PARTICULAR CONSTRUCTS OF SELF-CONCEPT THAT ARE ASSOCIATED WITH SELF-DIRECTEDNESS AMONG SELECTED WOMEN STUDENTS ENROLLED AT A COMMUNITY COLLEGE

A Dissertation
Presented to
the School of Education
Drake University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by Donna Adkins
May 1996
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May 1996

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An abstract of a Dissertation by Donna Adkins
May 1996
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The problem. This study was designed to investigate the relationship that exists between particular aspects of community college women's self-concept and self-directedness. It also attempted to identify differences that may occur by age, and educational attainment. Specifically, the study investigated the relationship of a measure of each of five self-concept constructs, as measured by the DOSC, of selected community college students to self-directedness. Determining any differences between traditional and non-traditional age women students may aid in helping educators provide more responsive learning environments. Additional information relative to self-concept and self-directedness can aid educators in understanding the frame of reference out of which adult women students attempt to learn. The concern is not merely to identify self-directed learning behavior in individuals but also to compile information that might aid educators in assisting women and others on a path to self-directedness in life.

Procedures. Participants were asked to complete a demographic sheet, the Oddi Continuing Learning Inventory and the Dimensions of Self-Concept Scale. Data was analyzed by using Pearson Product-Moment Correlation Coefficients, t-tests and partial correlation analysis. A qualitative assessment was also completed to glean more in-depth information.

Findings. Three of the five factors of the DOSC were determined to have statistical significance with self-directedness indicating the scales might be useful in aiding educators understanding of students. Older students scored higher on the self-directedness measure than younger students; however, scores on the self-concept measure showed no significant differences between the age groups.

Conclusions. The DOSC and OCLI are valid and reliable instruments for use with adult students. Three factors of the DOSC scale were significantly correlated with self-directedness, the relationships were moderate and other variables should also be explored. One factor of the DOSC resulted statistically significant correlations with educational aspirations; however, the relationship was extremely low and other variables should be considered.
Recommendations. Several recommendations were made for using different populations, variables and methodology. The results of this study support further investigations of the instruments used.
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Chapter 1

INTRODUCTION

This study was undertaken to evaluate if there were particular aspects of self-concept that tended to be more strongly associated with self-directedness in women.

It was Freud's impression (1933) that young men near age 30 were going to continue to develop, where in women of the same age a creeping rigidity already foretold a greater limitation of their scope as persons. More current research of Broverman, Broverman, Clarkson, Rosenkrantz, and Vogel (1970) on sex role stereotypes and judgments of mental health is widely interpreted to show that clinicians still expect greater maturity in men than in women. Our ideals for personality development in women are unclear, and how women's lives should be conceptualized is itself a disputed question (Helson, Mitchell, & Hart, 1985).

Many adult women turn to educational institutions as their choice of environments in which to develop and grow. Educational institutions can provide support structures for negotiating life transitions. A significant number of women find their decision to return to formal education after an interruption both serious and significant, changing their values, perceptions, and self-concept (Roach, 1976). The returning woman faces problems that can be anxiety-producing. Women approach learning with more self-doubt, fear and alienation than men do. Essential prerequisites for women's education are greater female representation in faculty and building and nurturing of learning communities (Gallos, 1992). Understanding herself and learning adequate
coping strategies can aid women in their journey toward growth and development.

Mature personality development seems to be basic to the management of anxiety. Individuals with mature personalities use "constructive personal resources to help alleviate the negative effects of anxiety (Laster, 1981, p. 17). Constructive personal resources include self-esteem and a sense of self-directedness or control over one's life.

Self-directed learning has most often been used to describe a form of study in which people take the primary initiative, with or without the help of others, for planning, conducting, and evaluating their own learning activities (Knowles, 1975). Self-directed learning is rooted in the psychological position that all people create the world in which they live (Della-Dora & Blanchard, 1979). In this context, education consists of people helping each other in manifesting their potential in living.

Krabbe (1983) believes that self-directedness must be the outgrowth of real education. Continued growth requires continued learning and such growth involves helping students to become skillfully self-directed in their learning behavior. Self-direction is the guidance or governing of oneself through courses of thought and channels of action. Recent works in this area have focused on the learning process itself (Spear, 1988; Danis & Tremblay, 1987) and on the characteristics and styles of learners who are self-directed (Chene, 1983; Oddi, 1984; Candy, 1987).

Much of the literature found concerning self-directedness is in the area of adult education (Houle, 1961; Brockett, 1983; Tough, 1978). As the idea of life long education develops, self-directedness becomes more important to the
educational goal of helping students to develop the ability and desire to be continuous learners. It has been suggested that adult self-directedness in learning has a number of conceptual aspects. In some cases a sociological perspective has been dominant. Another aspect reflects a pedagogical emphasis and a third perspective comes from a psychological concept. Both the sociological and pedagogical model seem to emphasize the importance of pedagogical procedures. Actually, each of the previous conceptualizations and their various manifestations generally ignore the psychological process. This is amazing when learning is basically a psychological event (Long, 1990). The critical element in self-directed learning is not a sociological variable, nor is it a pedagogical factor: the main distinction is a psychological variable. Yet overzealous interest in self-directedness has placed primary emphasis on pedagogical aspects of self-directed learning while generally neglecting the psychological element and an understanding of the psychological aspects of self-directedness remain inadequate (Long, 1990).

Malcom Knowles, in the opening chapter of *Self-Directed Learning*, states his bias; "Self-directed learning is the best way to learn.... Every act of teaching should have built in it some provisions for helping the learner become more self-directing" (1975, p.10). His reasons for this position summarize the advocacy of self-directedness which appear elsewhere in the literature:

1. There is convincing evidence that people who take the initiative in learning... learn more things... and tend to retain and make use of what they learn better and longer than do reactive learners.
2. Self-directed learning is more in tune with our natural processes of psychological development. . . As we grow and mature, we develop an increasingly deep psychological need to be independent, first of parental control, and then later of control by teachers and other adults.

3. Many of the new developments in education. . . put a heavy responsibility on learners to take a good deal of initiative in their own learning. Students entering into situations without having learned the skills of self-directed inquiry will experience anxiety, frustration, and often failure.

4. We are entering into a strange new world in which rapid change will be the only stable characteristic. . . It is no longer realistic to define the purpose of education as transmitting what is known. . . The main purpose of education must now be to develop the skills of inquiry (pp. 14-15).

Houle (1961) identified three categories of learners: (a) the goal-oriented, (b) the activity-oriented, and (c) the learning-oriented. The first of these, the goal-oriented individual, believes that knowledge should be put to use, otherwise, why pursue it? This person uses education as a means of accomplishing clear-cut objectives. Second is the activity-oriented individual who takes part in education because she or he finds in the process of learning a meaning which is often not connected with the content. The activity-oriented individual finds the real joy in learning to be in participation. The third group consists of learning-oriented people who seek knowledge for its own sake. For
this person, education is a constant rather than a continuing activity. For learners who are self-directed, each educational experience is also an activity with an objective or goal. All that is necessary is the wisdom and know-how of selecting the appropriate course of action.

"The desire to learn. . . is not shared equally by everyone" (Houle, 1961, p. 3). Meaningfulness of learning and motivation have long been distinguished as important to learning; however, the desire to learn seems to be basic to the idea of self-directedness in learning. If a person has a desire to learn, it seems that such desire should represent a motivating factor strong enough to continue learning at a steady pace. As Houle has pointed out, some people seek knowledge for the sake of knowledge and their desire to learn seems to pervade their very existence.

James McDonald (1967) points out three sources of concern for more independent learning. First, the American cultural value system ascribes high worth to the integrity of the individual, equality of opportunity, and the rights of life, liberty, and the pursuit of happiness. Secondly, the pragmatic philosophy of Dewey and Dewey (1915) which emphasizes the importance of problem solving, reflective thinking, and development of the whole individual has grown in importance. Finally, findings in psychoanalysis and the mental health area which show that the effect of emotional states on learning and the social conditions for mental health, indicate the advisability of more self-directedness in learning.

Brookfield (1988) asserts that "any act of self-directed learning must be seen as a complex configuration of differing domains, forms and methods: Most efforts we undertake to explore an area of knowledge, to acquire certain skills,
to become more insightful, involve us in a complicated and dynamic interconnection of reflection, action, individually planned activities, self-directed decisions, decisions arrived at collaboratively, decisions imposed upon us from within and so on" (p. 17). Therefore, in his opinion, no act of learning can be described as fully self-directing.

There has been less focus in the research literature on self-direction in learning as a personal characteristic of the learner. The assumption underlying much of this work is that learning in adulthood means becoming more self-directed and autonomous (Knowles, 1980; Chene, 1983). Chene (1983) offers three elements that characterize an autonomous or self-directed learner: independence, the ability to make choices, and the capacity to articulate the norms and the limits of a learning activity. The notion of readiness and the concept of autonomy have been studied and discussed most often in the professional literature on self-directedness as a personal attribute. As this strand of research is fairly recent, there is a need to increase research efforts in this arena. We need to isolate and define more clearly the variables that appear to assist a person to be more self-directed in his or her learning—from seemingly simple demographic variables such as age, socioeconomic status, and occupation to more complex concepts like autonomy, life satisfaction, or self-concept.

