Factors contributing to regular mall walking
by Anna Cecelia Brewer

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Nursing
Montana State University

Abstract:
This qualitative study employed ethnography, augmented by aspects of ethnonursing, to identify factors that contribute to participation in and adherence to regular physical activity. The regular physical activity of interest in this study was mall walking. Fourteen formal interviews were conducted with key informants, and supplemental data were obtained from 14 general informants for this study. Fifteen informants were male and 13 were female. Key informants were between the ages of 62 and 77.

Factors that contributed to participation In and adherence to regular mall walking included having a friend(s) or mate with whom to walk, making walking part of a daily routine, and having a safe, controlled environment in which to walk. Physical and psychological benefits of mall walking were also identified as reasons to persist at this activity.

The process of becoming a "regular" mall walker consisted of developing habits over time. "Regulars" were self-monitored participants in mall walking over at least a two year time period. "Regulars" went through the stages of "identifying a reason to start," "deciding to start," and "maintaining and/or persisting." Regular walking was interrupted only by vacations, illness, appointments, or unforeseen circumstances. However, walking was such a part of informants' lives that they would go through a stage of "coming back" to re-affiliate with the other regular walkers.

Nurses and other health care professionals could use findings from this study in the development and implementation of a rewarding yet beneficial activity, mall walking, with their clients. Recommendations for further research were identified.

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Date April 13, 1993

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ABSTRACT

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The process of becoming a "regular" mall walker consisted of developing habits over time. "Regulars" were self-monitored participants in mall walking over at least a two year time period. "Regulars" went through the stages of "identifying a reason to start," "deciding to start," and "maintaining and/or persisting." Regular walking was interrupted only by vacations, illness, appointments, or unforeseen circumstances. However, walking was such a part of informants' lives that they would go through a stage of "coming back" to re-affiliate with the other regular walkers.

Nurses and other health care professionals could use findings from this study in the development and implementation of a rewarding yet beneficial activity, mall walking, with their clients. Recommendations for further research were identified.

CHAPTER 1

INTRODUCTION

Historically, the practice of nursing has focused on care given to those who are sick, ill, injured, and unhealthy in acute and chronic care settings or home environments (Phipps, Long, Woods, & Cassmeyer, 1991). In recent years clients, the consumers of health care, are becoming better informed and more active as decision makers in the kind and quality of care they need and want, and nursing is becoming prepared to meet these changing needs of the client. Health promotion directed towards actualizing human potential is increasingly becoming a concern and a part of nursing practice (Pender, 1987). In 1985 it was reported by Stephens, Jacobs, and White that only about 20% of the adult population in the United States engaged in optimal levels of activity. Optimal levels of activity have been described as having sufficient frequency, intensity, and duration for improvement of cardiovascular fitness (Edmunds, 1991; Pollock, 1988). Most optimal levels of activity are considered to be exercise.

Blair (1988) cites the prevalence of inactive (sedentary) Americans as 80% of the total population. Because ample evidence links regular exercise to optimal health, "elimination of sedentary habits in the United States would have a major impact on health for the population" (p. 85-86). Carl J. Caspersen, PhD, MPH,

exercise epidemiologist at the Communicable Disease Center (CDC), Behavioral Epidemiology and Evaluation Branch, reviewed 43 studies that linked inactivity with coronary heart disease (CHD) risk (Powell, Thompson, Caspersen, & Kendrick, 1987). Caspersen likens a sedentary lifestyle as a risk factor for CHD to a high cholesterol level, high blood pressure, or smoking a pack of cigarettes a day. The number one priority for health promotion described in Healthy People 2000, a report of the U. S. Public Health Service (1990), is physical activity and fitness.

Although physical fitness is the obvious benefit of exercise, research has shown exercise to have other benefits. Haskell (1984) cited several research studies that determined that men and women who selected physically active lifestyles on their own "generally demonstrate fewer clinical manifestations of coronary heart disease (CHD) than their sedentary counterparts; when events do occur, they tend to be less severe and to appear at an older age" (p. 413). A significant decrease in caloric intake was noted in a group of sedentary mildly obese women placed in a moderate exercise training group for which walking was the trained exercise (Nieman & Onasch, 1990). Pender (1987) identified 10 positive outcomes of a systematic walking program:

(a) decreased percentage of body fat
(b) improved circulation
(c) increased muscle tone in legs
(d) decreased problems of constipation
(e) improved mental state, with decreased depression and anxiety
(f) improved recovery index following exercise
(g) lowered blood pressure
(h) improved physical fitness

(i) decreased risk of coronary heart disease
(j) decreased bone demineralization (p. 315)

Other researchers have cited several psychological benefits of exercise including relief of stress and anxiety, a decrease in feelings of depression (Kobasa, Maddi, & Puccetti, 1982), and an increase in feelings of self-esteem (Hughes, 1984). Bergman and Boyungs (1991) determined an indoor walking program increased lean body composition in older women, indicating weight was not necessarily decreased, but there was a decrease in fat stores throughout the body.

Early in 1979, two major health agencies, the Office of Health Information, Health Promotion, Physical Fitness and Sports Medicine, and the Division of Environmental Epidemiology of the National Center for Health Statistics, conducted a survey called the National Survey of Personal Health Practices and Consequences (NSPHPC) Wave I. Completed interviews for Wave I totaled 3025. A follow-up NSPHPC Wave II was done one year later with a re-interview response of 2436 individuals. In comparing the results of the surveys it was found ". . . that physical fitness was the least stable preventive health behavior over time and the most difficult behavior to maintain" (Pender, 1987, p. 52).

There has been extensive research citing factors that affect adherence to regular exercise (Noland, 1989; Oldridge, 1984; Pollock, 1988; Tappe, Duda, & Ehrnwald, 1989). Among these factors are attitude towards physical activity, time, personality, type of exercise program, lack of reinforcement from other people, inclement weather, desire, self-motivation, spouse influence, medical problems, age,

sex, socioeconomic status, and body weight and composition. Dishman (1988) noted that adherence to exercise regimes averaged from 50 to 80% for the first 5 to 6 months of a program and then decreased to less than 50% for one year or longer. Most of these exercise regimes were structured aerobic activities.

Lewthwaite (1990) examined motivational considerations in physical activity involvement and concluded a number of psychological factors influence sport and exercise behavior. However, the personal factors of goal orientation, self-perception of capabilities, and perceptual-affective experiences are individual differences that affect the meaning attached to physical activity involvement. Social-environmental factors inside a program and outside the program also affect the meaning of physical activity.

Significance of the Study

Kulbok (1985) and Dishman (1988) have both acknowledged the importance of exercise as a preventive health behavior. However, they have noted exercise behavior to be the most difficult to maintain over time, particularly for longer than a year.

Mall walking, a form of walking, is done daily by many people in malls nationwide. In almost any mall that is open to the public by 6:00 a.m., a variety of walkers can be seen frequenting that environment. These people appear as single, double, or group walkers. Some move slowly; others walk more rapidly. Most spend from 30 minutes to 1 hour at this walking activity.

During an initial visit to observe mall walking activity, the researcher was approached by a walker known by the researcher to inquire why the researcher was not walking. When told the researcher was checking out the location and the possibility of walking, she stated, "We [she and her husband] come here or to the other mall at least six times a week and have been doing this for the last four years when the weather gets too bad, and we can't walk outside."

Mall walkers are unsupervised participants in activity. Identification of factors that lead to maintenance of an unsupervised routine exercise activity, such as mall walking, would contribute to what is currently known about why people adhere to regular programs of activity. Factor identification would also provide information for nursing interventions directed towards helping the generally sedentary population of the United States. Information that could be used to promote the health benefits of mall walking as a self-monitored achievable exercise activity may aid in persuading sedentary individuals to seek a healthy lifestyle behavior.

Many studies have examined factors affecting the regularity of exercise (Dishman, 1988; Gatch & Kendzierski, 1990; Gauvin, 1990; Noland, 1989). Most of the studies were conducted with subjects in controlled supervised groups achieving defined aerobic criteria (Pollock, 1988) for exercise. Little research has been done to examine why people choose to continue a regular physical activity that is self-monitored, such as mall walking (Dishman, 1988; Noland, 1989).

Purpose and Aims

The purpose of this study was to identify the factors that contribute to participation in and adherence to regular mall walking. Specific aims of this research study were to: (a) describe the walking habits of regular mall walkers, (b) describe the self-perceived purposes of mall walking, (c) identify if mall walking is a self-determined or a prescribed activity, (d) identify the factors that promote adherence to participation in regular mall walking, (e) determine if any self-reported factors could be used to help inactive people choose mall walking as a regular activity, and (f) determine which theoretical framework, if any, would guide the practice of the resultant behavioral findings and this study.

Definition of Terms

Regular mall walking: Participation in mall walking for at least 20 minutes three times a week (Murray & Zentner, 1985).

Regular: A mall walker who is observed walking for at least 20 minutes, three times a week.

Key informant: A regular mall walker chosen to complete a formal interview (Leininger, 1985).

General informant: A regular who was not chosen for a formal interview but who provided information to the researcher, knowing a study was being conducted (Leininger, 1985).

Motivation: The condition of being driven by a force, stimulus, incentive, or influence (Mish, 1988).

Exercise: "Bodily exertion for the sake of developing or maintaining physical fitness" (Mish, 1988). Walking is a type of exercise (DeBenedette, 1988).

Supervised activity: A type of physical activity that has a designated leader who helps monitor participation in and adherence to this activity.

Unsupervised activity: A type of physical activity that is monitored by the participant (self-monitored) and participation in and adherence to the activity can only be reported by the participant (self-reporting).

CHAPTER 2

REVIEW OF THE LITERATURE

The literature about exercise, walking as an exercise, and the benefits of regular exercise is extensive. Most regular exercise activities which have been studied are supervised exercise and/or aerobic programs. A dearth of information exists which discusses factors that contribute to initiation of and adherence to self-monitored and/or self-directed regular physical activities such as mall walking.

Exercise as a Health Behavior

There is ample evidence linking regular exercise to health and functional capability throughout life. Mish (1988) defined exercise as "bodily exertion for the sake of developing or maintaining physical fitness" (p. 34). Criteria for a regular physical activity were identified by Murray and Zentner (1985) as being for 20 minutes, 3 times a week.

Pollock (1988) defined the four main components of an exercise program as: (a) warm-up periods which last approximately 10 minutes and include such activities as stretching and walking, (b) muscular conditioning involving activities, such as calisthenics and weight training lasting approximately 10 to 20 minutes, (c) aerobics, which can include a fast walk, swimming, bicycling, or dancing that continues for 20

to 40 minutes, and, (d) cool-down periods that last approximately 5 to 10 minutes and include walking or stretching activities. Additional guidelines for exercise recommended by most researchers, according to Pollock, include a frequency of 3 to 5 days per week of aerobic activity at 60 to 90% of maximum heart rate reserve for 20 to 50 minutes. Porcari, McCarron, Kline, Freedson, Ward, and Ross (1987) conducted two related studies of 345 subjects (165 men and 178 women) and determined fast walking, defined as 70% of maximal heart rate, could offer an adequate aerobic training stimulus for most adults.

