MICROCOPY RESOLUTION TEST CHART
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Women who enrolled in college during their middle-aged years (between ages 30 and 49) were studied. Attention was directed to: the relationship between returning to school and critical developmental issues; the influence of educational experience on understanding such issues; and the stress factors experienced by mid-life university women. Theories and research findings regarding mid-life development, women returning to the university, and mental health issues are discussed. The sample consisted of 74 women, 80 percent of whom were between 30 and 39 years old. A self-report inventory, which is appended, was administered to the women to determine sociodemographic data, educational experiences and aspirations, social support systems and satisfaction with friends and family, health and mental health, developmental issues, and concerns and acceptance regarding death. Projective measures that were administered included Life Tasks Assessment, the Thematic Apperception Test, and Sentence Completion. Multivariate analyses were employed to assess educational, mental health, and developmental variables. Findings are included on: obstacles in preparing for school, feelings about returning to school, life style characteristics, experience of mental health symptoms, and developmental concerns. (SW)
Final Report

DEVELOPMENTAL TASKS OF WOMEN
ENTERING HIGHER EDUCATION AT MID-LIFE

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ACKNOWLEDGEMENTS

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INTRODUCTION

One of the major changes accompanying the movement for women's rights in this country has been the infusion of older women students into the university. Although there has been an increase in the enrollment of all students 25 years and older, the increase in adult women students between 1972 and 1977 has been three times that of men (U.S. Bureau of the Census, 1978). Because many of these women are in their middle years, these "non-traditional" or "mature" students have needs and experiences that are qualitatively different from their younger peers (Badenhoop and Johansen, 1980). Some educational institutions have responded to this phenomenon by creating special services, such as counseling programs, day care centers, and weekend colleges (Geisler and Thrush, 1975; Hetherington and Hudson, 1981). Others have recognized that an alternative educational model, androgogy (Knowles, 1970), is more appropriate to the adult learner.

This is a study of women who have chosen to enroll in the university during their middle years. Women who enter the university at this atypical time appear to be at a critical point in their development as adults, a point in which they are asking themselves who they are, what they want, and who they wish to be. It is important for educators and social scientists to understand the psychological issues experienced by this group. Such understanding has implications for education, developmental psychology, and employment.

There is little agreement among social scientists on how to define middle adulthood. The most common approach is based on age (e.g., Levinson, 1978; Frenkel-Brunswik, 1968), but there is little agreement about what years constitute middle age. Some researchers view middle adulthood in terms of biological changes, such as menopause. Neugarten (1968b) considers psychological and social processes such as reassessment of the self and heightened sensitivity to one's position within a complex environment to be important indicators.
In this study, the concept of middle age will be based on a number of criteria. First, chronological age will be used to identify women between the ages of 30 and 49. Neugarten (1973) argues that the use of age is justifiable in preliminary explorations and that it is up to subsequent analyses to incorporate rigorous controls for confounding factors. Second, the psychological and social issues with which a woman is struggling are also considered in our definition. It is assumed that women who return to school are at a turning point in their lives and are engaged in a period of reassessment with regard to a variety of issues, including the adult developmental tasks suggested by Erikson (1959). Finally, one's perception of middle age is, ultimately, an individual matter. The importance of a phenomenological conception of middle age, which considers individual differences involved in defining the stage of mid-life, is recognized.

For this research, the terms middle age, the middle years, middle adulthood and mid-life will be used interchangeably. Although we are limiting our study to women between 30 and 49, we recognize that these age parameters are not universally accepted as the middle years. We have chosen these years because 30 is frequently cited as a critical year for women (Notman, 1980), and 49 is the approximate year for the onset of menopause, a biological factor.

The purpose of this research is to examine the adult developmental concerns experienced by women who have enrolled in the university in their middle adult years. Specifically, the intent is to determine: (1) the relationship between returning to school and critical developmental issues; (2) whether the educational experience contributes to an understanding of such issues; and (3) the implications of this experience for women's mental health. This research will be exploratory and descriptive.

The research presented here integrates theories on human development, particularly mid-life development, with knowledge about mature women who are returning to educational institutions. In addition it explores whether mid-life returning women are
experiencing symptoms of stress. The next three sections will discuss relevant theories and research findings regarding mid-life development, women returning to the university, and mental health issues.

Theories about Middle Age

One of the earliest theorists who discussed middle age was Carl Jung (1954), who said that around age 40, when the demands of family lessen, children are launched, and achievements in work stabilize, people begin to explore aspects of themselves which they previously suppressed. The obligations and social demands that are so central during the first part of life are replaced by introspection and concerns about the meaning of life. This transition is often associated with "storm and stress" (Jung, 1933), but successful resolution of these changes provides individuals with an outlook on life which is balanced and free from inner strife. Thus, men who focused on instrumental tasks in youth become more nurturant, while women in mid-life are faced with the desire to achieve. Jung (1954) suggests that after age 40 people confront these inner polarities and integrate masculine and feminine needs into a new synthesis. Elsewhere, Jung says that as people get older, they become more "individuated" (Jung, 1959). Jung's concept of individuation will be explored in this study.

Jung's proposition that people reverse earlier patterns during mid-life has been supported by Neugarten (1973), who refers to this shift as the "return of the repressed" and Gutmann (1964, 1967, 1980), who observed changes in themes projected in Thematic Apperception Tests of men and women in middle and older age groups of various cultures. Lowenthal (1975) observed that women approaching the post-parental stage express desires for self-growth, expansion, masculine pursuits, and dominance. Similar reintegrations of masculinity and femininity in mid-life are found in Levinson (1978), Gould (1978), and Cameron (1976).
A major theorist who has considered the issues of middle age as well as the tasks of adulthood in general is Erik Erikson. Erikson outlined eight stages, from infancy to old age, which, he said, unfolded in sequence according to the "epigenetic principle," a blueprint or ground plan. Although all stages exist in some form at all times (Erikson, 1963), stages have critical times of emergence, when biological maturation and social contingencies foster the ascendancy of particular "crises." Different cultures and historical periods respond differently to individuals at the various stages (Erikson, 1959).

According to Erikson (1959, 1963, 1968), the sequence of stages and their approximate critical times of emergence are as follows:

1. Trust vs. basic mistrust (infancy)
2. Autonomy vs. shame and doubt (toddler stage)
3. Initiative vs. guilt (pre-school)
4. Industry vs. inferiority (school age)
5. Identity vs. role diffusion (adolescence)
6. Intimacy vs. isolation (early adulthood)
7. Generativity vs. stagnation (middle adulthood)
8. Ego integrity vs. despair (older adulthood)

Erikson was one of the first theorists to describe adult development beyond Freud's genital stage. His contribution to the understanding of adulthood is significant. Nevertheless, Erikson has made remarks that suggest a limited understanding of women. Based on observations of children at play, Erikson (1968) has stated that women are directed toward "inner space" whereas men are oriented to external space. Moreover, Erikson (1968) ponders how a woman can have an identity without having met the man she will marry, concluding that her attractiveness and selectivity of the kind of man she will marry will provide a basis for her identity. Erikson's sexist biases have been criticized by several feminist writers (e.g., Chesler, 1972; Weisstein, 1969) and defended by Erikson.
In addition to the above reactions, there are some indications (e.g., Douvan and Adelson, 1966) that the sequence of life stages that Erikson proposes for both genders may be different for women.

Despite these criticisms of Erikson's work, the researchers believe that his conceptualization of life stages has sufficient merit to apply to research on women. Curiously, few attempts have been made to operationalize his concepts and apply these definitions to empirical research. For purposes of this study, working definitions of four of Erikson's stages—identity, intimacy, generativity, integrity—have been developed. The researchers have attempted to come close to Erikson's conceptualizations. In addition to these four Eriksonian stages, Jung's individuation has been operationalized.

The operational definitions of these five concepts are as follows:

1. **Identity** is the inner recognition that one is a unique individual. A woman with an identity has knowledge of herself, trusts herself, and accepts herself as similar to others in certain ways but different in other ways. A woman with an identity has a guiding philosophy of life, goals, and plans. She sees herself as a person who plays roles in relation to others but who has intrinsic worth outside of role playing. She has her own standards and values. Identity formation runs a range from indefinite to well defined.

2. **Intimacy** is the ability to develop, experience, and maintain close interpersonal relationships. It involves willingness to disclose one's own needs and feelings and to be the recipient of others' confidences. Sexuality is an expression of intimacy but it is possible to have sexual relations without intimacy and intimacy without sexual expression. Intimacy can occur in marital relationships and friendships between persons of the same sex and opposite sex. Intimacy can also occur between parents and children and in cross-generational relationships (kin and non-kin). Love and trust are encompassed in the concept of intimacy.
3. **Generativity** is the giving of one's energies to others. There is concern about the welfare of the next generation, including but not limited to one's children. Efforts made to nurture and foster the development of others. Generativity is expressed in responsible parenthood, mentoring, creative work, and productivity. It is opposite of narcissism.

4. **Integrity** is a feeling of wholeness and unity of personality. One's life appears to have purpose and meaning. Past, present and future are linked into a coherent whole. One has played many roles, but one is one person. The person does not wish to live her life over; she is satisfied. She can face death confidently. Statements such as "I am struggling with the meaning of life" and "I have few regrets about the ways I have lived my life so far" reflect concerns about integrity.

5. **Individuation** is similar to identity but the emphasis here is on differentiation from others. The individuated person has strong emotional bonds; yet she does not have the need to merge with others in order to feel whole. Such a person sees herself as an individual among individuals with whom she can conduct transactions without feeling consumed or absorbed. The individuated person has developed her own abilities and expresses her own needs. Individuation will be demonstrated in statements of recognition of a persons' own needs, interests, goals, opinions, rather than others' or collective needs, etc.

Other theorists whose conceptualizations of middle adulthood are germane to this research are Loevinger, Levinson, Stewart, and Gilligan. Loevinger (1976), an ego psychologist, developed a stage theory that parallels Erikson's but also reflects the concerns of cognitive structuralists such as Piaget and Kohlberg. According to Loevinger, the ego develops over time through a coherent, holistic process that involves character traits, conscious preoccupations, interpersonal relations, and cognitive style. Although Loevinger does not specify ages for life stages, her scheme is sequential and hierarchical.
The stages (in sequence) are called Presocial, Symbiotic, Impulsive, Self-Protective, Conformist, Conscientious-Conformist, Conscientious, Individualistic, Autonomous, and Integrated. The Sentence Completion Test developed by Loevinger and her associates (1970) is used in this study to measure respondents' level of ego development.

Levinson (1978) is another major thinker on adult development. Subjects of Levinson's research were middle aged men (biologists, business executives, factory workers, and novelists), the interviews with whom provided evidence that for men there are periods of stability alternating with periods of transition, the latter of which involve the restructuring of one's life. During the mid-life transition men reappraise the past, modify their life structures, and become more individuated. Middle aged men try to reconcile a number of polarities—young vs. old, destruction vs. creation, masculinity vs. femininity, and attachment vs. separateness. A couple of these polarities (young vs. old, attachment vs. separateness) will be looked at in our projective assessments.

Theories of adult development during middle adulthood either assume that women go through the same stages in the same sequences as men or exclude women entirely. The few studies which have focused on women's developmental experiences in adulthood raise questions about the applicability of findings on men to women. Stewart (1977), for example, who made a study of women, found developmental stages that were similar to Levinson's but with more diverse patterns. Moreover, Gilligan (1982) has observed that the psychological development of women is qualitatively different from men; that women's moral development in particular veers from Kohlberg's (1964) high levels of development not because women are immature but because women are concerned with interpersonal issues when they make moral decisions. According to Gilligan (1982), intimate interpersonal relationships are key considerations for women. A woman's sense of her identity and her need for intimacy are intertwined. Clearly the failure of traditional theories to focus on women's unique life development during middle age needs to be addressed.
Mid-Life Women Students

The presence of adult women in universities has stimulated some research, primarily on the students' motivation for returning to school, obstacles, special needs and characteristics. Badenhoop and Johansen (1980) found that the desire for a better job, the need for identity and dissatisfaction with a job were important reasons given by older women for attending school. According to Letchworth (1970), crises concerned with identity or integrity often precede re-entry. Other factors cited as motives include role changes in marriage or parenting, the desire for social contact, and economic need (Scott, 1980).

Returning women face a variety of obstacles ranging from anxiety about their academic performance to institutional barriers (Lichtenstein and Block, 1963; Berquist, 1973). Lack of evening classes, inadequate child care facilities, and limited financial aid are examples of problems mature women face in school. Although most of these women do well academically in spite of the many obstacles (Scott, 1980), many do not succeed. In a recent study, Astin (1975) reported that older students, particularly older women, were more likely to drop out than students of traditional entry age. Markus (1973) indicated that 48% of the women in her sample dropped out at least one time since their return. Clearly more adequate policies are needed to counteract these trends.

Women returning to the university at mid-life have special needs and problems that are not typical of younger students. In a survey of 764 students age 28 and over Geisler and Thrush (1975) found that time pressures and problems related to self-confidence, role definition, and sense of direction were common. Other problems cited here were scheduling of courses, the degree of university encouragement, sex and age discrimination, finances, and child care. Students turned primarily to their academic departments for counseling. Hetherington and Hudson (1981) evaluated two kinds of approaches to help returning women adjust to the college environment--a skill group and a personal growth group.
A couple of studies have compared middle aged college students with other groups such as younger students, non-college age peers, and women who went to college at more typical ages. Zatlin, Storandt, and Botwinick (1973) found that women students 35 years of age and older were less motivated by altruism, more dominant, and less sympathetic with feminism than younger women students. In a study comparing women students who were 29 to 55 with homemakers of similar ages, Erdwins, Tyler and Mellinger (1980) found that the women students are not more ambitious, achievement-oriented, or confident than homemakers.

