

APPROVAL SHEET

Title of Thesis: A Confirmatory Study on the Motivational
Orientations of Older Adults Involved
in Formal Education at the University
of Maryland

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ABSTRACT

Title of Thesis: A Confirmatory Study on the Motivational Orientations of Older Adults Involved in Education at the University of Maryland

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The purpose of this study was two-fold. One objective was to confirm Pritchard's (1978) typology of older adults' motives for education participation. Another purpose was to examine the influence that selected demographic variables (age, gender, socioeconomic status, and marital status) had on motivations of older students to participate in the "Golden Identification" (Golden I.D.) Program at the University of Maryland, College Park, Maryland. The sample consisted of 160 participants from the Golden I.D. Program who were selected through a systematic probability sampling procedure.

A mailed questionnaire comprised of three instruments was used for conducting this research. The first part of the questionnaire measured motivational orientations for participation in education by older adults and consisted of the Education Participation Scale for Older Adults and the Older Learner Participation Scale. The third instrument measured demographic characteristics of the study participants.

The results revealed that the motivation of the Golden I.D. students to participate in education can be divided

into the following six factors (in decreasing order of importance): "cognitive interest," "self actualization," "adaptation/self-understanding," "social contact," "social contribution," and "escape/stimulation." Furthermore, significant relationships emerged between the socioeconomic status of the participant, and the motives "social contribution," "escape/stimulation," and "self actualization." The implications of these findings and recommendations for further research are discussed.

A CONFIRMATORY STUDY ON THE MOTIVATIONAL ORIENTATIONS
OF OLDER ADULTS INVOLVED IN FORMAL
EDUCATION AT THE UNIVERSITY
OF MARYLAND

by

Megan Catherine McMahon

Thesis submitted to the Faculty of the Graduate School
of the University of Maryland in partial fulfillment
of the requirements for the degree of
Master of Arts
1988

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DEDICATION

To my family, whose love, tolerance,
and encouragement provided me with the opportunity and
support to complete this work, and to Peter, who stood
by me, I dedicate this thesis with
love and gratitude.

ACKNOWLEDGEMENTS

My sincere appreciation is extended to the Golden I.D. students who participated in this study, for without their time and input I could not have conducted this project. The ongoing assistance and support of my committee chair, Dr. Carol Cutler Riddick is particularly appreciated. And finally, I would like to thank my committee members, Drs. Fred Humphrey, and Mary Ellen Hrutka, who contributed invaluable expertise to this research effort.

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CHAPTER 1

INTRODUCTION

America is growing older. The number and proportion of older adults, 65 years of age and older, has increased and will continue to grow more rapidly than any other age group. It is estimated that in the year 2000 there will be at least 36 million Americans over the age of 60 (United States Special Committee of Aging, 1985).

Education has emerged during the last two decades as being instrumental in off-setting many of the physical, social, and psychological problems facing the growing number of elderly persons (Heisel, Darkenwald & Anderson, 1981; McGraw, 1982). It has been argued by professionals that participation in an educational experience can be an instrumental way of meeting the demands of later life. That is, such involvements can lead to diminished disengagement and give people the ability to take part in new interests and activities; as well as facilitate career change from active employment to retirement (Havinghurst, 1976; Heisel et al., 1981; Mizer, 1975; Perkins, & Robertson-Tchabo, 1981; Stanford, 1972). Additionally, participation in educational programs has been identified as one potential way to fill leisure hours (Bynum, Cooper, & Acuff, 1978).

Since the early 1970s many states have developed statewide legislation or policies directed toward the older student (Romaniuk, 1984; Timmerman, 1985). Older adults in

at least 43 states and the District of Columbia are able to enroll in reduced or tuition free programs in public higher education institutions on a space-available basis (Kingston, 1982; Perkins & Robertson-Tchabo, 1981).

Even so, only a small proportion of those over 60 take advantage of the education opportunities offered (Goodrow, 1975; Kauffman & Luby, 1974; Kingston, 1982; Marcus, 1978). The National Center for Education Statistics (1981) noted that only 3% of those age 65 and over participate in adult education. Statewide surveys of participation in education among older adults report even lower levels of participation. For example, a California Post-secondary Education Study (1981) estimated less than 1% of the continuing education participants in the California State University and college system were over 65 years of age (Romaniuk, 1984). Similarly, it has been reported that fewer than 1% of students participating in the North Carolina community college system were age 65 and over (Daniel, Templin & Shearon, 1977).

In short, these figures indicate that community colleges and state universities are not reaching the growing population of persons over the age of 65. According to Stanford and Pritchard (1977) and Spencer (1980), one concern that should be confronting higher education administrators is a better understanding of the motives of those elderly who are participating in structured educational programs.

Theoretical Framework

One theory that appears applicable for examining the motivational orientations for participation in education by older adults is proposed by Pritchard (1978). Pritchard has put forth the theoretical generalization that participation in education clusters into one or more of six motivational constructs or: escape/stimulation, social contribution, social contact, cognitive interest, self actualization, and adaptation self-understanding.

The foundation for Pritchard's work can be traced back to the earlier works of Houle (1961), Maslow (1968, 1970, 1971), Boshier (1971, 1973, 1977), Riddell, (1976), and Boshier and Riddell (1978). Houle (1961) identified three motivational types of learners or: goal-oriented, activity-oriented, and learning-oriented. Based on the early works of Houle (1961) and Maslow (1968, 1970, 1971), Boshier (1971, 1973, 1977) developed a conceptual model that linked reasons for participation in education to psychological states of growth or deficiency. Riddell (1976) and Boshier and Riddell (1978) refined Boshier's earlier model by advancing the notion that there were four motivational orientations for participation or: escape/stimulation, social contribution, social contact, and cognitive interest. Pritchard (1978) then expanded Boshier and Riddell's four factor model by adding two additional factors (based on factor analysis tests), or

self actualization and adaptation self-understanding factors.

Although Pritchard's theoretical model of the motivational orientations for participation in education by older adults provides a beginning to the conceptualization of motives of older learners, it may be simplistic. Moreover, the findings of studies that have examined older adult participation in formal education programs suggest that there are a number of factors (such as age, gender, socioeconomic status, and marital status) that may influence the motives of the older adult learner (Green & Enderline, 1980; Marcus, 1978; McGraw, 1982; Pritchard, 1978; Riddell, 1976).

Significance of the Study

There are at least two reasons why this study is significant. First, the study's findings can assist education and gerontology professionals in better understanding the differences in motivational orientations of older adult students as well as the factors influencing the motives of the older student. Identifying these differences could suggest varied approaches to the planning, designing, implementing, and marketing of educational programs to older adults. Second, by testing Pritchard's theoretical model of older adults' motivational orientations for educational participation, this study adds to our existing knowledge base.

Statement of the Problem

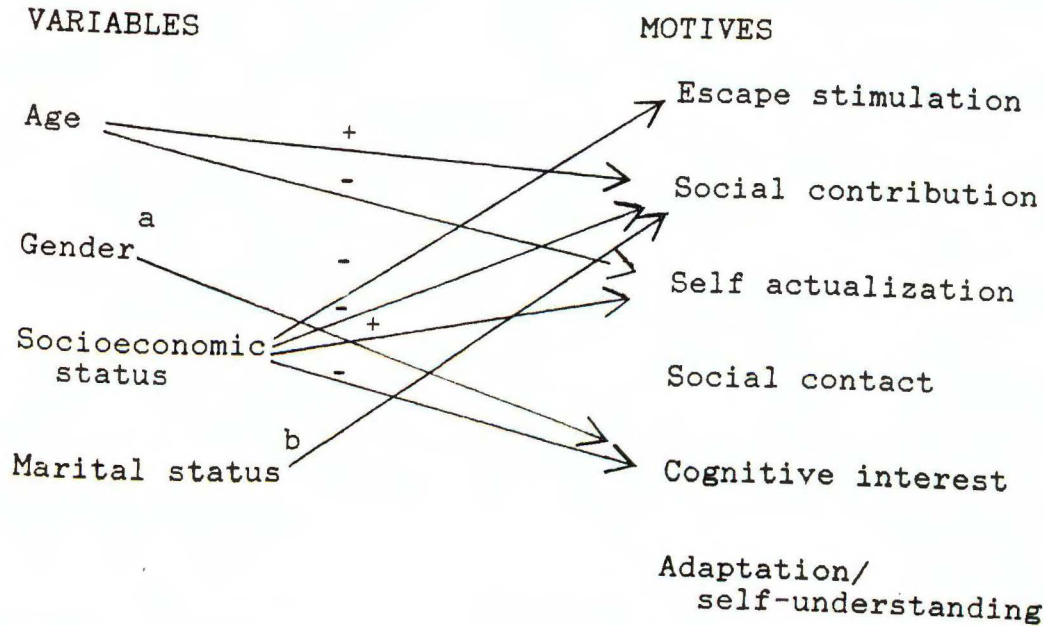
One purpose of the study was to test Pritchard's typology of older adults' motives for education participation. A second purpose of this study was to examine the influence that selected demographic variables (age, gender, socioeconomic status, and marital status) have on motivation to participate in the "Golden Identification" (Golden I.D.) Program at the University of Maryland, College Park, Maryland. A subproblem of the study was to ascertain the reliability of the motivational orientations for educational participation index.

Hypotheses

The basis for the following hypotheses was previous research (see Chapter 2 for more details). More specifically, hypotheses related to the problem statement are (see Figure 1):

1. The motivational orientations of older adult learners can be classified into one or more of the following six factors: escape/stimulation, social contribution, social contact, cognitive interest, self actualization, and adaptation-self understanding.
2. There is a positive relationship between the age of Golden I.D. participants and the educational participation motive "social contribution."

Figure 1



Note. A negative sign constitutes a negative relationship between the variable and motive specified. A positive sign constitutes a positive relationship between the variable and the motive specified.

a

The nature of the speculated relationship is that women are more likely than men to report being motivated to participate in adult education because of self-actualization reasons.

b

The nature of the speculated relationship is that divorced individuals are more likely than non-divorcees to report being motivated to participate in adult education because of social contribution reasons.

Figure 1. Hypothesized relationship between demographic variables and motivational factors.

3. There is a negative relationship between the age of Golden I.D. participants and the educational participation motive "self actualization."

4. There is an association between gender and the educational participation motive "cognitive interest;" such that female participants relative to male participants are more likely to report they were motivated to participate in adult education because of cognitive interest reasons.

5. There is a negative relationship between the socioeconomic status of Golden I.D. participants and the educational participation motive "escape/stimulation."

6. There is a negative relationship between the socioeconomic status of Golden I.D. participants and the educational participation motive "social contribution."

7. There is a positive relationship between the socioeconomic status of Golden I.D. participants and the educational participation motive "self actualization."

8. There is a negative relationship between the socioeconomic status of Golden I.D. participants and the educational participation motive "cognitive interest."

9. There is an association between the marital status of Golden I.D. participants and the educational participation motive "social contribution." That is, participants who are divorced relative to non-divorcees are more likely to report they were motivated to participate in adult education because of social contribution reasons.

Operational Definitions

The following operational definitions are used to represent the six factors identified in this study:

1. Adaptation/self-understanding--to learn to cope with the survival needs of later life (i.e., finances, consumerism, physical fitness, and health related problems); to develop a greater understanding of personal needs and losses.

2. Cognitive interest--to learn for the sake of learning, to satisfy an inquiring mind.

3. Escape/stimulation--to become involved in a stimulating activity; to escape boredom, responsibilities, or relationships.

4. Self actualization-- to fulfill a need for personal growth and creativity.

5. Social contact--to fulfill a need for personal associations, affiliation, and friendship; to participate in group activity.