Gillis and Perry (1991) examined "the relationships between physical activity and health-promoting behaviors in mid-life women" (p. 299). Ninety-two rural women participated in this study. The experimental group consisted of 52 women, while there were only 40 in the control group. Five self-reporting instruments (Cantril's Well-Being Ladder, Rosenberg's Self-Esteem Scale, Health Locus of Control, Health Promoting Lifestyle Profile, and Health Perceptions Questionnaire) were administered at three different time intervals. The theoretical framework for the study was Pender's (1987) Health Promotion Model. Gillis and Perry determined that the subject's level of well being and ability to manage stress were the only two variables which demonstrated statistically significant differences positively influenced by participation in an exercise program.

Smith (1989) reviewed the benefits of aerobic exercise, summarized current knowledge of exercise physiology, and provided a practical guide for helping physicians guide patients through an exercise program. He determined that because

physical exercise has such a wide range of physical and psychological benefits, physicians should start their patients on an exercise program. "Through a combination of personal role-modeling, patient education about exercise physiology and the benefits of exercise, and appropriate use of the exercise prescription, physicians can make a major impact by converting patients from a sedentary to an active lifestyle" (p. 238). Nurses could also make a major impact in converting sedentary clients to active healthy lifestyles, starting with some type of walking.

Walking as an Exercise

Nurses have the opportunity through patient education, screening clinics, and health promotion activities to provide information which can make an impact in choosing a physical exercise. Pollock, an exercise physiologist and professor of medicine, physiology, and human performance at the University of Florida, was quoted by Monahan (1987) as saying, "Most people can achieve 60% to 70% heart rate reserve in a very short time with walking" (p. 182). Walking, one of the oldest forms of motion, is now considered to be the most basic form of exercise (DeBenedette, 1988).

DeBenedette (1988) included mall walking in her ". . . far from exhaustive list of names recently assigned to an activity that basically consists of putting one foot in front of the other" (p. 148). She reported that "the U. S. Bureau of Census estimates that 100 million Americans walk for pleasure and fitness" (p. 145). According to DeBenedette, regular walking is identified by walking experts as being

"an excellent form of exercise for almost any healthy individual" (p. 148). Pender (1987) describes walking as an endurance exercise that is safe for people of all ages.

Paffenbarger, Hyde, Wing, and Hsieh (1986) in examining the physical activity and other lifestyle characteristics of 16,936 Harvard alumni found "mortality rates were significantly lower among the physically active" (p. 605). They also found "a gradient effect of walking led to a 21% lower risk of death as distance was increased from less than 3 miles to 9 or more miles per week" (p. 606).

Initiation of and Adherence to Physical Activity

Several authors have looked at motivational features of exercise and lifestyle behaviors (Blair, 1988; Gauvin, 1990; Gillis & Perry, 1990; Lewthwaite, 1990; Smith, 1989; Stoedefalke, 1985). Gauvin (1990) used a qualitative approach to study components of exercise. Gauvin, along with other researchers in the field of sport and exercise psychology, conducted research studies to try to identify the motivational processes underlying participation in physical activity. She focused on direction, intensity, and persistence. Her subjects were autonomous exercisers, fitness program enrollees, fitness program dropouts, or sedentary individuals. Gauvin learned that autonomous exercisers differed from fitness program enrollees, dropouts, and sedentary individuals in their motives for exercising, enjoyment of exercising, effort, and intensity at which they approached exercise, and in planning

and persisting at their exercise activity. Gauvin defined an autonomous exerciser motivationally as one who met the following criteria:

> Direction: 1 - has strong fitness/health motives; 2 - strong liking for the physical activity per se; 3 - a dislike for unpleasant surrounding factors; 4 - has a self-regulated mode of mobilizing energies towards exercise involvement; 5 - successfully engages in a specific activity.
>
> Intensity: 1 - expends a high, yet reasonable, amount of effort to physical activity; 2 - when involved in exercise demonstrates high, yet realistic, levels of intensity (. . . concentration, facial expression); 3 - streamlined thoughts during exercise.
>
> Persistence: 1 - has relapse prevention skills; 2 - feels guilt and emptiness as a result of a missed workout; 3 - feels energized following a workout; 4 - persists in exercise. (p. 57)

Gauvin credited Dishman (1985, 1988) with providing a wealth of descriptive information related to continued exercise involvement. Gauvin concluded there is a limited amount of explanatory information available to clarify how and why personal, situational, and program factors relate to continued exercise involvement in a positive or negative way. This was partially attributed to "the absence of a consensus in conceptually defining motivation in exercise settings (Perkins & Epstein, 1988), to the use of varied measurement instruments (Dishman, 1982, 1988; Martin & Dubbert, 1984) and to the over-reliance on specific samples of adherers (persisters vs. dropouts) in studying motivation in exercise settings" (Dishman, 1988, p. 52).

Fishbein and Ajzen (1975) introduced a model of attitudes, intentions and behaviors. This was further developed into the "theory of reasoned action" (Fishbein & Ajzen, 1980) and was refined by Ajzen (1985) as the "theory of

planned behavior." Gatch and Kendzierski (1990) examined the "utility of the theory of planned behavior (Ajzen, 1985) for predicting exercise intentions" (p. 100). The researchers concluded the theory of planned behavior could predict exercise intentions better than the theory of reasoned action.

Fleury (1991) developed a theory of wellness motivation called "empowering potential" to explain ". . . individual motivation to initiate and sustain cardiovascular health behavior" (p. 286). Empowering potential as a process was defined as having three stages; appraising readiness, changing, and integrating change. Appraising readiness included re-evaluating the worth of the behavior, identifying barriers to achieving the behavior, and owning the change if the choice to change was made. Changing included enacting strategies to achieve the behavior, creating loopholes which enabled flexibility, identifying how to overcome lapse, self-monitoring to assure achievement of the behavior, and affirming change which acknowledged information supporting the intention to change. Integrating change involved creating rituals, achieving harmony, and transforming change which meant the change became a part of their daily routine. Imaging and social support systems were categories occurring throughout this process to facilitate a persons "empowering potential."

Lewthwaite (1990) presented a conceptual model that organized the motivational variables of personal and social-environmental factors affecting meaning and behavior in contexts of physical activity. She used factors identified by several recent motivational theorists to develop her conceptual model. Personal

factors included were goal orientations, self-perceptions of capabilities, and perceptual-affective experiences. Social-environmental factors included staff, patient, and group interactions inside the program, support of family/friends, socialization history in physical activity/health, and socio-cultural influences. Behavior was described as directed in the forms of choice, effort, persistence, and performance.

Dishman (1988) compiled information on exercise adherence. His book, Exercise Adherence: Its Effect on Public Health, developed from his interest in the relationship of physical activity to health. Although many studies have been done to explain adherence to physical activity, Dishman, along with a panel of 33 experts, made nineteen recommendations for future study. Four of his recommendations for further study could be explored in an ethnographic qualitative study of regular mall walking:

> [a] determine factors that lead to the decision or intention to begin a physical activity program, [b] identify and put in priority the critical interactions, within and among personal and environmental factors, that determine a person's willingness and ability to be active, [c] determine the behavioral significance of perceived barriers to activity . . . and [d] determine the degree to which influences on participation may vary for different activity behaviors (p. 423).

Summary

An extensive body of literature reflects that walking, which includes mall walking, is an exercise that can be done by all age groups. A large body of literature specific to exercise and exercise behavior was found. Studies conducted

to examine exercise behaviors were most often carried out within a structured exercise program environment (Dishman, 1988; Gauvin, 1990) and compared to a group of non-exercisers. It was not surprising to learn that the participants who continued with the programs over a longer time period were those who were supervised and rewarded (Dishman, 1988; Gauvin, 1990). Factors that contribute to participation and persistence in unsupervised physical activity have not been so extensively studied.

Conceptual/Theoretical Framework

There are a number of theories that may explain the behavior of regular mall walking (Bandura, 1986; Dishman, 1988; Fleury, 1991; Prochaska & DiClemente, 1983). Gauvin (1990) used a qualitative approach to describe the cognitive, emotional, and behavioral concomitants of E. Duffy's (1949) motivational factors. Gauvin further explored these factors of direction, intensity, and persistence for exercise in individuals displaying different levels of exercise involvement. She noted there was a problem of defining and operationalizing motivation in each of the motivational models used to describe adherence to regular exercise. Until further data were obtained, identification of an explicit theoretical framework was delayed. Development of a theoretical framework was an aim of this study.

CHAPTER 3

RESEARCH METHODOLOGY

Design

The focus of this study was to identify the factors influencing participation in and adherence to regular mall walking. Ethnography (Spradley, 1979), a type of qualitative discovery approach, was used to obtain data from the mall walking culture. Components of the ethnonursing (Leininger, 1985) approach were integrated. "Ethnography is an excellent means to capture and understand human lifeways within specific environmental and cultural contexts" (Leininger, 1985, p. 40). The ethnonursing approach augmented ethnography through the use of Leininger's "sequenced phases of observation-participation field method" (p. 52). The four phases are: (a) primarily observation, (b) primarily observation with some participation, (c) primarily participation with some observation, and (d) reflective observations of impact. This approach facilitated the development of the rapport process (Spradley, 1979). Ideas from Schatzman and Strauss's (1973) field research strategies for watching, listening, and recording were also employed and allowed the researcher to recognize the role of "observer as a participant" (p. 61).

Population and Sample

The population studied was people who regularly participate in early morning mall walking at a small indoor shopping mall within an urban community located in the northwestern part of the United States. The number and ages of the mall walker population varied at any given time. However, anywhere from 5 to 55 different walkers of varying adult ages were observed between the hours of 6:00 a.m. to 8:00 a.m. at the mall. Fourteen key informants and 14 general informants were identified for participation in this study. Key informants had a history of regular mall walking for a period of 2 to 10 years. Informants who only walked in the mall during inclement weather and who otherwise walked regularly at another location were also included in this study. Each key informant had a history of walking regularly for at least 20 minutes, 3 times or more a week. Key informants and general informants were selected after the researcher spent time observing, participating, and becoming a part of the mall walking culture. Key informants included 6 females and 8 males between the ages of 62 and 77. General informants included 7 males and 7 females, all older than 50. Demographic characteristics of the key informants are provided in Appendix A.

Procedure

Two pre-visits were used to "get general information and a feel for the community" (Leininger, 1985, p. 47) to be studied. Using Leininger's sequenced

phases, three days were spent at different locations in the mall observing and determining which walkers might be selected for key informants. It was noted during this initial observation phase that certain walkers acknowledged each other with a nod, wave, smile, or a verbal greeting, whereas others did not. Spradley (1979) suggested documenting the findings from listening and observing in field notes. It was from these findings that the researcher learned about the mall walking culture. Five potential key informants were identified by the end of this time frame.