In very broad terms, self-concept is a person's perception of him/herself. Most definitions link this construct to achievement, and there is empirical evidence to support this theoretical linkage (Brookover, LePere, Hamachek, Thomas, & Erickson, 1966 and Torschen, 1964). The perceptions people have of themselves do not stop with description alone. Each individual has developed a large number of separate
perceptions called concepts of self which are regarded as part of the individual, or characteristic, or of his being (Combs & Snygg, 1959, p. 124). A feature of self-concept is that it is differentiable from the other constructs with which it is theoretically related and it is possible to indicate the direction one could take in specifying how self-concept is differentiable from, and related to, other constructs. Therefore, the more closely self-concept is linked with specific situations, the closer is the relationship between self-concept and behavior in the situation (Shavelson, Hubner & Stanton, 1976). Self-concept, then, whether used as an outcome itself or as a moderator variable that helps explain outcomes, is a critical variable in education and in educational evaluation and research (Shavelson et al., 1976).

The university is distinguished from the kindergarten chiefly by the difference in the maturity of the student, and adult education is distinguished in the same way from the schooling provided to children and youth. The study of the individual has been accepted as an important starting-point at the earlier levels of education. The theory and practice of adult education will not progress very far until they are based on an understanding of how mature people approach the tasks and opportunities of adulthood. The organized field of adult education is fragmented into groups built around institutions, processes, and special approaches; it can gain coherence and unified strength only on the basis of common themes, one of the most significant of which is the nature of the learner (Houle, 1961, p. 81).

As higher education becomes more universal, it also must become more diversified, rewarding, and enhancing a greater variety of human talents and attainments, and offering wider avenues for the development of expression, insight, and knowledge. Academic grades may predict academic grades;
scholastic aptitude tests may predict scholastic performance. But neither has much relationship to anything else—not creativity, not inventiveness, not leadership, not compassion, not good citizenship, not personal or social maturity, not mental health, not vocational success, not honest workmanship. Yet are we not concerned with these things too? And do they not have profound implications for the selection of students and for the very process of education itself (Pace, 1966, pp. 96, 97)?

Statement of the Problem and Purpose

The self-directed learner has long been recognized as the humanistic ideal, the self-actualized person (Kasworm, 1988). The basis for self-directed learning comes from the philosophical position that no one can "know" what is "right" for anyone else. It can become evident that there are possible educational situations which are more suitable for some students than for others. As in most areas of education, problems exist in identifying and assisting students in the most effective learning environment or situation. Philosophically, self-directed learners are expected to be strongly motivated toward learning. Part of the motivation and capacity to be self-directed results from the gratification of such basic needs as self-respect and self-esteem (Della-Dora & Blanchard, 1979). Abraham Maslow's theory suggests that self-directedness includes both the intrinsic determinants of behavior and the extrinsic determinants (Goble, 1970).

Carl Rogers (1969) outlined methods for facilitating self-reliant learning. Rogers says that there are practical ways of dealing with students which stimulate and facilitate significant and self-reliant learning. There will be little learning if students behave in a passive manner. It seems clear that when
students perceive that they can follow their own goals, they will invest more of themselves in their efforts, work harder, and retain and use more of what they have learned.

Since individual needs continually change, learning needs continue to grow with development. As new needs arise, new motivations for learning should also be present. Teachers, counselors, students, adult learners, and parents need to become more fully aware of characteristics for self-directedness in learning. In doing so they move toward creating conditions which make fulfilled lives an increasing possibility for every individual.

Both self-actualization and intrinsic motivation views share a common assumption: The salient feature of ongoing involvement in learning activities lies in the learner's personality. With few exceptions, however, recent literature has not focused on the personality attributes which enhance an individual's desire to continue learning.

Despite repeated assertions about the importance of psychological attributes for self-directed learning, the literature does not provide a systematic study of the self-directed learner's personality separate from the ability to engage in a self-instructional process. Knox (1973) states that the goal of education in general is to produce an "inner-directed, self-operating learner" (p. 47). Gibbons et al. (1980) identifies higher level psychological needs as the source of self-directed learning behavior, and Houle (1961) illustrates the essence of self-directed learning as an attribute of personality in his description of continuing learners who "approach life with an air of openness and an inquiring mind" (p. 3).
Brockett (1983) emphasizes that self-directed learning must be viewed with a lifelong learning perspective, while Cheren (1983) states that there is a whole-person aspect to self-directed learning. Similarly, Bergevin (1967) identifies a major purpose of adult education as helping adults "achieve a degree of happiness and meaning in life" (p. 30).

Indeed, there is evidence to suggest that perceptions of psychosocial well-being might be linked with levels of prior educational attainment (Leonard, 1981-82) and participating in continuing education (Sternberg, 1976). These criticisms can be met by moving beyond the focus on self-directed learning as a set of activities in a self-instructional process to a study of the motivational, cognitive, and affective characteristics or personalities of self-directed learners (Oddi, 1987). Linking self-directed learning and the personality of learners offers several advantages:

(a) The relationship could be studied regardless of the mode of learning preferred; (b) since psychological attributes tend to persist within an individual, such a linking could offer a relatively stable indicator of the relationship; and (c) the linking of self-directed learning and personality could provide a more comprehensive framework within which various other aspects of self-directedness could be studied and interrelated.

The self-concept research and the research in self-directedness have been the focus of many investigations; however, there are few studies which have investigated both variables, self-concept and self-directedness, in the same context. Educators traditionally discover themselves at transition points in students' lives, regardless of student age or curriculum. Additional information relative to self-concept can aid educators in understanding the frame of
reference out of which adult women students attempt to learn. The concern should be not merely to identify self-directed learning behavior in individuals but also to compile information that will assist educators in properly assisting students and other individuals on a path to self-directedness in learning.

Self-esteem, which has been defined as one's evaluation of the self, has been shown to be positively associated with educational aspirations in community college students (Kay & Felker, 1975; Prager & Freeman, 1979; Wingate, 1979). The findings of a positive relationship between educational aspirations and self-esteem may suggest that further understanding of factors associated with self-esteem in community college students could result in more effective programs designed to prevent attrition. Enhancement of self-concept may be a way to increase their educational aspirations, because students operating from a base of increased self-worth might be more likely to set goals that reflect their aptitudes (Prager, 1983).

Richardson and King (1991) argue that a primary educational objective should be enhancing the academic integration of women in a supportive environment in which interpersonal understanding can be improved for all.

The major focus of research on women, sex, and gender in community colleges has been limited and bifocal in nature. It has sought to compare women and men or to describe programs designed to help women overcome their unequal status. Few studies have identified and described "women worthies," taken consensus, or examined women's experiences in and of themselves (Twombly, 1993). Few studies have been done on women's learning in higher education and there is an extreme need for more research. Finally, adult learning theory and feminist theory support the proposition that
adult women may have distinctive needs and preferences as learners (Hayes & Flannery, 1995).

Therefore, this study was designed to investigate the relationship that may exist between particular aspects of community college women's self-concept and self-directedness. It also attempted to identify differences that occur by age, and educational attainment. Specifically, the study investigates the relationship of a measure of each of five self-concept constructs of academic self-concept of selected community college students to self-directedness. The constructs are the students' level of aspiration, level of anxiety, academic interest and satisfaction, leadership and initiative, and identification vs. alienation. These constructs will be assessed by scales in the Dimensions of Self-Concept (DOSC), Form H, developed by Michael, Smith, and Michael (1989) and described in a manual by Michael, Smith, and Michael (1989). Determining the differences, if any, between traditional and non-traditional age women students should aid in helping educators provide more responsive learning environments.
Definition of Variables

Independent variables

There are seven independent variables in this research project. Five of the independent variables are the sub-scales from the Dimensions of Self-Concept Scale including: (a) anxiety, (b) levels of aspiration, (c) academic interest and satisfaction, (d) leadership and initiative, and (d) identification vs. alienation. The sixth independent variable is age and the seventh independent variable is educational aspiration.

Dependent variables

The dependent variables are the scores of students in the measurement of self-directedness. These scores will be assessed by the individual answers on the OCLI.

Objectives of the Study

The objectives of the study are to (a) investigate the relationship between self-directedness and self-concept, (b) to investigate the association of age with self-directedness and self-concept, and (c) to investigate any association of educational attainment with self-directedness and self-concept.
Hypotheses

1. There would be a significant relationship between the Dimension of Self-Concept item scores and the total positive raw score of the Oddi Continuing Learning Inventory.

The following subhypotheses are based on the above hypothesis:

1. There would be a significant correlation between anxiety and self-directedness.

2. There would be a significant correlation between levels of aspiration and self-directedness.

3. There would be a significant association between academic interest and satisfaction and self-directedness.

4. There would be a significant association between leadership and initiative and self-directedness.

5. There would be a significant difference between identification verses alienation and self-directedness.

2. The mean total positive raw score of the OCLI for traditional students will differ significantly from that of nontraditional students.

3. The mean total positive raw scores of the DOSC scales for traditional students will differ significantly from that of nontraditional students.

4. There would be a significant association between educational attainment and self-concept scores.

5. There would be a significant correlation between educational attainment and self-directedness scores.
Significance of the Study

The significant benefits in the results of this study could include the following:

1. It could provide improved knowledge of parameters of successful learning of adults, specifically women in higher education.

2. It could provide more information about the OCLI. This is the only instrument presently developed to describe personality characteristics and identify self-directed continuing learners.