6. Social contribution--to prepare for service to the community; to become a more effective citizen.

Delimitations

The present study was exploratory in nature and focused on the motivational orientations of a sample of older adult participants involved in education at one university. The study sample included only the individuals, 60 years of age and older, who were enrolled in the Golden Identification Program at the University of

Maryland during the Spring, 1987 semester and who were willing to complete the survey.

Limitations

1. The sample population was not drawn from the overall population of all older adult education participants in Maryland; therefore, generalizations beyond the University of Maryland Golden I.D. population should not be done.

2. The revised instrument used to measure the motivational orientations has only demonstrated face validity; therefore, validity of the instrument may be in question.

CHAPTER II

REVIEW OF LITERATURE

This study investigated the motivational orientations of older adults who are participating in formal education. More specifically, the study aimed to: (a) test Pritchard's (1978) typology of older adults' motives for educational participation, and (b) examine the influence that selected demographic variables have on older adults' motivation to participate in the "Golden Identification" program at the University of Maryland, College Park, Maryland.

This chapter is divided into two sections. The first section summarizes the motivational orientation research. The second section reviews the literature that has dealt with the effect of certain factors (or age, gender, socioeconomic status, and marital status) on senior adults' participation in formal education. In addition, the second section summarizes research findings that have focused on the relationship between the demographic variable under examination and motivational orientations for older adults' participation in educational programs.

Motivational Orientation Research

Perhaps one of the earliest investigations into motivational orientations was conducted by Houle (1961), who conducted taped interviews with 22 continuing education participants in the Chicago area. Houle concluded that participants could be classified into three types. The first type was the "goal-oriented" learner who used

education as a means of accomplishing clear cut objectives. The second type of learner was the "activity-oriented" learner who took part in education because of a meaning derived from the circumstances of learning that had no necessary relationship with the announced purposes of the class. The third type of learner was the "learning-oriented" individual, or someone who participated in education for its own sake. Houle stated that these were not "pure" or independent learning types, but rather that the best way to represent the three types pictorially would be as three circles overlapping at the edges. Nevertheless, Houle maintained that the central emphasis of each type of learner orientation was clear.

Sheffield (1964), using the Houle typology, identified participants' motives for involvement in education via factor analysis. More specifically, Sheffield developed the Continuing Learning Orientation Index (CLOI), a list of 58 reasons why adults say they participated in adult education classes. The list contained 16 reasons that were judged to be representative of each of Houle's three hypothesized orientations, plus an additional 10 items. Respondents in the study were 453 adult education participants in 20 continuing education conferences held at 8 universities in the United States. Factor analysis yielded seven factors, five of which related directly to Houle's (1961) typology. Two of these factors were goal-oriented (personal-goal orientation and societal-goal

orientation); two were activity-oriented (desire-activity orientation and need-activity orientation); and one factor was learning-oriented (learning-orientation).

Boshier (1971) also utilized Houle's (1961) typology as well as the highest loading items from the Sheffield (1964) study to assemble a 48 item instrument dealing with reasons for participation in education. The instrument was named the Education Participation Scale (EPS) and utilized a 9 point Likert scale. In order to determine EPS factors, 233 participants enrolled in continuing adult education courses in New Zealand were randomly selected for study. A six week test retest reliability study for EPS involved 20 students from Boshier's "Personality Studies" University Extension class and revealed test retest correlations from .68 to 1.00. Results identified four independent and uncorrelated factors, two of which were vocationally oriented (inner versus other-directed advancement and professional future orientedness) and two related to socio-psychological motivations (self versus other-centeredness and social contact). Boshier (1971) concluded that the four factors were similar to Houle's typology.

Other research has been conducted to examine the motivational orientations of educational participation. Morstain and Smart (1974) utilized Boshier's (1971) Education Participation Scale with 648 adults enrolled in part-time course work at Glassboro State College during the

1972 semester. The factors obtained from the study (social relationships, external expectations, social welfare, professional advancement, escape/stimulation, cognitive interest) were similar to those identified by Boshier (1971) although the names for the factors vary. The researchers concluded that these findings supported the "usefulness" and reliability of the EPS. Nevertheless, it was pointed out that the motivational orientations for participation were more complex than Houle's (1961) original three part typology.

Burgess (1971) conducted a study that explored the educational orientations of adult participants and developed the Reasons for Educational Participation Index. The instrument consisted of 70 items derived from a number of sources and tested eight hypothesized orientations. The instrument was administered to 1,046 subjects in the metropolitan area of St. Louis, Missouri. Findings revealed 15 factors, seven of which were interpretable (desire to know, desire to reach a personal goal, desire to reach a social goal, desire to reach a religious goal, desire to escape, desire to take part in an activity, and desire to comply with formal requirements) and accounted for 63% of the total variance in the data.

To investigate further the motivational orientations for participation in education, Boshier (1971, 1973, 1977) attempted to conceptualize a psychosocial theory for motivational orientations. Boshier (1971, 1973) first

identified motivations as being growth-oriented or deficiency-oriented and later (1977) proposed the model of "life-space" and "life-chance" motivation. The term "life-space" was used as a synonym for growth motivation and the term "life-chance" was used as a synonym for deficiency motivation (Boshier, 1977). According to Boshier, "life-space" and "life-chance" motivation are opposite ends of a single continuum, a psychological dimension that underlies reasons for participation. The theory was tested with a population of 242 Vancouver adult education participants who completed the Educational Participation Scale (EPS). Data were analyzed using principal components factor analysis and orthogonal varimax rotation. Items loading .40 or higher after rotation yielded five factors. Results indicated that two factors could be associated with "life-space" (social welfare and cognitive interest), and that three factors correlated with "life-chance" (escape/stimulation, professional advancement, and external expectations). Boshier (1977) stated that:

It appears that motivational orientations are more than just superficial clusters of reasons for enrollment. They seem to be surface manifestations of psychological states which are in turn probably related to psycho-social conditions in various age and socio-economic groups (p. 112).

The motivational orientation research reviewed to this point focused on a broad age range of adult learners including older learners but not limited to them. Only a few studies have specifically examined older adults'

motivational orientation for participation in education and a brief review of these studies follows.

Riddell (1976), working under Boshier, hypothesized that motivations of older learners to participate in continuing education were related to psycho-social characteristics. Riddell employed Boshier's (1971) EPS to derive five motivational orientations for older learners: professional advancement, social welfare, external expectations, cognitive interest, and escape/stimulation. In particular, one factor, escape/stimulation, was associated with certain aspects of older participants' functioning. That is, this factor correlated negatively with social participation, adjustment to developmental tasks, and life satisfaction. Riddell (1976) concluded that the findings supported the idea that older persons are motivated to participate in education because of psycho-social characteristics and personal life styles rather than for particular course content.

In 1978 Boshier and Riddell continued the study of older adults' motivational orientations for education participation. Specifically, the focus of this study was to create a short form of the EPS that did not contain job-related items (those loading highly on the professional advancement factor), but retained a clear factor structure suitable for simple factor scoring. With the job-related items deleted the short form of the EPS consisted of 35 items. This short EPS was subjected to reliability and

factor analysis checks using a sample of 84 adults enrolled in a course designed for older learners. The test-retest reliability for the revised EPS was reported as .60 (Boshier & Riddell, 1978). The short form of the EPS was factor analyzed using principal component analysis and orthogonal rotation. The first unrestricted factoring produced 11 factors with eigenvalues greater than 1.0. The matrix was then re-factored to produce a three, four, and five factor solution. Since in the four factor solution each item was "pure" (i.e., loaded significantly on only one factor), the researchers chose it as the most appropriate model. The factors were titled "escape/stimulation," "social welfare," "social contact," and "cognitive interest," and included only items that loaded .40 or higher. Boshier and Riddell (1978) stated that the fact that the 35 items were contained in the four factors was in itself significant, and that consequently the short form was suitable for use with older adults.

Pritchard (1978) examined older adult participants' motivational orientations and utilized Boshier's revised EPS (35 item EPS) as well as a number of additional items that he developed to examine the motivational orientations of older adult learners. More specifically, to supplement the EPS, Pritchard drew on McClusky's (1974) theoretical conceptualization of educational needs of older persons, Havinghurst's (1972) developmental tasks framework, and Burgess' (1971) educational participation research. The

additional items were reviewed for content validity by a panel of 20 older learners, and were then subjected to factor analysis, thereby reducing the number of items used to 20. These 20 items were labeled the Older Learners Participation Scale (OLPS) and this scale was intended to be administered along with the EPS.

In an attempt to establish reliability and validity of the OLPS and EPS, Pritchard (1978) tested the combined scales with 10 older learners. The test-retest reliability coefficient emerged as .80. The EPS was factor analyzed by itself and resulted in factors similar to Riddell's (1976) study of an older learner population. Additionally, when both scales were factor analyzed together (principal component analysis with varimax rotation), the original EPS factors were confirmed (escape/stimulation, social contribution, socialization/stimulation, and cognitive interest), and two separate factors also emerged (self actualization and adaptation/self-understanding). Also, Pritchard reported that in several instances items from the EPS combined with items from the OLPS to constitute the factor, suggesting that "construct validity was inherent in the creation of logical learning orientations based on the items included in the measurement instrument" (p. 81).

Factors Linked to Motivational Orientations

A number of demographic variables have been identified as possible influences on older adults' motivation to participate in education. More specifically, previous

study results suggest that age, gender, socioeconomic status, and marital status exert an influence on older adults' educational motivations.

Age. Age of the participants is one variable that has been linked to participation in formal education by older adults (Havinghurst, 1976; Heisel et al., 1981; Lumsden, 1985; Pritchard, 1978). Indeed, various researchers have identified a need for the examination of age differences, especially within the "old-age" range. For example, it has been pointed out (Lumsden, 1985) that there is a need to distinguish between the "young-old" (interpreted as those who are 65 to 75 years of age), and the "old-old" (those over 75 years old). Moreover, Heisel, Darkenwald, and Anderson (1981) comment that, considering current life expectancy and the average age of retirement, 55 is not even a valid lower limit for the broad category of "older adult". In summary, a review of literature reveals that few if any studies have examined age differences between the "young-old" and the "old-old" when investigating motives for older adults' participation in education.

Among the studies dealing with age as a characteristic of participants in education was that by Johnstone & Rivera (1965). Data for the study came from a national survey of 24,000 adults involved in postsecondary learning activities. Study results revealed that a decline in participation in education began at the age of 50 and became quite pronounced after the age of 65. Anderson &

Darkenwald (1979) examined how age was related to the participation of older adults in continuing education. It was noted that older adults (aged 60 and over) were less likely to participate in adult education than younger adults (under 60 years of age).

A few studies have focused on how age has affected the motivational orientations of older adult learners. Heisel, Darkenwald, and Anderson (1981) conducted a study based on a representative sample of 510 persons aged 60 years and older. For purposes of the analysis, respondents were classified into one of three age categories, or 60 to 64, 65 to 69, and 70 years and older. Among other things it was reported that proportionately more among those 70 years and older reported taking courses for social and recreational reasons. It was also reported that proportionately more of the 65 to 69 age group reported taking courses because of personal interest and general information purposes.

Likewise, Pritchard (1978) conducted a study to identify the underlying motivational patterns that influence older persons to participate in educational programs. The sample consisted of 358 senior adult educational participants in classes at San Diego State University's College of Extended Studies during fall semester, 1977. In contrast to the findings of Heisel, Darkenwald, and Anderson (1981), Pritchard reported that age had a significant negative relationship ($p < .03$) with

the motivational factor "self actualization." The younger cohort in the study (i.e., those 55 to 65 years of age) were more likely to be motivated by the motivational factor "self actualization" than participants who were over 70. Further, Pritchard (1978) found a positive relationship ($p < .05$) between the factor "social contribution" and age such that the factor was more influential for the "old-old" than for the "young-old."