There is a lack of sufficient data on the developmental needs of middle aged women who are returning to the university. In a biographical study of 40 returning women, Kahnweiler and Johnson (1980) identified a number of concerns unique to this group of women, including an emphasis on the future, anxiety about physical appearance, and concerns about aging. These authors recognize that re-entry is part of an ongoing process of mid-life development. A more comprehensive study of these issues with an empirical analysis and an appropriate theoretical framework should illuminate the important relationship between developmental stage and the timing of re-entry.

**Stress and Mental Health**

Reports on the mental health status of women are subject to much controversy. Broverman and associates' (1970) study of mental health practitioners shows that the clinical assessments of the mental health of women were biased: criteria for the mentally healthy person and the mentally healthy man were different from criteria for the mentally healthy woman. This "double standard of mental health" puts into question observations about psychopathology among women.

Nevertheless, studies of mental health have come up with one consistent finding: women have more symptoms of depression than men (Weissman and Klerman, 1978; Turns, 1978; Scarf, 1980). In a study of hospitalized middle-aged women, Bart (1970) found that
many of these women were overprotective mothers whose children were leaving home. Radloff (1975) found that among married women, housewives and working wives were more depressed than husbands. According to Repetti (1980) women of a lower socio-economic status are more depressed than women of a higher status.

Studies of a variety of symptoms of mental illness point to marital status as a variable in the psychopathology of women. Gove and Geerken (1977) and Bernard (1973) concur that married women have poorer mental health than married men and single women. Bernard talks of the "housewife syndrome" with its concomitant "status denigration" as a significant problem. Welch and Booth (1977) found that among married women women who had been working for over a year had better mental health than housewives who were not working and wives who had worked for less than a year. In a large study in the southeastern part of the United States, Warheit and associates (1976) found that low socio-economic status, being separated, and having been married more than once, as well as being female, were related to high scores in a psychiatric symptom survey. Clearly multiple variables—e.g., marital status, socio-economic status, employment status—are associated with symptoms of distress.

There has been little research on the mental health status of mid-life returning women. In this study we are approaching this topic with the assumption that our population of subjects are mentally healthy. We are, however, interested in identifying stress symptoms—e.g., anxiety, depression, compulsive behavior—that the women may be experiencing. A list of symptoms such as those used in the studies of Veroff et al. (1981) and our own categories will be employed in this investigation.

The synthesis presented in this study is unique. Very few empirical studies have been performed on the developmental experiences of women, particularly mid life women who are returning to the university. Few studies of mid-life returning women have looked at the symptoms of stress that the women are experiencing.
This study aspires to contribute to knowledge about developmental factors, the educational experience, and stress factors experienced by mid-life university women. The next chapter will describe the methods employed in this study. The following two chapters will present descriptive findings and results of multiple regression analyses. The last chapter will include a discussion of the implications of this study and our recommendations for policy changes and future research.
METHOD

This chapter describes the subjects, the instrument and the procedures used to collect and analyze the data. In the first section the population and the strategies employed to select the participants are presented. Next, the contents of the interview schedule and procedures involved in the administration of the instrument are reviewed. This section also includes a discussion of the training of interviewers and coders as well as methods employed to insure reliability and validity. Finally, a brief review of the techniques involved in the analysis of data is provided.

Subjects

The original sampling plan described in the research proposal called for the selection of a random sample of 150 undergraduate women students of American nationality, ages 30 through 49 who were just entering the Columbus campus of The Ohio State University as full-time students during the fall of 1982. In pursuance of this plan we accessed the names of all students who met these criteria from the Student Data Base. Under the criterion 'just entering,' we selected freshmen, transfer students, and returning students, thus including students of any undergraduate rank. A computer printout of 148 names, addresses, and telephone numbers was obtained from the registration files. (These files excluded students who indicated in their registration material that they did not want their names released to other parties.) Because the number of eligible students was considerably smaller than we had anticipated, we decided to include the total population in our study.

Unfortunately, some of the 148 students listed were ineligible for our research because they were not enrolled full-time in a regular degree program or they were law, medical, or graduate students. In all, 118 students met our criteria. Of these 19 students (16.1%) refused to participate, primarily because of difficulties scheduling time with the
interviewer and general "busyness." Another 25 students (21.2%) were not interviewed because they could not be located or they did not show up for interviews that were scheduled sometimes repeatedly. Efforts were made to contact students with no telephones or with unlisted numbers through the mail.

Description of Population

The participants in this research are described along several demographic variables in Table 1. Although we considered women ages 30 through 49, 80% of our group were between 30 and 39 whereas 19% fell between 40 and 49, and most of these women were White. (Only 3% were Black.) The two most frequently cited religious affiliations were Protestant and Catholic, 45% and 26% respectively, although 18% referred to other religious categories and 12% indicated that they had no religious preferences. Not surprisingly, 66% of our women were married and 82% had children. Although all of these women were enrolled full-time in school, over half (54%) were employed. The majority of the women were comfortable financially: 51% had annual family incomes which were $30,000 or more. Our sample reflects a group of white middle-class women who can afford to return to school full-time in their middle years. The concerns of minority women or women who may wish to re-enter but cannot because of financial difficulties are not represented in this investigation. Generalizations regarding all women in mid-life must be made with caution.

The Interview Schedule

This schedule, which is presented in Appendix A, included a self-report inventory and a projective assessment. The former focused on the following area: (1) sociodemographic data such as marital status, religion, parental status, and work status; (2) educational experiences in the past and in the future including questions on career goals, whether or not the respondent took a break from college and, if so, why, their reasons for returning to school, obstacles encountered before entering or during school and most helpful resources;
Table 1

CHARACTERISTICS OF SAMPLE IN PERCENTAGES

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(3) social support systems and satisfaction with friends and family; (4) health and mental health; (5) developmental assessment—items were developed for each developmental task, e.g., identity, intimacy, generativity, and individuation, as suggested by Erikson (1959) and Jung (1959); and (6) a death anxiety scale to assess respondents' concerns and acceptance of death. The projective part of the interview included three different types of instruments: Life Tasks Assessment, The Thematic Apperception Test, and Sentence Completion. The Life Tasks Assessment required that the respondents tell the interviewer three things about themselves that would give the interviewer an idea of who they were (they were asked not to use their names). The Thematic Apperception Test (Murray, 1971) involved the presentation of four pictures to subjects. Picture One showed a man working in a field, a woman watching him, and a younger woman with books in her hands looking away from the scene. Picture Two depicted two people embracing. Picture Three showed two persons, one older and one younger. Picture Four revealed a man in a graveyard. These pictures (Murray's 2, 10, 12F, 15) were selected because of their ability to elicit responses relevant to the developmental concerns of the study. The respondents were shown the pictures one at a time and were instructed to tell stories to the pictures. The following questions were used to guide the responses of the participants: Who are these people? What are they doing? What do they want? What are they thinking? How do they feel? How will things turn out? Finally, the Sentence Completion Test presented parts of 15 sentences which the women had to complete. Examples of phrases which were used include: Raising a family . . ., A woman's job. . ., She felt proud that she . . ., etc. These sentences were selected from Loevinger's (1970) protocols.

Procedure

Six students in the master's degree program in social work were trained as interviewers over a course of three training sessions. During the first two sessions, the interviewing techniques, procedures, and the instrument were reviewed. Students were
asked to practice using the instrument on friends and to report difficulties in the next session. Role playing exercises on telephoning subjects to make appointments were conducted.

During the third session, interviewers viewed a videotape of two hypothetical interviews conducted by the researchers. One interview demonstrated an ideal situation in which the interview proceeded smoothly. In the other interview the respondent became anxious. The researchers modeled effective responses to subjects experiencing discomfort during the interview. Following the presentation of the videotapes, participants discussed how to handle ordinary and difficult situations.

The researchers conducted pretests of the instrument on over 30 social work students of the same age group as the population under study. The interview instrument was revised in accordance with difficulties identified during this process.

Interviews were conducted during a ten week period of the winter of 1983. Subjects were contacted initially by letter (Appendix B) and then by telephone. Respondents were interviewed in a variety of places—offices, the Student Union, homes, etc. In accordance with the requirements of the Human Subjects Committee, participants gave informed consent and were asked to give their permission to have their grades released at the end of the school year.

During the data collection period, interviewers were supervised by the researchers on an individual basis. Researchers reviewed completed interview protocols and contacted interviewers when there was a question of reliability. Contacts between interviewers and researchers were, on the average, weekly.

After all subjects were contacted, the interviewers were trained to code. Expert coders were utilized to assure reliability of coding. Ten percent of coders' protocols were check-coded by the expert coders. Reliability coefficients were computed by determining the percentage of agreement across all variables. These were in the 90% range. Coders
were also blind to the hypotheses of the research to mitigate any biases in the interpretation of responses.

The validity of responses was determined by employing three different techniques. First, face validity was utilized with the attitudinal variables, such as satisfaction with school or family life, perception of support systems, and feelings about returning to school. Second, construct validation approaches were used with the mental health and developmental items. A principal components method of factor analysis with varimax rotation to simple structure was employed to demonstrate the presence of several distinct mental health and developmental factors. The results of these analyses are presented in a later section of this report. Finally, concurrent validity between the direct self-report measures and the indirect projective assessments will also be assessed. The findings from the thematic procedure are not included in this report since the coding of these projective stories is just beginning and will be available for analysis at some later date.

Data Analysis

The analysis of data was organized into three areas: educational experiences, mental health and developmental concerns. Descriptive analyses, including frequencies and percentage of responses for each variable, are first presented for each area; results from a factor analysis of symptoms of mental health and of statements reflecting selected developmental issues are included, and scores were generated for each of the factors by summing relevant items. Finally, multivariate analyses were employed for relevant educational variables, for the mental health factors and for the developmental indices. The NEW REGRESSION procedure using least squares regression in Release 9 of the Statistical Package for the Social Sciences (Hull and Nie, 1981) was employed. Since the analysis was exploratory, a stepwise regression strategy was utilized. The findings from these analyses are presented for each area in the results section of this report.
DESCRIPTIVE ANALYSIS

This chapter consists of descriptive information on the population interviewed. The purpose is to provide an overview of the major characteristics that were found. No statistical tests will be discussed here; multivariate analyses will be presented in the next chapter. This chapter will be divided into four sections: educational factors, lifestyle characteristics, developmental issues, and health and mental health. A description of the major demographic characteristics has already been presented in the previous chapter (Table I).

Educational Factors

The subjects of this study were undertaking a variety of academic programs throughout the university. The colleges with the highest frequencies of mid-life just entering women were University College (26%), Medicine (18%), Education (12%), Arts and Sciences (12%), and Administrative Sciences (12%). Students in the Medical College were predominantly nursing students. The remainder of the respondents attended other colleges of the university. Most of the students (60%) were working on a B.S. degree. Many were working on a B.A. (18%) or a BSN (nursing; 14%). Six other students were working on other baccalaureate degrees.

Mid-life women students were pursuing a wide range of academic studies. The majors that had the highest frequencies are nursing (13), education (13), and business administration (12). Psychology and social work accounted for eight additional students. The remaining 36 students were pursuing a variety of studies, including mathematics, nutrition, journalism, dental hygienics, and history.

Over 75% of our sample had educational or training experiences since they left high school. This included college, vocational or technical schooling, nurses' training, business school, data processing, and community college. Several had been to workshops or took
courses in continuing education. The number of years since the women's most recent training ranged from less than a year to 21 years. Thirty-seven of our sample received a degree or certificate from a previous educational program. These degrees included an LPN, RN, associates degree, real estate license, and other baccalaureate degrees.

Seventy-eight percent of our population had begun to attend college at an earlier time and took a break. Breaks ranged from three months to 24 years, with the median of about 8 ½ years for those who took breaks. The reasons given for taking the break were primarily the following:

- Completed education desired (12)
- Marriage (15)
- Pregnancy, children (10)
- Financial and employment reasons (14)

Other reasons given were poor performance in college, relocation, and uncertainty about what to do with their lives. When asked how they felt now about having taken a break, 40% of those who took breaks said that they were glad that they had done so; 29% said that they had regrets; 16% had mixed reactions; 13% said they had no choice; and the remainder had other feelings.

Reasons for returning are described in Table 2. The categories with the highest percentages of positive responses were the desire to achieve (55%), practical reasons (47%), and the desire for fulfillment or stimulation (47%). Very few were returning because they were bored with family life, they desired to be self-sufficient, or because of a divorce or separation. Job dissatisfaction was given as a reason by 19% of the respondents.

When subjects were asked what their career goals were, 30 expressed the desire to fulfill a particular work role (e.g., to be a scientist), 14 had practical concerns (e.g., to finish a degree, to get a particular job), 8 wanted to help others, 9 wanted to achieve or perform a task (e.g., manage a store) and to desire affective satisfaction (e.g., job enjoyment, fulfillment). The reasons for choosing the careers they chose were primarily
<table>
<thead>
<tr>
<th>Reason</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Dissatisfaction</td>
<td>19%</td>
<td>81%</td>
</tr>
<tr>
<td>Bored with Family Life</td>
<td>10%</td>
<td>91%</td>
</tr>
<tr>
<td>Fulfillment/Stimulation</td>
<td>41%</td>
<td>60%</td>
</tr>
<tr>
<td>Achievement</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Autonomy (Self-Sufficiency)</td>
<td>10%</td>
<td>91%</td>
</tr>
<tr>
<td>Practical</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>Divorce/Separation</td>
<td>11%</td>
<td>90%</td>
</tr>
</tbody>
</table>
practical (31%), and affective (31%). Several were motivated by feelings of social responsibility (14%) and the desire for self-actualization (8%).

