoting behaviors for a group of blue-collar subjects were their perceptions of health status and self-efficacy. This correlation has been reported by other researchers as well (Dishman, Sallis, & Orenstein, 1985; Pender & Pender, 1983). The implication is that internal health locus of control is related to more positive perceptions of health and positive perceived health will spur behaviors to maintain it.

It was hypothesized that people with an internal locus of control would engage in more health promoting behaviors than those with an external locus of control. There was no significant difference in health behaviors scores of subjects with internal versus external locus of control. Wallston and Wallston (1981) also found no statistical difference between health locus of control

and health behaviors. Internal health locus of control was not a predictor of health behavior and correlated only slightly with two of the Health Promotion Lifestyle Profile subscales. Logically, it seems that IHLC would be predictive of positive health habits. However, IHLC has not been predictive in other investigations (Mullenkamp et al., 1983; Brown et at.,1983). In a study done by Weitzel (1989) neither the powerful others health locus of control nor the chance locus of control scales were predictive for the majority of criterion variables. When they were predictive, three percent was the maximum variance accounted for by either predictor. Wallston & Wallston (1981) have acknowledged that Health Locus of Control has a tendency toward nonproductive results when predicting health promotion, even under circumstances of valuing health.

In contrast, Pender (1990) found that perception of health was being internally controlled rather than controlled by luck or chance and was associated with a more health promoting activities. The extent of health promotion activities was positively related to the subjects belief that powerful others influenced or exerted external control on health. According to Pender's (1990) study of company employees, this effect may have been due to the nature of the sample. Employees with such beliefs may be more likely to enroll in structured workplace health promotion programs where the

collegial support of coworkers and professionals was readily available. Employees with a more internal control of health may pursue a health-promoting lifestyle through independent rather than group actions. On the other hand, participants in workplace health promotion programs may rely on the support of others for sustaining healthful lifestyles.

In the second hypothesis, income, education and gender were hypothesied to be positively related to health promoting behaviors. However, these variables were not found to be statistically related. The lack of a relationship between gender and health promotion activities was consistent with the findings of Yarcheski and Mahan (1989). They found that gender had no effect on health behaviors among adolescents.

The third hypothesis was supported. Subjects who reported that their health was better than others their age reported engaging in more health promoting activities. The person's view of their health explained 24% of the variance in health promotion activities. It was the only variable that entered the equation. Other factors exist that explain health promotion activities.

Limitations

A major limitation of this study was it's relatively small sample (N = 49). The sample was also atypical because all subjects were Caucasian (N = 49).

Therefore, generalizing the results to a larger population is difficult. Also, the design did not allow for testing direction of effect.

Implications for nursing practice

This study has several implications for nursing practice. The findings suggest that one's perceived health (compared to others their age) plays a major part in the practice of health promoting lifestyle. Nurses need to assess clients for their perceived health (as compared to others their age) because this may block or enhance health promoting activities. If the individual perceives that their health is better than others their age, they are more likely to participate in health promoting activities.

This study also provided information about the health practices of clients sixty years old and older. Nutrition related health activities were participated in most frequently and exercise related health activities were the least often participated in, especially supervised exercise programs. Seniors may not participate in supervised exercise programs because they are living on fixed incomes and such programs are very expensive. Physical activity may also be limited by chronic diseases such as arthritis. It is important that exercise programs for seniors be developed. They could be located in senior housing complexes or at senior meal sites.

Video tapes with self-participating exercise programs need to be developed for the elderly. This could be an excellent area for nurse's involvement.

Implications for patient education are also varied. The HPLP could be used as a tool to evaluate the need for health promotion education in the areas of self-actualization, health responsibility, exercise, nutrition, interpersonal support and stress management. Targeting areas of need would assist the teaching-learning process.

Suggestions for further research

Further examination of the variables that affect health promotion activities is warranted because of the large number of variables in Pender's (1987) model. This large number of variables makes the model difficult to test. It is hoped that with further research the number of variables can be reduced in order to determine those with the greatest impact on health promoting activities. Because only a small percent of the variance in health promotion activities was explained in this study, it is believed that other variables exist. Additional variables that might account for greater variance in health promotion lifestyle need to be identified in further research.

Similar research is needed using a more heterogeneous sample and a larger sample size in order

to confirm the findings of this study. Research also needs to be done to look at why a person continues with health promoting activities. Future studies should be directed at answering this. In a study done by Weitzel (1989) self-efficacy was suggested as a variable that may be most related to the continuance of health promoting activities. Research also needs to be done in order to understand exactly what health is and what effect individual's perceptions have on their health and health promoting activities.