3. In comparing age and educational attainment with self-directedness, information could be identified in terms of future educational planning and research.

4. Investigating self-concept characteristics of a selected sample of community college students could contribute to efforts of those involved in the development and delivery of educational services and personal growth opportunities for students.
Definitions of Terms

Adult learning:

Adult learning refers to the process of information acquired during adulthood made by individuals depending on needs, interests, skills, and resources available (Heimstra, 1978, p. 6).

Non-traditional student:

Adult students are described as students age 25 and above which is a common definition in the adult education literature. Twenty five has been designated as the chronological age used to separate adult students from students who enter and complete college immediately after graduating from high school (Eldred, 1977, p. 1; Hayes & Flannery, 1995).

Self:

Defined as denoting one's attitudes, feelings, perceptions, and evaluations about oneself as an object (Weltha, 1969, p.8).

Self-concept:

A central theme in Rogers' and other humanist views, this refers to individuals' overall perceptions of their abilities, behavior, and personality.

Self-directed learning:

In its broadest meaning, self-directed learning describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating goals,
identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes (Knowles, 1975, p. 18). Used synonymously with autonomous learning (Frank, Pirsch, & Wright, 1990).

Assumptions

The following assumptions were made with respect to this study:

1. Self-concepts of individuals can be measured

2. The persons responding to the instruments gave accurate and honest self-reports.

Limitations of the Study

1. The sample is limited to undergraduate women students enrolled at Des Moines Area Community College.

2. The study is exploratory in nature.

3. Due to the fact that subjects were selected from a population at Des Moines Area Community College, the results may not be generalizable beyond community college students.
Chapter 2
REVIEW OF RELATED LITERATURE

Introduction

"Education is what survives when what was learnt' has been forgotten"
(B.F. Skinner)

Developments that yesterday were in the realm of science fiction are now
taken for granted. Throughout these bewildering events, however, one thing
seems to have remained more or less constant: the limitations of individual's
capacity to cope with change. In this chapter, the many integral components of
self-directedness and self-concept are explored, as well as looking at
perspectives of adult development and the development of adult women.

Women comprise the fastest-growing segment of the lifelong learning
movement. As early as 1961, Wise recognized the increasing number of
mature women students and observed, "Study of the college student indicates
that the group which is increasing most rapidly in proportion to the total student
population of American colleges and universities is women over the age of 30"
(p. 705). One of the most significant trends in the United States in recent years
is the increased number of women who are achieving higher levels of education.
Generally, the concept that education has an important influence on women's
lives has been supported and LeFevre (1972) contends that women who
attended school tended to be more self-confident and autonomous than non-
attendees.
While significant differences were found between women of varying educational levels on measures of control over one's life, hostility, and attitudes toward women's autonomy, generally, the finding indicate that education serves to benefit women's mental well-being. Not only will their education afford career opportunities, it will provide opportunities of mental well-being and can assist women as a means to develop their autonomy and control over their own lives (Martin & Light, 1984).

Self-direction has become the accomplice of many educational schemes. It has been, and is, recruited by behaviorists and humanists, idealists and pragmatists, radicals and conservatives, positivists and constructivists. A versatile concept, it has been coopted to every purpose that adult educators pursue. The consequence of this has been that the literature on self-direction is extensive, but also confusing. The lack of internal consistency precludes the possibility of developing a coherent theory of self-direction, or even of self-directed learners, from within the literature itself (Candy, 1991).

Theorists have defined self-directedness in various ways, some focusing on achieving behavioral outcomes, others on making choices, and still others on cognitive processes. This has led investigators to operationalize self-directedness in a variety of ways. Even the construct has been called many different things including, control, choice, decision freedom, agency, mastery, self-efficacy, and self-determination (Rodin, Schooler, Schie & Warner, 1990). From the perspective of the individual, self-direction and autonomy are the same, autonomy being defined as "self-directing freedom" (Webster's Ninth New Collegiate Dictionary, 1985) or being "controlled from within" (Webster's New International Dictionary, 1961).
It has been asserted that creating "self-directed learners" will improve the quality of democratic participation, and ultimately the quality of life, because self-directing learners must inevitably become more self-determining citizens (Candy, 1991).

Self-direction is not so much a method of teaching as a characteristic of learners. In fact, self-directedness is increasingly viewed not simply as an attribute, but as a quality that may be present in varying degrees. Self-direction is applied to people--as a personal attribute or characteristic--as well as to the learning situation. Long (1989) suggests that "adult self-directed learning has a number of conceptual dimensions," including sociological, pedagogical, and psychological elements. Long also believes that we have paid the least attention in our work to the dimension he views as the most critical in self-directedness: the psychological dimension.

The premise of viewing self-directedness in learning as a personality construct shows promise. Oddi (1984, 1986) has made a significant contribution in this arena. Her conceptual framework moves us from looking at self-directedness as a mode of instruction to looking at the concept as an attribute of personality which motivates the individual to continue learning through any number of methodologies (Caffarella & O'Donnell, 1987).

There has been less focus in the research literature on self-directedness in learning as a personal characteristic of the individual. When it has been discussed as a personal attribute, the concept of autonomy has been the central focus. According to Chene (1983), autonomy is a structure which makes possible the appropriation of learning by the learner. Heath (1980) saw autonomy occurring in healthy, growing adults who become more self-
regulating, more in control of themselves, and more independent of the expectations and control of others (McBride, 1990). As this strand of research is fairly recent, there is a need to increase research in this area. This means defining more clearly those variables which appear to assist adults in becoming more self-directed (Merriam, 1991).

To understand self-directedness as a personal attribute, we need to isolate the variables that appear to assist individuals to be more self-directing from demographic variables such as age and socioeconomic status to more complex concepts like motivation, self-concept, and autonomy.

Related Research on Self-Directedness

Definitions of self-directed learning in the literature are frequently confusing, overlapping in some respects and subtly differing in others. The lack of a comprehensive, unified conception of and disagreement about the practices and values related to self-directedness has been the concern of numerous authors for more than a decade (Brockett, 1983; Brookfield, 1984; Houle, 1984; Griffin, 1978).

Kasworm (1988), perhaps, most clearly articulates the ambiguity surrounding self-directed learning when she notes that self-directed learning is conceived as a "set of generic, finite behaviors; as a belief system reflecting and evolving from a process of self-initiated learning activity; or as an ideal state of the mature self-actualized learner" (p.1).

Considerable writing and research about adult education, self-concept, and self-directedness in learning has been carried out during the past several years.
In today's society, with its rapid technological and social growth and change, occupational obsolescence, and changes in lifestyles and value systems, lifelong learning is required (Heimstra, 1976). The world we live in demands self-starting, self-directing citizens capable of independent action. The world is changing so fast we cannot hope to teach each person what he/she will need to know in twenty years. Our only hope to meet the demands of the future is the production of intelligent, independent people* (Combs, 1972, p. 59).

It would appear that one of the primary tasks of adult education is to develop and to permit the exercise both of individuality (Hostler, 1981) and autonomy: "While the fostering of mental autonomy is an important objective in the education of children, it is of special importance in the education of adults. In deeming someone to be an 'adult,' we are ascribing to him various rights and responsibilities in virtue of certain distinctive moral and personal qualities which we presume her to have... the qualities of impartiality, objectivity and balance, at least in some minimum degree, and the ability to draw on their experience with some measure of sense and skill... The project of fostering mental autonomy is the project of helping adults to be adult" (Paterson, 1979, pp. 120-121). Sacks and Einstein (1979) defined psychological autonomy in women as believing in one's ability and taking steps toward fulfilling goals along with a feeling of power.

As the need and demand for lifelong, continuous learning opportunities increase, skills and abilities to pursue learning must be more fully developed. Proponents of lifelong education further assume that a shift in emphasis from the provision of external resources to the development of people's inner capacities to learn will have to be made. The focus of education--elementary,
secondary, and postsecondary--has been narrowed decade by decade. The commitment to education as a training in character has vanished. And, despite the lip service paid to the ideal of creating a spirit of inquiry, education is increasingly directed toward teaching students not how to inquire but rather how to digest the results of other people's inquiry (Cohen, 1993). It has become commonplace to stress the importance of 'self-directedness' in learning as central to lifelong education, wherever it occurs.

Self-directedness is presumed to be good, something to be fostered in old and young learners (Joblin, 1988). In spite of the value of self-directedness of learning, much of the instruction in educational institutions is still authoritarian, fostering dependent and a habit of other-directed learning.

In adult education, one assumes that a person is a self-directing organism with initiative, intentions, choices, freedom, energy and responsibility (Tough, 1978). Education in America has been changing. The factors that have influenced these changes were summarized by Heimstra (1976) and these factors continue to influence changes occurring in today's educational systems.

Three major forces have acted in concert to help create the interest in, and need for, lifelong learning. The first of these can be described simply as the rapidity and constancy of change... societal and technological change... Thus, continuous change requires continuous learning.

A second major force, one certainly related to the first, is the continuous march by many adults toward occupational obsolescence... Consequently, adults frequently must turn to educational institutions just to maintain or regain competence.