Gender. Gender has been identified as a variable that affects the education participation of older persons. In Pritchard's (1978) study of older participants in continuing education, a significant correlation ($p < .000$) was found between gender and the motivational factor of "cognitive interest." That is, female respondents were more likely to be motivated to participate in the education by the motivational factor "cognitive interest" than the males in the study.

Socioeconomic status. Socioeconomic status (as measured by educational attainment, income level, and/or occupation) has also emerged as a variable with predictive utility in relation to the understanding of the motives of older adults (Anderson et al., 1979; Graney & Hays, 1976; Green & Enderline, 1980; Heisel et al., 1981; Pritchard, 1978). Pritchard (1978) has reported significant negative correlations ($p < .01$) between educational attainment and the three factors of "escape/stimulation," "social contribution," and "cognitive interest." That is,

motivations to escape or to contribute socially were stronger influences for those participants from an eighth grade or below educational background in comparison to all those with greater than an eighth grade educational attainment level. Similarly, those with an educational level below high school graduation were more influenced ($p < .01$) by the motivational factor "cognitive interest" than participants with a graduate degree. This particular finding was consistent with that reported by Heisel, Darkenwald, and Anderson (1981).

Other research conducted on participation in education of older adults identified income level as a variable with some relation to educational participation (Anderson et al., 1979; Covey, 1980; Goodrow, 1975; Green & Enderline, 1980; Heisel et al., 1981; Pritchard, 1978). Green and Enderline (1980) tested the hypothesis that the learning needs of the elderly vary according to socioeconomic strata (determined by income). Based on a study population of 143 older learners, it was found that upper- and middle-class white women expressed confidence in their ability to cope with life, and in their ability to find information they might need in the future from the education. The lower-class older adults expressed concern over their inability to cope with today's world or with unforeseen events that may occur in the future. The researchers stated that:

In general, as the individual descended the socioeconomic ladder, the shift of needs from the self actualization area to the information area became dramatic. Although all members indicated a general concern over their safety from crime, the need for information became evident particularly in the lower two socio-economic groups (p.15).

Pritchard (1978) noted that older adult learners from the lowest income bracket (defined as having a yearly income of under \$3,000) were more influenced ($p < .02$) to participate for reasons of "escape" than were those in the highest bracket (\$20,000 and over a year). This particular finding is consistent with that reported by Riddell (1976). Pritchard also found that the motivational factor of "social contribution" significantly influenced ($p < .04$) the participation of the income group reporting to have a yearly income of \$3,000 to \$4,999 but failed to influence those from the highest income level (\$20,000 and over a year).

Marital status. Earlier studies suggest that older adults' participation or desire to participate in educational activities may be affected by the adjustment made by both sexes to changes wrought by widowhood, divorce, absence of spouse, or the continuation of a single life (Spouce, 1980). Loneliness, isolation, and the tendency to withdraw from participation in many activities may become part of the adjustment process. Pritchard (1978), for instance, reported a significant relationship ($p < .05$) between marital status and the motivational factor of "social contribution." More specifically, it was found

that those who had been divorced were more motivated by the factor "social contribution" to participate in the education than non divorced participants.

PROCEDURES

The purpose of the study was two-fold. One aim of the study was to identify the motivational orientations of older adult learners who participate in the Golden Identification (I.D.) Program at the University of Maryland. A second aim was to examine the influence that selected demographic variables (age, gender, socioeconomic status, and marital status) have on the motivations of Golden I.D. Program participants.

Sample

The sample in this study consisted of participants from the Golden I.D. Program at the University of Maryland College Park, Maryland. The sampling frame used for this investigation was the list of 375 students registered in the Spring 1987 Golden I.D. Program. Systematic probability sampling procedure (with a sampling interval of 3) was used. The sample size of 200 was determined by assuming that 50% response rate resulting in at least 100 useable questionnaires-- a number recommended by Bailey (1978).

Intervention

The Golden I.D. Program makes available to eligible individuals, regular University of Maryland college-level courses and services (such as the use of libraries and free admission to athletic events. Tuition and most other fees are waived for individuals qualifying under the Golden I.D.

Program. In order to be eligible for the Golden I.D. Program, an individual must be at least 60 years of age or older by the first class day of the semester they desire to enroll in; a Maryland resident; retired (not engaged in gainful employment for more than 20 hours per week); or those under 60 years of age and retired and disabled (as defined by the Social Security or Railroad Retirement Act).

Instrumentation

Three instruments were used to conduct this study. In order to measure motivational orientations for education participation by older adults, Boshier and Riddell's (1978) Educational Participation Scale for Older Adults (EPSOA) and Pritchard's (1978) revised Older Learner Participation Scale (OLPS) were used (see Appendix A, Part I, items 1 through 30 and 31 through 47 are the EPSOA and OLPS, respectively).

Both the EPSOA and the OLPS have been tested for validity and reliability (Pritchard, 1978). The original EPSOA has documented construct validity (Boshier, 1971, 1973, 1977; Morstain & Smart, 1974; Riddell, 1976). Furthermore, Pritchard (1978) reported that the combined index (EPSOA and the OLPS), when subjected to factor analysis, consistently produced factors similar to those produced when the EPSOA or the OLPS index alone were subject to factor analysis. Given these results, Pritchard concluded that the OLPS had construct validity. Pritchard

(1978) also reports that the combined EPSOA and OLPS has an overall test-retest reliability coefficient of .80.

For each item used in the EPSOA and the OLPS, a 4-point Likert response category scale was used. An answer of "much influence" received a score of 4 points, "moderate influence" received a score of 3 points, "little influence" received a score of 2 points, and "no influence" received a score of 1 point.

Pritchard (1978) divided the 47 items of the two scales into 6 factors of motivational orientations through a factor analysis process. In order to extract the factors, Pritchard (1978) used Principal Factoring with Iteration procedure of factor analysis augmented by orthogonal rotation using the Varimax method. Factor scores in the form of z scores were produced. Factor number one was called "escape stimulation" and was comprised of items #4, 12, 13, 16, 23, 24, 25 26, and 30. Factor two was called "social contribution" and included items #2, 8, 14, 15, 21, 29, 44, and 46. Factor three, labeled "self actualization" included items #31, 33, 35, 39, 40, and 42. Factor four, called "social contact" was comprised of items #3, 6, 7, 9, 10, 18, 19, 20, 22, 28, 36, 38, and 41. Factor five was labeled "cognitive interest" and included questions #1, 5, 17, 27, and 32. And factor six was called "adaptation self-understanding" and included items #11, 34, 37, 43, 45, and 47.

The third instrument used in the study measured demographic characteristics (see Appendix A, Part II). Based on face validity (as judged by the principal investigator) age, gender, and marital status were each measured by one question. Response categories for marital status were: single (never been married), married, divorced, separated and widowed.

Socioeconomic status was measured by using the Duncan Socioeconomic Index (Miller, 1977). The Duncan Index calculates a prestige score for occupations based on educational attainment and income associated with the occupation. The construct validity for the Duncan Index has been reported as .91 (Miller, 1977). Additionally, the Duncan Index has reported .99 test-retest reliability (Hodge, Siefel, & Rossi, 1964).

In order to calculate the Duncan Index, respondents were asked to indicate and briefly describe their preretirement occupation (see Appendix A, Part II items 6 and 7). Based on the occupation indicated by the participant, a socioeconomic rating in the form of a number score between 0 and 99 was assigned (see Appendix B). For descriptive purposes only, the occupational status scores were broken down into three categories by the proportional distribution of actual responses (Bailey, 1978, pp.86-87). That is, scores between 71-100 were considered "high," scores between 36 and 70 were considered "medium," and scores between 0 and 35 were considered "low." Occupations

not included in the Duncan Index were assigned ratings, by the principal investigator, on the basis of their similarity to occupations that were included.

Additionally, two questions dealing with income and educational attainment (see Appendix A, Part II items 4 and 5) of the participant were asked. The rationale for asking these questions was to be able to compare characteristics of the sample group with 1980 Census data on the characteristics of Prince George and Montgomery County, Maryland senior residents since the majority of Golden I.D. students resided in one of these two counties (in the Spring 1987, 154 or 42% of Golden I.D. students resided in Prince George County and 206 or 51% resided in Montgomery County). These questions used response categories identical to the ones used in the 1980 U.S. census (United States Bureau of the Census, 1986). Demographic questions that were unanswered were treated as "missing data," and the percentages reported for these questions were adjusted to reflect usable responses.

Collection of Data

A mailed questionnaire technique was used for conducting this research. The questionnaire construction and data collection was designed based on the principles outlined by Dillman (1978). The questionnaire was printed in large capital type in order to make it easier to read. The initial mailing of the questionnaire was sent out in February, 1987. Each potential participant was sent a

questionnaire with a cover letter individualized with their name (see Appendix C) and a self-addressed, stamped return envelope. Individuals were asked to return the questionnaire as soon as possible. A follow-up reminder was sent within two weeks of the first mailing in the form of a postcard (see Appendix D). A second follow up reminder was sent to the non-respondents three weeks after the initial mailing. This mailing consisted of a cover letter that informed the non-respondents that their questionnaire had not yet been received (see Appendix E), and a replacement questionnaire.

Each questionnaire was coded with an identification number in order to reduce mailing costs in the follow-up phases. The methodology for this study was approved by the Human Subjects Committee of the Department of Recreation at the University of Maryland (See Appendix F).

To examine the clarity and sensitivity of questions and directions contained in the questionnaire a pilot study was conducted. The instrument was given to a convenience sample of 20 older adult learners participating in educational programs through the Montgomery County Community College system. The pilot group was asked to complete the questionnaire and to give comments regarding the clarity and sensitivity of the questions and response categories as well as the design of the questionnaire and letters. Results of the pilot revealed no problems with questionnaire construction, questionnaire length, nor did

the pilot sample take exception to any of the posed questions.

Statistical Analysis

An a priori decision was made by the investigator to delete a questionnaire from the study if the respondent failed to answer 10% or more of the motivation items posed. Those questionnaires that met this criterion but had missing data for the motivational orientation items were replaced with an estimate of the items' score. This step was taken in order to retain variance in the data. The estimate of the score was obtained by an equation that adds to the group's mean (\bar{M}) score (for respondents who had provided answers to the missing item under examination) the product of a random number (between 0 and +1) that has been multiplied by the standard deviation for the item. [$\bar{M} + (\text{random number} \times \text{standard deviation})$]. The random number (.516) was derived by the SPSSX subprogram Seed (SPSSX User's Guide, 1986). The standard deviation for a motivational orientation item was derived by using a regression equation for the item (i.e., an item that had a missing value) using gender as a dependent variable. Gender was judged by the researcher as an appropriate dependent variable for the missing value equation because it could lend the variance necessary. The final number resulting from the equation was then rounded to the closest whole number between 1 and 4, and the value was used to replace the item's missing value.

The next step in the statistical analysis was to perform confirmatory factor analysis using the sample data and the motivational orientation model proposed by Pritchard (1978). Confirmatory factor analysis procedure was conducted utilizing the Lisrel analysis of linear structural relationships by the method of maximum likelihood program (Joreskog & Sorbom, 1986). One measure of fit available with the maximum likelihood option is the Lambda X test which produces t-values. Joreskog and Sorbom (1986) state that t-values larger than two in magnitude are normally judged to be different from zero and therefore represent a significant fit of the data to the model and support for the use of the model.