Table 3 illustrates how the respondents perceived feelings of various people toward their returning to school. Note that the respondents themselves were most positive followed by family and friends. People in general elicited a range of feelings. The more intimate the relationship, the more positive the feelings.

We were interested in ascertaining the kinds of special arrangements students had to make in order to go to school at this time. Only 15% reported that they had no special arrangements to make. The arrangements in order of frequency were child care, rearranging paid employment, financial (e.g., loans), structuring around family schedule. In respect to the last item listed, respondents tried to schedule classes so that they did not conflict with the family's schedule.

Fifty-nine of the respondents experienced obstacles in preparing for school. The obstacles identified were:

- Financial (22)
- Psychological (15)
- Work arrangements (6)
- Transportation (2)
- Role conflict (1)
- Other (13)

The psychological conflicts consisted primarily of a lack of confidence. Twenty persons indicated that they experienced no obstacles in preparing for school.

Students also experienced conflicts once they were enrolled in school. For this question up to two responses were recorded per subject; therefore the frequencies exceeded 74. The obstacles and respective frequencies were:

- No obstacles (13)
- Conflicts with home (14)
- Scheduling problems (28)
- Bureaucratic red tape (3)
- Time pressures (20)
- Other (24)
<table>
<thead>
<tr>
<th>Perception Of</th>
<th>Positive</th>
<th>Negative</th>
<th>Neutral Or Mixed</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent's Feelings</td>
<td>80% (59)</td>
<td>1% (1)</td>
<td>18% (13)</td>
<td>1% (1)</td>
</tr>
<tr>
<td>Family's Feelings</td>
<td>70% (52)</td>
<td>4% (3)</td>
<td>26% (19)</td>
<td></td>
</tr>
<tr>
<td>Friends' Feelings</td>
<td>65% (48)</td>
<td>10% (7)</td>
<td>26% (19)</td>
<td></td>
</tr>
<tr>
<td>Feelings of People in General</td>
<td>51% (38)</td>
<td>20% (15)</td>
<td>15% (11)</td>
<td>14% (10)</td>
</tr>
</tbody>
</table>
Apparently the scheduling of classes, the library, resources as well as time pressures loomed as great obstacles for returning women students.

Several resources, events and persons were helpful to respondents. The most helpful resources in percents were friends and peers (19%), faculty (23%), husbands (16%), other intra-university resources, including advisors (24%), the family (3%), other (7%), and none (7%).

Despite obstacles and perhaps with the help of resources, respondents were well satisfied with their performance in school. Fifty-four percent reported that they were very satisfied, 34% that they were satisfied, 3% were undecided, 9% were dissatisfied and 1% were very dissatisfied.

Life Style Characteristics

This section will review a number of characteristics that will encompass aspects of the lives of students that were not part of their educational experience per se but which defined their personal lives. Included here were employment, finances, marital situation, closeness with others, children, and satisfaction with interpersonal relationships. We will discuss these topics consecutively.

The majority of mid-life women students (54%) were employed, working from two to 50 hours per week or more. Job types included nursing, managerial work, accounting, lab technician work, waitress, and secretarial. Eighty-five percent of the women who were working did so because they needed the money. Most of the women who were not working were supported by their husbands (N=38). Other sources of support were alimony, welfare, grants, and a combination of sources.

Forty-nine of the women interviewed (66%) were married. Of these, 39 (80%) were perceived as supportive of their wives' going to the university. Some husbands were negative, neutral or had mixed reactions to their wives' educational activities.
All except two of the husbands of the married women were working. The husbands were predominantly professionals (23) and businessmen (12). The remainder were laborers and government employees. Fourteen of the husbands had a high school education, 4 had some college, 21 had completed college, and 10 had a higher degree than college (master's, Ph.D., J.D. or M.D.). The educational and occupational profiles of husbands were representative of the middle and upper middle classes.

Thirty-one married women reported that there were changes in their marriage since the women returned to school; 18 reported that there were no changes. Of those reporting changes 19 (61%) said that the changes were positive; 8 (26%) said that the changes were negative; the remainder gave neutral, mixed, other, or uncertain responses. Overall it appeared that going to school had a positive effect on marriages.

The 49 married women reported that they were highly satisfied with their marriages:

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>P of Married</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>34</td>
<td>70%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>11</td>
<td>22%</td>
</tr>
<tr>
<td>Undecided</td>
<td>3</td>
<td>6%</td>
</tr>
<tr>
<td>Very dissatisfied</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>

Most of the married women shared their innermost feelings with their spouses most of the time. Twenty-one of the married women rated the level of closeness in their marriages a "10" on a scale ranging from 1 (low) to 10 (high); another 21 gave ratings of 8 or 9. It appeared that the married subjects of the study were satisfied with their marital relationships.

The 25 single women interviewed were predominantly previously married (divorced or separated; 24.3%); 2 were widows; 4 always single; 1 another category. We asked the single respondents a similar set of questions about their satisfaction and level of intimacy. Responses to the question, "How satisfied are you with being single?" were:
Ninety-two percent of the single people said that they had people in their lives with whom they could share their innermost feelings. These were predominantly family members and friends (men and women). Single women shared their innermost feelings with these people most of the time. Fifteen of the 25 single women (75%) gave their intimate relationships a "10" on closeness.

Most of the women interviewed (82.4%) were parents. The mean number of children was 1.9; the mode 2. The distribution of the ages of the children in frequencies were:

- Infants (0)
- Preschool (5)
- School age (15)
- Adolescence (7)
- Older than 18 (5)
- Combination (29)

Twenty-six percent of the respondents did not have children living with them. The others had a mode of two children at home.

When asked how going to school had affected the women's relationships with their children, 39% reported that the changes were positive, 15% reported that they were negative, 21% gave a mixed response, 16% reported that there were no changes, and the remainder reported neutral effects. Fifty-four percent reported that their parental responsibilities interfered with their progress in school. Despite the ambivalence reflected in the above findings, respondents reported a great deal of satisfaction with parenting.
Yet when asked who had the most responsibility for child care, 80% said that they did and only 5% said their husbands did. Child care arrangements made by the women in order to go to school were predominantly paid babysitters and day care centers, although many of the children of the subjects (43%) did not require child care.

Respondents who did not have children were divided equally on the question whether they intended to have children. Reasons given for not having children (e.g., interferes with career, feel inadequate regarding parenting) showed no pattern.

All respondents--single, married, parents--were asked to rate their satisfaction with their families and friends. Eighty-eight percent were satisfied or very satisfied with their lives; 76% were satisfied or very satisfied with their friendships. Consistent with this were the two top choices of a person with whom the respondents would discuss a school problem: (1) husbands and (2) friends.

An additional task was for subjects to rate school work, friends, job, and family in order of priority (1=most important, 4=least important). Results of this question are illustrated in Table 4. The most striking finding here was that the family was the highest priority for most of the women and friends were a low priority. School work seemed to be in the middle, whereas concern about a job was dispersed across the continuum with many respondents eliminating that question. This table reveals that although these women were matriculating at the university, families came first. Still school work did seem to be a second priority.

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>37</td>
<td>(61%)</td>
</tr>
<tr>
<td>Satisfied</td>
<td>19</td>
<td>(31%)</td>
</tr>
<tr>
<td>Uncertain</td>
<td>3</td>
<td>(5%)</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>1</td>
<td>(1%)</td>
</tr>
<tr>
<td>Very dissatisfied</td>
<td>1</td>
<td>(2%)</td>
</tr>
<tr>
<td>Concern</td>
<td>1 (high)</td>
<td>2</td>
</tr>
<tr>
<td>----------------</td>
<td>----------</td>
<td>---</td>
</tr>
<tr>
<td>School Work</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>Friends</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Job</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Family</td>
<td>61</td>
<td>7</td>
</tr>
</tbody>
</table>
Health and Mental Health

Eighty-two percent of the persons interviewed said that they had no physical health problems. Medical problems reported by those who answered positively were arthritis or pains, high blood pressure, diabetes, gynecological problems, and others. Eighty-eight percent reported that they had no signs of menopause.

Subjects were asked whether or not they had each of a list of complaints or troubles during the last six months. Many of these particular complaints were symptoms of stress. Responses given are in Table 5. Note that the symptoms that had the highest percentages of positive responses were irritability, the blues, and headaches, the first two of which are signs of depression. Previous studies (e.g., Weissman and Klerman, 1978) have commented on the frequency of depression among women. It is noteworthy, on the other hand, that the subjects of this study had low frequencies in shortness of breath, dizziness, tension, unpleasant recurring thoughts, the need to check things, fears, appetite changes, and less enjoyment in life. These were symptoms of anxiety and compulsivity.

Developmental Issues

The final topic we wish to describe are the developmental issues that the women in our population experienced. These were the tasks described by Erikson (1959) and Jung (1959), operationalized according to the procedures described in the previous chapter. In the first set of questions subjects were asked whether certain issues were of importance to them now; in the next set they were asked to choose which of two issues was currently more important to them.

Table 6 gives responses to the first set of questions. Each developmental task had two questions that tapped that issue. The task that had the most concurrence between the two questions and the highest percentage of agreement was generativity, which is the task Erikson had assigned to mid-life. In addition, intimacy and integrity had high percentages.
### Table 5
**MENTAL HEALTH: EXPERIENCE OF SYMPTOMS LAST SIX MONTHS**

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Yes</th>
<th>Experience</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>54% (40)</td>
<td>46% (34)</td>
<td></td>
</tr>
<tr>
<td>Insomnia</td>
<td>34% (25)</td>
<td>66% (49)</td>
<td></td>
</tr>
<tr>
<td>Upset Stomach</td>
<td>38% (28)</td>
<td>62% (46)</td>
<td></td>
</tr>
<tr>
<td>Dizziness</td>
<td>12% (9)</td>
<td>88% (65)</td>
<td></td>
</tr>
<tr>
<td>Shortness/Breath</td>
<td>3% (2)</td>
<td>97% (72)</td>
<td></td>
</tr>
<tr>
<td>Tense/Nervous—No Reason</td>
<td>18% (13)</td>
<td>82% (61)</td>
<td></td>
</tr>
<tr>
<td>The Blues</td>
<td>51% (38)</td>
<td>49% (36)</td>
<td></td>
</tr>
<tr>
<td>Unpleasant Recurring Thoughts</td>
<td>16% (12)</td>
<td>84% (62)</td>
<td></td>
</tr>
<tr>
<td>Need to Check Things Over. and Over</td>
<td>24% (18)</td>
<td>76% (56)</td>
<td></td>
</tr>
<tr>
<td>Irritable</td>
<td>61% (45)</td>
<td>40% (29)</td>
<td></td>
</tr>
<tr>
<td>Extreme Tiredness During Day</td>
<td>32% (24)</td>
<td>66% (49)</td>
<td></td>
</tr>
<tr>
<td>Less Enjoyment in Life</td>
<td>14% (10)</td>
<td>85% (63)</td>
<td></td>
</tr>
<tr>
<td>Appetite Change</td>
<td>20% (15)</td>
<td>78% (58)</td>
<td></td>
</tr>
<tr>
<td>Fears</td>
<td>24% (18)</td>
<td>76% (56)</td>
<td></td>
</tr>
<tr>
<td>Less Interest in Sex</td>
<td>15% (12)</td>
<td>81% (60)</td>
<td></td>
</tr>
<tr>
<td>Developmental Concern</td>
<td>Agree</td>
<td>Disagree</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>-------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Developing an Intimate Relationship (Intimacy)</td>
<td>55% (41)</td>
<td>45% (33)</td>
<td></td>
</tr>
<tr>
<td>Being Close to People (Intimacy)</td>
<td>91% (67)</td>
<td>8% (6)</td>
<td></td>
</tr>
<tr>
<td>Find Identity (Identity)</td>
<td>26% (19)</td>
<td>74% (55)</td>
<td></td>
</tr>
<tr>
<td>Discover Skills and Interests (Identity)</td>
<td>80% (59)</td>
<td>20% (15)</td>
<td></td>
</tr>
<tr>
<td>Being Productive (Generativity)</td>
<td>88% (65)</td>
<td>12% (9)</td>
<td></td>
</tr>
<tr>
<td>Giving of Self to Others (Generativity)</td>
<td>92% (68)</td>
<td>7% (5)</td>
<td></td>
</tr>
<tr>
<td>Meaning of Life (Integrity)</td>
<td>62% (46)</td>
<td>38% (28)</td>
<td></td>
</tr>
<tr>
<td>Few Regrets About Life (Integrity)</td>
<td>78% (58)</td>
<td>22% (16)</td>
<td></td>
</tr>
<tr>
<td>Give Up Own Values in Relationship (Individuation)</td>
<td>15% (11)</td>
<td>84% (62)</td>
<td></td>
</tr>
<tr>
<td>Confident When Others Disagree (Individuation)</td>
<td>84% (62)</td>
<td>16% (12)</td>
<td></td>
</tr>
</tbody>
</table>
Individuation was also high. (Disagreement with the question on giving up values was considered a sign of individuation.)