The third force... deals with the change in lifestyles or value systems affecting so many people... However, to enhance the
development of people's potential, it is suggested that many of basic attitudes and skills possessed by educators toward learners and the learning process must change. The idea of dispensing preestablished knowledge to a vacuum in the form of a student will need to be supplemented by, and in many instances exchanged for, a cooperative relationship between the learner and teacher in a mutual process of problem-solving, self-discovery, and just plain learning how to learn. (pp. 7-9)

Very few learning endeavors are entirely self-directed, but depend instead on individual motives and interests shaped and modified through interaction with other people. Thus, self-directed learning, like personal autonomy, is nearly always a "matter of degree" (Candy, 1991). Research would suggest that if adults are to be committed to lifelong education and learning, their capacity and need to be self-directed must be a significant part of the educational activity (Joblin, 1988).

First, from an individualist perspective, one might argue that all people, live and learn in a self-directed way because people exist as separate beings. Everyone perceives and organizes their skills in an independent and individualistic fashion. Empirical evidence would support such a claim. Adults can be committed to and preoccupied with certain self-chosen activities.

In a similar vein, but from an opposite perspective, some adults are very dependent and in need of much direction. There are many individuals who are adults chronologically, but who are much more passive than active in character. They appear to be easily influenced by others, seem to take very little initiative in giving direction in both their personal and political realms. They are inclined
to behave in anything but a self-directed way in many areas of their lives (Joblin, 1988).

Self-directedness, then, cannot be assumed to be, as Knowles implies a "natural" human characteristic. His reference to this trait as a process of "natural maturation" (Knowles, 1984) needs to be challenged on these grounds. Self-directedness would appear to need to be encouraged and nurtured by the culture or group which one is part of. It will not just happen naturally (Joblin, 1988). The potential which adults possess to be self-directing should never be lost sight of in the theory and practice of educating adults.

From an individualistic perspective, then, it seems essential to be aware that, while there will be many times when certain adults will display very passive and apathetic characteristics, self-directedness is a goal worth pursuing because such a goal affirms the worth, significance, and potential of each and every human being. Feelings of control may generate generalized positive affect, a sense of predictability and stability in one's life situation, and a recognition of self-worth. These positive psychological states are presumed to be facilitative because they result in increased motivation to care for oneself.

One problem may be that education is not yet perceived as a lifelong process, so that we are still taught in our youth only what we ought to know then and not how to keep finding out. One mission of adult education, then, can be stated positively as helping individuals to develop the attitude that learning is a lifelong process and to acquire the skills of self-directed learning (Knowles, 1980).

Cropley (1976), discusses learning throughout the life span and says learning is not restricted to a narrow process of acquiring knowledge; rather, it is
concerned with motivation and personal growth in the cognitive, affective, ethical, and aesthetic domains. A unified concept of self-directed learning is enhanced, therefore, by considering a broad conception which focuses on an individual's motivation to pursue learning throughout the life span rather than on the ability of an individual to engage in episodes of self-instruction. While self-directed learning in adults is considered primarily a process of self-instruction, this conception is inadequate because it fails to account for persistence in learning. This inadequacy, however, can be addressed by studying self-directed learning as it relates to the learner's personality (Oddi, 1987).

While it may be stimulating and provocative to subscribe to the idea that self-directedness is a function of external conditions, such as the physical isolation of the learner or the degree to which an instructor yields authority, such ideas deal more with pedagogy than psychology. Emphasis on pedagogical procedures to the neglect of psychological process is a dead-end approach to studying self-direction in learning. Pedagogical procedures whether imposed by a teacher or freely chosen by the learner remain pedagogical or "teaching" activities. Hence we have other-teaching or perhaps self-teaching but not self-learning. Self-directed learning occurs only when the learner primarily controls the learning process. The degree of control over the pedagogical procedure is a secondary consideration (Long, 1989).

According to Piaget (1972) human thought includes "inborn unconsciousness of thought itself" (p. 144). Yet as human beings mature they develop a remedy for the inborn natural tendency of thought to operate unconsciously. Reflection is one of the control processes in achieving this ideal. In contrast to the inborn
unconscious thought, reflective abstraction is an explicit act designed to create meaning and understanding.

It has been noted that psychological control is both necessary and sufficient for an activity to be described as self-directed learning. The literature also points out that the idea of psychological control is reflected, somewhat imperfectly, but acceptably by Garrison's concept of control and Rich's (1986) idea of freedom to. Following Rich's ideas, we may be guilty of providing "freedom from" (conceived as an absence of restraint or coercion so that any restrictions on the individual would be an abrogation of individual freedom) rather than "freedom to" (holds that one is not fully free to do something without the ability to perform an act). But in order to increase "freedom to" (greater independence and autonomy), it is necessary to enhance "freedom from" by reducing and, if possible, eliminating conditioning and indoctrination. Both processes bypass reflective thinking. And if the individual is to move from dependence to independence, it will be necessary to learn reflective thinking and arrive at one's own judgments and decisions (Rich, 1986). Rich appears to be suggesting that psychological control is nurtured in educational settings that emphasize "freedom to".

Dewey and Tufts (1936) also provide discussion of freedom. They imply that the development of self depends upon an individual's freedom. They note:

As far as a person becomes a different self or character he develops different desires and choices. Freedom in the practical sense develops when one is aware of this possibility and takes an interest in converting it into a reality. Potentiality of freedom is a native gift or part of our constitution in that we have capacity for growth and for being actively concerned in the process
and the direction it takes. Actual or positive freedom is not a native gift or endowment but is acquired. (p. 340)

Thus, Dewey and Tufts seem to say that freedom is a behavioral process that develops through practice. There is little doubt that they consider the process to have psychological origins (Long, 1990).

When self-directed learning is scanned through what might be referred to as one's philosophy of adult education, various theoretical perspectives seem to guide the research. Mezirow (1985), for example, suggests that self-reflective learning is essential to adults and that critical reflectivity is an integral component of learning. Brookfield (1985) calls on educators to clearly distinguish between techniques of self direction, and the internal change in consciousness that might be referred to as self-directed learning. These two authors, in calling for internal consideration appear to be speaking from an humanistic or existentialist perspective.

In the past decade there has accumulated a body of research investigating the relationship of adult self-directedness in learning to various psychosocial variables (Caffarella & O'Donnell, 1987). Within these studies there is a subset that suggests a relationship between adult self-direction in learning and psychological well-being, where psychological well-being is taken to mean a global construct incorporating such concepts as self-esteem, creativity, perceived health, and life satisfaction among others. This conceptualization of psychological well-being is based on Johoda's (1958) classical review of the nature of psychological health:

1. Attitudes toward oneself (e.g., self-concept, self-esteem, self-respect, self-acceptance).
2. Growth, development, and self-actualization (e.g., creativity, spontaneity, openness to change and learning, acceptance of others).

3. Balance of personality (e.g., resilience, flexibility, tolerance of risk).

4. Inner-directedness (e.g., autonomy, independence).

5. Realistic view of world (e.g., correct perception of self, correct perception of others).

6. Successful mastery of environment (e.g., competence in work, adequacy in social interactions, ability to solve problems, life-satisfaction).

Reviews of self-directed learning have been written (Brookfield, 1984; Caffarella & O'Donnell, 1987; Mocker & Spear, 1982) but none have addressed, specifically, the relationship between adult self-direction in learning and psychological well-being (McCune & Garcia, 1989).

Dill, Crowston, and Elton (1965) argue that "the ultimate goal of education must be to shift to the individual the burden of pursuing his own education" (p. 120). Knowles agrees and states (1975):

The important implication for the adult education practice is the fact that learning is an internal process in that those methods and techniques which involve the individual most deeply in self-directed inquiry will produce the greatest learning. In fact, the main thrust of modern adult educational technology is in the direction of inventing techniques for involving adults in ever-deeper processes of self-diagnosis of their own needs for continued learning . . . (p. 51).
Some evidence exists that a small minority of individuals cannot function effectively in situations requiring a large amount of self-directedness. Carlow (1967) reports that students who are submissive and have lowered conceptual level scores tend to do poorly using discovery approaches. Cronbach (1967) warns that "students who are anxiously dependent may be paralyzed by demands for self-reliance" (p. 90). However, for the majority of persons, greater self-direction appears to enhance retention of knowledge, transfer of knowledge, and interest in continued learning, among other benefits (Bruner, 1961).

Davidson (1976) conducted research on learning patterns of educationally disadvantaged, low income young mothers who headed households. "The low income mothers saw themselves as self-directing, responding to respect . . . and can be helped to diagnose their needs and to plan, conduct, and evaluate their own learning".

Neugarten's stages of adult development (1975) indicate that the chronological age of adults coincides with their moving from an outward direction to an inner-directedness. According to Neugarten, as individuals grow older, they become more self-directed.

Brodrick (1974) investigated the effects of self-directedness in learning practices on the English achievement and attitudes of community college students in Nebraska and Iowa. The study concluded that self-directed students spend a larger percentage of their learning time on the problems of life which confronted them than did conventional students and efficiency of reported study time favored the self-directed student.

A paper by Miller, Kohn and Schooler (1985), found that educational self-direction affects non-cognitive aspects of personality as well as cognitive
personality aspects. The paper goes on to state that non-cognitive aspects of personality play an important role in how educators contribute to students' intellectual development. Educational self-direction leads to more effective intellectual performance in part because it leads to a self-directed orientation and mitigates distress, as well as because of its role in cognitive training. Dewey appears to have been right in thinking that the building of "character" is central to the education process.