Summary

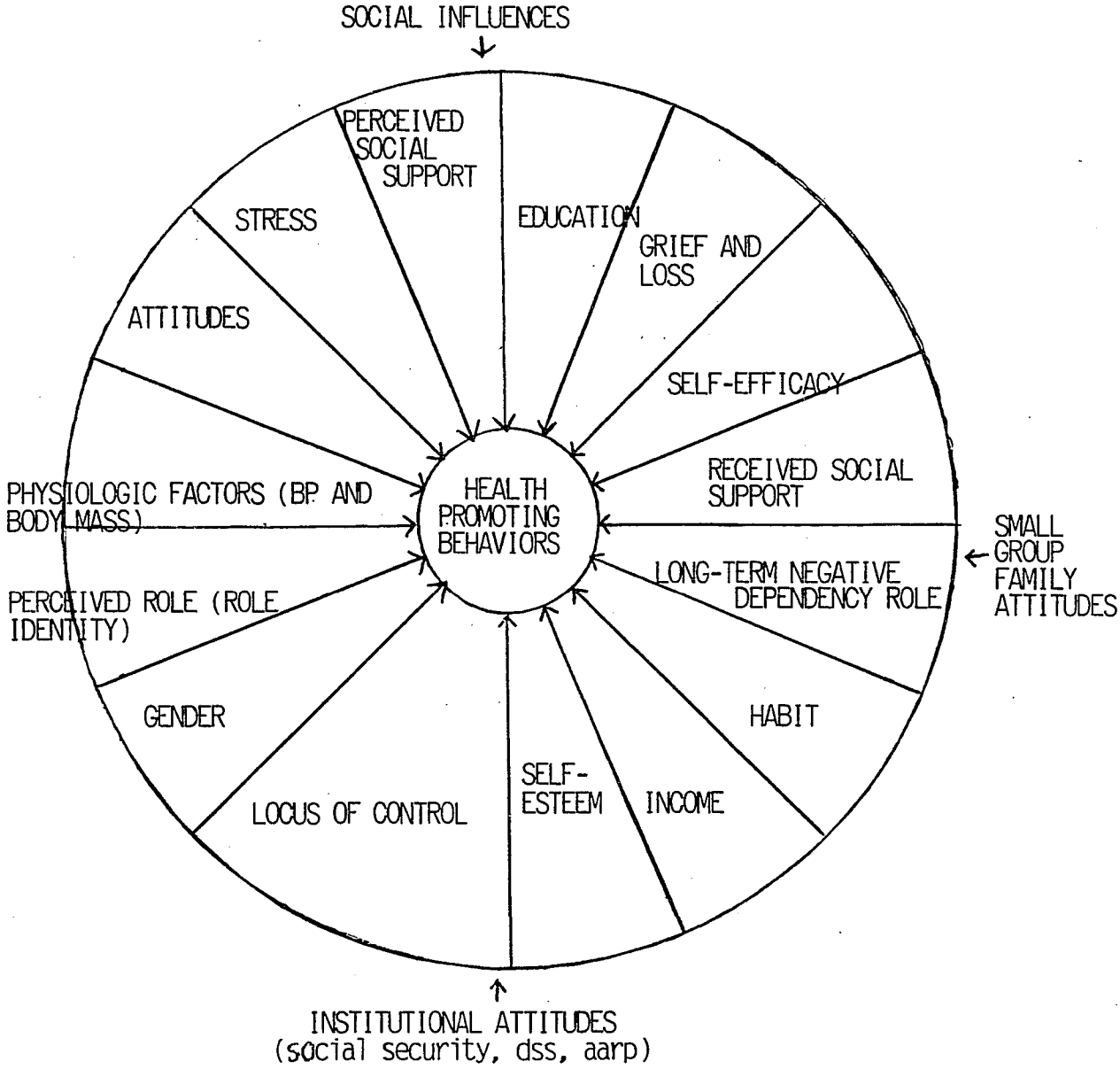
The purpose of this study was to answer the following question: What are the determinants of health promotion in the elderly? This research, while of an introductory nature, identified several findings. First, that perceived health as related to others was related to a positive view of health, and health promotion activities. Age, education, and gender were not related to health promotion activities. Perceived health related to others was moderately correlated with internal locus of control and negatively correlated with change health locus of control. Perceived health as related to others was significantly associated with health promotion activities. Finally, age was correlated with chance health locus of control.

Certainly many questions remain unanswered about

the determinants of health promotion. Nurses must continue to teach health promotion in creative ways to individuals and their significant others. It was concluded that there is support for some, but not all of the variables in the Health Promotion Model as applied to older adults. Psychological variables accounted for more variance than demographic variables. This has important practical consequences for health promotion. It is hoped that improvement in health promotion activities can be achieved.