Finding one's identity appeared to be surprisingly low; in contradiction to literature that leads one to believe that returning women were trying to find themselves at the university (e.g., Letchworth, 1970; Badenhoop and Johansen, 1980). On the other hand the quest for skills and interests—another form of identity seeking—was high. Overall, it appears that the middle aged returning women interviewed were dealing with many life tasks.

For the second set of questions, subjects were asked to choose between two developmental issues. The purpose of this was to determine which issue was paramount at this time. Findings on this question are in Table 7. Observe that in three of the five pairs generativity was the overwhelming choice. Identity was more important than integrity. The difference between intimacy and identity was small.
<table>
<thead>
<tr>
<th>Table 7</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHOOSING BETWEEN DEVELOPMENTAL ISSUES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intimacy (Relationship) vs. Identity (Finding Self)</strong></td>
<td>Intimacy: 53%</td>
<td>Identity: 45%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Integrity (Meaning) vs. Generativity (Giving of Self)</strong></td>
<td>Integrity: 26%</td>
<td>Generativity: 72%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Generativity (Productivity) vs. Intimacy (Relationship)</strong></td>
<td>Generativity: 85%</td>
<td>Intimacy: 14%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Identity (Skills) vs. Integrity (Meaning)</strong></td>
<td>Identity: 74%</td>
<td>Integrity: 26%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Generativity (Giving of Self) vs. Identity (Finding Self)</strong></td>
<td>Generativity: 76%</td>
<td>Identity: 22%</td>
</tr>
</tbody>
</table>
MULTIVARIATE ANALYSIS

In the last few chapters we examined the salience of various educational, mental health and developmental issues among returning women in mid-life by examining the frequency of responses to specific categories of variables. This descriptive analysis provided a broad overview of the issues. It is limited, however, by its inability to predict relationships between variables. In this next set of analyses the intent is to find the most predictive model for the selected dependent variables. Specifically, utilizing a stepwise multiple regression strategy, relevant independent variables are analyzed with dependent variables reflecting the three main areas of concern: educational experiences, mental health and developmental tasks. These three areas are discussed separately in this chapter.

1. Predicting Reactions to School

A. Dependent Variables

Three variables—satisfaction with performance in school, rating of importance of school, and grade point average—were used as dependent variables because of their relevance to the concerns of this study and because of their compatibility with the regression analysis.

For the first variable respondents were asked, "How satisfied are you with your performance in school?" They responded by indicating that they were very satisfied, satisfied, undecided, dissatisfied or very dissatisfied. The order of responses was later reversed such that subjects who stated they were very dissatisfied were rated (1) while those who stated they were very satisfied were rated (5). Thus the higher the rating the more satisfied the respondent was with her performance.
The second variable--rating of importance of school--was asked differently. The question was phrased in this way: "How would you rank the following concerns at the present time (1=most important; 4=least important): school work, friends, work and family? These were coded as four separate variables. The school work variable could be rated from 1 to 4. This was also reversed in order that those who rated this high--as most important--received a 4 while those who rated this low--as least important--received a 1.

The third variable was grade point average. We received written consent from respondents to obtain their spring quarter grades as well as their accumulated grade point averages. Approximately 20% preferred that we not access their grades. As a result, whenever this grade point average was included in the analysis the population of subjects dropped to 56. Since we just received the spring grades, these data cannot be analyzed at this time. They are presently being coded and will be added to the other variables.

B. Independent Variables

Table 8 presents a summary of the variable titles, variable abbreviations and metric information.

1. **Demographic Variables**--Seven variables included in this set were: age, educational level, work status, hours working, marital status, parental status and income. Since marital status was a nominal-level variable consisting of five categories, it was recoded into two levels--not married and married.

2. **Attitude Variables**--Three variables represented respondents' perceptions of others' feelings about their return to school: (1) "How does your family feel about your returning to school?" (not positive, positive); (2) "How do your friends feel about your returning to school?" (not positive, positive); (3) Besides your family and friends how do you think people in general regard women your age who are returning to school?" A fourth variable asked: "How do you feel about returning to school at this time? (not positive, positive).
Table 8

VARIABLE TITLES, VARIABLE ABBREVIATIONS, AND METRIC INFORMATION OF INDEPENDENT VARIABLES USED IN THE EDUCATION ANALYSES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abbreviation</th>
<th>Metric Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic and Life Style Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>Age</td>
<td>Years of Age</td>
</tr>
<tr>
<td>Education</td>
<td>Education</td>
<td>Freshperson=1; Sophomore=2; Junior=3; Senior=4</td>
</tr>
<tr>
<td>Work Status</td>
<td>Job</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Hours Working</td>
<td>Hours Work</td>
<td>Number of Hours</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Marital Status</td>
<td>Not Married=0; Married=1</td>
</tr>
<tr>
<td>Parental Status</td>
<td>Parental Status</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Income</td>
<td>Income</td>
<td>Less than $5,000=1; $5,000-9,999=2; $10,000-14,999=3; $15,000-19,999=4; $20,000-24,999=5; $25,000-29,999=6; $30,000 or more=7</td>
</tr>
</tbody>
</table>

| Attitude Variables                |                      |                                                         |
| Family's Feelings About Return    | Family Feels         | Not Positive=0; Positive=1                             |
| Friends' Feelings About Return    | Friends Feel         | Not Positive=0; Positive=1                             |
| People in General's Feelings About Return | People's Feel | Not Positive=0; Positive=1                             |
| Respondents' Feelings About Return | Respondents Feel    | Not Positive=0; Positive=1                             |

<p>| Education Variables              |                      |                                                         |
| Obstacles in Preparation         |                      | Psychological=1; Other Obstacles=2; No Obstacles=3; Dummy Coded |
| (First Mention)                  |                      |                                                         |</p>
<table>
<thead>
<tr>
<th>Variable</th>
<th>Abbreviation</th>
<th>Metric Information</th>
</tr>
</thead>
</table>
| Obstacles in School (First Mention) | OBS1, OBS2  | Psychological=1; None=0
Other Obstacles=1; None=0        |
| Most Helpful Resource          | OBS First    | No Obstacles=0; Obstacles=1                                                       |
|                                | RES1         | No Helpful Resources=0; Faculty=1                                                 |
|                                | RES2         | No Helpful Resources=0; Husband=1                                                  |
|                                | RES3         | No Helpful Resources=0; Peers and Friends=1                                         |
|                                | RES4         | No Helpful Resources=0; Other Resources=1                                           |
3. **Educational Variables**—Seven variables were included in this group. The first asked respondents if they experienced any obstacles when they were getting ready to return to school. This was recoded into three categories (psychological obstacles, non-psychological and no obstacles). To fit into the regression analysis this variable was then dummy coded. The "no obstacles" category was used as the residual category. The next variable, obstacles first, assessed whether subjects encountered obstacles once they were in school. This was recoded as no obstacles vs. obstacles, and we were concerned with the obstacles which the respondent first mentioned. Finally, the variable most helpful resources was originally phrased: "What kinds of resources, events, or persons have been most helpful to you since you have been in school?" This was reduced from eight categories to four (no helpful resources, faculty, husband, student peers and outside friends and other). This was also dummy coded, and the residual category was "no helpful resources." This resulted in four resource variables—res 1, res 2, res 3, res 4.

C. **Results**

The results of the regression analysis for the first dependent variable—satisfaction with performance in school—are shown in Table 9, and the model accounts for 20% of the variance. The first independent variable was educational level which had a beta weight of .25. The more advanced the students the more satisfied they were with their performance in school. Not surprisingly, with time students adjusted to academic pressures, learned what they did well and accepted that which they could not do. The second variable in the equation was obstacles—whether or not they experienced obstacles while they were in school. Those who indicated that they confronted no obstacles were more satisfied with their performance. Apparently, those who encountered difficulties along the way believed that these hindrances interfered with their success in academic work. Finally, the last contribution—friends as resources—was somewhat surprising. This result suggested that
Table 9

VARIABLES ASSOCIATED WITH SATISFACTION WITH PERFORMANCE IN SCHOOL

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
<th>B</th>
<th>Beta</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstacles</td>
<td>Satisfaction with School Performance</td>
<td>-.73</td>
<td>-.28</td>
<td>.01</td>
</tr>
<tr>
<td>Educational Level</td>
<td></td>
<td>.23</td>
<td>.23</td>
<td>.04</td>
</tr>
<tr>
<td>Friends as Resources</td>
<td></td>
<td>-.55</td>
<td>-.22</td>
<td>.05</td>
</tr>
</tbody>
</table>

R² = .19
students who relied on friends as resources rather than those who relied on none had lower ratings of their performance. Overall these results suggest that educational factors rather than demographic variables such as marital status or parental status were more important in determining returning women's assessment of their performance in school. These findings may have important policy implications for those attempting to improve students' achievements and subjective attitudes about school.

In the second analysis, the focus was on predicting students' evaluation of school relative to other responsibilities in their lives, and the regression model explained a good proportion of the variance—34% (see Table 10). Two variables associated with work were found to be most important here. First, number of hours working was inversely related to rating of school; that is, the greater the number of hours a student worked, the lower she evaluated school. Yet, those who had a job also rated it highly. Thus, having a job was an important influence in whether a student rated school positively; however, if the job was too demanding and required too many hours of work, the rating was lowered. Finally, it was interesting that respondents' views of others' attitudes about returning to school also affected their ratings of school. Respondents who believed that others felt positively about their re-entry evaluated school highly; conversely, those who thought others viewed it negatively, gave it a lower rating.

In all of these equations, the associations between independent and dependent variables are probably interactive rather than causal; for example, in the last model, it is just as likely that the students' attitudes toward school influenced their perceptions of the obstacles they encountered as well as whether or not they worked which, in turn, affected their evaluation of school. Future research is needed to determine the direction of causality in these relationships.
Table 10

VARIABLES ASSOCIATED WITH RATING OF IMPORTANCE OF SCHOOL

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
<th>B</th>
<th>Beta</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Hours Working</td>
<td>Rating of Importance of School</td>
<td>-.03</td>
<td>-.85</td>
<td>.0001</td>
</tr>
<tr>
<td>People Feel Positive</td>
<td></td>
<td>.12</td>
<td>.36</td>
<td>.0004</td>
</tr>
<tr>
<td>No Job</td>
<td></td>
<td>-.75</td>
<td>-.47</td>
<td>.0200</td>
</tr>
</tbody>
</table>

$R^2 = .34$
2. Predicting Developmental Concerns

Four developmental tasks—identity, intimacy, generativity, integrity—considered critical issues during the adolescent and adult years according to Erikson (1963) and Jung's (1959) task of individuation were used as dependent variables for this analysis. The intent was to measure the interface between crucial developmental struggles and other concerns facing women who return to school at mid-life. A total of ten questions focusing on specific developmental areas were included in the interview. Respondents were asked to indicate whether they agreed or disagreed with each of the statements.

Identity, the first dependent variable used in the regression analysis, included the following two statements: (1) "I am trying to figure out who I am," and (2) "I am interested in finding out what my skills and interests are." Intimacy was reflected by: (1) "I am interested in developing an intimate relationship with someone," and (2) "I am interested in being close to people." Generativity was measured from: (1) "I am concerned about being productive," and (2) "I am interested in giving of myself to people." The last two developmental issues were Integrity, which was operationalized through these two statements: (1) "I am concerned about the meaning of life," and (2) "I have few regrets about the way I have lived my life;" and Individuation assessed from: (1) "Even when other people disagree with me I feel confident about my own beliefs," and (2) "When I am involved in an intimate relationship I tend to give up my own values in favor of the values of the other person."

B. Independent Variables

Table II presents a summary of the variable titles, variable abbreviations and the metric information for the independent variables used in the analysis of the developmental issues.
Table II

VARIABLE TITLES, VARIABLE ABBREVIATIONS,
AND METRIC INFORMATION OF INDEPENDENT
VARIABLES USED IN THE DEVELOPMENTAL ANALYSES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abbreviation</th>
<th>Metric Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic and Life Style Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>Age</td>
<td>Years of Age</td>
</tr>
<tr>
<td>Education</td>
<td>Education</td>
<td>Freshperson=1; Sophomore=2; Junior=3; Senior=4</td>
</tr>
<tr>
<td>Years Since Educational Training</td>
<td>Years Train</td>
<td>Number of Years</td>
</tr>
<tr>
<td>Took a Break from College</td>
<td>Break</td>
<td>No=0; Yes=1</td>
</tr>
<tr>
<td>Work Status</td>
<td>Job</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Hours Working</td>
<td>Hours Work</td>
<td>Number of Hours</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Marital Status</td>
<td>Not Married=0; Married=1</td>
</tr>
<tr>
<td>Parental Status</td>
<td>Parental Status</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Number of Children</td>
<td>Number Child</td>
<td>Number of Children</td>
</tr>
<tr>
<td>Number of Children at Home</td>
<td>Child Home</td>
<td>Number of Children at Home</td>
</tr>
<tr>
<td>Signs of Menopause</td>
<td>Menopause</td>
<td>No Sign=0; Yes, Signs=1; Post-Menopausal=2</td>
</tr>
<tr>
<td>Income</td>
<td>Income</td>
<td>Less than $5,000=1; $5,000-9,999=2; $10,000-14,999=3;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$15,000-19,999=4; $20,000-24,999=5; $25,000-29,999=6;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$30,000 or more=7</td>
</tr>
<tr>
<td>Attitude Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with Family</td>
<td>SAT Fam</td>
<td>Very Satisfied=1; Satisfied=2; Uncertain=3; Dissatisfied=4; Very Dissatisfied=5</td>
</tr>
<tr>
<td>Satisfaction with Friends</td>
<td>SAT Frds</td>
<td>Very Satisfied=1; Satisfied=2;</td>
</tr>
<tr>
<td>Variable</td>
<td>Abbreviation</td>
<td>Metric Information</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>Reason for Return to School</td>
<td></td>
<td>Uncertain=3; Dissatisfied=4; Very Dissatisfied=5</td>
</tr>
<tr>
<td>Job Dissatisfaction</td>
<td>Job Dissatisfaction</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Bored with Family Life</td>
<td>Bored Family</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Fulfillment/Stimulation</td>
<td>Fulfillment</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Achievement</td>
<td>Achievement</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Autonomy</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Practical/Feasible</td>
<td>Practical</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Divorce</td>
<td>Divorce</td>
<td>Yes=1; No=2</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>Non-Psychological Obstacles=0; Psychological=1</td>
</tr>
</tbody>
</table>
1. **Demographic and Lifestyle Variables**—In addition to the seven independent variables used in the previous analysis, five others were added, including the number of children a respondent had, how many lived with her, signs of menopause, the number of years since the respondents last educational experience and whether or not she took a break from college.