Related Research on Self-Concept

Educators have suggested with increasing frequency that enhancing the self-concept should be the prime aim of schooling in itself. Thus, self-concept is viewed not only as an object of educational inquiry but also as a vital outcome in its own right (Taylor & Michael, 1981). There seems to exist in the literature a continual recurrence of certain assumptions regarding the self. Most self theoreticians view the self basically as a person's attitudes and feelings about oneself. These attitudes and feelings, reflecting the individual's interpretation of all their experiences, are fused into a core which serves as the individual's frame of reference from which they evaluate themselves and their cognitive field (Badgett, 1968).

Academic self-concept has been viewed by numerous investigators as an important facet of general self-concept (Shavelson, Hubner, & Stanton, 1976). The relative importance of academic self-concept to the overall affective status of an individual is dependent in part on situation and environmental variables. An individual in a school setting is more likely to demonstrate a greater concern
with academic self-concept that with physical self-concept (Reynolds, Ramirez, Magrina, & Allen, 1980).

In reference to education, two humanistic psychologists stand out: Carl Rogers (1902-1987) who is known for his student-centered approach, and Abraham Maslow (1908-1970) who is known for his views on self-actualization and humanistic education. A close study of their humanistic paradigm and the problems in education they addressed is still as meaningful as it was decades ago. Maslow mapped out a comprehensive and compelling vision of people as being self-actualized beings, striving toward health, individual identity and integrity, and autonomy. He based his early studies on a survey of people who he deemed to be "self-actualizers," and identified characteristics that they all seemed to have in common. These attributes included acceptance of others; freshness of perception; autonomy and independence; creativity; genuineness in relationships; positive self-concept; and involvement in a cause outside of themselves" (1971, p. 43).

This vision of people has many aspects in common with the archetype of the self-directed individual, and humanistic psychology has informed much of educational practice. Carl Rogers, for instance, a contemporary of Maslow, adopted a similar position, although he concentrated instead on the role of the therapist or, in the teaching situation, of the educator. In Roger's view, the optimal relationship would be a client-centered one, with the educator or therapist adopting a nonjudgmental, facilitative role to assist the client or learner achieve self-fulfillment or self-actualization. The goal of education must be to develop a society in which people can live more comfortably with change than with rigidity. Educators must be able both to conserve and convey essential
knowledge and values of the past, and to eagerly welcome innovations which are necessary to prepare for an unknown future. A way must be found to develop, within the educational system as a whole, and in each component, a climate conducive to personal growth, a climate in which students are nourished and expressed rather than stifled. A way must be found to develop a climate in the system in which the focus is not upon teaching, but on the facilitation of self-direction in learning (Rogers, 1969). Like Maslow, Rogers believed that people are born with a natural tendency toward growth, exploration, and higher achievement. The premise of this is that educators need to intervene as little as possible in a person's natural development (Candy, 1991).

The idea of helping people to grow and reach their potential captures the imagination of many educators. Clearly, both Maslow and Rogers have been influential in shaping the thinking of adult educators (Brookfield, 1985, p. 19). Principles from humanistic philosophy and psychology have permeated the field of adult education. The notion of growth, development, and change is integral to much of the psychological literature on adult development.

It is evident, therefore, that self-directedness in learning draws much of its support from the same philosophical base as humanistic education, and moreover that it is based at least partly on similar tenets. It is suggested that the continuous deterioration of American education ensues in part from its failure to address Rogers and Maslow's humanistic concerns (DeCarvalho, 1991). Instead of educating the whole person and facilitating personal growth, educators rather train students in skills that make them efficient and adjusted to a technological society which, although unrecognized, is in itself also a value. Rogers and Maslow thought that the ultimate goal of education was to facilitate
fulfillment of the student's full potential and concluded that it is important that the educational system induces students to explore their organismic potential and, by forming an alliance with it, properly train them in their self-chosen profession or scholarly field (Rogers, 1961). An educational system based on these principles, they argued, will turn out much more creative people (DeCarvalho, 1991).

John Dewey's identification of development as the overarching aim of education meant that schools and the process of teaching should be concerned with the whole person and foster emotional as well as intellectual growth. The education profession, after briefly flirting in the early 1970's with humanistic approaches to education (Rogers, 1969), has by and large limited itself to issues of academic attainment, leaving personal and emotional growth to mental health professionals or to outside influences such as the family (Nucci & Lee, 1993).

Although two decades old, Maslow and Rogers' humanistic message is still valid for the 1990's. The success of any educational system depends on its ability to involve students in the process of learning and perceive meaning in the acquisition of knowledge. Without the student's wonder, curiosity and personal need to learn, good teachers and well-funded schools will fail (DeCarvalho, 1991). Alberta Education (1991) acknowledges that it is not possible to teach students without integrating all the domains, that students learn by integrating content with process, and that educational institutions play a significant role in teaching affective education.

Bonnie Cook-Freeman (1980) makes the point that schools exist to preserve the status quo, not to change society, and characterizes the entire U.S.
educational structure as colonial in its impact on women. The cumulative effect of girls' inhibition in learning opportunities has historically been the general exclusion of women from a significant power resource, that of access to specialized information. Ambivalence about power, self-expression, and achievement for most women is expressed not in the masochistic extremes of an abusive context, but rather in a life pattern of noncommittal, uncertain starts, indecision, and failure. For most women, the inability to carry out a goal-oriented program is not so much the result of poor planning or ignorance of economic reality, as an indication of low self-esteem, an identity of deserved powerlessness. Lack of confidence is the barrier to accomplishment which haunts nearly all women (Brandenberg, 1974; Abbott, 1986).

Beane (1985) describes the affective domain as that area of human nature and conduct that deals with emotions, feelings, values, attitudes, predisposition's, and morals. Rubin (1974) says that affective education is about the learner's attitude toward self, toward life, toward school, and toward purpose. Attitudes are expressed in behavior. Perhaps education in the United States continues to deteriorate since Maslow and Rogers first proposed the humanistic/affective paradigm in education three decades ago, because it failed to introduce a more humanistic dimension to teaching and learning.

Dickstein and Hardy (1979) investigated the relationship between self-esteem and autonomy and moral behavior in 100 college students. The correlations for men and women indicated that self-esteem is an important predictor for all variables in women, while it appeared to play a lesser role in men. Thus, while self-esteem was positively correlated with autonomy in both
men and women, a considerably stronger correlation was found between these variables in women.

Holt and Sonstegard's (1965) research indicates that an individual's self-concept influences the extent to which he/she is capable of relating to the curriculum. Super (1957, p. 111) maintains that, "... a well formulated self-concept, which takes into account the realities of the working world, makes for an easier transition from school to work than does a hazy or unrealistic concept of the self."

Mitchell (1959) measured the self-concepts of 100 freshmen and sophomore college students and correlated their anxiety scores with their self-concept scores. The results of the study significantly indicate that the higher the self-concept, the less the anxiety. Palermo, Castaneda, and McCandless (1956) correlated self-concept with anxiety in a study with subjects having similar intelligence scores. Those subjects with low self-concepts were not only more anxious than the subjects with high self-concepts, but they also did more poorly in "complicated school subjects" (p. 338).

Armstrong (1971) investigated the self-concepts, social backgrounds and the nature of learning activities of high and average learning adults of low educational attainment. The study, in focusing on the relationship between self-concept and educative behavior, found that high learners had a higher self-regard, a greater self-ideal discrepancy, and a much clearer conception of themselves as "learners," in comparison to low learners. High learners saw themselves as being reliable, tenacious, independent, with broad interests, high achievement motivation, and openness to new experiences. Low learners,
perceived themselves as warm and friendly, conformist, and either complacently satisfied with or angrily resigned to their current life situation.

A study of differences in sex, home background, educational background, and self-actualization attainment of 250 college students at Northern Illinois University was completed by Gibb (1966). In summarizing some of the most significant findings, it was identified that the following students were more highly self-actualized:

1. female
2. from families with 1-2 children
3. from families whose mothers had worked full-time
4. from a large state university for the first two years of collegiate experience
5. involved in the college of liberal arts

Minkevich (1973) investigated the differences in self-concept and other selected variables between 361 transfer and occupational students in a comprehensive community college. Results of the data indicated that there were no significant differences between the groups of students on the following: (a) self-concept; (b) mean age; (c) grade point average; and (d) parent’s educational achievement. Significant differences between transfer and occupational students were found in their distribution according to: (a) sex; (b) highest level of educational aspiration; (c) and (c) the amount of financial support available.

Palermo (1976) implemented and tested a Movement Communication Program on self-concept, autonomy, and social reaction of 114 adult learners. The program was designed to enable the learner to acquire a more positive self-
concept, greater self-directedness, and social control in relation to his/her personal fulfillment, and personal social communication. The results revealed that age was negatively correlated with self-concept and autonomy. Education correlated significantly with age. Self-concept, autonomy, and personal orientation scales correlated significantly with each other.

U'ren (1971) emphasized that a sense of competence, a sense of doing or achieving something that is valued, is crucial for the development and maintenance of self-esteem. It is easy to assume that low self-esteem is the underlying cause of behavioral difficulties, but in many cases behavioral inadequacies which lead to anxiety and low self-esteem constitute the major concerns in a person's life.