The next three days were spent in Leininger's second phase of observation and minimal participation. During this phase the researcher determined the group had accepted her presence. Key informants were selected after observing which walkers appeared to recognize each other and sit in formed groups talking after they walked. Each of these potential key informants was timed to make sure they walked at least 20 minutes, a criterion defined by the researcher for this study. During this second phase of the study, if the researcher was approached by a mall walker to inquire as to the researcher's reasons for being there, the researcher answered, "I am interested in finding out from people who regularly come here why they come and what keeps them coming back." The first two phases spanned a two week time frame.

The next several weeks were spent in Leininger's third phase of primarily participation, to facilitate information gathering from informants, to identify additional key informants, and to continue observation and recording of field notes

until all contacts were made. It was during this phase that rapport became firmly established. This was apparent when, on the fifth day of participating in mall walking, one of the male key informants asked the researcher to "stop and join us for coffee."

Key informants were approached during walking activity, and after hearing the purpose of the study were asked if they would be willing to participate in the study. A date, time, and mutually agreed upon location was established for face-to-face interviews. The introduction to the interview schedule (Appendix B) was read or given to the informant to read at the time of the appointment. Upon agreement to be a part of the study, they were asked to read and sign the informed consent (Appendix C). The time frame for each interview was between 40 minutes to 1 hour and 15 minutes. If additional information was needed, informal discussions took place to clarify meaning during walking time or during "coffee and chat" time. These encounters were recorded in field notes and later condensed or supplemented with observational notes (Schatzman & Strauss, 1973; Spradley, 1979). Data collection took place over a five month period during which 40 one to two and a half hour site visits were made. Permission was obtained from 12 of the key informants to tape record their interviews. All key informants agreed to note taking during the interview. General informants were also told the purpose of the study, and information was gleaned from these informants about the mall walking culture. The information was recorded in field notes after participating with them

in mall walking activity. Later observational or expanded notes were used to supplement the field notes.

Instrumentation

A semi-structured interview schedule (Appendix D) was used to collect data from the key informants. Interview questions were developed after initial observation of the mall walking culture and using Spradley's (1979) suggestions for asking descriptive, structural, and contrast questions and Gauvin's (1990) motivation questions as guidelines. The interview schedule was checked by colleagues for clarity and understanding. Questions were modified as suggested by these colleagues.

Spradley (1979), Catanzaro (1988), and Leininger (1985) noted that in a naturalistic-inductive study such as ethnography, a hypothesis is generated from the data at a set time and in a set place therefore, external validity cannot be demonstrated. Leininger suggested "concurrent validity should refer . . . to the ability to show congruency, meanings, and syntactical relationships of findings with respect to subjective, inferential, intuitive, symbolic, objective (empirical), and other quality factors under consideration. Thus, qualitative validity should rest upon knowing and understanding the phenomena as fully as possible" (p. 69). To assure reliability, verbatim transcriptions of tape recorded interviews were made. A colleague was asked to code some of the data as a further check for reliability.

Procedures for Recording Data

Field notes were recorded immediately after observation. Field notes were also made in conjunction with the tape recording at the time of the interview. Field notes consisted of data obtained through the listening technique of eavesdropping while participating in walking, listening to situational conversations that occurred during post-walking activities of "coffee" and "chatting," and listening during the formal interview process (Schatzman & Strauss, 1973). Field notes were used to describe non-verbal cues, observations, mall walking activity occurrences, and discussions with general informants after these encounters. These field notes were later supplemented with additional observational notes. Observational notes were added to supplement the field notes with ideas, feelings, or observations not already documented in the field notes. They provided an expanded account of interactions.

Methods of Analysis

Data collected from all but two of the interviews were tape recorded and transcribed verbatim by a professional transcriptionist or the researcher. Data collected from two key informants who refused tape recording were taken mostly in shorthand then transcribed verbatim to facilitate the coding process. These data were used to support the data transcribed verbatim from the formal interviews with key informants. All data were analyzed and coded for recurrent themes or terms

which would allow for identification of patterns or cultural meanings (Catanzaro, 1988; Marshall & Rossman, 1989; Spradley, 1979). Inferences about the meaning of the data were guided through the use of Spradley's ethnographic techniques of domain analysis, taxonomic analysis, componential analysis, and theme analysis to "uncover the system of cultural meanings that people use" (p. 94). Ongoing content analysis occurred using Spradley's (1979) analysis techniques. A generic coding system was chosen to sort symbols, "objects or events that refer to something" (Spradley, 1979, p. 95), into concept-indicator model categories until an intricately patterned system of symbols was obtained that demonstrated meaning for the mall walking culture. Cultural symbols were used to identify domains using domain analysis. Taxonomic analysis was used to discover relationships among domains. Componential analysis was done to identify attributes associated with the cultural symbols. A theme analysis was then done to identify principles or laws specific to this culture and provide a better understanding of the mall walking culture. All data had identifying information removed.

Prior to beginning the study, a courtesy letter (Appendix E) was sent to the manager of the mall. This was done to make certain mall staff knew of the presence of the researcher, what the researcher was doing, and that the rights of the mall walkers were respected.

Rights of Human Subjects and Consent Process

The study commenced after approval was obtained from the Montana State University College of Nursing Human Subjects Review Committee and the Director of the Billings, Montana campus (Appendix F).

There were no physical risks identified from participating in this study. Slight psychological discomfort from answering questions or being recorded during the interview could have been experienced by the key informants. Informants were told before and during the time of the interview that they could omit any questions they chose not to answer or terminate the interview at any time. Each informant was given a code letter which was used when documenting any information related to this study. All identifying information was removed. No name list with corresponding codes was kept.

Each key informant was approached by the researcher and asked if he/she would be willing to participate in a study to discover what factors influenced their participation in and adherence to regular mall walking activity. If they agreed to participate they were asked to read and sign an informed consent (Appendix C).

Each informant was told that the information obtained, either during a formal interview or when recorded as field notes, would be kept anonymous. It was explained that each person for whom information was recorded would be given a number or a letter and all personal identifying information on all data recorded would be removed. Numbers were used to identify general informants, and letters

were used to identify key informants. This was done to assure anonymity of the informant. Until the study was completed, all tapes and written materials were kept in a file locked in the home of the researcher. The tapes were destroyed after they were transcribed and verified.

There were no direct benefits to the informant except for coffee or a small gift which was given to each key informant in appreciation for the time spent on the interview process. There may have been an indirect benefit from being able to talk about the feelings, behaviors, and experiences associated with regular mall walking activity. There may also have been some indirect benefit in the realization that factors that contribute to regular mall walking may help someone else successfully engage in mall walking activity. Informants were reminded of the importance of their input to this study. The risks were minimal in relationship to the contribution of information to the body of knowledge of factors that contribute to adherence to mall walking as regular physical activity.

CHAPTER 4

FINDINGS

The focus of this study was to identify the factors influencing participation in and adherence to regular mall walking. Specific aims of this research study were to: (a) describe the walking habits of regular mall walkers, (b) describe the self-perceived purposes of mall walking, (c) identify if mall walking was a self-determined or a prescribed activity, (d) identify the factors that promote adherence to participation in regular mall walking, (e) determine if any self-reported factors could be used to help inactive people choose mall walking as a regular activity, and (f) determine which theoretical framework, if any, would guide the practice of the resultant behavioral findings and this study.

A qualitative discovery approach, ethnography, was augmented by the sequenced phases of observation-participation field method, an ethnonursing framework, which enabled the researcher to understand why mall walkers participate in this physical activity regularly. Domain analysis allowed the researcher to identify cover terms associated with mall walking behaviors. Taxonomic analysis revealed processes and stages mall walkers went through to start and persist in this activity. Using theme analysis, the researcher further identified why walkers maintained or persisted in walking activity.

Demographic Characteristics of the Sample

Fourteen key informants and 14 general informants were selected for participation in this study. There were 6 female and 8 male key informants between the ages of 62 and 77. General informants, who provided supplemental data, included 7 males and 7 females, all older than 50. Eight key informants were retired. Of the 5 who were semi-retired, 2 were females who proposed that "a housewife never retires," and the other 3 did "small odd jobs" for extra money. One female said "No" when asked if she was retired. Further questioning revealed she did not "qualify for retirement because I've mostly been a housewife all my life." Through further questioning it was learned that her husband was receiving money from his job after his retirement, and she did not yet qualify for social security. Demographic characteristics of the key informants are provided in Appendix A.

Location of the Study

This study took place at a small indoor shopping mall within an urban community located in northwestern United States. The design of the mall included a center court from which four major spoke-like corridors or passageways extended. At one end of the north-south corridor was a play arena for children and several small fast-food eating centers. At the opposite end of this corridor was a mall directory, a gazebo-type seating area, and an entrance area.

The two major spokes running east-west were the longest spokes. At one end was a major grocery/drug store, and at the other end was a national department store. The grocery store opened at 7:00 a.m. The mall management had placed benches on which customers could sit along the entire east-west corridor. They had also placed coat racks near the benches at the west end of the corridor near the grocery store for the mall walkers to use.

The mall had a restaurant at the west end near the grocery store and a delicatessen and eating area at the east end. The delicatessen was advertised to open at 7:30 a.m., but it gradually, over a three week time period, began opening earlier during the summer to accommodate the mall walkers. By September, it was opening at 7:00 a.m.

The total number of stores in the mall was 35, including the eating areas. The advertised opening time of the mall was 10:00 a.m. Mall walkers learned from each other, the mall management, the staff at the grocery store, and the staff at the delicatessen that the mall doors opened at 6:00 a.m. There were six main entry/exit doors which allowed entrance to the mall corridors. These were the doors used by the walkers who walked the mall regularly. The mall was spacious and well lit. Three to four maintenance staff could be seen or easily located every morning. The temperature was always comfortable. The walking surface was smooth with no inclines. The environment was conducive to walking.

Several years ago one of the local hospitals mapped out the area to be walked. A sign and picture on the wall by the grocery store explaining the areas to

walk and describing the distance as equal to 0.5 mile was prominent. Tenth mile markers were placed regularly throughout the mall, but were noticed only when pointed out by the regular walkers.

The mall is centrally located within the urban community. Three key informants walked to the mall "when it's not too cold or icy" outside. Two of these key informants were a husband and wife who lived "11 to 12 blocks" from the mall, but had walked up to 30 blocks to get to the mall during the summer. They would then walk one or two rounds in the mall. The third key informant was a 77 year old female who had been walking for six years. She liked to walk to the mall during the summer so she could "get out and enjoy the mornings, hear the birds, smell the flowers." Two males, one living a block from the mall and the other living 2 1/2 blocks from the mall, walked to the mall year round.