2. **Attitude Variables**—A different set of attitude and education variables which presumably reflected more relevant theoretical contributions to the developmental issues of the study were selected for this set of analyses. Instead of using items reflecting respondents' perceptions of others' attitudes about their return to school, we used satisfaction variables which focused on more general attitudes about life satisfaction. These measures were considered potentially more valuable in predicting developmental concerns.

3. **Reasons for Returning to School**—The last group of factors focused on subjects' motives for returning to school. Seven variables representing the most frequent responses to the question, "Why did you decide to return to school this fall?" were developed. They were: job dissatisfaction as a reason for returning, boredom with family life, need for fulfillment or stimulation in life, need to achieve, desire for greater autonomy, practical reasons and divorce. These were coded as yes or no. Finally, whether or not a respondent experienced any psychological obstacles in preparing for school was also included.

C. **Results**

In Table 12 the findings from the regression analyses are reported for each developmental issue. In the first analysis, identity was the dependent variable, the only one item—menopause—from the set of independent variables was significant in the stepwise regression, and the model accounted for only 6% of the variance. Apparently, other factors which we did not consider were more important in predicting women's concerns about identity in mid-life.
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>B</th>
<th>Beta</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Menopausal Status</strong></td>
<td>Identity</td>
<td>.25</td>
<td>.23</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td>Intimacy</td>
<td>-.42</td>
<td>-.38</td>
<td>.00</td>
</tr>
<tr>
<td>Took Break</td>
<td></td>
<td>.42</td>
<td>.32</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>R^2</td>
<td></td>
<td>.26</td>
<td></td>
</tr>
<tr>
<td><strong>Parental Status</strong></td>
<td>Generativity</td>
<td>-.26</td>
<td>-.27</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Took Break</td>
<td>Integrity</td>
<td>.59</td>
<td>.37</td>
<td>.00</td>
</tr>
<tr>
<td>Years Since Previous Education</td>
<td></td>
<td>.04</td>
<td>.37</td>
<td>.00</td>
</tr>
<tr>
<td>Hours Working</td>
<td></td>
<td>.01</td>
<td>.34</td>
<td>.00</td>
</tr>
<tr>
<td>Parental Status</td>
<td></td>
<td>-.41</td>
<td>-.25</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>R^2</td>
<td></td>
<td>.27</td>
<td></td>
</tr>
<tr>
<td>Obstacles Preparing for School</td>
<td></td>
<td>-.40</td>
<td>-.29</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td>Individuation</td>
<td>-.04</td>
<td>-.27</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>R^2</td>
<td></td>
<td>.14</td>
<td></td>
</tr>
</tbody>
</table>
In the second model, predicting the salience of intimacy, 26% of the variance was explained. The first variable in the equation was marital status with a beta weight of -.38. The inverse relationship between marital status and intimacy suggested that single women focused more on issues related to intimacy than married women who, presumably, felt more resolved about these concerns. The insignificance of age in this model conflicts with earlier claims that struggles with intimacy are developmentally determined. According to these results, the salience of intimacy is more tied to one's lifestyle, e.g. whether or not one is married, rather than to developmental factors. Of course, a greater range of ages might reveal different results. Taking a break from college was also significantly related to intimacy. This was unexpected since one would assume that women who interrupted their schooling for marriage and family reasons would have felt resolved about their needs for intimacy. The desire for intimacy, however, could have been unusually strong for these women; conversely, women with different priorities may not have considered sacrificing school for these reasons.

Similar findings appeared in the equation predicting generativity. Those without children were more interested in finding ways to become generative than were those who had children. The latter group was presumably satisfied with their generative outlets. Age was also not a significant factor in this equation.

Multiple factors were contributory in the analysis of integrity. The relevant variables included: whether or not a respondent took a break, years since training, hours working and parental status. Social life style influences were once again the most contributory.

In the last regression analysis, the dependent variable was individuation, and the two significant independent factors were whether or not a respondent experienced psychological obstacles in her preparation to return to school as well as age. The negative correlation between obstacles and individuation suggested that women who were highly individuated or felt confident about themselves were less likely to report psychological
difficulties in preparing for their return to school. This was not surprising. The inverse 
relationship between age and individuation, however, was unexpected. According to Jung, 
individuation increases with age. These results suggested the opposite: the younger the 
woman, the more individuated she was. A more appropriate label for this item might be 
"self-confidence" since the two items selected to measure this area focused on a woman's 
ability to maintain confidence about her views when faced with disagreement. Younger 
women, from a different cohort than older women and more strongly influenced by the 
women's movement, may have felt more confident about themselves.

3. Factor Analysis of Developmental Concerns

The unexpected results in the models described in the previous section led us to 
question the validity of our measures. In order to ascertain whether the developmental 
statements did, in fact, form natural clusters which reflected these developmental 
concerns, we conducted a factor analysis of the ten statements. A principal components 
method with varimax rotation to simple structure was utilized. A four factor structure, 
accounting for 58% of the variance, was obtained. With the exception of one item, all of 
the statements loaded on one of the factors—with a minimum loading of .40 or greater. 
The results are presented in Table 13.

The four clusters which emerged in this analysis were quite different from the 
previously defined developmental issues, and raised both theoretical and empirical 
questions about the existence of the alleged developmental stages of identity, intimacy, 
generativity and integrity. An examination of the factored dimensions suggested that 
developmental struggles were more overlapping and integrated than was previously 
assumed.

The first factor was titled, "Identity/Intimacy." It consisted of five statements (in 
order from highest to lowest): (1) "I am trying to figure out who I am," (2) "I am interested
Table 13

PRINCIPAL COMPONENT ANALYSIS OF DEVELOPMENTAL FACTORS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productive</td>
<td>-.07</td>
<td>.69</td>
<td>.37</td>
<td>-.11</td>
</tr>
<tr>
<td>Meaning</td>
<td>.39</td>
<td>.67</td>
<td>.22</td>
<td>.29</td>
</tr>
<tr>
<td>Intimacy</td>
<td>.56</td>
<td>.32</td>
<td>-.40</td>
<td>-.11</td>
</tr>
<tr>
<td>Identity</td>
<td>.60</td>
<td>.21</td>
<td>-.40</td>
<td>.13</td>
</tr>
<tr>
<td>Confident</td>
<td>-.50</td>
<td>.47</td>
<td>.27</td>
<td>.33</td>
</tr>
<tr>
<td>Skills</td>
<td>-.10</td>
<td>.06</td>
<td>-.49</td>
<td>.48</td>
</tr>
<tr>
<td>Give Up Values</td>
<td>.41</td>
<td>.07</td>
<td>.32</td>
<td>-.63</td>
</tr>
<tr>
<td>Close to Others</td>
<td>.30</td>
<td>-.39</td>
<td>.53</td>
<td>.33</td>
</tr>
<tr>
<td>Giving</td>
<td>.53</td>
<td>.27</td>
<td>.36</td>
<td>.42</td>
</tr>
<tr>
<td>Few Regrets</td>
<td>-.25</td>
<td>.18</td>
<td>-.07</td>
<td>-.05</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>1.7</td>
<td>1.6</td>
<td>1.3</td>
<td>1.1</td>
</tr>
<tr>
<td>% Variance</td>
<td>17%</td>
<td>16%</td>
<td>13%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Total Variance: 57%
In developing an intimate relationship with someone," (3) "I am interested in giving of myself to people," (4) "Even when other people disagree with me I feel confident about my own beliefs" (this was inversely related), and (5) "When I am involved in an intimate relationship I tend to give up my own values in favor of the values of the other person."

This factor accounted for the greatest amount of variance and was of much interest to us. The fusion of identity and intimacy issues into one dimension confirms recent claims, e.g., Gilligan (1982), that women define themselves through interpersonal experiences. Identity and intimacy are, apparently, not independent factors as they still may be for men. A preliminary analysis to assess the intercorrelations among items revealed that the strongest correlation in the matrix was between intimacy and identity at .34 (p .003). Although many have speculated about such a relationship, until now it has not been empirically demonstrated. It is noteworthy that the two other variables which were significant in this cluster were confidence about beliefs and giving up values. The former was inversely related while the latter was positively associated. It is, perhaps, threatening to a woman's sense of identity to be intimately involved with another person. Thus the desire for intimacy and for an identity may co-exist among women. Identity struggles among women are complex and, clearly, integrated with other developmental tasks such as intimacy and generativity.

The second factor called "Productivity/meaning" was loaded with the following statements: (1) "I am concerned about being productive," (2) "I am concerned about the meaning of life," and (3) "Even when other people disagree with me I feel confident about my own beliefs" (which is positively associated). The search for meaning through productive activities was also a very significant concern for these women. The eigenvalue of 1.6 for this factor was almost equivalent to the eigenvalue of 1.7 for the first factor, suggesting that these issues were of equal importance.
The third factor was referred to as "Generativity." The relevant items in this group were: (1) "I am interested in being close to other people," (2) "I am interested in finding out what my skills are" (this is inversely related), (3) "I am interested in developing an intimate relationship with someone" (this is inversely related), and (4) "I am trying to figure out who I am" (also inversely related). Additional items which were positively associated included: (5) "I am concerned about being productive" at .37, and (6) "I am interested in giving of myself to people." Clearly, this factor does not indicate concerns about identity or intimacy. An interest beyond oneself--an outer-orientation--is implied. Concerns about generativity, specifically giving to others as well as being productive, were indicated by this factor.

Finally, the fourth factor was entitled "Individuation/Confidence" and was difficult to interpret. It was comprised of the following: (1) "When I am involved in an intimate relationship, I tend to give up my own values in favor of the values of the other person," (2) "I am interested in finding out what my skills and interests are," and (3) "I am interested in giving of myself to people." The statement: (4) "Even when other people disagree with me I feel confident about my own beliefs," was also relevant.

4. Predicting "Factored" Developmental Concerns

A. Dependent Variables

Scores were generated for each of the factors by summing those items that loaded .30 or greater on each. An attempt was made, however, to avoid overlapping items when computing the indexes. Scores ranged from 0 to 4 for "Identity/Intimacy," 0 to 3 for "Productivity/Meaning," 0 to 5 for "Generativity" and 0 to 4 for "Individuation/Confidence." The average scores for each factor were 2.4 for "Identity/Intimacy," 2.3 for "Productivity/Meaning," 3.3 for "Generativity" and 3.4 for "Individuation/Confidence." The higher the score the greater was the person's agreement with the developmental issues.
B. **Independent Variables**

The same independent variables which were included in the regression analysis of the previous developmental variables outlined in Table 12 were used in this assessment. They included thirteen demographic or life style measures, two attitudinal items concerned with satisfaction with family and friends, seven items reflecting different motives for returning to school and a question about obstacles in preparation for school.

C. **Results**

The results from this set of analyses are presented in Table 14. Although similar independent variables emerged as significant in this assessment, as in the earlier investigation, the arrangement of variables in the models was different. The two groups of dependent variables were apparently measuring distinct processes which were not necessarily related to each other.

In the first analysis of the dependent variable--"Identity/Intimacy"--taking a break, satisfaction with family and obstacles in preparation for school were the most significant independent variables, in that order. Taking a break appeared in the earlier "a priori," unfactored assessment of intimacy. Its appearance again in the model of "Identity/Intimacy" suggests that the decision to interrupt school was related to concerns about intimacy, and, surprisingly, these results indicated that those who did take a break felt more unresolved about intimacy issues than did those who did not. It is also noteworthy that satisfaction with family was negatively correlated to Identity/Intimacy. Finally, obstacles in preparation for school was inversely related; those with psychological concerns exhibited lower concerns with identity/intimacy issues.

The second model included "Productivity/Meaning" as the dependent variable. Only one variable--divorce as a reason for returning to school--was contributory. The minimal variance accounted for, 7%, suggests that this was not a very meaningful model.
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>B</th>
<th>Beta</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>To took Break</td>
<td>Identity/Intimacy</td>
<td>.80</td>
<td>.31</td>
<td>.0089</td>
</tr>
<tr>
<td>Satisfaction with Family</td>
<td></td>
<td>-.35</td>
<td>-.28</td>
<td>.01</td>
</tr>
<tr>
<td>Obstacles Preparing for School</td>
<td></td>
<td>-.60</td>
<td>-.23</td>
<td>.04</td>
</tr>
<tr>
<td></td>
<td>R²</td>
<td>.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorce as Reason for Return to School</td>
<td>Productivity/meaning</td>
<td>.66</td>
<td>.26</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>R²</td>
<td>.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td>Generativity</td>
<td>.87</td>
<td>.43</td>
<td>.0002</td>
</tr>
<tr>
<td></td>
<td>R²</td>
<td>.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>Individuation/Confidence</td>
<td>1.29</td>
<td>.86</td>
<td>.0003</td>
</tr>
<tr>
<td>Hours Working</td>
<td></td>
<td>.03</td>
<td>.65</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>R²</td>
<td>.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The factor which we are calling "Generativity" became the dependent variable in the third equation. Although only one variable--marital status--also emerged in this assessment, a greater amount of variance was explained by this model. Married persons expressed greater interest in issues related to generativity than unmarried women. This dimension also included a high, but negative loading of the item "I am interested in developing an intimate relationship with someone."