The enhancement of students' self-concepts is valued as a goal of education and as a moderator and perhaps a cause of scholastic achievement. Shavelson et al. (1976) states that the construct of self-concept can further be defined by the following features: (a) It is hierarchical, with perceptions of behavior at the base moving to inferences about self in subareas (e.g., academics), then to inferences about self in academic and non-academic areas, and then to inferences about self in general; (b) Self-concept becomes increasingly multifaceted as the individual develops from infancy to adulthood; and (c) It has both a descriptive and evaluative dimension such that individuals may describe themselves (e.g., I am happy) and evaluate themselves (e.g., I do well in school). In their study of 99 students they concluded that general self-concept was correlated with academic self-concept (Shavelson & Bolus, 1982).

Song and Hattie (1984) indicated in their study of 2,297 high school students that across both sexes, the relations among academic self-concept, social self-
The study of lives is notoriously complex and laborious. To construct theories and measures of development that organize some significant aspects of life experience in adulthood is a creative and valuable contribution.

The central focus of a developmental perspective revolves around a predictable sequence of growth, adaptation, and transformative change. The most general definitions of development refer to orderly and sequential changes in characteristics and attitudes that adults experience over time (Knox, 1977).

Knox (1977) explains that while developmental changes occur over time, few occur strictly as the result of time. The process of developmental change implies both choice and necessity in interaction with life circumstances. Development involves a process of qualitative change rather than an additive process. The major significance of concepts and theories of development rests in their articulation of patterns of individual variation, together with some idea of
the dynamics of change over time, as an individual progresses from one set of circumstances and patterns to another (Weathersby & Tarule, 1980).

The arc of developmental theory leads from "infantile dependence to adult autonomy, tracing a path characterized by an increasing differentiation of self from other and a progressive freeing of thought from contextual constraints" (Gilligan, 1977, p. 481). The developmentalists utilized the work of Piaget and extended the concept into adulthood. Developmental theory arises out of the active interchange between the individual and the social and physical environments in which they live.

Enhanced public awareness of the importance of developmental changes in adulthood has been influenced by articles and books such as Woman's place in a man's life cycle (Gilligan, 1979), The season's of a man's life (Levinson, Darrow, Kline, Levinson, & McKee, 1976), Passages (Sheehy, 1976), and Adaptation to life (Valliant, 1977). These resources emphasize age-linked periods of adult development, developmental tasks associated with each stage, and the inner processes of development that enable greater coping ability.

Tarule and Weathersby (1979) suggest that most theories possess some level of general agreement:

1. individuals have deep-seated and basic ways to create meaning and maintain coherence in their lives--a frame of reference;

2. this frame of reference results from some interaction between the individual and the environment;

3. the resulting structures are fairly stable and subject to change, and;
4. the process of development involves changing these inner structures. (p. 13).

Loevinger's (1966, 1976), is a general theory of ego-development, applicable to both men and women. Loevinger's work provides, first, a basis for identifying individuals who have achieved considerable development of personality, and later, concepts with which to describe stages and aspects of this development. When Loevinger says that the ego develops, she is saying that there are systematic changes in styles of life, method of facing problems, opinions about self and others, cognitive styles, interpersonal relationships, and moral judgment. Ego-development is not synonymous with ego-dominance; it has aspects of what other theorists have termed individuation (Jung, 1966) or the development of the self (Kohut, 1977) because conflicting and less conscious aspects of the psyche enter the conscious domain as ego-development progresses. Loevinger suggests that the average adult in the U.S. is at what she calls the self-aware level, just past the conformist stage. At the higher stages of development (conscientious, individualistic, autonomous, and integrated) impulse control is increasingly based on internal, long-term, choice-based motives.

Levinson (1978) advocates a view of adult development in which he conceptualizes the life structures as the basic pattern of a person's life at any given time. He speaks of adult development as "the evolution of the life structure during the adult years" (pp. 41-42.). He describes the life structure as evolving "through a relatively orderly sequence during the adult years. The essential sequence consists of a series of alternating stable (structure building) periods and transitional (structure changing) periods. These life structures
rarely remain static and generally alternate between stable periods lasting 6 to 8 years and transitional periods of 4 to 5 years.

The following sequence provides a brief overview of Levinson's theory of adult development between the ages of 18 and 45:

**Early Adult Transition:** ages 17-20. Terminating pre-adulthood and beginning early adulthood.

**Entering the Adult World:** ages 22-28. The basic task is to create and test a provisional structure which might provide a linkage between the valued self and the adult society.

**Age Thirty Transition:** ages 28-33. This period provides an opportunity to work on flaws and limitations of the initial adult structures.

**Settling Down:** ages 33-40. Settling for a few key choices, creating a more broadly defined structure around those choices, and investing as fully as possible in the components of that structure.

**Mid-Life Transition:** age 40-45. The primary task is to modify the life structure of the thirties and create a basis for a new structure for middle-age.

**Entering Middle Adulthood:** age 45-50. The main task involves making critical choices, giving these choices meaning and commitment and building a viable life structure around these choices.

Levinson's theory has aroused much skepticism (Lacy & Hendricks, 1980; Rossi, 1980; and Wrightsman, 1981), and its applicability to women in particular has been questioned (Gilligan, 1982; Rossi, 1980). Two of the issues that have
been raised seem especially relevant. One is whether women have the resources and opportunities to change their life structure in the optimal ways that Levinson describes. Many men may not have them either, but certainly women have been expected to adapt to men's moves and children's needs, and may not be in a position to change their life structure according to their own needs—or not at regular intervals. Another issue is whether Levinson's emphasis on individual achievement is inappropriate for women. Gilligan (1982) maintains that the "elusive mystery of women's development lies in the recognition of the continuing importance of attachment in the human life cycle" (p.23). She also faults Levinson for taking the developmental path of males as the norm for all development. Levinson's study views the woman's role as that of "supporting the man's dream," never acknowledging that she might have her own dreams (Slagle, 1992).

Levinson's casting of primary developmental issues into polarities reflects much of Erikson's (1980) epigenetic philosophy. For example, Erikson's three stages of adulthood include intimacy verses isolation, generativity vs. stagnation, and integrity vs. despair.

Helson, Mitchell, and Hart (1985) examined the lives and developmental processes of seven women in a longitudinal study and concluded that women with very different personalities, problems, and ways of life can attain high levels of ego-development; and that theories of adult development are useful but uneven in application.

A synthesis of the recent adult developmental literature indicates the possibility of four distinct stages of adulthood between the ages of 19 through 55. The literature suggests that the processes for women and men are similar
but that various stages probably occur at somewhat different ages. Although the cited work by Levinson (1978) and Levinson et al. (1976) did not include women, their findings support other literature (Fried, 1967; Gould, 1972) based on samples which did include women; their work has been most relevant in formulating a theory specifically for women.

Even though many of the adult models are based on the male model of development, consideration of all adult roles must be primary components of any theory of adult development to be applicable to women and their everyday struggles in life.

The Development of Adult Women

Major contributions to female developmental theory (Chodorow, 1978; Gilligan, 1982; Lyons, 1983; Miller, 1976; and Schaef, 1985) must be integrated into educational and organizational structures. The addition of female developmental theory expands the effectiveness of a multifaceted group that includes women and men, by identifying developmental issues of both. In other words, themes of connectedness, cooperation, and relationship, described as more female traits, would be valued and incorporated into a structure with themes of separateness, competition, and hierarchy, described as male traits (Rideout & Richardson, 1989).

In the last 15 years, research on women's development has provided evidence that men and women may follow different developmental pathways and, within those pathways, address different developmental issues or concerns. Stimuli for much of this research were critical reexaminations of the major developmental theories (Straub, 1987).
For contemporary American women, the "me" society is really the "them" society. The cultural forces which propel males into positions of influential effectiveness engage in a tug-of-war with the developing female, alternately thrusting her forward and sweeping her back in an undertow of self-doubt. The questioning of identity and of available life roles, which first surfaced as a sharply focused dilemma of middle class mid-life women, has grown to become a cultural sea change. Touching the lives of every American woman, it emerges most clearly at the critical lifestyle choice points of adolescence and middle age (Evans, 1982).

Theorists from Freud onward have placed great value on autonomy. Silverman (1987) argued the concept of autonomy from the vantage point of female development. Healthy growth is seen as the increasing ability to pursue personal aims without too much restricting dependence on others. Many psychoanalytic writers have spoken of the organism's increasing differentiations, increasing dependence, and increasing individuation. All these imply the existence of continua from infancy to adulthood, from dependence to independence. Autonomy is viewed as an ideal not only in the psychoanalytic community but also in Western culture. And, of course, the value-laden perspective of the larger culture influences analysts' theoretical conceptions (Silverman, 1987).

An article by Benton, Czechanski, Pavy and Sweeney (1993) focused on current psychoanalytic writings about women's developmental theory. Various papers and articles by Karen Horney, Carol Gilligan, Jean Baker Miller, Nancy Chodorow and Belenky were reviewed. From these reading, a picture of a woman, quite different from the one Freud described, emerged. Freud's
description was held on to by psychoanalytic theorists until the mid-1970's. Finally, in the past decade, women have been credited with their own unique developmental line separate from that of men. A woman's need for affiliation comes in contact with her aggression at every stage of development. It is this conflict that is suspected to be at the root of women's pervasive low self-esteem and fear of success. Aggression is needed for differentiation; it is the power behind separateness. Although autonomy does not come easily to women, an authentic emotional life is possible only if all thoughts and feelings are embraced. The kind of woman she becomes is powerfully influenced by society's rules and expectations of how she should behave.