Nine key informants drove 2 1/2 blocks to 2 miles to the mall to walk. A female key informant drove the 2 1/2 blocks to the mall because depth perception differentiation after cataract surgery prohibited walking outdoors. A male key informant drove 8 blocks to the mall to walk because he had emphysema and could not breathe well when exposed to exhaust fumes.

Selection of Key Informants

Data collection from informants took place over a five month period between the hours of 6:00 a.m. and 9:30 a.m. and during agreed-upon, scheduled interview times. Although walkers could be seen walking during all hours of the

day, the early morning hours were chosen for the study because it was noted that this time frame had the greater total number of walkers participating in walking activity. During this initial observation phase it was noted that certain walkers acknowledged each other with a nod and a smile, a wave, or a verbal greeting, whereas others did not. It was discovered that these walkers referred to each other as "a regular." The term "regular" was used to identify a mall walker who was observed walking several times a week and who had continued this activity long enough to be recognized by the other "regulars" with a wave, smile, nod, or a verbal greeting.

Decision to Start Walking

Discovery of reasons for deciding to walk occurred when a rationale type of domain analysis identifying semantic relationships was used. Statements made by the informants were analyzed for included terms. For example, "I'm walking because of problems with my circulation [Raynaud's disease]" was included under a grouping or term "problems with circulation." Using this same semantic relationship and taxonomic analysis, three factors emerged that guided the informants' decision to walk: physician suggestion [medical/surgical problems], friend or mate suggestion, and self-initiated.

Eight key informants had physicians who suggested they walk because of hip, knee, colon, heart, or arterial surgery; problems with circulation to the heart [heart

attack], legs, or limbs [Raynaud's]; and miscellaneous medical problems such as arthritis, emphysema or asthma, and hip or back pain.

A friend or mate suggested walking to eight of the key informants. Informants made statements such as, "If it was good for [name of mate] I knew it would be good for me." "We just decided one day to do it together because our doctors had told both of us we should walk. So, we started the next day." "Four of us get together every day and walk. I started because my doctor told me to. The other three started because I talked them into it."

Two key informants decided to walk on their own. That decision was identified through statements such as, "I knew it was one of the best things you could do." And, "It gives me time to myself away from the house." Table 1 outlines factors that led to the decision to mall walk.

Utilizing domain and taxonomic analysis allowed the researcher to differentiate the process of <u>becoming</u> a regular mall walker, which included making entry, participating, and re-entry, from the stages of <u>being</u> a regular mall walker, which consisted of identifying a reason to start, deciding to start, maintaining and/or persisting, and coming back. These discoveries and other interview data allowed the researcher to identify two recurrent themes which exposed the roles environment and social support played in persisting in regular mall walking. The discussion provided in the following text will describe the entire discovery and examination process in greater detail.

Table 1. Factors that Led to the Decision to Mall Walk.

Physician (MD) suggestion (8):

1. Because of surgery
   a. hip or knee
   b. colon
   c. iliac-femoral by-pass graft
   d. femoral artery by-pass graft

2. Because of heart problems
   a. angioplasty
   b. coronary artery by-pass surgery (CAB)
   c. heart attack in the past

3. Because of circulation problems
   a. Raynaud's syndrome
   b. legs

4. Other medical reasons
   a. arthritis
   b. asthma or emphysema
   c. hip and back pain

Friend or mate suggested (8):

1. "If it was good for [mate], I knew it would be good for me."
2. "We just decided one day to do it together because our doctors had told both of us we should walk. So, we started the next day."
3. "I originally started to walk with a friend because we decided it would be good for us. She's no longer here, but I still keep walking. If I don't, I feel guilty."
4. "A friend and I started walking together, now I walk by myself."
5. "I saw how much [mate] enjoyed it, so started walking with her to keep her company."
6. "I came to walk at this mall because of my wife and the friends she made here. She likes walking at this mall better than the other one."
7. "Four of us get together every day and walk. I started because my doctor told me to. The other three started because I talked them into it."

Self initiated (2):

1. "I knew it was one of the best things you could do."
2. "It gives me time to myself away from the house."

Process of Becoming a Regular Mall Walker

As previously described, the researcher entered the culture of mall walkers and became a mall walker. Field notes written throughout the researcher's participation in mall walking enabled the researcher to identify the process of becoming a regular mall walker (Table 2). The walking habits of regular mall walkers, of which the researcher was one, are described as making entry, participating, and re-entry as follows.

Making Entry

Accessing the Mall

During the first three days of observation, several preparatory phases of mall walking were discovered. First, and most important, was learning which doors were open by 6:00 a.m. so one could enter the building through the door of choice. Most entrance doors were accessible for entry. It was learned that an exit could only be made through the main exit door at the front of the mall near the grocery store or through the entrance doors of the mall until the official opening hour for the mall stores.

Cultural Norms

The second phase of making entry consisted of identifying cultural norms. Four specific cultural norms were identified: (a) walking speed, (b) walking time, (c) walking direction, and (d) attire worn. Anywhere from 5 to 55 walkers of

Table 2. The Process of Becoming a Regular Mall Walker.

Making Entry (Phase 1)	Participating (Phase 2)	Re-Entry (Phase 3)
1. Learn which doors are open to enter mall (6:00 a.m.)	1. Enter the mall at your self-determined time.	1. Enter the mall at your usual time.
2. Observe walkers for cultural norms a. Direction walking b. Speed walking c. Attire	2. Remove coat (if needed) a. Hang it up on coat rack provided b. Toss on a bench of your choice	2. Remove coat (if needed) a. Hang it up b. Toss it on a bench
3. Establish acceptance a. Participate b. Nod or say "Hello," "Hi" c. Watch for acknowledgement by other walkers d. Accept if other walkers ask you to join them	3. Walk at your chosen speed a. Can start slow then speed up b. Slow down to visit if you choose	3. Start walking slower than usual at first a. So as not to tire quickly b. To warm up for speed increase
	4. Walk for set time or number of rounds (miles). Greet the other walkers with a nod, smile, wave, or verbally.	4. Establish walking speed
	5. Conclude walk with post-walking activities a. Coffee at deli or store b. Coffee and "chat" at deli or bench in front of the store c. Get coat d. Exit through usual doors	5. Greet the regulars a. Explain absence b. Ask how they are doing c. Spend more time than usual talking with the other walkers while walking
		6. Conclude walk as usual

varying adult ages were observed over a five month period between the hours of 6:10 a.m. to 8:00 a.m. Numbers, it was discovered, changed based on the weather and individual factors such as appointments, vacations, or illness. Walkers walked alone or in groups of two, three, or four. Three groups of females appeared in dresses with walking shoes, walked for 1/2 hour, then left. Two to three young females walked with the mother of one of the females. The mother appeared to be in her early fifties. A pregnant female walked with her husband and her sister-in-law. She said she was walking because her doctor suggested it, and her husband and his sister were there to keep her company. A male walker who appeared to be in his early sixties came in, walked a unique path, then left in about 15 minutes. He always wore a cap and a heavy coat which he clenched tightly about him. Some of the walkers tapped the metal columns as they turned the corners. Other walkers cut corners. Each individual or group seemed to have a set way in which they walked. A 70 year old key informant who had mall walked for seven years said, "Most of us are really grateful they allow us to walk here."

Speeds Walked

Speeds walked varied with each individual. Most walkers could be observed walking somewhat slower their first and last round "to get started" or "to slow down." Four male key informants, two male general informants, and two female key informants related that they "take the first round or two a bit slower to warm up." Two of these males said they "cool down during coffee." Two females

had observed the researcher start out walking and said, "You are walking slower today than usual." It was explained this was done to "warm up." One of the females said, "We always walk at the same speed, slow, so there's no need for us to warm up." They then laughed. A younger couple who usually could be seen walking in the afternoon after work, were observed walking two mornings during the summer. They were the fastest couple observed walking. They wore royal blue nylon exercise pants, dark blue tee-shirts, and sports walking shoes. They had a synchronized walking routine. The regular swish of their walking pants was definitely audible to most walkers throughout the mall in the usual quiet of the early morning walking hours.

Time and "Rounds"

Time and "rounds" walked varied. General informants spent 30 minutes to 1 hour walking. Time spent walking at the mall by each key informant varied from 1/2 to 1 1/2 hours. The number of laps or rounds varied per individual from 1 to 10. The term "lap" or "round" was used by the walkers to describe the distance around the inside perimeter of the mall. The term "round" was used by regulars. The term "lap" was used by those who had not been walking long. One round equaled 0.5 mile and took from 8 to 15 minutes to walk. One male who had knee surgery took approximately 30 minutes to walk one round.

Walking Attire

It was noted during the initial observation time that attire for walking also varied with each individual. Two male walkers, one dressed in "sweats" and sports walking shoes, and the other dressed in slacks and soft leather shoes wore headsets with radios attached. One of these males stated, "I listen to music and the news so I don't get bored while I walk." A younger female dressed for work, but wearing sports walking shoes, also wore headphones. The group of two or three younger females who walked with the one female's mother wore "sweats" or loose fitting exercise clothing. Some of the walkers continued to wear their coats the first couple of rounds, then would remove them. Street clothes or working clothes were worn by 13 of the 14 key informants and by 13 of the 14 general informants. Very few regulars wore exercise clothing of any type. Those who did were often the ones who also attended an exercise class that was offered from 7:30 a.m. to 8:15 a.m., Monday and Wednesday, from September through May. Only 9 of the 28 informants wore sports shoes specific for walking. All other informants wore "comfortable" shoes. One female general informant came and walked two rounds, then went home. She wore sandals to "walk the mall" because "they're comfortable."

Walking Direction

The direction in which walkers walked was also identified and followed by the researcher when participating in walking. All but two of the informants walked

counter-clockwise when they entered the mall. Both of the informants who chose an alternate unique path used time as their gauge for completion of their walking activity rather than number of "rounds." Another male came in many times and never walked the same path twice. He was not acknowledged by any of the regulars. He left the mall in about 15 minutes.

Gaining Acceptance

The third phase of making entry to the mall walking culture consisted of gaining acceptance. This could only be done through participating in regular mall walking. The process of gaining acceptance is described in Chapter 3. Acceptance was accomplished when the researcher was acknowledged by the regulars through a verbal greeting, a nod or a wave, or a smile. If other walkers started talking and walking with another walker, acceptance of the walker was implied. When one was asked to sit and have coffee with a group of walkers or an individual walker, acceptance was also considered to be implied.

Participating

The next several weeks (4 1/2 months) the researcher participated (phase 3 of the sequenced phases of the observation-participation field method) in regular mall walking. By the fifth day of participating in mall walking, it was determined that rapport was established when one of the males, identified as a potential key informant, asked the researcher to "stop and join us for coffee." This male

informant had spent time walking with the researcher and asking questions, demographic in nature.