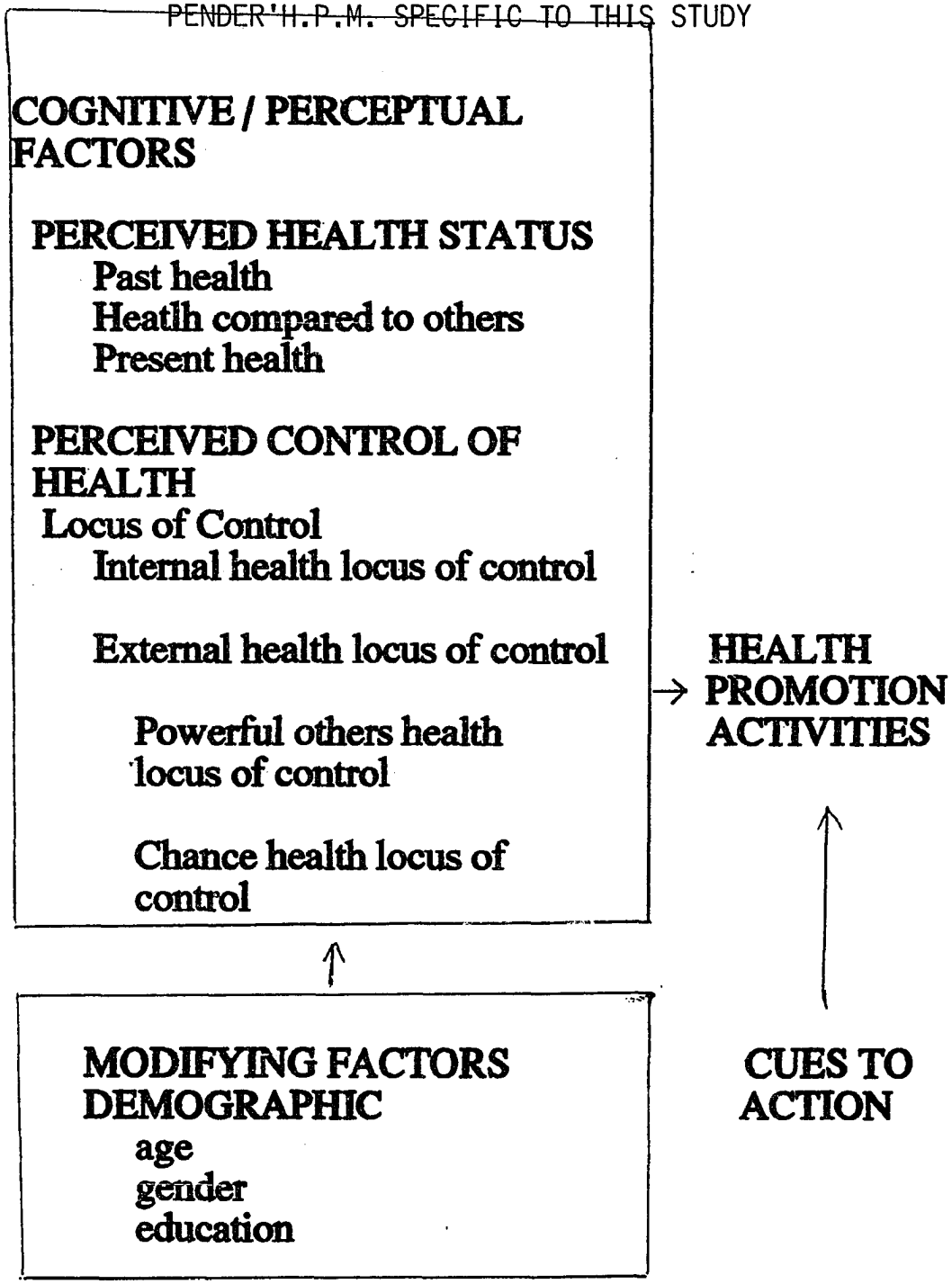
APPENDIX A

FACTORS AFFECTING HEALTH PROMOTING ACTIVITIES



APPENDIX B

PENDER'H.P.M. SPECIFIC TO THIS STUDY



APPENDIX C

MULTIDIMENSIONAL HEALTH LOCUS OF CONTROL SCALE

For each item we would like you to circle the number that represents the extent to which you disagree or agree with the statement. When making your choice, do not be influenced by your previous choices.

1.	If I get sick, it is my own behavior that determines how soon I get well again.	1	2	3	4	5	6
2.	No matter what I do, if I am going to get sick, I will get sick.	1	2	3	4	5	6
3.	Having regular contact with my physician is the best way for me to avoid illness.	1	2	3	4	5	6
4.	Most things that affect my health happen to me by accident.	1	2	3	4	5	6

5.	Whenever I don't feel well, I should consult a medically trained professional.	1	2	3	4	5	6
6.	I am in control of my health.	1	2	3	4	5	6
7.	My family has a lot to do with my becoming sick or staying well.	1	2	3	4	5	6
8.	When I get sick, I am to blame.	1	2	3	4	5	6
9.	Luck plays a big part in whether I stay healthy.	1	2	3	4	5	6
10.	Health professionals control my health.	1	2	3	4	5	6
11.	My good health is largely a matter of good fortune.	1	2	3	4	5	6
12.	The main thing that affects my health is what I myself do.	1	2	3	4	5	6
13.	If I take care of myself, I can avoid illness.	1	2	3	4	5	6