Finally, the last analysis of "Individuation/Confidence" showed no similarities to the previous unfactored assessment of individuation. In this model, the contributory variables were unemployment status and hours working. Those without a job as well as those who worked a lot of hours shared a common focus on issues related to individuation or confidence about themselves. Recall that these two variables also emerged as significant in predicting respondents' ratings of the importance of school. However, the associations to the dependent variable were inversely related; the unemployed and hard-working women rated school very low relative to other areas of their lives.

Although the findings from this second analysis differed significantly from the previous set, they both indicated that social/life style influences predominated over developmental ones.

5. Factor Analysis of Mental Health Symptoms

The third part of this research focused on mental health. Most of the women in our population maintained multiple roles at home and at work, and, consequently, experienced a variety of conflictual demands in their lives. We wanted to assess the extent, if any, of stress and anxiety in this group of women. A total of fifteen symptoms of mental health were included in the instrument. Interviewers asked the participants to tell them whether or not they had experienced any of the following complaints or troubles over the last six
months: headaches, trouble with steering, upset stomach, dizziness, shortness of breath when you are not exerting yourself, tense or nervous for no reason, the blues, unpleasant thoughts you can't get out of your mind, need to check things over and over again, irritability, extreme tiredness during the day, less enjoyment or interest in life, appetite change, fears they could not face certain situations and less interest in sex. A principal component analysis similar to that which was conducted in the analysis of the developmental factors was also used to search for clusters of symptoms of mental health. The results from this analysis are presented in Table 15.

Six factors, with eigenvalues of one or greater, emerged, and they explained 68% of the total variance. The first factor explained 20% of the variance, and was called "Depression" since the items with high loadings on this factor were the blues, less enjoyment in life, irritability, recurring unpleasant thoughts, headaches and insomnia. The second factor was quite different and included such variables as tension, shortness of breath, and insomnia. This was negatively correlated with being tired and a decline in sexual interest. We decided to call this dimension "Anxiety." Factors three, four and six did not conform to any previously known types of mental illness. However, factor five was called "Compulsivity" because the following variables had high loadings on the factor: recurring unpleasant thoughts, checking things over and over, less enjoyment in life, and tension. Headaches and stomach problems were also inversely related. These three factors—Depression, Anxiety and Compulsivity—were then used as dependent variables in the regression analyses which are described in the next section.

6. Predicting Mental Health

Scales for the Depression, Anxiety and Compulsivity factors were developed by summing the items with high loadings in each cluster. Multiple regression analyses which
**Table 15**

**PRINCIPAL COMPONENTS OF MENTAL HEALTH SYMPTOMS**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headaches</td>
<td>.50</td>
<td>.35</td>
<td>.27</td>
<td>.09</td>
<td>-.39</td>
<td>-.00</td>
</tr>
<tr>
<td>Insomnia</td>
<td>.50</td>
<td>.37</td>
<td>-.10</td>
<td>-.14</td>
<td>.06</td>
<td>-.49</td>
</tr>
<tr>
<td>Stomach Problems</td>
<td>.37</td>
<td>.17</td>
<td>-.46</td>
<td>.00</td>
<td>-.45</td>
<td>.22</td>
</tr>
<tr>
<td>Dizziness</td>
<td>.33</td>
<td>-.19</td>
<td>.40</td>
<td>-.07</td>
<td>-.09</td>
<td>-.09</td>
</tr>
<tr>
<td>Short of Breath</td>
<td>.06</td>
<td>.58</td>
<td>.17</td>
<td>-.16</td>
<td>-.02</td>
<td>.59</td>
</tr>
<tr>
<td>Tense</td>
<td>.29</td>
<td>.61</td>
<td>.18</td>
<td>.26</td>
<td>.37</td>
<td>-.28</td>
</tr>
<tr>
<td>The Blues</td>
<td>.68</td>
<td>-.19</td>
<td>-.00</td>
<td>.05</td>
<td>-.25</td>
<td>-.09</td>
</tr>
<tr>
<td>Recurring Unpleasant Thoughts</td>
<td>.59</td>
<td>-.20</td>
<td>-.05</td>
<td>-.25</td>
<td>.46</td>
<td>-.04</td>
</tr>
<tr>
<td>Checking Things Over and Over</td>
<td>.17</td>
<td>.05</td>
<td>-.61</td>
<td>.30</td>
<td>.34</td>
<td>.09</td>
</tr>
<tr>
<td>Irritable</td>
<td>.60</td>
<td>-.09</td>
<td>.16</td>
<td>-.29</td>
<td>-.11</td>
<td>-.03</td>
</tr>
<tr>
<td>Tired</td>
<td>.51</td>
<td>-.38</td>
<td>-.31</td>
<td>-.05</td>
<td>-.12</td>
<td>.09</td>
</tr>
<tr>
<td>Less Enjoyment in Life</td>
<td>.61</td>
<td>-.07</td>
<td>-.05</td>
<td>-.28</td>
<td>.44</td>
<td>.39</td>
</tr>
<tr>
<td>Appetite Change</td>
<td>.39</td>
<td>.30</td>
<td>.00</td>
<td>.59</td>
<td>-.04</td>
<td>.15</td>
</tr>
<tr>
<td>Fears</td>
<td>.45</td>
<td>-.29</td>
<td>-.00</td>
<td>.52</td>
<td>-.09</td>
<td>-.10</td>
</tr>
<tr>
<td>Sex Decline</td>
<td>.10</td>
<td>-.33</td>
<td>.54</td>
<td>.44</td>
<td>.12</td>
<td>.27</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>3.0</td>
<td>1.5</td>
<td>1.3</td>
<td>1.3</td>
<td>1.1</td>
<td>1.0</td>
</tr>
</tbody>
</table>
| % Variance Explained       | 20%      | 10%      | 9%       | 8.4%     | 7.5%     | 6.7%     | Total Variance 68%
included the set of independent variables used in the previous assessment of education attitudes were conducted for all three scales. The results from these analyses are shown in Table 16.

Only two variables--income and age--were significant in the depression equation, and they explained 16% of the variance. Income was the most contributory. Women with lower incomes were more prone to depression than were the affluent women. It is interesting that this variable was more important than marital status, parental status, perception of support from family and friends, and types of resources used. The second factor which emerged was age; the younger the woman the more likely she was to exhibit symptoms of depression. This finding is consistent with other studies which indicate high rates of depression among young women. Unfortunately, the sources of depression cannot be determined from this research, and they may or may not be related to a woman's return to school.

Similarly, age was significant, and the only relevant variable predicting symptoms of anxiety. Again the older the woman student, the less anxious she became. Previous analyses indicated that women in higher ranks, e.g., juniors and seniors, rated their performance more highly than women who were just starting out in school. It was thus not surprising that middle-aged women who were beginning college for the first time were more anxious than those who were returning as juniors or seniors. However, being a younger middle aged student apparently makes one vulnerable to anxiety.

Finally, income was a contributory influence in explaining symptoms of compulsivity; however, one would have expected to find higher compulsivity among the affluent rather than among the poor women. Similar to the model predicting depression, the findings indicated that poverty contributed to anxiety. Contrary to previous analyses of the developmental concerns, socio-economic status as well as developmental stage seemed important in this instance.
### Table 16

**VARIABLES ASSOCIATED WITH MENTAL HEALTH**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td><strong>Depression</strong></td>
</tr>
<tr>
<td></td>
<td>$B$</td>
</tr>
<tr>
<td></td>
<td>-.39</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Anxiety</strong></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.12</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Compulsivity</strong></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-.26</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td></td>
</tr>
</tbody>
</table>
SUMMARY AND CONCLUSIONS

This research has been concerned with mid-life women who have recently enrolled in the university as undergraduate students. It is in response to a trend of the last decade or so among women to seek educational opportunities at non-traditional ages. Although the student role remains the same regardless of age, the educational experience and needs of older students are different from their younger peers.

The purpose of this research was threefold. First of all, we were interested in identifying the developmental issues that were particular to mid-life women who were initiating educational plans. We suspected that the decision to enter the university at an atypical time might be related to developmental tasks such as identity and generativity, described by Erikson (1959). Our second purpose was to look at the educational experience of the returning women and determine what variables were related to satisfaction and successful achievement. Finally, we wanted to determine to what degree, if at all, our subjects were experiencing symptoms of stress.

Previous research on adult development has focused primarily on the lives of men (e.g., Vaillant, 1977; Levinson, 1978) or made assumptions that men and women negotiate the same life stages in the same sequence (e.g., Erikson, 1959; Gould, 1978). Although there has been some recent interest in mid-life women (e.g., Fuchs, 1977; Rubin, 1979; Notman, 1978, 1979; Robertson, 1978; Bardwick, 1978), most previous research is descriptive and lacks in empirical rigor. Some research on women (e.g., Gilligan, 1982; Stewart, 1977) suggests that the lives of men and women are qualitatively different; that women should be understood on their own terms.

The most definitive statements on adult development (e.g., Erikson, 1959; Jung, 1933; Havighurst, 1953; Levinson, 1978; Frenkel-Brunswik, 1968; Neugarten, 1968) support the significance of mid-life as a time of inner transformation. Nevertheless, application of developmental research to women is problematical (Rossi, 1980; Barnett and Baruch,
There is limited knowledge about women in their middle years, particularly women who started college in later life. There have been few studies of mid-life returning women that have considered developmental issues and even fewer that are empirically based. Although there has been some research on the needs of returning women, we hope to add to this body of knowledge. We also would like to contribute to knowledge about stress that women may experience at times of transition. It is hoped that besides bridging gaps in previous knowledge, this research will suggest programs and policies that will enhance the quality of the educational experience of mid-life returning women.

Method

The subjects of this study were women of the ages of 30 through 49 who were just entering The Ohio State University as undergraduate students. Subjects were any rank (freshpersons, sophomores, juniors, seniors), because many of them had been to college previously, having taken a break primarily for reasons of marriage and raising families. Students were full-time and enrolled in an academic program. We interviewed 74 women of a population of 118 persons who met the criteria of the study.

Interviews were face-to-face and took approximately one hour each. Questions were open and closed-ended. The primary topics that were included were demographics, motivation for returning to school, resources and obstacles, marital relationships, parenting, developmental issues, and mental health symptoms. We included three projective tests—a "Who am I?" question, four pictures from the Thematic Apperception Test (Murray, 1971), and fifteen items from Loevinger and associates' (1970) Sentence Completion Tests. In addition, we included some questions on death and dying.

Six women interviewers (other than the researchers) conducted the interviews following three training sessions, which included observing model interviews on a videotape. Interviewers were supervised on a weekly basis. Protocols were reviewed by
the researchers. The findings reported in the previous two sections were descriptive and analytical. Multiple regression analyses and factor analyses were the primary methods of analysis.

The following three sections consist of a discussion of the major findings and their implications. The educational experience, developmental issues, and mental health symptoms will be reviewed. We will conclude with a discussion of the difficulties and limitations of this study and the need for further research and will offer recommendations.

Educational Experience

The women in our sample felt very positively about returning to school and perceived that family and friends were supportive of their venture. School work, however, should be understood in the context of the women's lives. Most of the women in our sample were married (66%), parents (82%) and employed (54%). Sixty-one of the subjects considered family life their highest priority.

Our major findings about the educational experience are as follows:

1. A student is satisfied with her performance in school insofar as educational factors, rather than demographic factors, are favorable. The principal educational factors found were a lack of obstacles and a higher educational level. Obstacles affected how a person felt about her school performance; they may have also induced low grades and attrition. Students at high educational levels (e.g., juniors and seniors) were more satisfied because they were closer to completing their work or involved in their major studies. Satisfaction increased over time (i.e., level) so long as there were no obstacles.

Because obstacles were of significance, these should be identified early by counselors and advisers so that they can be mitigated as soon as possible. It should also be understood that lower level students were more likely to be dissatisfied than higher ranking students.
2. **Working while going to school affects students' assessment of the importance of school.** Work affected subjects' ratings of the priority of school in two ways: (1) the more hours a woman worked the less she valued school; (2) working women rated school more highly than women who were not engaged in paid employment. This suggests that some employment is salutory, but working many hours detracts from a student's prioritization of school.

3. **Mid-life women students feel positively about school insofar as they perceive that people in general feel positively about women who return to school.** On the basis of a regression analysis (Table 10), it appeared that mid-life women students internalized their perceptions of others' attitudes and reflected these in their own prioritization of school. This suggests that the opinion of others is important to these women and that positive public attitudes would benefit the women by making them feel more comfortable with making school a priority. Public education on the beneficial aspects of returning to the university at mid-life can go a long way in helping women feel good about school and themselves. Emphasis on the successful achievement and life satisfaction on the part of these women should be emphasized.

In the future we intend to perform a further analysis on the factors related to achievement at the university. We will be relating independent variables to grade point averages during the spring quarter of 1983 and cumulative grade point averages.