The next phase of analysis was to compute factor scores. The formula that was used to compute the factor scores was: the factor score coefficient (FSC) multiplied by the item score (X) minus the mean (M) for the particular item divided by the standard deviation for that item (sd) or $FSC(X-M)/sd$ (SPSSX User's Guide, 1986). The factor score coefficients were supplied by Pritchard (I.C. Pritchard, personal communication, October 2, 1987) and can be found in Appendix G. The item means and item standard deviations came from the study data and are also cited in Appendix G. Factor scores for each participant were computed for each of the six factors and were then used as dependent variables in the further analysis.

The remaining hypotheses were tested by using either Pearson-Product moment correlation (Hypothesis 2, 3, 5, 6, 7 and 8) or one-tailed analysis of variance (Hypotheses 4 and 9). Additionally, for descriptive purposes, measures of association associated with correlation analysis (i.e., r^2) and analysis of variance (i.e., η^2) were calculated.

Statistical analyses were executed by using the University of Maryland's Sperry-Univac 1100/82 Computer System. Release 10 of the Statistical Package for Social Sciences (SPSSX User's Guide, 1986) was used for the statistical calculations.

CHAPTER IV

ANALYSIS OF DATA

A mail questionnaire was used to collect data on the motivational orientations and demographic background of participants in the Golden I.D. Program at the University of Maryland. A total of 200 subjects were chosen (through a systematic probability sampling procedure) from a sampling frame of 375 participants enrolled in the Spring 1987 Golden I.D. Program. After a six week period 169 out of the 200 mailed questionnaires were returned. Using the a priori requirement that 90% or more of the motive items had to be completed in order for the questionnaire to be included in the data analysis (see Chapter 3), nine of the returned questionnaires were deleted from data consideration, (resulting in an 80% response rate).

Sample

Table 1 contains descriptive information on the sample. The mean age of the participants was 66, and the age of the participants in the sample ranged from 57 to 82 years of age. Males and females were represented about equally. That is, 81 were female and 79 were male. Over three-fourths of the respondents were married (76.2%). Of the remaining study participants, 15% were widowed, 6% were divorced, 1% were single and less than 1% were separated. There was one respondent who did not give his/her marital status.

Table 1
Demographic Characteristics of Respondents

Characteristics	Frequencies (N = 160)	Percentage
<u>Age</u>		
Mean	66.92	
Range	57 to 82	
<u>Gender</u>		
Male	79	49.4
Female	81	50.6
<u>Educational Attainment</u>		
4 years of high school	12	7.5
1 to 3 years of college	22	13.8
4 years of college	17	10.7
Some graduate work	34	21.4
Masters degree	50	31.4
Doctorate degree, M.D., and J.D.	19	12.1
Graduate Degree but type not specified	5	3.1
<u>Income</u>		
\$ 5,000 to \$9,999	1	0.7
\$10,000 to \$14,999	4	2.7
\$15,000 to \$19,999	9	6.0
\$20,000 to \$24,999	18	12.1
\$25,000 to \$34,000	20	13.4
\$35,000 to \$49,999	46	30.9
\$50,000 and over	51	34.2

Table 1 Continued

<u>Characteristics</u>	<u>Frequencies</u>	<u>Percentage</u>
<u>Occupational Status Score</u>		
Mean	70.7	
Range	15 to 96	
<u>Scores</u>		
0 to 35	11	7.6
36 to 70	39	26.9
71 to 100	95	65.5
<u>Marital status</u>		
Single	2	1.3
Married	122	76.7
Divorced	10	6.3
Separated	1	0.6
Widowed	24	15.1

The level of educational attainment of study participants ranged from the completion of 4 years of high school to a doctorate degree. The modal educational level of the students was completion of a master's degree (31%). Another 20% of the sample reported having completed graduate work. Of the remaining study participants, 10% had 4 years of college, 13% had 1 to 3 years of college, and 7% had 4 years of high school.

The mean income of the sample was in the \$25,000 to \$34,000 a year category, and respondents reported incomes ranging from \$5,000 per year to over \$50,000 per year. Since the majority of the Golden I.D. students reside in Montgomery County and Prince George County, Maryland, both of these counties were considered in the comparison of mean annual incomes. In 1979 the average annual income of persons 65 years of age or older was reported to be \$26,706 in Montgomery County and \$17,836 for Prince George's County (United States Bureau of the Census, 1983). When translated into 1986 dollars, these values become \$40,538 and \$27,074, respectively (based on an increase of the United States Department of Labor Consumer Price Index from 217 in 1979 to 330 in early 1986). Consequently, the income for the sample was representative of the annual income of \$27,074 for those 65 years of age or older living in Prince George's County, Maryland but it was slightly lower than the income of \$40,538 reported for those 65

years of age and older living in Montgomery County, Maryland.

The occupational status scores for the sample ranged from 15 to 96. The mean occupational score for the sample participants was 70.7 and the standard deviation was 17.5. For the sample participants only 7.6% scored low (scores ranged from 0 to 35) and 26.9% scored in the medium level. The largest percentage of the group scored in high range (65.5%). Of those who scored high 31% were between 72 and 80 and 35% were between 81 and 96.

Motivational Orientation Factor Structure

Overview. The mean and standard deviation for each factor item can be found in Table 2. Mean factor scores revealed that the following were, in decreasing order of importance, motives for participation in the Golden I.D. program: "cognitive interest" ($M = 3.3$), "self actualization" ($M = 2.8$), "adaptation/self-understanding" ($M = 2.2$), "social contact" ($M = 2.0$), "social contribution" ($M = 1.9$), and "escape/stimulation" ($M = 1.3$).

Factor structure. Confirmatory factor analysis by the maximum likelihood method was used to evaluate the appropriateness of the proposed model of older adults' motivational orientations to participate in education (Pritchard, 1978). The confirmatory factor analysis produced t-values for each item named on a particular factor (see Table 3). All but 3 of the items (or items 13,

Table 2

Item by Factor Mean and Standard Deviation

Item by factor name	<u>a</u> <u>M</u>	<u>sd</u>
One: "Escape/stimulation"	1.29	
4. To carry out the recommendations of some authority	1.19	.62
12. To help me earn a degree, diploma, or certificate	1.59	1.05
13. To escape television	1.39	.80
16. To have a few hours away from responsibilities	1.35	.74
23. To meet formal requirements	1.35	.83
24. To maintain or improve my social position	1.34	.68
25. to escape an unhappy relationship	1.07	.36
26. To comply with the suggestions of someone else	1.21	.62
30. To comply with instructions from someone else	1.15	.56
Two: "Social contribution"	1.90	
2. To become more effective as a citizen	2.11	1.13
8. To acquire knowledge to help with other educational courses	1.87	1.12
14. To prepare for community services	1.59	.94
15. To gain insight into human relations	2.33	1.10
21. To improve my ability to serve mankind	2.03	1.06

Table 2 continued

Item by factor	^a M	sd
Two: "Social contribution"		
29. To improve my ability to participate in community work	1.61	.93
44. To better understand today's social problems	2.34	1.12
46. To learn to be a better consumer	1.34	.70
Three: "Self actualization"		
	2.75	
31. To have a feeling of challenge and accomplishments	3.12	1.04
33. To learn a specific skill	2.21	1.24
35. To improve my personal competency	2.90	1.08
39. To feel a sense of achievement	3.20	.94
40. To make use of my talents	2.73	1.15
42. To learn to be more creative	2.38	1.17
Four: "Social contact"		
	1.97	
3. To get relief from boredom	1.90	1.01
6. To overcome the frustration of day to day living	1.69	.92
7. To be accepted by others	1.42	.74
9. To fulfill a need for personal associations and friendships	2.00	.93
10. To participate in group activity	1.96	.97
18. To become acquainted with congenial people	2.23	.89

Table 2 continued

Item by factor	M ^a	sd
Four: "Social contact"		
19. To provide a contrast to the rest of my life	1.92	1.03
20. To get a break in the routine of home or work	1.75	.96
22. To improve my social relationships	1.63	.82
28. To make new friends	1.86	.84
36. To learn how best to use my leisure time	1.92	1.02
38. To satisfy a desire to develop new interests	2.87	1.09
41. To find more satisfying leisure activities	2.56	1.07
Five: "Cognitive interest"		
1. To seek knowledge for its own sake	3.58	.83
5. To satisfy an inquiring mind	3.71	.62
17. To learn just for the joy of learning	3.70	.68
27. To learn just for the sake of learning	3.47	.92
32. To keep up-to-date with changes in everyday living	2.25	1.16

Table 2 continued

Item by factor	^a	
	M	sd
Six: "Adaptation/self-understanding"	2.24	
11. To gain insight into my personal problems	1.52	.89
34. To better prepare myself for retirement living	2.00	1.14
37. To better cope with challenges of daily living	1.77	.95
43. To make a better adjustment in retirement	2.23	1.12
45. To change my lifestyle	1.64	.95
47. To understand myself better	2.06	1.09

^a

Possible responses were: no influence = 1 points, little influence = 2 points, moderate influence = 3 points, and much influence = 4 points.

Table 3

Confirmatory Factor Analysis of Motivation Variables

Lambda X Numbers = T-Values

Item	Motives					
	1	2	3	4	5	6
1					7.0	
2		9.8				
3				5.4		
4	6.2					
5					7.9	
6				8.1		
7				5.4		
8		5.6				
9				9.2		
10				8.7		
11						8.4
12	9.7 ^a					
13	1.2 ^a					
14		10.7				
15		7.4				
16	.9 ^a					
17					10.7	
18				11.0		
19				6.2		
20				7.0		
21		12.1				
22				9.0		
23	12.1					
24	4.7					
25	2.8					
26	4.2					
27					8.8	
28				9.3		
29		11.4				
30	2.0					
31			10.4			
32					1.4 ^a	
33			5.2			
34						10.9
35			7.4			
36				7.1		
37						10.2
38				4.5		
39			11.3			
40			9.2			

Table 3 continued

Confirmatory Factor Analysis of Motivation Variables
Continued
Lambda X/T-Values

Item	Motives					
	1	2	3	4	5	6
41				7.6		
42			7.5			
43						11.2
44		8.0				
45						7.1
46		6.0				
47						8.4

Note: Motives are as follows: 1 = escape stimulation, 2 = social contribution, 3 = self actualization, 4 = social contact, 5 = cognitive interest, and 6 = adaptation/self-understanding. See Appendix A, Part I for list of items.

^a

These scores are not significant at the 2.0 level.

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16, and 32) reported scores over 2.0 (the established cut off point for significance). Indeed, the data basically "fit" the proposed model. Given these results, hypothesis one was not rejected.

Hypotheses Testing

Analysis of variance and Pearson-product moment correlation were used to investigate the effect specific demographic variables had on Golden I.D. students' motivational orientations to participate in education. The results of the study supported two of the remaining eight hypotheses.

Hypothesis number 2 stated that there was a positive relationship between age and the educational participation motive "social contribution." Instead, a negative and insignificant association emerged between age and "social contribution," $r(154) = -.08$, $p = .16$.

Hypothesis 3 stated that there would be a negative relationship between age and the motive "self actualization." A negative, though insignificant association, emerged between age and "self actualization," $r(154) = -.08$, $p = .17$.

The fourth hypothesis stated that there would be an association between gender and the motive "self actualization," such that female participants relative to male participants were more likely to report they were motivated to participate in adult education because of self actualization reasons. The mean scores on this motive for

males and females were $-.29$ and $-.22$, respectively. Analysis of variance testing revealed, however, an insignificant relationship between gender and "self actualization," $F(1,159) = .50$, $p = .24$.