14. When I recover from an illness it's usually because other people (for example, doctors, nurses, family, or friends) have been taking good care of me. 1 2 3 4 5 6

15. No matter what I do, I'm likely to get sick. 1 2 3 4 5 6

16. If it's meant to be, I I will stay healthy. 1 2 3 4 5 6

17. If I take the right actions I can stay healthy. 1 2 3 4 5 6

18. Regarding my health, I can only do what my doctor tells me to do. 1 2 3 4 5 6

Thank-you for participating. If you are interested in receiving a short summary of this study or would like to participate again next year, just leave your name and address on the separate form. Your answers will remain confidential.

APPENDIX D

Pender's (1982) Health Promotion Lifestyle Profile

DIRECTIONS: This questionnaire contains statements regarding your present way of life or personal habits. Please respond to each item as accurately as possibly, and try not to skip any item. Indicate the regularity with which you engage in each behavior by circling: "N" for never, "S" for sometimes, "O" for often, and "R" for routinely.

1.	Eat breakfast.	N	S	O	R
2.	Report any usual signs or symptoms to a physician.	N	S	O	R
3.	Like myself.	N	S	O	R
4.	Perform stretching exercises at least three thimes per week.	N	S	O	R
5.	Choose foods without preservatives or other additives.	N	S	O	R
6.	Take some time for relaxation each day.	N	S	O	R
7.	Have my cholesterol level checked and know the result.	N	S	O	R

8. Am enthusiastic and optimistic about life.	N	S	O	R
9. Feel I am growing and changing personally in positive directions.	N	S	O	R
10. Discuss personal problems and concerns with persons close to me.	N	S	O	R
11. Am aware of the sources of stress in my life.	N	S	O	R
12. Feel happy and content.	N	S	O	R
13. Exercise vigorously for 20-30 minutes at least three times per week.	N	S	O	R
14. Eat three regular meals a day.	N	S	O	R
15. Read articles and books about promoting health.	N	S	O	R
16. Am aware of my personal strengths and weaknesses.	N	S	o	R
17. Work toward long-term goals in my life.	N	S	O	R

18.	Praise other people for their accomplishments.	N	S	O	R
19.	Read labels to identify the nutrients in packaged foods.	N	S	O	R
20.	Question my physician or seek a second opinion when I do not agree with recommendations.	N	S	O	R
21.	Look forward to the future.	N	S	O	R
22.	Participate in supervised exercise programs or activities.	N	S	O	R
23.	Am aware of what is important to me in life.	N	S	O	R
24.	Enjoy touching and being touched by people close to me.	N	S	O	R
25.	Maintain meaningful and fulfilling interpersonal relationships.	N	S	O	R
26.	Include roughage/fiber (whole grains, raw fruits and vegtables) in my diet.	N	S	O	R

27.	Practice relaxation or meditation for 15 - 20 minutes daily.	N	S	O	R
28.	Discuss my health care concerns with qualified professionals.	N	S	O	R
29.	Respect my own accomplishments.	N	S	O	R
30.	Check my pulse rate when exercising.	N	S	O	R
31.	Spend time with close friends.	N	S	O	R
32.	Have my blood pressure checked and know what it is.	N	S	O	R
33.	Attend educational programs on improving the environment in which we live.	N	S	O	R
34.	Find each new day interesting and challenging.	N	S	O	R
35.	Plan or select meals to include the "basic four" food groups each day.	N	S	O	R

36.	Consciously relax muscles before sleep.	N	S	O	R
37.	Find my living environment pleasant and satisfying.	N	S	O	R
38.	Engage in recreational physical activities (such as walking, swimming, soccer, or bicycling).	N	S	O	R
39.	Find it easy to express concern, love and warmth to others.	N	S	O	R
40.	Concentrate on pleasant thoughts at bedtime.	N	S	O	R
41.	Find constructive ways to express my feelings.	N	S	O	R
42.	Seek information from health professionals about how to take good care of myself.	N	S	O	R
43.	Observe my body at least monthly for physical changes/danger sings.	N	S	O	R
44.	Am realistic about the goals that I set.	N	S	O	R

45.	Use specific methods to control my stress.	N	S	O	R
46.	Attend educational programs on personal health care.	N	S	O	R
47.	Touch and am touched by people I care about.	N	S	O	R
48.	Believe that my life has purpose.	N	S	O	R

APPENDIX E

COVER LETTER

AS A REGISTERED NURSE AND A GRADUATE STUDENT AT GRAND VALLEY STATE UNIVERSITY, I AM INTERESTED IN HEALTH AND THE KINDS OF THINGS PEOPLE DO TO STAY HEALTHY. I AM PARTICULARLY INTERESTED IN FINDING OUT WHAT PEOPLE THINK ABOUT THEIR HEALTH. SO THAT I AND OTHER NURSES AND DOCTORS CAN USE THIS INFORMATION TO HELP OLDER ADULTS STAY AS HEALTHY AS POSSIBLE. TO BE ABLE TO DO THIS, I AM ASKING PEOPLE 60 YEARS OF AGE AND OLDER IF THEY WOULD BE WILLING TO HELP BY ANSWERING A FEW QUESTIONS.