**Developmental Findings**

On the basis of the data reported in the previous two chapters we have come to the following conclusions about mid-life women who are just entering the university:

1. **The most salient developmental issue for the women in our sample was generativity.** According to Erikson (1959, 1963), generativity is concern for and the desire to give to the next generation, including one's children. It also includes productivity in
work. Generativity as we operationalized it in direct questions was an important issue for 90% of the women in our study (see Table 6). It was more important than integrity, intimacy, or identity (see Table 7).

This finding is consistent with Erikson's designation of generativity as a critical issue in middle adulthood. However, it contradicts other studies of older returning women (e.g., Scott, 1980; Badenhoop and Johansen, 1980) which report that this group is very concerned with issues of identity and integrity. Only 26% of our population said that they were seeking to find out who they were, although many of our subjects were interested in finding out what their skills were.

Our conclusion regarding the predominance of generativity is based on our a priori definitions of generativity which have yet to be validated with the projective measures.

2. For the women in our study, developmental issues were intertwined rather than in the separate and sequential form that Erikson proposed. This conclusion was based on a factor analysis we conducted (see Table 13) in which we were able to identify four clusters of developmental issues which we called identity/intimacy, productivity/meaning, generativity, and individuation/confidence.

The first factor, identity/intimacy, was consistent with the work of Gilligan (1982), who stated that for women the issues of identity and intimacy were fused. Women define themselves through relationships with others.

The second factor, productivity/meaning, suggested that women sought meaning through being productive. This factor was negatively correlated with being close to others. Productivity/meaning was a variant of generativity and integrity as defined by Erikson (1959, 1963).

We called the third factor generativity. Its major components were being close to others, productivity, and giving. It was negatively correlated with intimacy, identity, and finding skills. The component "being close to others" was thought to be a measure of
intimacy. Apparently this kind of closeness was a generic rather than a specific kind of intimacy and correlates negatively with "developing an intimate relationship," our primary measure of intimacy. The factored generativity cluster included a positive association with the desire for the generic but not the specific type of intimacy. This finding did not contradict Erikson's finding but it defined the dimension more specifically.

The fourth factor included primarily the individuation or confidence measures as well as giving to others. It appears that this factor was truly a measure of confidence rather than individuation but we retained the original name in juxtaposition with confidence.

The clusters of factors that we found raises questions about the validity of the developmental issues as defined by Erikson and as we originally operationalized them. It appears that, at least for mid-life returning women, developmental issues are integrated and intertwined. We do not know whether this finding would hold if we had a sample that included a wider range of ages, men, or non-returning women.

3. Regression analyses on the developmental task indicated that social life style factors, rather than developmental factors (e.g., age) were related to the developmental issues. Regression analyses of the factored developmental issues found taking a break, satisfaction with family, and obstacles preparing for school related to identity/intimacy; divorce as a reason for returning to school related to productivity/meaning; marital status related to generativity; and employment factors related to individuation/confidence. With the exception of menopause in relation to identity and age in relation to individuation, we found similar results in the regression analysis on the a priori definitions of life stages. This suggests that life style and life circumstances (e.g., marital and parental status, taking a break, employment, and obstacles) were stronger predictors of developmental issues than age.

In recent years, Neugarten (1983) has expressed the opinion that developmental stages are not relevant to adult development. Our findings support her claim. These results contradict the work of Levinson (1978) in which sub-stages based on age are described for
middle adulthood. Our study suggests that people have control over their developmental issues insofar as their life style is congruent with specific tasks.

4. We found no evidence in our study for the existence of a mid-life crisis for the women we interviewed; nor did we discern that these women were searching for meaning or reassessing their lives, as explicated by Neugarten (1968, 1973) and Jung (1933). The emphasis on generativity that we found suggests that these women were concerned with being productive and giving to others; they did not appear to be in conflict about this.

Mental Health

During the interview, the women were given fifteen symptoms of mental distress and instructed to indicate whether or not they had experienced any of these complaints within the last six months. Overall, these women appeared in good mental health, and did not report inordinate amounts of distress. Symptoms of agitated depression were expressed most often by these women. Many complained of feeling irritable, headaches, the blues, upset stomachs and insomnia. Studies consistently show that women are twice as likely as men to experience symptoms of depression (Weissman and Klerman, 1979), and young women are particularly vulnerable. According to Winokur (1973) and Klerman (1983), with age, depression declines among women, especially among those over the age of 55.

In spite of the changes brought about by returning to school, these women exhibited minimal amounts of anxiety. The symptoms of anxiety—tenseness and shortness of breath—had very low frequencies. Most of these women fulfilled demands of multiple roles at home and at school, yet they were not, apparently, under a great deal of stress.

To determine whether there were any clusters of mental health problems among these women, a principal components analysis was conducted of the fifteen symptom items. Although six factors emerged which accounted for 68% of the variance, only three of these dimensions were clearly interpretable. The first factor—depression—explained the
greatest amount of variance and was comprised of such variables as the blues, irritability, less enjoyment of life, recurring unpleasant thoughts, tiredness, headaches and insomnia. This was the most contributory mental health cluster, and explained much more of the variance than the second factor—anxiety—which emerged with an eigenvalue of only 1.5.

The anxiety factor included such items as tenseness, shortness of breath, insomnia and headaches, all of which are commonly identifiable symptoms of anxiety. The third recognizable dimension was titled compulsivity, because it included the following set of symptoms: recurring unpleasant thoughts, checking things over and over, and tenseness. Among women who are somewhat achievement-oriented, such as the women in this population, a certain amount of compulsivity is functional and contributes to the need to do well and to finish projects on time.

Factors three, four and six did not conform to any previously defined dimensions of mental health. Additional clusters which, as yet, have not been identified apparently exist for these women. Factor analysis is a valuable tool for studying symptoms of mental health with populations whose concerns may differ from those of the dominant culture. Rather than imposing previously established categories on the population which may or may not accurately depict their concerns, the researcher discovers underlying structures inductively.

The factors of depression, anxiety and compulsivity were, subsequently, developed into factor scores by summing items which had high loadings on each of the factors, and regression analyses were performed on all three dimensions. The most significant variable predicting depression among these women was income. The relevance of socioeconomic status to mental health is well documented. In a national survey of Americans in 1957 and in 1976, Veroff et al. (1981) found that in both years people with high incomes, compared to those with low income: (1) reported greater present happiness and higher future morale; (2) less often said they have felt as if they might have a nervous breakdown; (3) had a
positive orientation toward and saw fewer restrictions in marriage; (4) reported greater happiness in their own marriages; and (5) reported greater job satisfaction and listed fewer symptoms of mental health. They also observed that the influential relationship of income to education underlies many of the correlations of income to subject mental health. Yet, since all of the women in this study were undergraduates, education could not adequately explain the high correlation between income and depression in this investigation. The influence of income on depression remained even within the contexts of controls for parental status, marital status, work status, attitudes toward school and education. The relevance of socioeconomic status to mental health among women returning to school has important implications for clinicians who plan to work with these women. While psychological contributions, e.g., self-esteem, family dynamics, should not be neglected in their counseling, the results from this study suggest that counselors working with returnsy women should focus on mitigating the effects of poverty in their lives and on helping these women improve their economic status since these are, apparently, the most significant predictors of depression in this population. The contribution of financial resources to well-being is often neglected by mental health practitioners.

A second factor--age--emerged as important in predicting depression in this population. While the range of ages is limited in this group, the tendency for women to become less depressed with age (cf. Winokur, 1973; Klerman, 1983) is evident even from 30 to 49 years of age. This developmental trend is well documented among women, but explanations for this decline are not clear. Of course other changes such as menopause and the empty nest occur during this period. The lifting of responsibilities for child care and responsibilities in the household may explain some of this decline. According to Campbell et al. (1976), women with young children exhibit considerable amounts of stress and strain, and they report less general satisfaction with life. A more in-depth investigation of these developmental trends is clearly needed.
In the regression analysis of anxiety, age was the only contributory variable. Thus, women became both less depressed and less anxious with increasing age. Income emerged as significant in predicting compulsivity; the high income groups exhibited less obsessive-compulsive types of behavior than the lower income groups.

In summary, both socioeconomic and developmental influences were relevant in predicting the mental health of women returning to school, and income appeared especially predictive of depression and compulsivity. Academic advisors or facilitators interested in developing support groups for women returning to school should encourage discussions about the impact of their finances and life changes on well-being in order that they can consider alternative, more constructive ways of coping with their anxieties and their feelings of depression surrounding these issues. At the least, faculty and administrators in higher education should be aware of those who are most vulnerable—young women and women with financial difficulties.

Limitations of the Research

The generalizability of the findings from this study is limited by a number of factors. First, and most importantly, the size of the population was small, and it was comprised largely of white middle-class women most of whom were financially comfortable. A more representative group of women returning to school at mid-life could be obtained by including those who re-enter on a part-time basis. Second, the lack of a control group of non-returning women limits the conclusions we can make about women in the middle years. It would be useful to compare the developmental struggles of women who decide to re-enter school with similar women who decide not to return. Finally, our population favored women who had time to participate as some women were too busy to be interviewed. Stress symptoms might have been higher had we been able to interview all of the women in this group.
Future research in this area should include larger samples with comparison groups, e.g., working women, housewives, and graduate students. There are almost no studies of women returning to school which have included control groups in their investigation. Thus no findings can be attributed to the unique conditions of returning women until comparisons are made with similar women who have decided not to re-enter school at this time. Indirect measures, such as projective instruments, of mental health and psychological concerns about returning to school and growing older should also accompany direct measures of assessment. We expect that the analyses of the Thematic Apperceptive Test and The Sentence Completion Test in conjunction with the questionnaire should be revealing. These should be completed in the next few months.

**Recommendations**

While this investigation represents a very preliminary assessment of the developmental and contemporary concerns of women returning to school at mid-life, the results from this research have important theoretical implications about the phenomenological experience and the nature of the developmental process among women returning to school in mid-life. Moreover, the findings have implications for policy-making and planning in relation to mid-life women who are attending universities. We would like to recommend that persons providing education, counseling, and student services to this population be particularly cognizant of the following:

1. Mid-life women who are entering the university are dealing with the developmental issue of generativity (Erikson, 1959, 1963). They are interested in being productive and in giving to others. They wish to contribute to society and care about the next generation. As such, they have great potential to contribute to the vitality of the university community.
2. Mid-life returning women are, for the most part, married, parents, and employed, although there are differences within this population. Social life style factors (e.g., marital status, employment) have great impact on these students' satisfaction with their performance in school and their inclination to give school work a high priority. Moreover, their perception of public attitudes toward them affect these women's attitude toward school. Efforts by appropriate university staff to improve the image of older women students will help the students.

3. Mid-life re-entry women are, overall, in good mental health. Like many women, however, they do experience some depression, which, in the case of our sample, seems to be related to economic status and age. Faculty and counselors should be aware that the younger, less affluent mid-life student is more likely to be depressed than her older, more comfortable counterpart.

4. This population of women does experience obstacles in preparing for school and in attending school. University staff can alleviate some of these impediments by providing individual and social supports. Individual support can be provided by faculty, advisers, and counselors. Social support can be marshalled by organizing peer support groups among mid-life returning students. In addition, universities can offer classes at alternative times (evenings, weekends), as well as on-campus day care facilities and financial aid. Faculty and staff seminars describing the mid-life students, the obstacles, and their needs will assist university staff in understanding and addressing the needs of this emerging student population.
Appendix A

MID-LIFE WOMEN IN HIGHER EDUCATION

Interview Schedule

A. INTRODUCTORY INFORMATION
1. Respondent No.
3. Study No. 1
4. Interviewer name/code
5. Date of interview

B. SOCIODEMOGRAPHIC DATA
6. Date of birth
   Age as of last birthday
7. Race/ethnic group (observe)
   ___ Caucasian
   ___ Black/Afro-American
   ___ Hispanic
   ___ Asian American
   ___ Other
   ___ Uncertain
8. Religion
   ___ Protestant
   ___ Catholic
   ___ Jewish
   ___ Other (specify)
   ___ None; atheist
9. Current educational level  
   ___ freshman  
   ___ sophomore  
   ___ junior  
   ___ senior
10. When do you anticipate graduating?  mo. ______ yr. ______
11. What degree are you working on? ______
12. In which college are you presently enrolled? ______
13. What is your major area of study? ______
14. Have you had any other kinds of educational or training experiences since high school?  
   ___ yes  ___ no

IF YES TO Q14 ANSWER Q5 15-19. IF NO PROCEED TO Q20.
15. Specify kinds of educational/training experiences you have had since high school.

16. How long ago was your most recent training or educational experience? ______ years
17. How many years did you complete? ______
18. Did you acquire a degree or certification in your field of study?  
   ___ yes  ___ no
19. IF YES TO Q18, please specify kind of degree/certification.

20. Have you ever taken a break from college (excluding summer and vacations) and then returned?  
   ___ yes  ___ no
If YES to Q20 Answer Qs 21-24. If NO Proceed to Q25.

21. When did you take a break? year(s): ____________________

22. For how long? _____ years _____ months

23. Why did you take a break at that time?

24. In retrospect, how do you feel about having taken that break?

25. Why did you decide to return to school this fall? (Probe for life events, e.g., children starting school or leaving home, unemployment, divorce or feelings, e.g., boredom, lack of purpose, etc.)

26. What are your career goals?

27. Why have you chosen this particular career?

28. How does your family feel about your returning to school? (Probe for negative, positive, neutral, mixed responses among various family members.)