While participating in walking it was observed that regulars have an established routine. The routine observed to be prevalent in all of the mall walkers included: (a) entering the mall at a usual time, (b) removing a coat or wrap and depositing it on the nearest bench to the entry doors or hanging it on the coat rack provided at the front of the store [this might be done after the first round], (c) walking at a "comfortable" speed, which may include speeding up or slowing down to visit with other walkers if one chose to do so, (d) walking for a set amount of time or a set number of "rounds" during which other regulars were acknowledged with a smile, nod, wave, or a verbal greeting, and (e) concluding walking with post-walking activities.

Entering the Mall

All of the informants explained how they determined the time they came to walk. A 62 year old male key informant said, "I look forward to getting up and getting my shower and meeting some guys at a certain time. It's sort of like I'm going to work. I've got a purpose." Other informants expressed it as, "It's how I start my day." A female informant said, "I get up, get dressed, brush my teeth, and come to walk." A 70 year old male key informant said, "I get up, shower, sit and read the paper with a cup of coffee, then I come walk." A female informant said the time she came was dependent upon when she could fit it in. "We [she and her

husband] come in the morning during the winter. In the summer my husband golfs, so I usually come by myself between other things, but mostly in the morning."

Removing Wrap

This step was only done during cold or inclement weather. The location in which the walker entered usually determined where the wrap (coat, sweater) was hung, draped, or left lying. Each walker chose a location and the location was constant.

Walking at Chosen Speed

The speeds at which walkers walked have been discussed previously. Speeds were determined by each individual walker. Two rounds equaled 1 mile. Times taken to complete 1 mile varied from 15 to 30 minutes with the exception of a male key informant who took longer due to knee surgery. The calculated miles per hour, therefore, varied from 2 to 4 miles per hour. Most informants used the word "comfortable" when they were asked the speed at which they walked.

Walking a Set Time or Number of Rounds

Time spent walking at the mall by each key informant varied from 1/2 to 1 1/2 hours each day. Key informants walked 1 to 10 rounds or 1 to 5 miles a day, 5 to 6 days a week.

Two key informants, a couple, said they walked for "about 40 minutes" rather than a specific number of rounds. When observing walkers it was noted that

the people who came dressed in suits, slacks, skirts, or dresses usually walked 1/2 hour and then left. Two male informants knew their walking time was 25-33 minutes, but also kept track of the number of rounds they made, which was three. All of the other walkers, when asked, knew exact number of rounds. For four of the informants the number of rounds walked in the mall varied only because more time was spent outside during the summer walking to and around the mall. They would then come into the mall and walk one or two rounds before having coffee. Four female key informants walked 4 rounds, or 2 miles, each morning. Another key informant walked 2 rounds, and the sixth female key informant walked 6 rounds. Three male key informants walked 3 rounds, two walked 4 rounds, one walked 1 round, and the eighth walked 8-10 rounds. One round at a moderate to fast pace took about 10 minutes to walk. It was during the time spent walking with other regulars that the researcher learned from a 68 year old male key informant, who had been walking for 8 years, how to count rounds. "I count rounds by transferring quarters from one pocket to the other," he said. A 67 year old female key informant who also had been walking for 8 years, said she kept track of the number of rounds she walked by looking at and numbering her fingers. The researcher found that using and transferring pennies from one pocket to another was an easy way to remember the number of completed rounds. Keeping a tissue in each pocket prevented jingling when walking.

Post-Walking Activities

Several kinds of post-walking activities were identified through domain analysis. One activity consisted of having coffee at a table in the delicatessen at one end of the mall or having "free coffee" from the grocery store at the other end of the mall. If coffee was obtained from the store, it was drunk while sitting on one of the benches near the store. Another post-walking activity was to "chat," usually while drinking coffee in the delicatessen or in front of the grocery store. Those who sat at the bench in front of the grocery store having coffee and chatting were often joined in conversation by regulars just starting their morning walk or just ending it. One male stopped by two to three times a week after exercising at the local YMCA "just to visit" one to four other males who frequented this area. Listening to conversations of the gatherers at the bench enabled the researcher to learn how long some of the other walkers had been there, if they were considered regulars, or if they were new. The males who congregated around the bench seemed to know each other well. One of these males was a key informant who had a history of mall walking for 7 years. This group of males talked about their vehicles, their sump pumps not working, and about how the land had changed around the mall since the mall was first built. Other times they discussed their vacations or if they were going on vacations. At times they would joke with each other and laugh. If two of the males had completed their rounds, which was usual, they would comment to other regulars they knew as they passed the bench at which these men were sitting. Some of the female walkers would stop to talk for a few

minutes then continue walking. A female informant who usually walked alone would occasionally sit alone having her coffee and a doughnut at this end of the mall.

Like the group which formed at the west side of the mall near the grocery store, four groups of walkers congregated in the delicatessen after walking to have coffee and "chat." One group consisted of two to three females at one table having "coffee and toast." Two of these females used to work together and used to walk together. However, one of the females "went back to work to help put my grandsons through college" so she walks "when I don't have to be to work by 9:00 a.m." This female informant was 70 years old.

Two to four male walkers who usually walked together as a group sat at a table by the window and talked about each other, their day-to-day experiences, and about the past. This group of males jokingly chided each other, and often were heard laughing. They also talked about their physical health and their wives [with the exception of one male who is a widower]. Their conversations mostly seemed to be all in fun. When asked what kept them coming to the mall to walk every day except Sunday, one of the males said with a smile, "They talk about you if you don't show up."

A third group of three to four male walkers sat at two tables which were close together. They were usually joined by one or two female walkers and by two males who didn't walk, but who came in to have coffee and doughnuts with this

group at the same time every day. They all knew each other by name and talked to each other between these two tables.

A fourth group of three males and three females congregated at the back of the delicatessen near the back door to have coffee and visit. This group included two married couples who sometimes walked together, a widow, and a lone married walker. The lone male and the widowed female met the wives of this group first and started having "coffee and good conversation" together before the husbands started walking. The males who were married always completed their walking activity before their wives did. They all concluded their walk with coffee and conversation about the past, their mobile homes or cabins, their trips, family, social events, and daily events. This group also laughed and joked with each other. Each one of these groups shared personal events with the researcher. These events included such things as the birth of a baby, a new afghan which was crocheted for an expectant daughter, pictures of family, a medical problem, or a problem with a son.

The researcher started sitting with the two to three females who usually sat at the front of the delicatessen. As relationships were established with each group of walkers the researcher began sitting with the different groups of walkers at their table or tables. The researcher requested permission to leave or to sit at each table. By the third month of data collection the researcher "table-hopped" and was the only one of the walkers to do so.

Other walkers ended their walking activity by obtaining their coats or wraps and going home to "have breakfast with" or "get breakfast for" the family or mate.

Re-entry

Because data collection was interrupted unexpectedly for a 1 month time period, the researcher was able to identify a process called re-entry. This happened when a "regular" interrupted walking activity for any length of time, particularly for vacation or illness. The researcher noticed that when a "regular" was gone and then returned a "checking up on" type of process occurred with the missing "regular." The means-end semantic relationship led to the discovery of the re-entry grouping of behaviors. When a "regular" came back from a break in routine walking activity, a couple days were spent re-entering. During this phase, a "regular" entered the mall at the usual time, hung up a coat if needed, and began walking. As other "regulars" were passed, the "regular" re-entering was greeted with questions or statements such as "Where were you?," "Thought you were lost," "Missed you," or "Are you o.k.?" More time than usual was spent being asked to walk and talk with other "regulars" in apparent attempts to determine why the re-entering "regular" was missing. A 67 year old female key informant said, "We're like a family here. We look out for each other. If one of us is missing, we become concerned, not knowing whether they are sick or have died. You know we have had some of us [regulars] die."

Stages of Being a Regular

Using taxonomic analysis when examining the data also allowed the researcher to identify the stages of being a regular mall walker (Figure 1). Factors that promote adherence to participation in regular mall walking will be discussed under the headings of maintaining/persisting and coming back.

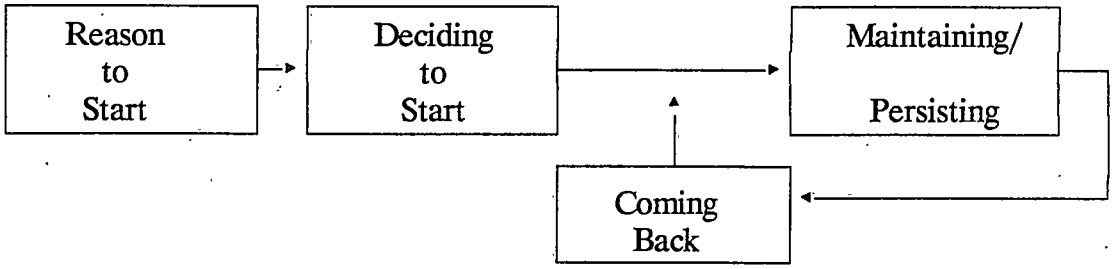

Figure 1. Stages of Being a Regular Mall Walker.

Identifying a Reason to Start

The reasons informants gave for starting to walk varied. Three main reasons emerged: (a) "the doctor suggested I start" [8 key informants], (b) "a friend [or mate] suggested we start" [8 key informants], or (c) "I started because I knew it was good for me" [2 key informants]. Factors that led to the decision to mall walk are listed in Table 1. It was interesting to note that even though physicians suggested walking to 50% of the key informants, only two males and one female key informant began walking as soon as they were home from the hospital. Four

key informants took from 3 months to 2 years after their doctors suggested they walk before they began walking.

Deciding to Start

Two female key informants were discussing the fact that their doctors had suggested they start walking, one "after my total hip surgery" and the other "because of the circulation in my legs." It was several months after the suggestions were made by their physicians that they were at a party talking about it. "On the way home from this party we just decided to start the next day and we've been coming here every day since!" stated one of these informants. That was 2 1/2 years ago. A 67 year old female key informant had initiated walking in the mall on her own because "The doctor told my husband that it would be good for him to walk after his heart attack. After he died, I took up walking because I didn't get enough [exercise] at home, and I knew it was one of the best things you could do." This female had been walking for 8 years. Another female key informant, a 66 year old, whose husband had begun walking after a heart attack said, "I started walking about a year after he did, because I decided if it was good for him, it was good for me, so one day I just started." She had a 9 year walking history. A 70 year old male key informant who had walked for 7 years, when asked why he decided to walk, answered "for my health, isn't that what it's all about?" A 72 year old male key informant with a 2 year walking history explained, "My wife was coming so when her friend couldn't walk with her I did, and here I am." A 77 year old female key

informant who had walked for 6 years said that after her husband died she "just decided I was going to get out and enjoy the mornings with the flowers and the birds. But when it got cold, I came here [mall]. Now I end my summer walks here and have coffee and eat breakfast." A 62 year old male informant who had walked at the mall for 4 years started coming to the mall to walk right after femoral artery by-pass graft surgery because his doctor suggested he walk. However, he also had emphysema so could not walk outside in the cold or near exhaust fumes. Two male key informants decided to come to the mall to walk because they had friends coming here; "So I decided to come too," each one stated. One of these males, a 68 year old, had had a stroke 2 years before and didn't want to come and "slow down" his friends. They finally persuaded him to come "and it was the best thing I did," he stated. A 68 year old male key informant said, "I had breathing problems, a high cholesterol (276), and was just sitting around home doing nothing. It took about a year after the doctor suggested I walk that I finally got tired of sitting around home doing nothing and came here [mall] to walk." That was 7 years ago. Each walker had his/her own unique reason for finally starting to walk. An idea was planted which ultimately came to fruition.