YOU ARE IN NO WAY OBLIGATED TO PARTICIPATE IN THIS STUDY. IF YOU DECIDE YOU WOULD LIKE TO PARTICIPATE YOU CAN COMPLETE THE ATTACHED QUESTIONNAIRE. DO NOT WRITE YOUR NAME ON THE QUESTIONNAIRE SO THAT NO ONE WILL KNOW WHO IS ANSWERING THE QUESTIONNAIRE. WHEN YOU HAVE COMPLETED THE QUESTIONNAIRE, SEAL IT IN THE ENVELOPE PROVIDED BEFORE RETURNING IT. ALL ANSWERS WILL BE KEPT CONFIDENTIAL.

THIS QUESTIONNAIRE WILL TAKE ABOUT FIFTEEN MINUTES TO COMPLETE. IF YOU HAVE ANY QUESTIONS I WILL BE AVAILABLE TO ANSWER THEM. IF YOU WOULD LIKE A SUMMARY OF THIS RESEARCH PLEASE WRITE YOUR NAME AND ADDRESS ON A SEPERATE PIECE OF PAPER. A SUMMARY WILL BE SENT TO YOU. IF YOU HAVE ALREADY PARTICIPATED IN THIS STUDY PLEASE DO NOT FILL OUT ANOTHER QUESTIONNAIRE.

THANK YOU FOR YOUR PARTICIPATION. ALTHOUGH NO DIRECT BENEFIT WILL BE OBTAINED, YOU HAVE THE SATISFACTION OF KNOWING THAT YOU HAVE HELPED OTHERS. I APPRECIATE YOUR ASSISTANCE IN THIS STUDY. IF YOU HAVE ANY QUESTIONS AFTER TODAY, PLEASE FEEL FREE TO CALL (616) 754-7381 AND ASK FOR VICKY.

THANK YOU

VICTORIA ANN MERREN

FOR EACH ITEM I WOULD LIKE YOU TO CIRCLE THE NUMBER THAT REPRESENTS THE EXTENT TO WHICH YOU DISAGREE OR AGREE WITH THE STATEMENT. WHEN MAKING YOUR CHOICE, DO NOT BE INFLUENCED BY YOUR PREVIOUS CHOICES.

	STRONGLY DISAGREE	MODERATELY DISAGREE	SLIGHTLY DISAGREE	SLIGHTLY AGREE	MODERATELY AGREE	STRONGLY AGREE	
1.)	1	2	3	4	5	6	IF I GET SICK, IT IS MY OWN BEHAVIOR THAT DETERMINES HOW SOON I GET WELL AGAIN.
2.)	1	2	3	4	5	6	NO MATTER WHAT I DO IF I AM GOING TO GET SICK, I WILL GET SICK.
3.)	1	2	3	4	5	6	HAVING REGULAR CONTACT WITH MY PHYSICIAN IS THE BEST WAY FOR ME TO AVOID ILLNESS.

4.)	1	2	3	4	5	6	MOST THINGS THAT AFFECT MY HEALTH HAPPEN TO ME BY ACCIDENT.
5.)	1	2	3	4	5	6	WHENEVER I DON'T FEEL WELL, I SHOULD CONSULT A MEDICALLY TRAINED PROFESSIONAL.
6.)	1	2	3	4	5	6	I AM IN CONTROL OF MY HEALTH.
7.)	1	2	3	4	5	6	MY FAMILY HAS A LOT TO DO WITH MY BECOMING SICK OR STAYING HEALTHY.
8.)	1	2	3	4	5	6	WHEN I GET SICK, I AM TO BLAME.
9.)	1	2	3	4	5	6	LUCK PLAYS A BIG PART IN DETERMINING HOW SOON I WILL RECOVER FROM AN ILLNESS.
10.)	1	2	3	4	5	6	HEALTH PROFESSIONALS CONTROL MY HEALTH.
11.)	1	2	3	4	5	6	MY GOOD HEALTH IS LARGELY A MATTER OF GOOD FORTUNE.
12.)	1	2	3	4	5	6	THE MAIN THING THAT AFFECTS MY HEALTH IS WHAT I MYSELF DO.