29. How do your friends feel about your returning to school?
30. Besides family and friends, how do you think people in general regard women of your age who are returning to school?

31. How do you feel about returning to school at this time? (Observe affect as well as content.)

32. What kinds of special arrangements, if any, have you had to make in order to go to school at this time (e.g., babysitting, financial aid, employment)?

33. What particular obstacles have you had in making preparations to return to school (e.g., obtaining a loan, transportation, lack of confidence)?

34. What kinds of obstacles have you encountered since you've been in school (e.g., library hours, babysitting, etc.)?

35. How satisfied are you with your performance in school?
   __ very satisfied
   __ satisfied
   __ undecided
   __ dissatisfied
   __ very dissatisfied
36. What kinds of resources, events, or persons have been most helpful to you since you have been in school (e.g., advisor, Adults in Transition, faculty your age, peers, etc.)?

C. EMPLOYMENT STATUS

37. Do you hold a (paying) job now?
   ___ yes  ___ no

IF YES TO Q37 ANSWER Qs 38-40.

38. What kind of job do you have? (Give job title, e.g., waitress)

39. How many hours per week do you work? ________ hours

40. What is your primary reason for working at this time?

IF NO TO Q37:

41. If you are not working, how are you supporting yourself at this time?

D. MARITAL STATUS

42. What is your marital status at this time? Are you
   ___ married
   ___ never married
   ___ previously married (e.g., separated, divorced)
   ___ widowed
   ___ other ____________________________
IF MARRIED, ANSWER Qs 43-51. IF UNMARRIED GO TO Q52.

43. How does your husband feel about your going to school?

44. Is your husband working now?
   ___ yes ___ no

45. IF YES TO Q44, what does he do?

46. What is your husband's highest degree?

47. Since you have returned to school, have there been any changes in your marriage?
   ___ yes ___ no

48. IF YES TO Q47, in what respects has your marriage changed?

49. How satisfied are you with your marriage?
   ___ very satisfied
   ___ satisfied
   ___ undecided
   ___ dissatisfied
   ___ very dissatisfied

50. How often do you share your innermost feelings with your husband?
   ___ most of the time
   ___ sometimes
   ___ rarely
   ___ never
51. On a scale from 1 to 10, how close would you say that you are with your husband (10 = very close; 1 = not close)? (Show scale)  

IF NOT MARRIED:  

52. How long have you been (widowed, divorced, single)?  
   _____ years _____ months  

53. How satisfied are you with being single?  
   ___ very satisfied  
   ___ satisfied  
   ___ undecided  
   ___ dissatisfied  
   ___ very dissatisfied  

54. Are there people in your life with whom you can share your innermost feelings?  
   ___ yes ___ no Specify who these people are.  

55. How often do you share your innermost feelings with these people?  
   ___ most of the time  
   ___ sometimes  
   ___ rarely  
   ___ never  

56. On a scale from 1 to 10, how close would you say that you are with these people (10 = very close; 1 = not close)? (Show scale)  

E. PARENTAL STATUS  

57. Do you have any children?  
   ___ yes ___ no
58. How many children do you have? ____________

59-63. Would you tell me whether they are boys or girls, how old they are, and whether they are living with you or away from home?

<table>
<thead>
<tr>
<th>59. Child No.</th>
<th>60. Sex</th>
<th>61. Age</th>
<th>62. Whom child lives with</th>
<th>63. Child living away from home</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td>2</td>
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<td>3</td>
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<td>4</td>
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<td>7</td>
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<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Coder: Include non-biological children)

64. How has returning to school affected your relationship with your children? (Look for affect as well as verbal responses.)

65. How have your parental responsibilities affected your progress in school?

66. At different times in persons' lives, they experience different degrees of satisfaction with being a parent. How satisfied are you with being a parent now?

____ very satisfied
____ satisfied
____ uncertain
____ dissatisfied
____ very dissatisfied
67. What kinds of child care arrangements, if any, have you had to make in order to go to school?

68. Who in your family has MOST of the responsibility for taking care of the children?
   ___ self
   ___ husband
   ___ other (Who? ___________________)

69. If you do NOT have children, do you intend to have children some day?
   ___ yes ___ no

70. IF YES TO Q69, do you expect this to affect your career goals? If so, how?
   ___ yes ___ no

71. IF NO TO Q69, specify why not.

F. SOCIAL SUPPORT SYSTEM

72. Overall, how satisfied are you with the degree of emotional closeness you experience with your family?
   ___ very satisfied
   ___ satisfied
   ___ uncertain
   ___ dissatisfied
   ___ very dissatisfied
73. How satisfied are you with the degree of emotional closeness you experience with your friends?
   ___ very satisfied
   ___ satisfied
   ___ uncertain
   ___ dissatisfied
   ___ very dissatisfied

74. Of all the people you know, whom would you talk to regarding a problem you are having in school? (Choose one person)

G. HEALTH

75. Do you have any physical conditions that interfere with your activities?
   ___ yes   ___ no
   If YES, please specify

76. Do you have any other health problems? ___ yes   ___ no
   If YES, please specify

77. Do you have any signs of menopause? (Probe for whether or not person has been through menopause or is going through menopause or is not going through menopause yet.)
I'm going to read off a list of troubles or complaints that people have from time to time. Tell me whether or not you have had any of these complaints in the last 6 months.

<table>
<thead>
<tr>
<th>No.</th>
<th>Complaint</th>
</tr>
</thead>
<tbody>
<tr>
<td>78.</td>
<td>Headaches</td>
</tr>
<tr>
<td>79.</td>
<td>Trouble with sleeping</td>
</tr>
<tr>
<td>80.</td>
<td>Upset stomach</td>
</tr>
<tr>
<td>81.</td>
<td>Dizziness</td>
</tr>
<tr>
<td>82.</td>
<td>Shortness of breath when you are not exerting yourself</td>
</tr>
<tr>
<td>83.</td>
<td>Tense or nervous for no reason</td>
</tr>
<tr>
<td>84.</td>
<td>The blues</td>
</tr>
<tr>
<td>85.</td>
<td>Unpleasant thoughts you can't get out of your mind</td>
</tr>
<tr>
<td>86.</td>
<td>Need to check things over and over again</td>
</tr>
<tr>
<td>87.</td>
<td>Irritable</td>
</tr>
<tr>
<td>88.</td>
<td>Extreme tiredness during the day</td>
</tr>
<tr>
<td>89.</td>
<td>Less enjoyment or interest in life</td>
</tr>
<tr>
<td>90.</td>
<td>Appetite change</td>
</tr>
<tr>
<td>91.</td>
<td>Fears you can't face certain situations</td>
</tr>
<tr>
<td>92.</td>
<td>Less interest in sex</td>
</tr>
</tbody>
</table>

H. LIFE TASKS

93. Tell me three things about yourself that will give me an idea who you are. (Don't use your name)
Do you agree or disagree with each of the following in terms of where you are now?

<table>
<thead>
<tr>
<th></th>
<th>AGREE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>94.</td>
<td>I am concerned about being productive</td>
<td></td>
</tr>
<tr>
<td>95.</td>
<td>I am concerned about the meaning of life</td>
<td></td>
</tr>
<tr>
<td>96.</td>
<td>I am interested in developing an intimate relationship with someone</td>
<td></td>
</tr>
<tr>
<td>97.</td>
<td>I am trying to figure out who I am</td>
<td></td>
</tr>
<tr>
<td>98.</td>
<td>Even when other people disagree with me I feel confident about my own beliefs</td>
<td></td>
</tr>
<tr>
<td>99.</td>
<td>I am interested in finding out what my skills and interests are</td>
<td></td>
</tr>
<tr>
<td>100.</td>
<td>When I am involved in an intimate relationship I tend to give up my own values in favor of the values of the other person</td>
<td></td>
</tr>
<tr>
<td>101.</td>
<td>I am interested in being close to people</td>
<td></td>
</tr>
<tr>
<td>102.</td>
<td>I am interested in giving of myself to people</td>
<td></td>
</tr>
<tr>
<td>103.</td>
<td>I have few regrets about the way I have lived my life</td>
<td></td>
</tr>
</tbody>
</table>

I am going to read to you a series of pairs of statements. Tell me which one of the following pairs of statements best describes you at this time? (Circle (a) or (b).)

104. (a) I am interested in developing an intimate relationship with someone; or
     (b) I am trying to figure out who I am

105. (a) I am concerned about the meaning of life; or
     (b) I am interested in giving of myself to people
106. (a) I am concerned about being productive; or
(b) I am interested in developing an intimate relationship with someone

107. (a) I am interested in finding out what my skills and interests are; or
(b) I am concerned about the meaning of life

108. (a) I am interested in giving of myself to people; or
(b) I am trying to figure out who I am

109. How would you rank the following concerns at the present time (1 = most important; 4 = least important)? (If not applicable, code as "9")

my school work

my friends

my job

my family

I. FINANCES

110. What is your family income (any source, including child support)? (Show card with breakdown)

J. PROCEDURES FOR ADMINISTERING THE TAT

Interviewers should read the following statement to subjects before administering the TAT:

I am now going to show you a series of four pictures. I would like you to use your imagination and think of a story that would go to each picture. The story should have a beginning, a middle and an end. Then I will ask you a series of questions to guide you in your response. There are no right or wrong answers. Your responses will be used for research purposes only.

After you read this to subjects, show them the pictures one at a time and record their responses on the following pages.
PICTURE 1 (2)

Use the following questions to guide subjects' responses and record their stories exactly as they describe them to you. Do not summarize. Record their responses verbatim.

Who are these people?

What are they doing?

What do they want?

What are they thinking?

How do they feel?

How will things turn out?
PICTURE 2 (10)

Use the following questions to guide subjects' responses and record their stories exactly as they describe them to you. Do not summarize. Record their responses verbatim.

Who are these people?

What are they doing?

What do they want?

What are they thinking?

How do they feel?

How will things turn out?
Use the following questions to guide subjects' responses and record their stories exactly as they describe them to you. Do not summarize. Record their response verbatim.

Who are these people?

What are they doing?

What do they want?

What are they thinking?

How do they feel?

How will things turn out?
PICTURE 4 (15)

Use the following questions to guide subjects' responses and record their stories exactly as they describe them to you. Do not summarize. Record their responses verbatim.

Whom do you see in this picture?

What is going on?

What wants are being expressed here?

What thoughts are being expressed here?

What feelings are being expressed here?

How will things turn out?
K. **SENTENCE COMPLETION** (Please complete the following sentences)

1. Raising a family

2. A woman's job

3. Education

4. Being with other people

5. For a woman a career is

6. I feel very

7. The thing I like about myself is

8. My conscience bothers me if

9. A woman feels good when

10. A good mother
11. She felt proud that she

12. When I am criticized

13. Sometimes she wished that

14. A woman has a right to

15. If I can't get what I want
L. **DEATH INVENTORY**

Indicate how often you experience the following.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>most of the time</td>
<td>sometimes</td>
<td>rarely</td>
<td>never</td>
</tr>
</tbody>
</table>

1. I am afraid to die.
2. The thought of death enters my mind.
3. It doesn't make me nervous when people talk about death.
4. I dread to think about having to have an operation.
5. I am not afraid to die.
6. I am not afraid of getting cancer.
7. The thought of death bothers me.
8. I am distressed by the way time flies so rapidly.
9. I fear dying a painful death.
10. The subject of life after death troubles me.
11. I am scared of having a heart attack.
12. I think about how short life is.
13. I shudder when I hear people talking about a World War III.
14. The sight of a dead body is disturbing to me.
15. I feel that the future holds nothing for me to fear.
16. Compared with other people my age I think about death
   - more than others
   - about the same as others
   - less than others
17. Compared with 10 years ago, I am
   ___ more concerned about death now
   ___ as concerned as I ever was
   ___ less concerned now

18. When I think about the prospect of my own death, I am more concerned about (choose 1)
   ___ not having accomplished what I had planned; OR
   ___ leaving behind those I love
# M. INTERVIEWER’S ANALYSIS

1. **Interruptions**
   - None
   - Few
   - Many

2. **Abstract thinking level**
   - Good
   - Moderate
   - Low

3. **Articulate**
   - Very
   - Moderate
   - Poor

4. **Cooperation**
   - Good
   - Somewhat
   - Uncooperative

5. **Friendly**
   - Very
   - Somewhat
   - Didn’t show

6. **Interest level**
   - High
   - Moderate
   - Low

7. **Suspicious**
   - High
   - Moderate
   - Low

8. **Talkative**
   - Yes
   - Somewhat
   - No
9. Tearful
   1. Yes
   2. Occasionally
   3. No

10. Tense
    1. High
    2. Moderate
    3. Low

COMMENTS
January 6, 1983

Dear

We are conducting a research project involving women between the ages of 30 and 49 who are returning to school. We are interested in learning about the educational goals and developmental interests of mature women taking classes at the university. Your name was selected through university records. Your experience can help us understand the needs and concerns of women similar to you.

Most existing studies of adult development are based on men. Although these studies provide valuable insights into men's experiences over the life cycle, their findings do not necessarily apply to women. Very little is known about changes which affect women over the life cycle.

In a few weeks one of our staff will call you to explain the research and to request your participation in an interview.

Your participation is completely voluntary and is not required by the university. Should you decide that you are not interested in being involved in the project, simply let us know when we call you.

We appreciate your cooperation and anticipate that you will find this a valuable experience.

Sincerely,

Roberta G. Sands (422-8879)

Virginia Richardson (422-1876)

RGS/VR/ns
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