Hypothesis 5 stated that there would be a negative relationship between socioeconomic status and the motive "escape/stimulation." The nature of the relationship between socioeconomic status and this motive indeed turned out to be negative and significant, $r(145) = -.16$, $p = .03$. Additionally, the r^2 for this hypothesis was $.03$, indicating that 3% of the variance in "escape stimulation" was accounted for by the variable socioeconomic status.

Hypothesis 6 linked socioeconomic status and the motive "social contribution" by speculating that there would be a negative relationship between the two variables. As hypothesized, a significant negative relationship between these two variables did emerge, $r(145) = -.23$, $p < .01$. The r^2 for this hypothesis was $.05$ demonstrating that 5% of the variance in the factor "social contribution" was explained by the socioeconomic status of the participant.

Hypothesis 7 posited a positive relationship between the socioeconomic status of the participant and the motive "self actualization." Instead, a significant negative association emerged between socioeconomic status and "self actualization," $r(145) = -.25$, $p < .01$. In addition, the r^2 was $.06$ establishing that 6% of the variance in the

motive "self actualization" was explained by the socioeconomic status of the older student.

Hypothesis 8 stated a negative relationship between socioeconomic status and the motive "cognitive interest." A negative but insignificant relationship emerged between the participant's socioeconomic status and "cognitive interest," $r(145) = -.05, p = .29$.

The ninth hypothesis stated that there would be an association between marital status and the educational participation motive "social contribution," such that divorced participants relative to non-divorced participants were more likely to report they were motivated to participate in adult education because of social contribution reasons. The mean scores on this motive for divorcees and non-divorcees were $-.07$ and $.00$, respectively. Furthermore, analysis of variance testing revealed, an insignificant relationship between marital status and "social contribution," $F(1,158) = .39, p = .27$.

CHAPTER V

SUMMARY OF CONCLUSIONS

The purpose of the study was two-fold. One purpose of the study was to identify the motivational orientations of older adult learners who participate in the Golden Identification (I.D.) Program at the University of Maryland. A second purpose was to examine the influence that selected demographic variables (age, gender, socioeconomic status, and marital status) have on the motivations of older adults to participate in the Golden I.D. Program. This chapter is divided into the following five sections: (1) summary of procedures; (2) summary of findings; (3) conclusions; (4) discussion and implications; and (5) recommendations for further research.

Summary of Procedures

A total of 200 subjects were chosen (through a systematic probability sampling procedure) from a sampling frame of 375 participants enrolled in the Spring 1987 Golden I.D. Program at the University of Maryland in College Park, Maryland. After a six week period, 169 surveys were returned. Of this number, 160 persons returned completed and usable questionnaires (corresponding to an 80% response rate).

A two-part survey questionnaire was developed, using the principles outlined by Dillman (1978), and was used to collect data on the motivational orientations and demographic background of participants in the Golden I.D.

Program at the University of Maryland. The data were recorded and examined using confirmatory factor analysis, analysis of variance, Pearson-Product Moment Correlations, and measures of association associated with correlation analysis (i.e., r^2) and analysis of variance (i.e., η^2).

Summary of Findings

Confirmatory factor analysis by the maximum likelihood method was performed using the original study's (Pritchard, 1978) six factors and the data collected from the present survey. This analysis produced t-values for each item and 91% of the items had scores over 2.0, the established cut-off point for significance (see Joreskog & Sorbom, 1986). This high number of significant items confirmed the appropriateness of using these factors in the present study. Consequently, the six factors (from the original model) were used in hypotheses testing as dependent variables in the study described herein.

The hypothesized positive relationship between the age of participants and the educational participation motive "social contribution" was not upheld by the findings of this investigation. Statistical analysis revealed an insignificant negative relationship between age and "social contribution." This finding is contrary to the positive significant relationship between age and the motive "social contribution" reported by Pritchard (1978).

The hypothesized positive relationship between age and "self actualization" was not substantiated. A negative insignificant relationship emerged between these two variables. This finding conflicts with the significant positive relationship Pritchard (1978) reported between socioeconomic status and the motive "self actualization."

It was hypothesized that females relative to males would be more likely to participate in adult education for "cognitive interest" reasons. The present study revealed an insignificant association between gender and the motive "cognitive interest." Although the mean scores for the two gender groups were both negative, the findings suggested a tendency for women to be more influenced than men by the motive. Contrastingly, Pritchard (1978), found a significant association between gender and "cognitive interest."

As speculated, the study's findings confirmed that a significant negative relationship existed between socioeconomic status and the motives "escape/stimulation" and "social contribution." Such findings are supportive of those reported by Pritchard (1978) and Riddell (1976). Additionally, it was hypothesized that there would be a positive relationship between socioeconomic status and the motive "self actualization." Contrary to what was hypothesized, a significant negative relationship emerged between the two variables. Such a finding is in direct conflict to what Green and Enderline (1980) have reported.

Additionally, socioeconomic status was expected to correlate negatively with the motive "cognitive interest." Although a negative relationship occurred between socioeconomic status and "cognitive interest," this relationship was found to be insignificant. In comparison, Pritchard (1978) reported a significant negative relationship between socioeconomic status and "cognitive interest."

Finally, it was predicted that divorced participants would be influenced to a greater extent by the motive "social contribution" than non-divorced older students. The mean scores did not, however, reflect this association ($M = .00$ and $-.07$ for non-divorcees and divorcees, respectively) nor was there a significant association found between marital status and "social contribution." These results do not support the previous findings of Pritchard (1978).

Conclusions

Based upon the findings and within the limitations of this study, the results suggest that the motivation of older adults to participate in education is complex and determined by both social and psychological motives. Furthermore, the motivation of University of Maryland Golden I.D. students to participate in education can be divided into the six factors or motives that were proposed by Pritchard (1978). More specifically, the most frequent reported motives for participating in the Golden I.D.

Returning for a post-graduate course has provided a satisfying mental stimulation adding a welcome factor to the required completion of certain household chores. The structure of this experience has had an additional salutary effect.

I enjoy the classes and the different types of people one meets. I participate in order to keep using my brain to retard senility. A perennial student, I love learning, problem solving, and the challenge of courses.

I enjoy helping others where I can contribute.

There is no end to learning, learning is living and the more I learn the more I live.

My primary goal is to gain knowledge in areas that will help me pursue interests that have been on the "back-burner" for a long time because of lack of time during my working years.

I am at present participating in the Golden I.D. Program to learn as much as I can about General Agriculture with the prospects of going to a country in West Africa to assist where I am needed in scientific farming.

I feel if I completed a program, got a degree, I would feel more like a person.

I was already enrolled as a post-graduate student before becoming eligible for Golden I.D. status. When due to ill health, I had to reduce my professional work-load, I gladly profited from the program to continue doing what I liked to do... becoming more knowledgable for my own sake and sharing that knowledge with elderly as a fellow elderly.

To broaden one's knowledge in areas or subjects that one did not learn or specialize in earlier life. Also one's mental exercise, i.e., to learn, think, read should never stop as an active activity of life.

The primary purpose for participation in the Golden I.D. program is self satisfaction-you might call it entertainment...I do not take courses to improve myself or the world, nor do I take them to learn to enrich my life. I take them because they do enrich my life. I take subjects in which I have an interest, and as the courses unfold I see facets that are intrinsically fascinating and at hold my attention, much as is the case of the artist who observes the

passing scene and sees things he may not have seen before. The purpose is not to find more satisfying leisure activities (question 41 your questionnaire), but to engage in satisfying activities. It is not to change my life style (question 45) but to exploit my environment to the fullest to gain satisfaction. To learn and understand unravels the mystery of the universe.

The findings regarding the relationships between the motives and the socioeconomic status of Golden I.D. students raises a number of issues. Since only one third of the Golden I.D. participants are low socioeconomic status, one question that arises is whether or not the university is adequately meeting the special needs of low socioeconomic status older persons. Moreover, do the variety of courses that are offered appeal to the "escape/stimulation" and "cognitive interest" needs of low socioeconomic status persons? And, is the availability of such courses is known to these individuals?

Insignificant results can be explained by a number of plausible explanations exist. First, the difference between sample sizes, when comparing Pritchard's (1978) investigation ($N = 358$) to the study described herein ($N = 160$), could explain why different results were noted. Second, given the 9 year span between the two studies, cohort differences and period effects could possibly explain the differences in results.

Still, this investigation has specific implications for service providers. The findings suggest that, in order to stimulate greater participation in educational programs, publicity techniques, counseling services, and outreach

methods should take into consideration the motivational orientations of older adults. Additionally, other service providers, such as recreators, should consider this information on motivations when programming recreational activities for older adults.

In summary, dealing in depth with one specific group of older adult learners, this investigation has added to the existing understanding of the motivations of older adults who participate in education. Also, it has served to confirm the validity of the revised OLPS the EPSOA index proposed by Pritchard (1978).

Recommendations for Further Research

This study has added to the research regarding selected demographic variables as they relate to the motives of older adult education participants. There is, however, a need for further research dealing with older adults' motivation to participate in education. First, studies using the combined OLPS and the EPSOA scales with other older adult learner groups seems warranted in order to examine the external validity of the noted findings. Second, studies conducted with older learners from different learning settings (such as community college, Elder Hostel, or Life Long Learning Institutions) could provide insights to how setting and course content affects educational motives. Third, future investigations should assess how changes in the sociodemographic characteristics of the older population will affect motivational

orientations. Fourth, evaluation studies on the effectiveness of outreach and publicity efforts, that utilized motivational orientations in program planning and recruitment, should be undertaken. Finally, studies need to be conducted to explore the reasons older adults are not involved in educational programs and offerings.

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APPENDIX A
SURVEY QUESTIONNAIRE

PART I DIRECTIONS: IN AN EFFORT TO BETTER UNDERSTAND THE MOTIVES OF THOSE OLDER ADULTS WHO ARE PARTICIPATING IN EDUCATION, WE ARE STUDYING GOLDEN IDENTIFICATION STUDENTS AT THE UNIVERSITY OF MARYLAND. THE FOLLOWING QUESTIONS DEAL WITH REASONS FOR PARTICIPATION IN EDUCATION. PLEASE INDICATE THE EXTENT TO WHICH EACH OF THE REASONS LISTED BELOW INFLUENCED YOU TO PARTICIPATE IN THE GOLDEN IDENTIFICATION PROGRAM. THERE ARE NO RIGHT OR WRONG ANSWERS... BUT PLEASE BE HONEST! SOMETIMES THE "MUCH INFLUENCE" CATEGORY IS ON THE RIGHT-HAND SIDE OF THE PAGE, SOMETIMES IT IS ON THE LEFT. FOR EVERY QUESTION POSED, CIRCLE ONLY ONE ANSWER.