The disparity between women's experience and the representation of human development, noted throughout the psychological literature, has generally been seen to signify a problem in women's development. Instead, the failure of women to fit existing models of human growth may point to a problem in the representation, a limitation in the conception of the human condition, an omission of certain truths about life (Gilligan, 1982). Following this introduction, Gilligan describes how women tend to form identity and, with it, an interpersonal orientation different from that typically learned by men. In contrast to the model for males, she locates female development squarely within relationships (Wood & Lenze, 1991). Gilligan argues that women are not reflected within existing theory and their experiences have been distorted by interpreting them within a framework that excludes them. It is inappropriate, inaccurate, and devaluing, she suggests, to judge women's experiences, actions, and values, within categories and conceptions that are alien to and imposed on them. Gilligan then advanced a model of female development that has been supported and

Langan-Fox (1991) indicated from her research on women's development that women have a 'pluralistic' crossroad or junction in development, not only in temporal terms (goals which take longer to achieve) but also in terms of breadth and complexity. Women have persisting needs which are more concerned with developing aspects of their personality; emotions and bodies; securing autonomy; learning to control their minds; and establishing general relationships with others.

Nicholson (1991) assessed 168 women about their experiences of autonomy in conjunction with internal locus of control and social support and the relation to meaning in women's lives. Early developmental experiences of intimacy and autonomy may be key factors in the process of integrating responsibilities to others with responsibility for self. Many women with life-meaning may have been prepared by their families of origin to resist societal pressures to remain passive and dependent. Thus women who as children were reinforced by their caregivers for self-sufficiency, as well as caring for others, may more easily achieve fulfillment as adults. The results also agree with Frankl (1984) that psychosocial processes are directly related with meaning. This accounts for the implication that higher education levels influence meaning indirectly, i.e. through association with the capacity for autonomy. It seems likely that women predisposed and motivated to strive for meaning choose higher education levels and occupations which provide greater personal freedom and responsibility (Nicholson, 1991).
By acknowledging the values of interpersonal connections, Miller and Gilligan pick up a critical and missing strand in traditional conceptualizations of development. They describe a sense of self organized around making and maintaining relationships and are clear that feeling worthy, able, and deserving of consideration contribute to relatedness. But they do not go on to explore what role autonomy takes in the lives of women, thereby, leaving readers free to drift toward the old assumptions (Belle, 1985): to assume autonomy is not an aspect of women's experience. Berlin and Johnson (1989) argue that autonomy can be understood as a sense of freedom and personal integrity that encompass women's feelings of worth, ability, and self-consideration and clarify how autonomy makes critical contributions to interpersonal connections. One has to bear in mind that women are not a homogeneous group. Older women with little and unsuccessful experience of education can benefit from educational autonomy, whereas the younger ones with relatively more and better educational experiences sometimes do not want special treatment or can survive in a male-dominated setting (Schedler, 1993).

Taub and McEwen (1991) thesis was that there are differences in class level in measures of autonomy. They sampled 320 undergraduate women and suggested in their results that the timing of developmental interventions may need to be reconsidered. Traditionally, interventions concerned with developing autonomy have been used with freshmen and sophomores, and those concerned with relationships have been used with juniors and seniors, following the framework presented by Chickering (1969). For women such timing may need to be adjusted. When working with women students, a broader definition of autonomy than that provided by Chickering may need to be adopted. Straub
(1987) suggested that for many women the development of self-directedness involves tasks more commonly associated with freeing interpersonal relationships. Perhaps women develop autonomy through their relationships with others.

Community College Women Students

A majority of community college students are women and approximately 60% of its part-time students are women (Twombly, 1993). The National Education Association (NEA) (1992) reported that part-time students enrolled in community colleges comprised 67% of the total higher education population. NEA also reported increased attendance among women undergraduates at colleges and universities. The National Center for Education Statistics (1988) projects that the number of non-traditional students will grow to 45% by 1997. Since the number of adults, 25 years old and older, enrolled in higher education is continuing to rise, especially in the community colleges (Lorenzo, 1991), there are very practical reasons for more research on the student population aged 20-50 or older.

Summary

This chapter has presented a review of relevant literature useful in understanding self-directedness and self-concept as well as the development of adult women in higher education.

Generally, findings indicate that education serves to benefit women's mental well-being. Literature has shown that persons with higher self-directedness in
learning have higher and better improved self-images and incorporating such concepts as self-esteem, creativity, and life satisfaction among others.

Proponents of lifelong education exert that it has become commonplace to stress the importance of self-directedness in learning as central to lifelong education.

Significant differences in race, age, educational levels, and sex are recorded in terms of self-concept. Self-concept can be changed positively and significantly as a result of education and training. The enhancement of students' self-concepts is valued as a goal of education and as a moderator and perhaps a cause of achievement.

Self-direction is not so much a method of teaching as a characteristic of the learner. Long (1989) suggests that self-directedness has a number of conceptual dimensions and also believes the least attention has been paid to the most critical dimension in self-directedness: the psychological dimension. Because this strand of research is fairly recent Merriam (1991) points out that there is a need to increase research in this area by clearly defining variables which appear to assist adults in becoming more self-directed.
Chapter 3
METHODOLOGY OF THE STUDY

The primary purpose of this study was to investigate any relationships between self-directedness and self-concept of selected women community college students. This chapter presents and discusses procedural steps which were necessary to collect and analyze data gathered in this study relating to the self-directedness and self-concept of adult learners. The following are described in this chapter: primary and secondary hypotheses; the population and sample; the instruments; the data collection techniques; and the data analysis procedures.

The study explored the following questions:

1. Is there an association between the self-concept and self-directedness?
2. Is there an association between age and self-directedness?
3. Is there an association between age and self-concept?
4. Is there a relationship between educational aspiration and self-concept?
5. Is there a relationship between educational aspiration and self-directedness?
Hypotheses

1. There would be a significant relationship between Dimension of Self-Concept item scores and the total positive raw score of the Oddi Continuing Learning Inventory.

The following subhypotheses are based on the above hypothesis:

1. There would be a significant correlation between anxiety and self-directedness.

2. There would be a significant correlation between levels of aspiration and self-directedness.

3. There would be a significant association between academic interest and satisfaction and self-directedness.

4. There would be a significant association between leadership and initiative and self-directedness.

5. There would be a significant relationship between identification versus alienation and self-directedness.

2. The mean total positive raw score of the OCLI for nontraditional students will differ significantly from that of traditional students.

3. The mean total positive raw scores of the DOSC for traditional students will differ significantly from that of nontraditional students.

4. There would be a significant association between educational aspiration and self-concept scores.

5. There would be a significant correlation between educational aspiration and self-directedness scores.
Research Hypotheses

H0 1: There is a significant correlation between self-concept item scores and total self-directedness scores.

The following subhypotheses are based on the above hypothesis:

1. There is a significant correlation between anxiety and self-directedness.
2. There is a significant correlation between levels of aspiration and self-directedness.
3. There is a significant association between academic interest and satisfaction and self-directedness.
4. There is a significant association between leadership and initiative and self-directedness.
5. There is a significant association between identification versus alienation and self-directedness.

H0 2: The OCLI mean scores of nontraditional students will be greater than the OCLI mean scores of traditional students.

H0 3: The DOSC mean scores of nontraditional students will be greater than the mean scores of traditional students.

H0 4: There is a significant association between educational aspiration and self-concept scores.

H0 5: There is a significant association between educational aspiration and self-directedness scores.
Null Hypotheses

\( H_0 1 \): There is zero correlation between self-concept item scores and self-directedness scores.

The following subhypotheses are based on the above hypothesis:

1. There is no significant relationship between anxiety and self-directedness.
2. There is no significant relationship between levels of aspiration and self-directedness.
3. There is no significant relationship between academic interest and satisfaction and self-directedness.
4. There is no significant relationship between leadership and initiative and self-directedness.
5. There is no significant relationship between identification versus alienation and self-directedness.

\( H_0 2 \): There is no significant difference between age categories in terms of self-directedness mean scores as measured by the OCLI.

\( H_0 3 \): There is no significant difference between age categories in terms of DOSC mean scores.

\( H_0 4 \): There is no significant association between educational aspiration and self-concept scores.

\( H_0 5 \): There is no significant association between educational aspiration and self-directedness scores.
Population and Sample

Setting

Des Moines Area Community College, established March 18, 1966, is a publicly supported two year institution serving the Des Moines metropolitan area and surrounding counties. The College is accredited by North Central Association of Colleges and Secondary Schools and is approved by the Iowa Department of Education and the Iowa Board of Regents. Summary statistics for the main campus report for spring term, 1995, that 55% of the student body was female with an average age of 27.52 years (Shriver, 1995).

Participants

The participants included in this study were women community college students who volunteered from various psychology courses. The courses were obtained from the Registrar and the researcher then engaged the participants in the study. Adult development literature suggests that processes for men and women are similar but that various developmental stages probably occur at somewhat different ages. Since gender seems to be a crucial variable it was controlled for in this study by limiting the sample to women only (Hyman, 1988).