Walkers learned about the mall being open for walking from "a friend," "the sign" [posted at the main entry to the mall], or their "doctor." The researcher remembered seeing an article in the local newspaper about the local hospitals contributing the signs and determining distance that could be walked at each of the local malls.

Maintaining/Persisting

"What keeps the walkers coming here, year after year" was an immediate question the researcher had during an initial visit to the mall. Numerous responses were given by the key informants and general informants which were sorted into domain cover terms and examined and categorized using taxonomic analysis, until 5 themes emerged: (a) "It's scheduled; part of my routine," (b) "I like seeing and visiting with the other people," (c) "I need space and time to myself," (d) the physical and psychological effects, and e) "I don't feel right if I don't come."

Scheduled/Part of Routine

Three of the general informants and all of the key informants identified making walking a part of their routine as a reason for continuing to walk. A 65 year old key informant who had walked for 3 years said, "Walking is the way I start my day." A 62 year old male said, "I look forward to getting up and getting my shower and meeting some guys at a certain time. It's sort of like I'm going to work. And, I've got a purpose." This informant had a 4 year walking history. "Well it gets to be a daily routine and now I enjoy it," was how a 68 year old male who had been walking for 7 years described his walking. A 66 year old female key informant who had walked for 2 1/2 years said, "I think that once you start walking you just set your priorities to that and you really just keep on doing it. It's very important to me." Another female, a 67 year old key informant who had mall walked for 8 years said, ". . . I get up and just go to the mall every morning. It's

scheduled. It's a definite thing. It's part of my routine." Another 67 year old female with a 2 1/2 year walking history said, "It's just something I know I should do every day so I do it . . . It's a habit now." A 77 year old female who had been walking for 6 years stated that walking " is part of my life." The only reasons given for missing scheduled walks were "illness," "vacation," "going out of town," "an appointment [doctor, hair, dentist]," or "something out of the ordinary" occurring.

Seeing/Visiting Other People

Informants referred to being with other people as a reason for continuing to walk over the years. Male key informants referred to "companionship, friends," and "visiting with other people." All of the female key informants enjoyed "seeing the other people." Five of the 6 female key informants liked "visiting with the other people, friends," or "meeting new people." Most informants went on to say that the "people are friendly here" and that was one of the main reasons they continued to come. Having someone to walk with or knowing that when they came to the mall they would meet or see someone they knew kept them walking in the mall also. A 77 year old female said she liked coming to the mall to "see the people." Two male key informants said they came to "have coffee with the boys." A 66 year old female who had been walking for 2 1/2 years said she came to the mall to walk because of "the buddy system-if you're not here, you're missed." A 67 year old female who had been walking for 8 years said, "It brightens your day with the people you meet and just your relationship with other people."

Space and Time to Self

A 65 year old female key informant who had been walking for 3 years said she walked because, "I need space and time to myself." Although no general informants made this statement, two male and two female informants related that they "walk to get out of the house," or "need time away from home," or "need time to myself."

Physical and Psychological Effects

Several physical and psychological effects of walking were identified during domain analysis. Physical effects identified by both general and key informants, male and female alike, included: (a) "It limbers me up." or "It keeps my joints active." (b) "It keeps the blood circulating." (c) "It keep my muscles toned." (d) "It exercises my heart and lungs." (e) "It helps my breathing." (f) "It has improved my walking" [68 year old male who had a stroke]. (g) "It has improved my cholesterol" [two male key informants]. (h) "I've been able to maintain [or lose] my weight." (i) "It helps my hip and back movement."

Only two key informants, a 67 year old female and a 62 year old male, said their doctors asked them if they were still walking when they went in for their regular check-ups. A 68 year old male who had been walking for 7 years kept an exercise log at home which included the change in his cholesterol and his weight decrease as a result of regular walking and an additional hour of daily exercise at home. He had kept his doctor informed by showing the doctor his exercise log

when he went to see him. This same male credited walking and exercise as being "the reason I am still here [alive] today."

Some of the psychological effects identified were: (a) "It brightens your day." (b) "You feel good," or "It perks me up." (c) "It helps get your mind off your problems," or "I get a break from worrying." (d) "It relieves feelings of anxiety." (e) "I feel more ambitious." (f) "It helps me sleep better." (g) "I enjoy it."

"Don't Feel Right"

"I don't feel right if I don't come." This statement was made by a 70 year old key informant who had been walking for 7 years. Another male key informant, a 68 year old who had been walking for 2 years said, "I'd miss it." A 77 year old female key informant who had been walking for 6 years said, " I feel guilty if I don't walk." A general informant also expressed not feeling right if she didn't walk.

Coming Back

After a "regular" took a break from mall walking, usually for vacation or illness, he/she went through the process stage of coming back. This involved spending more time with other "regulars" explaining their absences and explaining to others as they walked by about why they had been missing. In addition, key informants made statements which indicated there was more than greeting and explaining occurring when they returned. A 62 year old male who had been gone for over a month and who had not walked much or exercised while he was gone

explained, "When I came back, it took me about a week to be able to make the walks without killing myself." He was referring to his back and hip pain and discomfort. A 70 year old male key informant returned to mall walking after knee surgery. He reported walking regularly for 4 years prior to surgery. After surgery, he walked only one half mile. Though he was discouraged, he continued. Three females who had been gone related, "When I'm gone, I miss the people." or "When you're gone they miss you, so it's nice to come back."

Reasons to Walk in the Mall

Through domain analysis the researcher identified reasons why walking in the mall was chosen over walking outside by one half of the informants. Three main categories emerged through taxonomic analysis: affiliation, a safe and/or secure environment, and a controlled environment.

Affiliation

A 66 year old female key informant stated, "We [she and the friend she walks with] didn't know all these people until we started walking." A 62 year old male key informant started walking alone when he first started mall walking. "But, I didn't walk that long [alone], because a guy was walking, and he had a heart problem, so he and I walked together until he passed away. So, that was about the time I started walking with these other guys." This 62 year old male talked three of his other friends into walking with him 6 days a week. Two friends had walked

with him 3 1/2 years and the third had been walking with him for 2 years when this study commenced. A 73 year old male stated, "It brings me in contact with friends I've met on the route" [walking rounds]. "I like to watch the people and try to guess what profession they used to be in," commented a 77 year old female key informant. Six female and two male key informants stated, "They miss you when you're not here." This seemed to be a secure feeling that developed when one knew and recognized the other walkers. The mall was a friendly, warm, comfortable environment in which to engage in walking. Walkers became a part of a caring community of people.

Safe and Secure Environment

A 68 year old male key informant said, "The biggest reason I walk inside is if something would happen, people would see you." Four key informants, three females and one male, said, "I think it's easier to walk in this mall than it is out there" [referring to the other local mall]. A female and a male clarified this by adding, "I didn't like the floor at the other mall." [In comparing the two mall floors, the mall at which the study was done had a smoother surface on which to walk]. A 67 year old female explained why she walked in the mall, "I like to walk, but not at the house. My depth perception is wrong, and I always have to look at the ground when I walk. These glasses put things larger and farther away than they are. But here I can walk. You don't have to figure out how far it is. I don't have to look at the ground to see where I'm walking. Here I don't have to watch for

cars. I just don't go outside and walk." "There are no dogs barking at you in here," related a male general informant." A female general informant and a 65 year old female key informant said, "It's not safe to walk outside." A female general informant concurred, saying, "It's [the mall] a well lit area. It's too dark outside. You never know who the crazies are that might be out there in the dark."

Two male key informants said, "It's easy to walk in here. There's no bumps all over the place." Further questioning revealed that they were talking about the bumps in the sidewalk that occur when tree roots break up the sidewalk. The 62 year old key informant who had emphysema talked about liking the mall because "It's all the same level." He went on to discuss how even gradual changes in elevation affect his breathing when he walks outside.

Controlled Environment

One 68 year old key informant cited "the same temperature year round" as being a reason to walk in the mall. Another male and 2 female general informants and a female and 3 male key informants concurred with this statement. Each went on to explain how this was related to "breathing," "arthritis," or not liking to walk outside "in the cold" or "weather." Three key informants said they liked access to "the bathrooms." A 62 year old key informant with emphysema walked in the mall because, "there's no car fumes here."

Summary

In examining the behaviors of mall walkers identified in this study, using taxonomic analysis, certain attributes of mall walkers became apparent: (a) they established routines, (b) they associated in groups, (c) they acknowledged "regulars," (d) they were friendly, concerned, and caring, (e) they dressed for comfort, and (f) they only missed "scheduled" walks if "sick," if "on vacation" or "out of town," if "appointments were scheduled [doctor, hair, dentist], or if "something out of the ordinary" occurred to prevent them from going to the mall.

CHAPTER 5

CONCLUSIONS

This qualitative study employed ethnography, augmented by aspects of ethnonursing, to identify factors that contributed to participation in and adherence to regular mall walking. The walking habits of regular mall walkers were described and analyzed. Both the process of becoming a regular mall walker and the stages of being a regular mall walker were discovered as walking habits were analyzed. Purposes of mall walking and factors that could be used to help inactive people choose mall walking as a recurring activity were identified. Conclusions are presented for each aim of the study in the following pages. Discussion of conclusions then ensues.

Walking Habits of Regular Mall Walkers

Mall walkers were found to have regular walking habits. Habits included having a set time period for walking, walking either a set number of rounds or a set amount of time, acknowledging other "regulars," socializing over coffee with other walkers, and including walking as a scheduled routine part of the day.

Development of these habits were reported by or observed in those walkers who had walked for 2 to 10 years. These habits were described in greater detail in

the process of becoming a regular mall walker and the stages of being a regular mall walker.

Self-Perceived Purposes of Mall Walking

There were several self-perceived purposes for mall walking. Informants referred to walking as being good for limbering up a body part or the whole body, for specific physical and/or psychological reasons, for exercise, for spending time for themselves away from home, for getting started on the day, and ". . . to be with and visit with other people [friends]."