		EXTENT INFLUENCED (CIRCLE ANSWER)			
1.	TO SEEK KNOWLEDGE FOR ITS OWN SAKE.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
2.	TO BECOME MORE EFFECTIVE AS A CITIZEN.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
3.	TO GET RELIEF FROM BOREDOM.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
4.	TO CARRY OUT THE RECOMMENDATIONS OF SOME AUTHORITY.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
5.	TO SATISFY AN INQUIRING MIND.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
6.	TO OVERCOME THE FRUSTRATION OF DAY TO DAY LIVING.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
7.	TO BE ACCEPTED BY OTHERS.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
8.	TO ACQUIRE KNOWLEDGE TO HELP WITH OTHER EDUCATIONAL COURSES...	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
9.	TO FULFILL A NEED FOR PERSONAL ASSOCIATIONS AND FRIENDSHIPS.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
10.	TO PARTICIPATE IN GROUP ACTIVITY.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE

		EXTENT INFLUENCED (CIRCLE ANSWER)			
11.	TO GAIN INSIGHT INTO MY PERSONAL PROBLEMS.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
12.	TO HELP ME EARN A DEGREE, DIPLOMA, OR CERTIFICATE.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
13.	TO ESCAPE TELEVISION.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
14.	TO PREPARE FOR COMMUNITY SERVICE.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
15.	TO GAIN INSIGHT INTO HUMAN RELATIONS.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
16.	TO HAVE A FEW HOURS AWAY FROM RESPONSIBILITIES.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
17.	TO LEARN JUST FOR THE JOY OF LEARNING.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
18.	TO BECOME ACQUAINTED WITH CONGENIAL PEOPLE.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
19.	TO PROVIDE A CONTRAST TO THE REST OF MY LIFE.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
20.	TO GET A BREAK IN THE ROUTINE OF HOME OR WORK.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
21.	TO IMPROVE MY ABILITY TO SERVE MANKIND.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
22.	TO IMPROVE MY SOCIAL RELATIONSHIPS.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
23.	TO MEET FORMAL REQUIREMENTS.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
24.	TO MAINTAIN OR IMPROVE MY SOCIAL POSITION.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE

		EXTENT INFLUENCED (CIRCLE ANSWER)			
25.	TO ESCAPE AN UNHAPPY RELATIONSHIP.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
26.	TO COMPLY WITH THE SUGGESTIONS OF SOMEONE ELSE.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
27.	TO LEARN JUST FOR THE SAKE OF LEARNING.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
28.	TO MAKE NEW FRIENDS.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
29.	TO IMPROVE MY ABILITY TO PARTICIPATE IN COMMUNITY WORK.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
30.	TO COMPLY WITH INSTRUCTIONS FROM SOMEONE ELSE.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
31.	TO HAVE A FEELING OF CHALLENGE AND ACCOMPLISHMENTS.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
32.	TO KEEP UP-TO-DATE WITH CHANGES IN EVERYDAY LIVING.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
33.	TO LEARN A SPECIFIC SKILL.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
34.	TO BETTER PREPARE MYSELF FOR RETIREMENT LIVING.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
35.	TO IMPROVE MY PERSONAL COMPETENCY...	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE
36.	TO LEARN HOW BEST TO USE MY LEISURE TIME.....	NO INFLUENCE	LITTLE INFLUENCE	MODERATE INFLUENCE	MUCH INFLUENCE
37.	TO BETTER COPE WITH CHALLENGES OF DAILY LIVING.....	MUCH INFLUENCE	MODERATE INFLUENCE	LITTLE INFLUENCE	NO INFLUENCE

 EXTENT INFLUENCED
 (CIRCLE ANSWER)

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|-----|---|-------------------|-----------------------|-----------------------|-------------------|
| 38. | TO SATISFY A DESIRE
TO DEVELOP NEW
INTERESTS..... | NO
INFLUENCE | LITTLE
INFLUENCE | MODERATE
INFLUENCE | MUCH
INFLUENCE |
| 39. | TO FEEL A SENSE
OF ACHIEVEMENT..... | MUCH
INFLUENCE | MODERATE
INFLUENCE | LITTLE
INFLUENCE | NO
INFLUENCE |
| 40. | TO MAKE USE OF MY
TALENTS..... | NO
INFLUENCE | LITTLE
INFLUENCE | MODERATE
INFLUENCE | MUCH
INFLUENCE |
| 41. | TO FIND MORE
SATISFYING LEISURE
ACTIVITIES..... | MUCH
INFLUENCE | MODERATE
INFLUENCE | LITTLE
INFLUENCE | NO
INFLUENCE |
| 42. | TO LEARN TO BE MORE
CREATIVE..... | NO
INFLUENCE | LITTLE
INFLUENCE | MODERATE
INFLUENCE | MUCH
INFLUENCE |
| 43. | TO MAKE A BETTER
ADJUSTMENT IN
RETIREMENT..... | MUCH
INFLUENCE | MODERATE
INFLUENCE | LITTLE
INFLUENCE | NO
INFLUENCE |
| 44. | TO BETTER
UNDERSTAND TODAY'S
SOCIAL PROBLEMS..... | NO
INFLUENCE | LITTLE
INFLUENCE | MODERATE
INFLUENCE | MUCH
INFLUENCE |
| 45. | TO CHANGE MY
LIFESTYLE..... | MUCH
INFLUENCE | MODERATE
INFLUENCE | LITTLE
INFLUENCE | NO
INFLUENCE |
| 46. | TO LEARN TO BE A
BETTER CONSUMER..... | NO
INFLUENCE | LITTLE
INFLUENCE | MODERATE
INFLUENCE | MUCH
INFLUENCE |
| 47. | TO UNDERSTAND
MYSELF BETTER..... | MUCH
INFLUENCE | MODERATE
INFLUENCE | LITTLE
INFLUENCE | NO
INFLUENCE |

PART II DIRECTIONS: FINALLY, WE WOULD LIKE TO ASK SOME QUESTIONS ABOUT YOURSELF TO HELP INTERPRET THE RESULTS.

1. WHAT IS YOUR SEX (CIRCLE NUMBER)?
 1. MALE
 2. FEMALE

2. WHAT IS YOUR PRESENT MARITAL STATUS (CIRCLE NUMBER)?
 1. SINGLE (NEVER BEEN MARRIED)
 2. MARRIED
 3. DIVORCED
 4. SEPARATED
 5. WIDOWED

3. WHAT IS YOUR AGE (SPECIFY)? _____

4. WHICH OF THE FOLLOWING CATEGORIES BEST DESCRIBES YOUR TOTAL FAMILY INCOME DURING 1986 (CIRCLE NUMBER)?
 1. \$ 0 - \$ 1,999
 2. \$ 2,000 - \$ 4,999
 3. \$ 5,000 - \$ 9,999
 4. \$10,000 - \$14,999
 5. \$15,000 - \$19,999
 6. \$20,000 - \$24,999
 7. \$25,000 - \$34,999
 8. \$35,000 - \$49,999
 9. \$50,000 AND OVER

5. WHICH IS THE HIGHEST LEVEL OF EDUCATION THAT YOU HAVE COMPLETED (CIRCLE NUMBER)?
 1. 0 - 4 YEARS ELEMENTARY SCHOOL
 2. 5 - 7 YEARS ELEMENTARY SCHOOL
 3. 8 YEARS OF ELEMENTARY SCHOOL
 4. 1 - 3 YEARS OF HIGH SCHOOL
 5. 4 YEARS OF HIGH SCHOOL
 6. 1 - 3 YEARS OF COLLEGE
 7. 4 YEARS OF COLLEGE
 8. SOME GRADUATE WORK
 9. A GRADUATE DEGREE(S) (CIRCLE ANSWER)
 - MASTERS
 - DOCTORATE
 - M.D.
 - OTHER (SPECIFY) _____

6. PRIOR TO RETIREMENT WHAT WAS YOUR MAJOR OCCUPATION?

7. PLEASE GIVE A BRIEF DESCRIPTION OF THAT OCCUPATION:

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IS THERE ANYTHING ELSE YOU WOULD LIKE TO TELL US ABOUT YOUR MOTIVATION TO PARTICIPATE IN THE GOLDEN I.D. PROGRAM AT THE UNIVERSITY OF MARYLAND? IF SO, PLEASE USE THIS SPACE FOR THAT PURPOSE.

YOUR CONTRIBUTION TO THIS EFFORT IS VERY GREATLY APPRECIATED. IF YOU WOULD LIKE A SUMMARY OF RESULTS, PLEASE PRINT YOUR NAME AND ADDRESS ON THE BACK OF THE RETURN ENVELOPE (NOT ON THIS QUESTIONNAIRE). WE WILL SEE THAT YOU GET IT.

APPENDIX B
SOCIOECONOMIC STATUS INDEX SCORING

Socioeconomic Index (SEI) Scores for Occupations by Duncan

Duncan's
SEI Score

Category

Professional, technical and kindered workers

78	Accountants and auditors
60	Actors
79	Airplane pilots and navigators
90	Architects
67	Artists and art teachers
52	Athletes
76	Authors
75	Chiropractors
52	Clergymen
84	College presidents, professors, and instructors
45	Dancers and dancing teachers
96	Dentists
73	Designers
39	Dietitians and nutritionists
67	Draftsmen
82	Editors and reporters
85	Engineers, technical
87	Aeronautical
90	Chemical
84	Civil
84	Electrical
86	Industrial
82	Mechanical
82	Metallurgical, and metallurgists
85	Mining
87	Not elsewhere classified
31	Entertainers
83	Farm and home management advisors
48	Foresters and conservationists
59	Funeral directors and embalmers
93	Lawyers and judges
60	Librarians
52	Musicians and music teachers
	Natural Scientists
79	Chemists
80	Other natural scientists
46	Nurses, professional
51	Nurses, student professional
79	Optometrists
96	Osteopaths
84	Personnel and labor relations workers
82	Pharmacists
50	Photographers
92	Physicians and surgeons

Professional, technical and kindered workers continued

82	Public relations men and publicity writers
69	Radio operators
67	Recreation and group workers
56	Religious workers
64	Social and welfare workers, except group
81	Social scientists
64	Sports instructors and officials
48	Surveyors
72	Teachers
48	Technicians, medical and dental
62	Technicians, electrical and electronic
62	Technicians, other engineering and physical sciences
62	Technicians
58	Therapists and healers
78	Veterinarians
65	Professional, technical, and kindered workers (n.e.c)

Managers, officials, and proprietors, except farm

72	Buyers and department heads, store
33	Buyers and shippers, farm products
58	Conductors, railroad
74	Credit men
50	Floormen and floor managers, store
63	Inspectors, public administration
72	Federal public administration and postal service
54	State public administration
56	Local public administration
32	Managers and superintendents, building
54	Officers, pilots, pursers, and engineers, ship
66	Officials & administrators, public administration
84	Federal public administration
66	State public administration
54	Local public administration
58	Officials, lodge, society, union, etc.
60	Postmasters
77	Purchasing agents and buyers
68	Managers, officials, and proprietors-Salaried
60	Construction
79	Manufacturing
71	Transportation
76	Communications, and utilities and sanitary services
70	Wholesale trade
56	Retail trade

Managers, officials, and proprietors, except farm
continued

50	Food and dairy products stores
	Retail trade continued
39	Eating and drinking places
68	General merchandise and limited price variety stores
69	Apparel and accessories stores
68	Furniture, housefurnishings, and equipment stores
64	Motor vehicles and accessories retailing
31	Gasoline service stations
64	Hardware, farm implement, & building material retailing
59	Other retail trade
85	Banking and other finance
84	Insurance and real estate
80	Business services
47	Automobile repair services and garages
53	Miscellaneous repair services
50	Personal services
62	All other industries (incl. not reported)
48	Managers, officials, & proprietors--Self-employed
51	Construction
61	Manufacturing
43	Transportation
44	Communications, and utilities and sanitary services
59	Wholesale trade
43	Retail trade
33	Food and dairy products stores
37	Eating and drinking places
47	General merchandise and limited price variety stores
65	Apparel and accessories stores
59	Furniture, housefurnishings, and equipment stores
70	Motor vehicles and accessories retailing
33	Gasoline service stations
61	Hardware, farm implement, & building material retailing
49	Other retail trade
85	Banking and other finance
76	Insurance and real estate
67	Business services
36	Automobile repair services and garages
34	Miscellaneous repair services
41	Personal service