13.).	1	2	3	4	5	6	IF I TAKE CARE OF MYSELF, I CAN AVOID ILLNESS.
14.).	1	2	3	4	5	6	WHEN I RECOVER FROM AN ILLNESS, IT'S USUALLY BECAUSE OTHER PEOPLE (FOR EXAMPLE DOCTORS, NURSES, FAMILY, OR FRIENDS) HAVE BEEN TAKING GOOD CARE OF ME.
15.).	1	2	3	4	5	6	NO MATTER WHAT I DO I'M LIKELY TO GET SICK.
16.).	1	2	3	4	5	6	IF IT'S MEANT TO BE, I WILL STAY HEALTHY.
17.).	1	2	3	4	5	6	IF I TAKE THE RIGHT ACTIONS I CAN STAY HEALTHY.
18.).	1	2	3	4	5	6	REGARDING MY HEALTH, I CAN ONLY DO WHAT MY DOCTOR TELLS ME TO DO.

DIRECTIONS: THIS QUESTIONAIRE CONTAINS STATEMENTS ABOUT YOUR PRESENT WAY OF LIFE OR PERSONAL HABITS. PLEASE RESPOND TO EACH ITEM AS ACCURATELY AS POSSIBLE, AND TRY NOT TO SKIP ANY ITEMS. INDICATE THE REGULARITY WITH WHICH YOU ENGAGE IN EACH BEHAVIOR BY CIRCLING: "N" FOR NEVER, "S" FOR SOMETIMES, "O" FOR OFTEN, OR "R" FOR ROUTINELY.

	NEVER	SOMETIMES	OFTEN	ROUTINELY	
19.)	N	S	O	R	EAT BREAKFAST.
20.)	N	S	O	R	REPORT ANY UNUSUAL SIGNS OR SYMPTOMS TO A PHYSICIAN.
21.)	N	S	O	R	LIKE MYSELF.
22.)	N	S	O	R	PERFORM STRETCHING EXERCISE AT LEAST THREE TIMES A WEEK.
23.)	N	S	O	R	CHOOSE FOODS WITHOUT PRESERVATIVES OR OTHER ADDITIVES.
24.)	N	S	O	R	TAKE SOME TIME FOR RELAXATION EACH DAY.
25.)	N	S	O	R	HAVE MY CHOLESTEROL LEVEL CHECKED AND KNOW THE RESULT.
26.)	N	S	O	R	AM ENTHUSIASTIC AND OPTIMISTIC ABOUT LIFE.

27.)	N	S	O	R	FEEL I AM GROWING AND CHANGING PERSONALLY IN POSITIVE DIRECTIONS.
28.)	N	S	O	R	DISCUSS PERSONAL PROBLEMS AND CONCERNS WITH PERSONS CLOSE TO ME
29.)	N	S	O	R	AM AWARE OF SOURCES OF STRESS IN MY LIFE.
30.)	N	S	O	R	FEEL HAPPY AND CONTENT.
31.)	N	S	O	R	EXERCISE VIGOURSLY FOR 20-30 MINUTES AT LEAST THREE TIMES PER WEEK.
32.)	N	S	O	R	EAT THREE MEALS A DAY.
33.)	N	S	O	R	READ ARTICLES OR BOOKS ABOUT PROMOTING HEALTH.
34.)	N	S	O	R	AM AWARE OF MY PERSONAL STRENGTHS AND WEAKNESSES.
35.)	N	S	O	R	WORK TOWARD LONG-TERM GOALS IN MY LIFE.
36.)	N	S	O	R	PRAISE OTHER PEOPLE EASILY FOR THEIR ACCOMPLISHMENTS.
37.)	N	S	O	R	READ LABELS TO IDENTIFY THE NUTRIENTS IN PACKAGED FOODS.

38.)	N	S	O	R	QUESTION MY PHYSICIAN OR SEEK A SECOND OPINION WHEN I DO NOT AGREE WITH RE-COMMENDATIONS.
39.)	N	S	O	R	LOOK FORWARD TO THE FUTURE.
40.)	N	S	O	R	PARTICIPATE IN SUPERVISED EXERCISE PROGRAMS OR ACTIVITIES.
41.)	N	S	O	R	AM AWARE OF WHAT IS IMPORTANT TO ME IN LIFE
42.)	N	S	O	R	ENJOY TOUCHING AND BEING TOUCHED BY PEOPLE CLOSE TO ME.
43.)	N	S	O	R	MAINTAIN MEANINGFUL AND FULFILLING INTERPERSONAL RELATIONSHIPS.
44.)	N	S	O	R	INCLUDE ROUGHAGE/FIBER (WHOLE GRAINS, RAW FRUITS AND VEGTABLES). IN MY DIET.
45.)	N	S	O	R	PRACTICE RELAXATION OR MEDITATION FOR FIFTEEN TO TWENTY MINUTES DAILY.