Factors That Promote Adherence to Walking

Factors that promoted adherence to participation in regular mall walking were identified. Of significant importance were those factors related to the decision to walk. Two factors identified by key informants that led to the decision or intention to begin mall walking were a suggestion made by a friend or a mate or a suggestion made by a physician. Although a physician may have initially suggested mall walking as a activity, over half of the walkers would not have started had it not been for a friend or a mate who walked or wanted to walk with the regular.

In comparing the mall to other environments where groups could become involved in regular physical activity, such as exercise clubs or the YMCA, the researcher drew some conclusions about the mall walking culture and environment.

Mall walkers do not pay a fee to walk in the mall nor do they have to purchase any special clothing in order to participate. They are not being pushed by other participants to improve; it is a self-directed activity. And, it is a friendly, safe, temperature-controlled, community-like environment where walkers feel comfortable.

One example that clarifies the interaction of social support and environmental factors was a 68 year old male who had suffered a stroke. He was told by rehabilitation personnel that his leg probably would not get any better. He was talked into walking by his three other male friends. "And you still drug that leg when you started walking with us," stated one of his friends. It took this male two years, after he was invited, to start to walk. He credits walking with his friends as improving the speed and agility with which he now can walk. The insistence of friends and safeness of the environment were powerful motivators for this person.

Regular walkers reported that they would interrupt mall walking only for appointments, illness, vacation [although they walk on vacation "if feasible"], holidays, or surgery. The only time company presented an interruption was "when they get up too early" or "they keep you up too late at night talking." Usually "regulars" asked company to come walking with them or left the company at home until they completed their walk. This could be attributed to the fact that walking was "scheduled" and a "priority" for the walkers.

Mall Walking--A Choice for Inactive People

The self-reported factors that could be used to help inactive people choose mall walking as a regular activity included: (a) a friend or a mate with whom to walk helps one keep coming to walk, (b) attire worn can be anything presentable and comfortable, (c) walking can "limber [you] up," and "makes you feel good" (d) the temperature is controlled, the surface is smooth, and the mall is a safe place, (e) the number of "rounds" to be walked and walking speed are self-determined, (f) there is no fee to start or continue with this activity, and (g) if walking is made a priority by scheduling it as a routine part of the day, it becomes a habit.

Supporting Theoretical Framework

Ethnography is a type of grounded theory used to describe a culture by learning about the culture firsthand (Spradley, 1979). Field research has as its goal the discovery of theory or a framework from the data by means of comparative analysis (Schatzman & Strauss, 1973; Leininger, 1985).

Throughout data analysis, four themes emerged: (a) the process of becoming a regular mall walker, (b) the stages of being a regular mall walker, (c) the mall as a safe and controlled environment, and (d) continuous social support of friend, other regulars, or a mate was necessary for persistence in mall walking behavior. Fluery's (1991) "empowering potential: a theory of wellness motivation"

(p. 286) and Gauvin's (1990) motivational features of exercise and lifestyle provided the theoretical framework for this study.

A framework was developed to identify the motivational features of a regular mall walker (Figure 2). Direction, intensity, and persistence were affected by and dependent upon a safe environment and affiliation [social support].

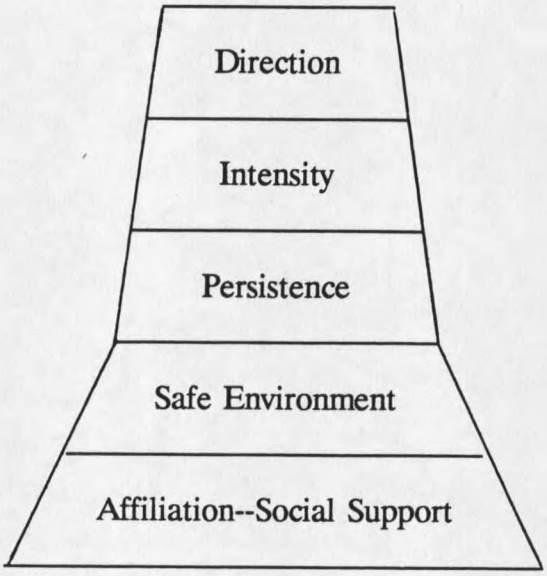

Figure 2. Motivational Features of a Regular Mall Walker.

Mall walkers demonstrated motivational direction through liking their chosen activity and location, scheduling and making walking a priority, readily identifying the physical and psychological benefits of walking, and by persisting in this activity over a period of years.

Intensity was demonstrated by walkers counting rounds and timing the activity. Walkers did not allow disruptions to prevent them from completing their rounds or time to walk.

Persistence was apparent in "regulars" who had a history of walking for 30 minutes to 1 1/2 hours per day, 3 to 6 days a week, over 2 to 10 years. Informants reported missing walking and socializing when they had to interrupt their mall walking schedule.

Having a safe environment in which to walk and in which to affiliate with friends who also participated in mall walking were important factors in adherence to mall walking activity.

Discussion

Motivation per se was not defined by this study. However, data could readily be grouped to fit the definition Gauvin (1990) proposed for an autonomous exerciser. Gauvin's work on direction, intensity, and persistence contributed to the development of the theoretical framework for the study.

The role of environmental factors and social support for maintenance of a change in health behavior were major findings of this study. Fluery (1991), using grounded theory, developed a theory of wellness motivation to initiate and sustain cardiovascular health behavior. Fluery's empowering potential theory could be readily operationalized for mall walkers: (a) appraising readiness to walk--self or mate initiated, doctor suggested, (b) changing--informants "talked about walking

then did it," "just decided to do it too," or decided to walk for their health, (c) integrating change--informants made walking a part of their daily routine. From this theoretical framework and analysis of the data the researcher developed the stages of being a regular mall walker: reason to start, decision to start, maintaining and/or persisting, and coming back.

The findings from this study may concur with Lewthwaite's (1990) social factor of family and friends affecting meaning and behavior which leads to choice, effort, persistence, and performance. Further qualitative and quantitative analysis would be indicated to confirm or dispute such a relationship.

Becoming a participant in the regular physical activity of mall walking involved knowledge of how to become part of the culture through gaining entry, becoming accepted, participating, and persisting at the activity. Being a regular participant in mall walking consisted of four stages: identifying a reason to walk, deciding to walk, developing a reason to persist at the activity, and coming back instead of dropping out of the activity. The most powerful indicators for persistence at this regular activity were having a person [mate, friend] with whom to walk, and making walking a habit [scheduled, part of routine].

Limitations

The limitations of the study follow:

1. This study was conducted at a single mall during a set time frame. It is believed that the early morning hours chosen for data collection influenced the age

group of the study subjects. All informants were retired or semi-retired. Generalizing the findings to other age groups is not appropriate at this time.

2. The 5 months taken to collect data did not seem to be long enough. A longitudinal ethnographic study might provide additional findings.

3. The methodology selected limited generalizability of any findings.

Implications for Nursing Practice

Information gleaned from this study could be used by nurses to encourage initiation and participation in one form of physical activity, walking. Assisting clients interested in physical activity to identify a walking partner and a routine time might facilitate exercise. Knowing the benefits of the mall as a suitable location for walking might also facilitate implementation of an exercise plan. Identifying the physical, psychological, and longevity benefits as discussed in this study may also assist the nurse in promoting mall walking as an acceptable physical activity. Mall walking may also assist clients to become part of a social community that looks after and cares for each other but doesn't place any demands on the participant. Because it is not monitored, except by the participant of the activity, time frames are flexible and can be individualized. This activity is cost-effective as no special attire is needed, and no club dues need to be paid. It is also enjoyable for those who participate.

Recommendations for Further Research

Further research recommendations follow:

1. A quantitative study should be carried out using the findings of this study.

2. The study should be replicated with a different age group engaging in mall walking activity to determine if discoveries would support, refute, modify or expand the findings.

3. The persistence and longevity of walkers who walk mainly in the mall and those who do not use the mall should be explored in a comparative study.

4. Because of the length of time that informants in this study had successfully engaged in exercise, new studies focused on locus of control and other motivational factors are in order.

5. More studies should focus on persons who are successful practitioners of health behaviors.

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APPENDICES

APPENDIX A

DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

Table 3. Demographic Characteristics of Female Key Informants.

	Informant					
	1	2	3	4	5	6
Age:	77	67	67	66	65	66
Retired:	Yes	Yes	Semi	Never	No	Semi
			These three equated being a "Housewife" as not allowing them to retire.			
Previous work:	Secretary	Book-keeper	Hair-dresser	Tailor shop	Dress shop	Does food demos
Year of school completed:	10	13.5	12	12	12	12
Income per year:	OK	$11,000	0	0	$21,600 (Husband)	Varies-$4.35/hr
Marital status:	Widow	Widow	Married	Married	Married	Married
How far to mall to walk:	5 blocks	2.5 blocks	23 blocks	21 blocks	4.5 blocks	7-8 blocks
Length of time walks:	1 hr.	55 min.	Varies	Varies	45 min.-1 hr.	40 min.
No. rounds:	4	6	3-4	2	4-5	4
		[1 round equals 0.5 mile at the mall]				
No. miles:	2	3	1.5-2	1	2-2.5	2
No. years mall walking	6	8	2.5	2.5	3	9
Other exercise	Yard House-work	House-work	Stationary bike	Work in garden	0	Row-buster Rebound jogger

Table 3. Continued.

	Informant					
	1	2	3	4	5	6
Medical problem:	Arthritis	0 [poor eyesight]	Arthritis Leg circulation	Leg circulation	0	0
Who told you to start walking:	Self	Self then doctor	Doctor then friend	Doctor then friend	Friend	Mate
How long after doctor suggested did you begin:	0	I had started a year or so before.	Soon after surgery	A year or so	0	0
How long after friend/mate asked did you start:	0	0	Next day	Next day	That week	That week
	Smoking Lifestyle Behavior					
Smoke:	No	Past	Past	Past	0	0
Packs/day:	0	1	1	2	0	0
No. years:	0	15	12	40	0	0
No. years since quit:	0	32	4	7	0	0

Table 4. Demographic Characteristics of Male Key Informants.

	Informant							
	1	2	3	4	5	6	7	8
Age:	70	72	68	65	62	68	62	70
Retired:	Yes	Yes	Yes	Semi	Semi- Does odd jobs for money.	Yes	Yes	Yes
Previous work:	City	Mail Carrier	City	Truck Driver	Ag. sales/ Management	Sold Farm Machinery	Manager- Local Newspaper	Power Company
Years of school completed:	12	12+	8	12	16	12	12	8
Income per year:	$27,000	$11,000	$22,000	Not enough	$6,000	?	?	?
Marital status:	Married	Married	Married	Married	Widowed	Married	Married	Married
How far to mall to walk:	1.5 mi.	11-12 blocks	1 block	7-8 blocks	1 mile	2 miles	8 to 10 blocks	2½ blocks
Length of time walks:	30 min.	1-1½ hr.	1½ hr.	40 min.	25-33 min.	25-33 min.	Varies	38 min.
No. rounds:	1	2-5	8-10	4 [1 round equals 0.5 mile at the mall]	2-3	2-3	3	4
No. miles:	0.5	1-2.5	4-5	2	1-1½	1-1½	1½	2

Table 4. Continued.