Clerical and kindred workers continued

49	All other industries(incl. not reported)
68	Agents
44	Attendants and assistants, library
38	Attendants, physician's and dentist's office
25	Baggagement, transportation
52	Bank tellers
51	Bookkeepers
44	Cashiers
39	Collectors, bill and account
40	Dispatchers and starters, vehicle
67	Express messengers and railway mail clerks
44	File clerks
62	Insurance adjusters, examiners, and investigators
53	Mail carriers
28	Messengers and office boys
45	Office machine operators
44	Payroll and timekeeping clerks
44	Postal clerks
44	Receptionists
61	Secretaries
22	Shiping and receiving clerks
61	Stenographers
44	Stock clerks and storekeepers
22	Telegraph messengers
47	Telegraph operators
45	Telephone operators
60	Ticket, station, and express agents
61	Typists
44	Clerical and kindered workers (n.e.c)

Sales workers

66	Advertising agents and salesmen
40	Auctioneers
35	Demostrators
08	Hucksters and peddlers
66	Insurance agents, brokers, and underwriters
27	Newsboys
62	Real estate agents and brokers
73	Stock and bond salesmen
47	Salesmen and sales clerks
65	Manufacturing
61	Wholesale trade
39	Retail trade
50	Other industries (incl. not reported)

Craftsmen, formen, and kindred workers

22	Bakers
16	Blacksmiths

Craftsmen, formen, and kindred workers continued

33	Boilermakers
39	Bookbinders
27	Brickmasons, stonemasons, and tile setters
23	Cabinet makers
19	Carpenters
19	Cement and concrete finishers
52	Compositors and typesetters
21	Cranemen, derrickmen, and hoistmen
40	Decorators and window dressers
44	Electricians
55	Electrotypers and stereotypers
47	Engravers, except photoengravers
24	Excavating, gradin, androd machinery operators
49	Foremen
40	Construction
53	Manufacturing
54	Metal industries
60	Machinery, except electrical
60	Electrical machinery, equipment, and supplies
66	Transportation equipment
41	Other durable goods
39	Textiles, textile products, and apparel
53	Other nondurable goods (incl. not specified mfg.)
36	Railroads and railway express service
45	Transportaion, except railroad
56	Communications, and utilities and sanitary services
44	Other industries (incl. not reported)
23	Forgemen and hammermen
39	Furriers
26	Glaziers
22	Heat treaters, annealers, and temperers
23	Inspectors, scalers, and graders, log and lumber
41	Inspectors
46	Construction
41	Railroads and railway expres service
45	Transportaiton, etc. R.R., commun. & other public util.
38	Other industries (incl. not reported)
36	Jewelers, watchmakers, goldsmiths, and silvermiths
28	Job setters, metal
49	Linemen and servicemen, telegraph, telephone, and power
58	Locomotive engineers
45	Locomotive firemen
10	Loom fixers
33	Machinists

Craftsmen, formen, and kindred workers continued

25	Mechanics and repairment
48	Airplane
19	Automobile
36	Office machine
36	Radio and television
23	Raiload and car shop
27	Not elsewhere classified
19	Millers, grain, flour, feed, etc.
31	Millwrights
12	Molders, metal
43	Motion picture projectionists
39	Opticians, and lens grinders and polishers
16	Painters, construction and maintenance
10	Paperhangers
44	Pattern and model makers, except paper
64	Photoengrvers and lithographers
38	Piano and organ tuners and repairmen
25	Plasterers
34	Plumbers and pipe fitters
49	Pressmen and plate printers, printing
22	Rollers and roll hands, metal
15	Roofers and slaters
12	Shoemakers and repairers, except factory
47	Stationary engineers
25	Stone cutters and stone carvers
34	Structural metal workers
23	Tailors
33	Tinsmiths, coppermiths, and sheet metal workers
50	Toolmakers, and die makers and setters
22	Upholsterers
32	Craftsmen and kindred workers (n.e.c.)
18	Former members of the Armed Forces

Operatives and kindred workers

35	Apprentices
25	Auto mechanics
32	Bricklayers and masons
31	Carpenters
37	Electricians
41	Machinists and toolmakers
34	Mechanics, except auto
33	Plumbers and pipe fitters
29	Building trades
33	Metalworking trades
40	Printning trades
31	Other specified trades
39	Trade not specified
32	Asbestos and insulation workers

Operatives and kindred workers continued

17	Assemblers
19	Attendants, auto service and parking
11	Blasters and powdermen
24	Boatmen, canalmen, and lock keepers
42	Brakemen, railroad
24	Bus drivers
25	Chainmen, rodmen, and axmen, surveying
17	Checkers, examiners, and inspectors, mfg.
30	Conductors, bus and street railway
32	Deliverymen and routmen
23	Dressmakers and seamstresses, except factory
12	Dryers
22	Filers, grinders, and polishers, metal
10	Fruit, nut, and vegetable graders and packers, exc factory
18	Furnacemen, smeltermen, and pourers
17	Graders and sorters, mfg.
29	Heaters, metal
21	Knitters, loopers, and toppers, textile
15	Laundry and dry cleaning operatives
29	Meat cutters, except slaughter and packing house
21	Milliners
10	Mine operatives and laborers
02	Coal mining
38	Crude petroleum and natural gas extraction
12	Mining and quarry, except fuel
03	Motormen, mine, factory, logging camp, etc.
34	Motormen, street, subway, and elevated railway
15	Oilers and greasers, except auto
18	Packers and wrappers
18	Painters, except construction and maintenance
42	Photographic process workers
50	Power station operators
16	Sailors and deck hands
05	Sawyers
17	Sewers and stichers, mfg.
05	Spinners, textiles
17	Stationary firemen
44	Switchmen, railroad
10	Taxicab drivers and chauffeurs
15	Truck and tractor drivers
06	Weavers, textile
24	Welders and flame--cutters
18	Operatives and kindred workers (n.e.c.)
17	Manufacturing
	Durable goods
07	Sawmills, planing mills, and misc. wood
07	Sawmills, planing mills, and mill work
09	Miscellaneous wood products
09	Furniture and fixtures

Operatives and kindred workers continued

17	Stone, clay, and glass products
23	Glass and glass products
10	Cement, and concrete, gypsum, and plaster products
10	Structural clay products
21	Pottery and related products]
15	Misc. nonmetallic mineral and stone products
	Metal industries
15	Primary metal industries
17	Blast furnaces, steel works, and rolling and finishing mills
12	Other primary iron and steel industries
15	Primary nonferrous industries
16	Fabricated metal industries (incl. not spec. metal)
16	Cutlery, handtools, and other hardware
16	Fabricated structural metal products
15	Miscellaneous fabricated metal products
14	Not specified metal industries
2	Machinery, except electrical
21	Farm machinery and equipment
31	Office, computing, and accounting machines
22	Miscellaneous machinery
26	Electrical machinery, equipment, and supplies
23	Transportation equipment
21	Motor vehicles and motor vehicle equipment
34	Aircraft and parts
16	Ship and boat building and repairing
23	Railroad and misc. transportation equipment
29	Professional and photographic equipment, and watches
23	Professional equipment and supplies
40	Photographic equipment and supplies
28	Watches, clocks, and clockwork-operated devices
16	Miscellaneous manufacturing industries
	Nondurable goods
16	Food and kindred products
16	Meat products
22	Dairy products
09	Canning and preserving fruits, vegetables, and sea foods
14	Grain-mill products
15	Bakery products
12	Confectionery and related products
19	Beverage industries
11	Misc. food preparations and kindred products
19	Not specified food industries
02	Tobacco manufacturers
06	Textile mill products
21	Knitting mills

Operatives and kindred workers continued

08	Dyeing and finishing textiles, exc. wool and knit goods
14	Floor coverings, except hard surface
02	Yarn, thread, and fabric mills
10	Miscellaneous fabricated textile products
21	Apparel and other fabricated textile products
22	Apparel and accessories
17	Miscellaneous fabricated textile products
19	Paper and allied products
19	Pulp, paper, and paperboard mills
17	Paperboard containers and boxes
19	Miscellaneous paper and pulp products
19	Printing, publishing, and allied industries
20	Chemicals and allied products
09	Synthetic fibers
26	Drugs and medicines
15	Paints, varnishes, and related products
23	Miscellaneous chemicals and allied products
51	Petroleum and coal products
56	Petroleum refining
14	Miscellaneous petroleum and coal products
22	Rubber and misc. plastic products
12	Rubber products
16	Leather and leather products
10	Leather, tanned, curried, and finished
09	Footwear, except rubber
14	Leather products, except footwear
16	Not specified manufacturing industries
18	Nonmanufacturing industries (incl. not reported)
18	Construction
15	Railroads and railway express service
23	Transportation, except railroad
21	Communications, and utilities and sanitary services
17	Wholesale and retail trade
19	Business and repair services
11	Personal services
17	Public administration
20	All other industries (incl. not reported)

Private household workers

07	Baby sitters, private household
19	Homemakers, private household
10	Living in
21	Living out
12	Laundresses, private household
07	Private household workers
12	Living in
06	Living out

Service workers, except private household

13	Attendants, hospital and othe institution
26	Attendants, professional and personal service
19	Attendants, recreation amusement
17	Barbers
19	Bartenders
30	Boarding and lodging house keepers
08	Bootblacks
11	Chambermaids and maids, except private household
10	Charwomen and cleaners
15	Cooks, except private household
17	Counter and fountain workers
10	Elevator operators
17	Hairdressers and cosmetologists
31	Housekeepers and stewards, except private household
09	Janitors and sextons
11	Kitchen workers, except private household
37	Midwives
04	Porters
22	Practical nurses
	Protective service workers
37	Firemen, fire protection
18	Guards, watchmen, and doorkeepers
21	Marshals and constables
39	Policemen and detectives
40	Public
36	Private
34	Sheriffs and bailiffs
17	Watchmen (crossing) and bridge tenders
25	Ushers, recreation and amusement
16	Waiters
11	Service workers, except private household

Laborers, except farm and mine

07	Carpenters' helpers, except logging and mining
10	Fishermen and oystermen
08	Garage laborers, and car washers and greasers
11	Gardeners, except farm, and groundkeepers
11	Longshoremen and stevedores
04	Lumbermen, raftsmen, and wood choppers
08	Teamsters
09	Truck drivers' helpers
08	Warehousemen
	Laborers
08	Manufacturing
	Durable goods
03	Sawmills, planing mills, and misc. wood products

Laborers, except farm and mine continued

03	Sawmills, planing mills, and mill work
02	Miscellaneous wood products
05	Furniture and fixtures
07	Stone, clay, and glass products
14	Glass and glass products
05	Cement, and concrete, gypsum, and plaster
05	Structural clay products
07	Pottery and related products
05	Misc. nonmetallic mineral and stone products
07	Metal industries
07	Primary meal industries
09	Blast furnaces, steel works, and rolling and finishing mills
04	Other primary iron and steel industries
06	Primary nonferrous industries
07	Fabricated metal industries (incl. not spec. metal)
07	Cutlery, hand tools, and other hardware
07	Fabricated structural metal products
07	Misc. fabricated metal products
10	Not specified metal industries
11	Machinery, except electrical
14	Farm machinery and equipment
17	Office, computing, and accounting machines
10	Miscellaneous machinery
14	Electrical machinery, equipment and supplies
11	Transportation equipment
13	Motor vehicles and motor vehicle equipment
15	Aircraft and part
02	Ship and boat building and repairing
08	Railroad and misc. transportation equipment
11	Professional and photographic equipment, and watches
10	Professional equipment and supplies
16	Photographic equipment and supplies
11	Watches, clocks, and clockwork-operated devices
12	Miscellaneous manufacturing industries