46.)	N	S	O	R	DISCUSS MY HEALTH CARE CONCERNS WITH QUALIFIED PROFESSIONALS.
47.)	N	S	O	R	RESPECT MY OWN ACCOMPLISHMENTS.
48.)	N	S	O	R	CHECK MY PULSE RATE WHEN EXERCISING.
49.)	N	S	O	R	SPEND TIME WITH CLOSE FRIENDS.
50.)	N	S	O	R	HAVE MY BLOOD PRESSURE CHECKED AND KNOW WHAT IT IS.
51.)	N	S	O	R	ATTEND EDUCATIONAL PROGRAMS ON IMPROVING THE ENVIRONMENT IN WHICH WE LIVE.
52.)	N	S	O	R	FIND EACH NEW DAY INTERESTING AND CHALLENGING.
53.)	N	S	O	R	PLAN OR SELECT MEALS TO INCLUDE THE "BASIC FOUR" FOOD GROUPS EACH DAY.
54.)	N	S	O	R	CONSCIOUSLY RELAX MUSCLES BEFORE SLEEP.
55.)	N	S	O	R	FIND MY LIVING ENVIRONMENT PLEASANT AND SATISFYING

56.)	N	S	O	R	ENGAGE IN RECREATIONAL PHYSICAL ACTIVITIES (SUCH AS WALKING, SWIMMING, SOCCER, OR BICYCLING).
57.)	N	S	O	R	FIND IT EASY TO EXPRESS CONCERN, LOVE AND WARMTH TO OTHERS.
58.)	N	S	O	R	CONCENTRATE ON PLEASANT THOUGHTS AT BEDTIME.
59.)	N	S	O	R	FIND CONSTRUCTIVE WAYS TO EXPRESS MY FEELINGS.
60.)	N	S	O	R	SEEK INFORMATION FROM HEALTH PROFESSIOALS.
61.)	N	S	O	R	OBSERVE MY BODY AT LEAST MONTHLY FOR PHYSICAL CHANGES/DANGER SIGNS.
62.)	N	S	O	R	AM REALISTIC ABOUT THE GOALS THAT I SET.
63.)	N	S	O	R	USE SPECIFIC METHODS TO CONTROL MY STRESS.
64.)	N	S	O	R	ATTEND EDUCATIONAL PROGRAMS ON PERSONAL HEALTH CARE.

65.) N S O R TOUCH AND AM TOUCHED BY PEOPLE I CARE ABOUT.

66.) N S O R BELIEVE THAT MY LIFE HAS PURPOSE.

67.) GENERALLY SPEAKING, WOULD YOU DESCRIBE YOUR PRESENT HEALTH AS:

4_____EXCELLENT
3_____GOOD
2_____FAIR
1_____POOR

68.) COMPARED TO OTHERS YOUR AGE, WOULD YOU RATE YOUR HEALTH AS:

5_____MUCH BETTER
4_____SOMEWHAT BETTER
3_____ABOUT THE SAME
2_____SOMEWHAT WORSE
1_____MUCH WORSE

69.) DURING THE PAST SIX MONTHS, WOULD YOU RATE YOUR HEALTH AS:

1_____CHANGING FOR THE WORSE
2_____THE SAME
3_____CHANGED FOR THE BETTER

PLEASE ANSWER THE FOLLWOING QUESTIONS SO THAT I CAN DESCRIBE THE GROUP OF PEOPLE WHO TALKED ABOUT THEIR HEALTH.

70.) YEAR BORN_____

71.) MARITAL STATUS: CHECK THE RESPONSE MOST APPROPRIATE PLEASE!

1_____MARRIED
2_____SINGLE
3_____DIVORCED
4_____SEPERATED
5_____OTHER

72.) GENDER:

1_____MALE
2_____FEMALE

73.) RACE:

1_____CAUCASION
2_____BLACK
3_____HISPANIC
4_____OTHER (PLEASE SPECIFY)_____

74.) EDUCATION: NUMBER OF YEARS COMPLETED_____

75.) APPROXIMATE ANNUAL HOUSEHOLD INCOME:

1_____LESS THAN$5,000
2_____$5,001 - 10,499
3_____$10,500 - 14,999
4_____$15,000 - 19,999
5_____$20,000 - 24,999
6_____$25,000 - 29,000
7_____OVER $30,000
8_____UNSURE

76.) NUMBER OF PEOPLE IN YOUR HOUSEHOLD, INCLUDING YOURSELF_____

77.) HAVE YOU BEEN HOSPITALIZED DURING THE LAST SIX MONTHS?

1_____YES

2_____NO

78.) LIST ANY ILLNESSES FOR WHICH YOU ARE CURRENTLY BEING TREATED FOR BY A PHYSICIAN?

_____

THANK-YOU FOR YOUR PARTICIPATION. IF YOU ARE INTERESTED IN RECEIVING A SHORT SUMMARY OF THIS STUDY, JUST LEAVE YOUR NAME AND ADDRESS ON A SEPERATE PIECE OF PAPER. YOUR ANSWERS WILL REMAIN CONFIDENTIAL.