	Informant							
	1	2	3	4	5	6	7	8
No. years mall walking:	2	2	7	10	3½	2	4	7
Other exercise:	Yard work Garden Bike	House Yard	Bike-30 min. Upper body machine-30 min.	Rebound jogger	0	Neck and arm Walk 1 mile in afternoon	Pulmonary rehab exercises	Rowing machine 10 min. and upper body exercises 10 min./day
Medical problem:	Knee surgery Arthritis	Injured knee	Angioplasty-3 Breathing	Hx CAB	Hip and back pain	Stroke	Emphysema Vascular surgery	Colostomy (due to cancer)
Who told you to start walking:	Doctor/ Wife	Wife	Doctor	Doctor	Friend	Friends	Doctor	Doctor
How long after doctor suggested did you begin:	?	0	1 year Doctor just suggested, didn't say I had to.	Day after home from hospital	0	0	After home from hospital	3 months
How long after friend/mate asked did you start:	Used to walk at other mall before wife. Had knee surgery and can't walk well now.	1 year	0	0	6 months-1 year	2 years	0	0

APPENDIX B

INTRODUCTION TO THE INTERVIEW

INTRODUCTION TO THE INTERVIEW SCHEDULE FOR KEY INFORMANTS

Introduction

My name is Anna Brewer. I am a registered nurse and a master's degree candidate at Montana State University College of Nursing. I am conducting a study to discover what factors contribute to participation in and adherence to regular mall walking. I have noticed you seem to come here regularly. It would be helpful for the purposes of this study to obtain your thoughts on regular mall walking and any factors that you think contribute to your coming here regularly. I would like to ask you some questions about participation in this activity. I expect this to take no longer than an hour of your time. You are free not to answer certain questions if you prefer, or to terminate the interview at any time. All information you give me will be kept confidential.

This study is being done to generate a body of knowledge related to mall walking activity. To date, there is very little research data available specific to why people engage in and continue regular mall walking as a physical activity. Participation in this study is voluntary and you need not feel obligated to participate.

In addition to taking notes during the interview, I would like to tape record our conversation. This would allow me to concentrate on listening and identify additional important questions I may formulate during the interview. It would also allow me to identify additional important input following termination of the interview that I may want to clarify with you. After the interview is transcribed and assigned specific numbers to be used as identification data, the tape will be destroyed. Your name, town, and other confidential information about you will be kept in a separate file from these transcribed notes to assure complete confidentiality. Upon completion of the data collection, all confidential information (i.e., name, town) will be destroyed. If you agree to be a part of this study, I have a consent form for you to read and sign. May I go on with the interview?

APPENDIX C

INFORMED CONSENT

Montana State University
College of Nursing

Participant Consent Form

Factors Contributing to Regular Mall Walking

Anna C. Brewer, B.S.N., R.N.
Montana State University
College of Nursing
(406) 248-1557

Purpose

The number one priority for health promotion by the year 2000 for the United States Department of Health and Human Services is physical activity and fitness. However, 1985 data indicates that only about 20% of the adult population of the United States engages in optimal levels of activity. This means 80% of Americans are inactive. Further, if they begin an exercise regime, less than 50% continue past one year. Although many studies have been done to discuss why people don't continue regular activity, little research has been done to examine why people do continue with regular activity. The purpose of this study is to identify factors that contribute to participation in and adherence to regular mall walking.

Benefits

This study has not been designed to benefit you directly. It will, however, provide information to the body of knowledge relating to adherence to regular physical activity.

Procedures, Risks

If you choose to participate in this study, you will be asked to answer questions during a personal interview. The date, time, and location of the interview will be agreed upon by you and the researcher. The interview should take approximately one hour. The questions will relate to factors you perceive as affecting participation in and adherence to regular mall walking. There will be no physical risks from participating in this study. The interview questions may make you feel uncomfortable. You are free to skip questions that you do not wish to answer.

Voluntary Participation, Confidentiality

Your participation in this interview process is completely voluntary. You may withdraw from this study at any time without penalty or further inquiry. Your interview will be tape recorded for accuracy of information and will be assigned a number. Your name will not be divulged on tape. All tapes will be transcribed. The tapes, along with any supporting written notes, will be kept in a locked file cabinet in my home. The tapes will be destroyed after they have been transcribed and verified. The typewritten transcripts will be kept until the completion of the study. A number, not your name, will be assigned to the typewritten transcripts. Your name will not appear in any published reports stemming from this study. Upon completion of the study, all identifying information will be destroyed; and, until destroyed, only the researcher will have access to this information. The consent form will be kept in a locked file in the College of Nursing for five years, then will be destroyed.

Costs, Reimbursements

There are no direct costs to you for participating in this study. A small gift of appreciation will be given to you for participation in the interview process, but you will not be paid for your involvement with this project.

Anna C. Brewer, BSN, RN Date

Participant's Statement

This study has been explained to me, and I voluntarily consent to participate in this activity. I have had the opportunity to ask questions and understand that future question I may have about the research or about my right will be answered by the above primary investigator.

Participant's Signature Date

APPENDIX D

INTERVIEW SCHEDULE

Factors Influencing/Contributing to
Regular Mall Walking

Interview schedule

1. Tell me, how long have you been coming here to walk?

2. Do you walk here in the summer? winter? during inclement weather?

3. How many times do you mall walk per week?
   a. one time
   b. two times
   c. three times
   d. four times
   e. five times
   f. six times
   g. seven times

   Do you have any other activity (exercise) that you do regularly?

4. Tell me, what keeps you coming here at least three times a week for 20 minutes or more (all year round? only in the winter? in inclement weather?) to mall walk?

5. Tell me, what do you think your regular mall walking does for you personally?

6. Tell me, what made you decide to come here to walk?

7. What reasons would keep you from coming here to walk?

8. Suppose for some reason you were unable to mall walk for two weeks because of some event that occurred in your life, what would you do? Why?

9. What determines how long you stay at the mall to walk? (What determines the amount of time you walk?)

10. Tell me, what relationship, if any, exists between mall walking and your personal lifestyle?

11. What does mall walking do for you? (Probes: physically? mentally? emotionally? personally? socially?)

12. Do you consider mall walking an exercise? If not, what do you consider it to be?

13. What determines the speed at which you walk?

The next few questions are considered demographic in nature.

Birth date: _____ Age: _____
Retired? _____ Work: _____
Job/Profession: _____
Housewife? _____ _____

How far do you drive to get to the mall to walk? _____

Year of school completed? _____

Approximate income per year? _____

Married ____ Single ____ Widowed _____

Length of time walks _____

Number of laps completed _____ Equates with ____Miles

Do you currently smoke or have you smoked in the past? Yes____ No____
Number of packs ____ Number of years____

Post walking activities (if any):

APPENDIX E

COURTESY LETTER

April 29, 1992

_____, Manager
_____
_____
_____

Dear _____,

This letter is to introduce myself, Anna C. Brewer, a registered nurse and a graduate student at Montana State University, College of Nursing. I am currently involved in the last portion of my program of study which consists of doing my thesis work. I have chosen to do my thesis on "Factors contributing to regular mall walking". I'm conducting this study to discover what factors contribute to participation in and adherence to regular mall walking.

I have chosen _____ as the environment in which I would like to do this study. I wish to inform you of the project in case you are approached about it or if you need to let your early morning workers know. I do not want an introduction to the mall walkers. I want to become a part of what they do by first observing the people who walk at your mall, participating in regular mall walking myself, and developing rapport with most of them so I can ask questions about why they continue doing this physical activity. It is also important for the study that I approach each one myself, after establishing rapport, to inform them about why I am there. I hope to accomplish this rapport within three to four weeks.

I hope to seek out several regular walkers to spend more time talking with, other than the time we are walking. This will be strictly voluntary on their part, and will occur after their regular walking activity. It is not my intent to infringe on their mall walking. My intent is to learn from them why they participate in mall walking, how long they have walked, and why they continue to walk, particularly in this environment.

Please feel free to contact me if you have any questions or concerns regarding this project.

Sincerely,

Anna C. Brewer, B.S.N., R.N.
Day phone: 255-8430 Evening phone: 248-1557

APPENDIX F

APPROVAL FORM: HUMAN SUBJECTS REVIEW COMMITTEE

FORM B

MONTANA STATE UNIVERSITY
COLLEGE OF NURSING

UNIVERSITY HUMAN SUBJECTS COMMITTEE SUMMARY

Name of Proposal: Factors Contributing to Regular Mall Walking

Name of Investigator/s: Anna C. Brewer, BSN, RN
(Circle one: undergraduate student/s, graduate student/s, faculty member/s)

Faculty Advisor (if student research): Ruth Vandenhoek

Date of College of Nursing Review: 3-11-92

Reviewed by:
(List College of Nursing reviewers involved by names and type of committee, e.g. J. Doe, Great Falls Extended Campus Committee)

M. Burman Billings Campus Committee

C. Lafrenta Billings Campus Committee

Approved by:

Campus H.S.R. Committee M. Burman

Education Director Jean Ballantyne

Brief Description of Subjects (age, sex, health status, etc.)
(To Be Completed by the Investigator/s)

Subjects for this study will be chosen from individuals that currently are walking regularly at a small indoor shopping mall.

FORM B

Brief Description of Procedure (what is to be asked of or done to subjects)
(To Be Completed by the Investigator/s)

Subjects will be approached during walking activity and, after explaining the purpose of the study, will be asked if they would be willing to participate in the study. A face-to-face interview will be conducted at a mutually agreed upon date, time, and location. The subject will advised that participation in this study to discover what factors influence their participation in and adherence to regular mall walking activity is voluntary. If subjects agree to participate, they will be asked to sign an informed consent.

[X] Exempt Under Federal Reg. 45 CFR 46 46.101 (2) (b) (3)
(Insert number and letter as appropriate)

OR

[ ] Questionable or Ruled Not Exempt Under Federal Reg. 45 CFR 46

*Proposal sent to College of Nursing Dean for Review on _____

[X] Ruled Exempt by College of Nursing Dean

Julie E. Johnson
Signature

3-11-92
Date

Explanation: Research involves interview procedures - Subjects cannot be identified

OR

[ ] Sent to University Human Subjects Review Committee by College of Nursing Dean

Date

Notes: Distribution of this form: (After Exempt Ruling OR after review by College of Nursing Dean).

Original: Investigators

Copies: Campus File
College of Nursing Human Subjects Review File in Bozeman
University Human Subjects Committee through College of Nursing Assistant Deans' Office

11/16/88:F-4.POL