Nondurable goods

09	Food and kindred products
08	Meat products
13	Dairy products
06	Canning and preserving fruits, vegetables, and sea foods

Nondurable goods continued

06	Grain-mill products
10	Bakery products
10	Confectionery and related products
16	Beverage industries
05	Misc. food preparations and kindred products
14	Not specified food industries
03	Textile mill products
01	Yarn, thread, and fabric mills
06	Other textile mill products
09	Apparel and other fabricated textile products
07	Paper and allied products
06	Pulp, paper, and paperboard mills
10	Paperboard containers and boxes
08	Miscellaneous paper and pulp products
23	Printing, publishing, and allied industries
08	Chemical and allied products
04	Synthetic fibers
22	Drugs and medicines
08	Paints, varnishes, and related products
08	Miscellaneous chemicals and allied products
22	Petroleum and coal products
26	Petroleum refining
03	Miscellaneous petroleum and coal products
12	Rubber and miscellaneous plastic products
06	Leather and leather products
02	Not specified manufacturing industries
07	Nonmanufacturing industries (incl. not reported)
07	Construction
03	Railroad and railway express service
09	Transportation, except railroad
06	Communications, and utilities and sanitary services
12	Wholesale and retail trade
09	Business and repair services
05	Personal services
07	Public administration
06	All other industries (incl. not reported)
19	Occupation not reported

Note. From Handbook of research design and social measurement (p.117-130) by D.C. Miller, 1977, New York:Longman



THE UNIVERSITY OF MARYLAND

COLLEGE PARK, MARYLAND

DEPARTMENT OF CHEMISTRY

APRIL 15, 1967

Dear Mr. [Name]:

I am pleased to hear of your interest in the work of the Department of Chemistry at the University of Maryland. The Department is currently engaged in a number of projects which are particularly concerned with the study of the physical and chemical properties of polymers. We are particularly interested in the study of the structure and properties of polymers which are formed through a coupling process in which two different monomers react to form a single polymer chain. This process is known as a coupling reaction and is of great importance in the synthesis of many of the polymers which are used in a wide variety of applications. We are currently engaged in a study of the structure and properties of polymers which are formed through a coupling process in which two different monomers react to form a single polymer chain. This process is known as a coupling reaction and is of great importance in the synthesis of many of the polymers which are used in a wide variety of applications.

APPENDIX C
COVER LETTER

The results of this research will be made available to interested persons in the College Park area as well as other interested persons. You will receive a copy of the report if you request it. If you are interested in receiving a copy of the report, please write to the Department of Chemistry, University of Maryland, College Park, Maryland 20742. In appreciation of your time and interest in this research, we will be pleased to send you a copy of the report. We have the report at the University of Maryland and will be glad to send you a copy of the report. We have the report at the University of Maryland and will be glad to send you a copy of the report.

Carol C. [Name], Ph.D.
Assistant Professor



THE UNIVERSITY OF MARYLAND

COLLEGE PARK CAMPUS

College of Physical Education, Recreation and Health
February 18, 1987

Dear (Name inserted):

Education has been identified as a useful and enjoyable activity for older persons. Even so, many older adults in the College Park area do not participate in any of the available educational programs. In an effort to better understand this phenomenon we are studying those older adults who are participating in the Golden Identification (I.D.) Program at the University of Maryland. Your name was systematically drawn through a sampling process in which every Golden I.D. student had an equal chance of being selected. This means that only about 200 of the total group of students are being asked to complete this questionnaire. In order for the results of this study to be representative of the motives of all the Golden I.D. students it is essential that each person in the sample return their questionnaire.

As a participating Golden I.D. student, you have the ability to lend insight into the motivation of those older adults who are involved in educational programs. Information that you provide on the motivation to participate in education can be used to assist in the planning, designing, implementing and marketing of education to older adults in the College Park area.

You may be assured of complete confidentiality. This questionnaire includes an identification number for mailing purposes only. We use this so that we may check your name off of the mailing list when we receive your completed questionnaire, your name will never be placed on the questionnaire.

The outcome of this research will be made available to education providers in the College Park area as well as other interested professionals. You may request a summary of the research results by writing "copy of results requested" on the back of the return envelope; and printing your name and address below it. Please do not put this information on the questionnaire itself. In appreciation of your time effort for completing this questionnaire we will be sending you a coupon for one free ice cream at the University of Maryland ice cream parlor in Turner Laboratory.

We are happy to answer any questions you may have. Please write or call. The telephone number is (301) 649-2068 and you can reach Megan any morning except Wednesdays.

Thank you for your assistance.

Sincerely,

Megan McMahon
Recreation Department

Carol C. Riddick, Ph.D
Assistant Professor



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Faint text, possibly a subtitle or address line, centered below the title.

Faint text, possibly a date or location, centered below the subtitle.

Faint text, possibly a date, centered on the page.

Faint paragraph of text, possibly the beginning of a letter or report.

Faint paragraph of text, continuing the letter or report.

APPENDIX D

FIRST FOLLOW-UP POSTCARD

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Faint text at the very bottom of the page, possibly a footer or page number.



THE UNIVERSITY OF MARYLAND

COLLEGE PARK CAMPUS

College of Physical Education, Recreation and Health

Department of Recreation

March 5, 1987

Last week a questionnaire requesting your feeling about your motives to participate in the Golden I.D. program was mailed to you. Your name was drawn in a systematic manner from the overall list of Golden I.D. students.

If you have already completed and returned it to us please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small, but representative group of Golden I.D. students it is very important that yours also be included in the study if the results are to accurately represent the motives of the Golden I.D. students.

If by some chance you did not receive the questionnaire, or it got misplaced please call Megan, (301-649-2068) any morning except Wednesday, and we will get another one in the mail to you today.

Sincerely,

Megan McMahon
Department of Recreation

Carol C. Riddick, Ph.D
Assistant Professor



THE UNIVERSITY OF MARYLAND

COLLEGE PARK, MARYLAND

March 13, 1967

APPENDIX E
SECOND FOLLOW-UP LETTER

Dear Mr. [Name]:

I am writing you regarding your response to the questionnaire which was mailed to you on [Date]. We are sorry we did not receive your questionnaire until [Date].

We are glad to hear that you are interested in the study. We are sorry to hear that you are unable to participate in the study at this time. We will be glad to contact you again in the future.

Your cooperation is greatly appreciated.

Carol J. Riddick, Ph.D.
Assistant Professor



THE UNIVERSITY OF MARYLAND

COLLEGE PARK CAMPUS
College of Physical Education, Recreation and Health

Department of Recreation

March 15, 1987

Dear (Name inserted):

About three weeks ago we wrote you seeking your feelings on your motives to participate in education. As of today we have not yet received your completed questionnaire.

We have designed this study because of the belief that a better understanding of the motives of those older adults who participate in education will help us better provide education to this group of citizens in the College Park area.

We are writing to you again because of the significance each questionnaire has to the usefulness of this study. Your name was systematically drawn through a sampling process in which every Golden I.D. student had an equal chance of being selected. This means that only about 200 of the total group of students are being asked to complete this questionnaire. In order for the results of this study to be representative of the motives of all the Golden I.D. students it is essential that each person in the sample return their questionnaire.

In the event that your questionnaire has been misplaced, a replacement is enclosed. We are happy to answer any questions you may have. Please write or call. The telephone number is (301) 649-2068 and you can reach Megan any morning except Wednesdays.

Your cooperation is greatly appreciated.

Sincerely,

Megan McMahon
Department of Recreation

Carol C. Riddick, Ph.D
Assistant Professor

APPENDIX F
HUMAN SUBJECTS FORM

The undersigned hereby certifies that the above-mentioned project is a research project that meets the criteria for approval as set forth in the regulations of the Department of Health, Education and Welfare, and that the project has been approved by the Human Subjects Committee of the institution.

[Faint signatures and text, likely names of committee members and dates]

THE UNIVERSITY OF MARYLAND
Department of Recreation

TO: PROJECT DIRECTOR ` Megan McMahon

SUBJECT: RESEARCH PROPOSAL USING HUMAN SUBJECTS

Title: An Examination of the Motivaitonal Orientations of Older Adults
Involved in Formal Education at One University.

Funding Agency:

Principal Investigator: Megan McMahon

Advisor: Dr. Carol C. Riddick

The Graduate Committee reviewed the above-mentioned project on 1/30
1987, in accordance with Part 46 of Title 45 of the Code of Federal
Regulations (45 CFR 46), revised March 8, 1983.

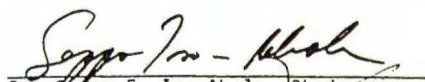
The composition of the Human Subjects Committee is:


Dr. Seppo E. Iso-Ahola, Chairman
Dr. Anthony J. Fedler
Dr. John W. Churchill


The committee effected an independent determination of: (1) the rights and welfare of the individual or individuals involved, (2) the appropriateness of the methods used to secure informed consent, and (3) the risks and potential benefits of the investigation.

The committee has determined that the subjects are are not at risk, and approves this project as conforming to University and Federal Government policy in protecting the rights of the subjects.

The Principal Investigator or Project Director in signing this report agrees to follow the recommendations of the committee and to notify the Chairman of this committee of any additions to, or changes in procedure, subsequent to the review.


Dr. Seppo E. Iso-Ahola, Chairman


Dr. Anthony J. Fedler


Dr. John W. Churchill


Principal Investigator

11/86

APPENDIX G

STATISTICS USED FOR COMPUTATION OF FACTOR SCORES

Statistics used for computation of factor scores

$FSC(X-M)/sd$, where FSC = Factor Score Coefficient,

X = item value M = Mean,

and sd = Standard Deviation

Factor 1 Items

	Factor score coefficient	Mean	Standard deviation
23	.152	1.25	.63
4	.114	1.39	.87
26	.126	1.31	.71
16	.125	1.47	.87
13	.125	1.41	.88
24	-.092	1.41	.81
25	-.090	1.12	.50
20	.093	1.78	1.06
12	.096	1.12	.50
3	-.084	1.87	1.11
30	.157	1.15	.56

Factor 2 Items

2	-.104	2.03	1.17
8	.100	1.62	1.22
14	-.163	2.35	.93
15	.110	2.07	1.16
21	.145	2.43	1.18
29	.249	2.60	1.09
44	.161	2.66	1.21
46	.070	1.77	1.08

Factor 3 Items

31	.124	2.66	1.12
33	.217	1.88	1.21
35	.146	2.26	1.11
36	-.077	2.90	1.16
39	.231	2.34	1.17
40	.204	2.78	1.18
42	.166	2.32	1.26

Statistics used for computation of factor scores continued

$FSC(X-M)/sd$, where FSC = Factor Score Coefficient,

X = item value M = Mean,

and sd = Standard Deviation

	Factor score coefficient	Mean	Standard deviation
Factor 4 Items			
3	-.074	2.41	1.11
6	.112	2.09	1.16
7	-.076	2.37	.95
9	.199	2.43	1.10
10	-.163	2.52	1.15
18	.212	2.06	1.03
19	-.059	1.78	1.14
20	.091	1.96	1.06
22	-.075	2.16	1.07
28	.177	1.87	.99
36	.045	1.62	1.16
38	.079	2.93	1.07
41	.138	2.32	1.13
Factor 5 Items			
1	.125	3.46	.93
5	.203	3.23	.81
17	.253	3.56	.91
27	.260	3.40	1.04
32	-.081	2.93	1.12
38	-.098	2.86	1.07
Factor 6 Items			
11	.146	2.42	1.24
34	.183	2.40	1.21
35	.126	2.22	1.11
37	.321	2.42	1.21
43	-.171	2.90	1.19
45	-.117	1.68	1.11
47	.103	2.35	1.21