REFERENCES

REFERENCES

Brown, N. J., Muhlenkamp, A. F., Fox, L. M. & Osborn, M. (1983). The relationship among health beliefs, health values, and health promotion activity. Western Journal of Nursing Research, 5, 155-165.

Dishman, R. K. Sallis, J. F., & Orenstein, D. R. (1983). The determinants of physical activity and exercise. Public Health Reports, 158-171.

Duffy, M. E. (1988). Determinants of health promotion in midlife women. Nursing Research, 37, 358-361.

Field, T. M., Huston, A., Quay, H. C., Troll, L., & Finley, G. E., (1982). Review of human development. New York: Wiley.

Fowles, D. G. (1986). A profile of older americans: 1986. (Report No. PF 3049 (587)-D996). Washington, D. C.: American Association of Retired Persons (AARP).

James, W. H., Woodruff, A. B., & Werner, W., (1965). Effect of internal and external control upon changes in smoking behavior. Journal of Consulting Psychology, 29, 184-186.

Lundy, J. F. (1972). Some personality correlates of contraceptive use among unmarried female college students. Journal of Consulting Psychology, 80, 9-14.

MacDonald, A. P. (1970). Internal-external locus of control and the practice of birth control. Psychological Rep., 27, 206.

Matteson, M. A., & McConnell, E. S. (1988). Gerontological nursing: Concepts and practice. W. B. Saunders: Philadelphia.

Moore, P. V., & Williamson, G. C. (1984). Health promotion. Nursing Clinics of North America. 19(2). W. B. Saunders: Philadelphia.

Muhlenkamp, A. F., Brown, N. J. & Sands, D. (1985). Determinants of health promotion. Western Journal of Nursing Research, 5, 128-131.

Pender, N. J. & Pender, A. R. (1988). Health promotion in nursing practice. (2nd ed.). Norwalk, NJ: Appleton & Lange.

Polit, D. F. & Hungler, B. P. (1987). Nursing research: Principles and methods. (3rd ed.). Philadelphia, PA: J. B. Lippincott.

Speake, D. L., Cowart, M. E. & Pellet, K. (1989). Health perceptions and lifestyles of the elderly. Nursing Research, 12, 93-100.

Walker, S. N., Pender, J. J., & Volkan, K. (1987). Explaining health-promoting behavior among older adults. Symposium presented at the 40th Annual Scientific Meeting of the Gerontological Society conducted in Washington, D. C.

Wallston, K. A., Wallston, K. A., & DeVellis, R. (1978). Development of the multidimensional health locus of control (MHLOC) scales. Health Education Monographs. 6, 160-170.

Wallston, K. A., Wallston, B. S., Kaplan, G. D., & Maides, S. A. (1976). Development and validation of the health locus of control (HLOC) scale. Journal of Consultative and Clinical Psychology, 44, 580-585.

Weiler, P. G., Chi, I., & Lubben, J. E. (1989). A statewide preventive health care program for the aged. Public Health Reports, 104, 215.

Weitzel, M. H. (1989). A test of the health promotion model with blue collar workers. Nursing Research, 38. 99-103.

Yarchescki, A., & Mahon, N. E. (1989). A causal model of positive health practices: The relationship between approach and replication. Nursing Research. 38, 88-94.

THE UNIVERSITY OF MICHIGAN
SCHOOL OF
NURSING

April 16, 1991

Victoria Merren
1001 S. Cedar St.
Greenville, MI 48838

Dear Ms. Merren:

You have my permission to use the "Health Promotion Lifestyle Profile" in your thesis and to have it published in your completed research report which I understand is a thesis.

I wish you success in your professional career.

Cordially,

[redacted]

Nola J. Pender, PhD, RN, FAAN
Professor and Director
Center for Nursing Research

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The Florida State University
Tallahassee, Florida 32306-4053

College of Social Sciences
Institute on Aging

April 18, 1991

To: Victoria Marren

From: Marie E. Cowart MEC

I just received your note. The three questions on health perceptions are in the public domain, so you do not need to obtain permissions for them. The reference is the National Health Interview Survey, Department of Health and Human Services.

Congratulations on completing your thesis. Your findings were interesting.

Vanderbilt University Medical Center

School of Nursing

Godchaux Hall
Nashville, TN 37240-0008
Telephone (615) 322-4400
FAX (615) 343-7711

April 17, 1991

Victoria Ann Merren
1001 S. Cedar St.
Greenville, MI 48838

Dear Ms. Merren:

You have my permission to reprint our Health Locus of Control scale in your thesis.

Thank you for filling out and returning a HLC Usage Questionnaire.

Sincerely yours,

[redacted]

Kenneth A. Wallston, Ph.D.
Professor