The "Use of Human Subjects in Research" form was filed and approved by the Human Subjects Review Committee at Drake University before work was begun on this study (See Appendix D).
Instruments

Two instruments plus a demographic sheet were used to collect the necessary data for this study. One was the Oddi Continuing Learning Inventory (OCLI), and the other one was the Dimensions of Self-Concept Scale (DOSC).

The Oddi Continuing Learning Inventory

The OCLI is the newest measure of self-directedness in learning. This instrument was originally developed in 1984 by L.F. Oddi to identify self-directed continuing learners. It is a self-report instrument and respondents were asked to circle one of the seven options for each separate statement and is described to subjects as "a set of statements designed to collect information on how you approach learning". Response choices were: 1) "Strongly disagree; You would almost never agree"; 2) "Moderately disagree; You would infrequently agree"; 3) "Slightly disagree; You would seldom agree"; 4) "Undecided; You can't really agree or disagree with the item"; 5) "Slightly agree; You would occasionally agree"; 6) "Moderately agree; You would frequently agree"; and 7) "Strongly agree; You would agree most of the time."

Initially an extensive list of personality characteristics of self-directed learners was compiled from recurring themes in the writings of experts on self-directed learning and from research findings suggesting empirical support for these variables. Logically related attributes were then successively divided into groups and eventually refined into three broad overlapping clusters hypothesized as being the essential personality dimensions of self-directed continuing learners. Each dimension was conceived as lying on a continuum.
having two poles, one of which related to individuals marked by high amounts of the characteristic (i.e., self-directed continuing learners) and one of which related to individuals marked by low amounts of the characteristic (i.e., non self-directed continuing learners). Oddi (1986) identified three dimensions which she labeled (1) Proactive Drive vs. Reactive Drive which focused on the individuals skill to begin and continue learning intrinsically; (2) Cognitive Openness vs. Defensiveness which centers upon the learner's receptivity to change; and (3) Commitment to Learning vs. Aversion to Learning which encompasses the notions of learning for learning sake (Houle, 1961), attitude of continuous learning, and learning through various modes (Oddi, 1986).

According to Oddi (1986):

These three dimensions of the self-directed continuing learner's personality were assumed to be interrelated and mutually reinforcing. They combine to enable this individual to extract information and learn from life, be it via self-planned learning projects, participation in formal or informal group learning activities, or reflection on personal performance and life experiences. The pleasure and satisfaction derived from learning enhance the individual's self-confidence and promote further receptivity to learning; thus, the self-directed continuing learner tends to initiate and persist in learning, exhibiting a trend of behavior directed toward increasing growth and self-fulfillment through learning. (p. 99)

Reliability

Used on a sample of 271 graduate students, the 24 items on the OCLI yielded an internal consistency (standardized coefficient alpha) of .875. Test/retest reliability was .893 (Oddi, 1986).
The reliability of the OCLI with a sample of 126 nursing students was .90 (Cronbach’s alpha) (Oddi, Ellis and Roberson, 1990).

Six (1989) administered the OCLI to a group of 328 business students and recorded a reliability coefficient (Cronbach’s Alpha) of .77.

Validity

A study conducted by Oddi, et. al, (1990), stated that the significant positive relationship of .90 between total OCLI scores and total scores in the Job Activity Survey (JAS), a self-report measure of nurses’ on-the-job learning activities, suggests evidence for the convergent validity of the OCLI as a measure of self-directed continuing learning among nurses.

Scores on the OCLI correlated positively ($r = .363, p = .004$) with scores on the Leisure Activity Survey, a measure to the extend of which adults participate in educational activities. Scores also correlated positively with scores on numerous subscales of the Adjective Check List, a self-report instrument that describes various personality characteristics. These positive correlations suggest convergent validity of the OCLI. A measure of discriminant validity was provided when scores on the OCLI failed to correlate significantly ($r = .040, p = .754$) with scores on the Shipley Institute of Living Scale which provides an estimate of adult intelligence (Oddi, 1986).

It can be concluded, on the basis of correlations of the OCLI scores with other instruments of known reliability and validity, that the OCLI is a valid instrument when used in its entirety.
Dimensions of Self-Concept

The Dimensions of Self-Concept (DOSC) was developed to measure non-cognitive factors associated with self-esteem or self-concept in an educational setting. This instrument differs from others in that each item was carefully prepared to represent an activity or attitude in the school learning situation or environment and was derived from a psychological theory of academic self-concept. The DOSC is a self-report instrument that reflects the perceptions that students have regarding each of 80 statements in Form H--16 items for each of the five dimensions. Response choice options for each statement were: 1) "Never"; 2) "Seldom"; 3) "About half the time"; 4) "Very often"; and 5) "Always". Many of the constructs underlying self-concept would be worthy of consideration from both a theoretical and applied standpoint, particularly if the constructs could be translated into operationalized measures. The authors of the DOSC chose five dimensions of activity judged to be central to a conceptualization of the self-concept: (a) level of aspiration, (b) anxiety, (c) academic interest and satisfaction, (d) leadership and initiative, and (e) identification verses alienation. These five main dimensions were selected in terms of the following rudimentary theory or rationale of affectivity in school learning (Michael & Smith, 1976):

An unrealistic level of aspiration—either too high or too low—was hypothesized to be related to the probable subsequent occurrence of anxiety. Students who set unrealistically high levels of expectation could well become discouraged, depressed and fearful (anxious) of loss of status and of possible criticism (symbolic punishment) from parents, peers or significant others. Students who set
unrealistically low levels of expectation might already be anxious and fearful of possible failure. Setting low level goals could generate a certain degree of immediate security (preservation of self-esteem) but at the expense of later development of positive attitudes toward learning and toward opportunities for positive recognition and leadership roles. Highly anxious students are likely to lose academic interest, to fail to acquire a sense of satisfaction with their schoolwork, to forego opportunities for leadership roles in the school setting, and eventually to develop feelings of alienation and rejection accompanied by a manifestation of hostility toward the school as an institution. On the other hand, students relatively free of anxiety who are successful in light of realistic levels of aspiration attain success that engenders academic interest and feelings of satisfaction with the school experience. Such satisfaction can be anticipated to lead to greater self-confidence and to numerous opportunities to exercise initiative and to assume leadership responsibilities, which in turn are reinforcing mechanisms for attaining even greater academic satisfaction and interest, for assuming new leadership roles and for evolving positive identification with the school establishment. In other words, frequent success leads to further success; repeated failure, to a greater sense of failure, frustration and alienation. (pp. 522-523.)

The results of the data analysis for previous trial forms led to the design of a published version known as Form H--College in 1985. The resulting item and scale scores provided a basis for determining empirically the extent to which items intended to reflect a certain construct actually belonged to the scale designed to portray that construct. Detailed psychometric analyses of the item and score scales have been described by Michael, Denny, Knapp-Lee, and Michael (1984). Selected outcomes of psychometric evaluation of this form are summarized in a paper by Michael, Denny, Ireland-Galman, and Michael (1984),
and Caracosta and Michael (1986) provided a follow-up study regarding the construct and concurrent validity of this form.

**Reliability**

Several studies with community college students have been completed (included in the above mentioned articles) to establish reliability. For the Level of Aspiration, Anxiety, the Academic Interest and Satisfaction, the Leadership and Initiative, and the Identification vs. Alienation factor subscales, internal-consistency estimates of reliability of 0.90, 0.89, 0.89, 0.88, and 0.85, respectively were obtained (Michael, et. al., 1984).

For a sample of 239 undergraduate students reliability estimates ranged from 0.86 to 0.88 (Caracosta & Michael, 1985).

**Validity**

The scores of a community college sample of 202 students provide the means for determining (a) the correlations of each of five factor subscales of the Dimensions of Self-Concept Scale (DOSC) with the Total Score of the Academic Self-Concept Scale (ASCS) and (b) the empirical factor structure of each instrument.

The DOSC, Form H, is a multidimensional academic self-concept measure in which at least three of its hypothesized factors derived from a theory of academic self-concept could be verified. Among the five DOSC, Form H, subscales, the range of intercorrelation was -.26 to .63 with a median algebraic value of .30. All negative correlations were accounted for by the Anxiety subscale of the DOSC.
The ASCS Total Score registered correlations of -.25 (p < .01), -.37 (p < .001), .25 (p < .01), .34 (p < .001), and .11 (p > .05) with the DOSC subscales of Level of Aspiration, Anxiety, Academic Interest and Satisfaction, Leadership and Initiative, and Identification vs. Alienation, respectively.

In this particular study, the DOSC, Form H, measure appears to show higher concurrent validity coefficients with self-report college achievement indicators than does the ASCS Total Score. The Level of Aspiration subscale of the DOSC shows considerable promise as a potentially valid predictor of college achievement. The occurrence of modest correlations between the ASCS Total Score and the DOSC factor scales as well as differences in empirical factor structure suggests that the two measures reflect not altogether similar constructs (Halote & Michael, 1984).

Five Dimensions of DOSC

The five factor dimensions measured by the DOSC scales may be described as follows:

A. Level of Aspiration. This factor is a manifestation of patterns of behavior that portray the degree to which achievement levels and academic activities of individuals are consistent with their perception of their potentialities in terms of scholastic aptitude or of past and current attainments.

B. Anxiety. The second factor reflects behavior patterns and perceptions associated with emotional instability, a lack of objectivity, and a heightened or exaggerated concern about tests and the preservation of self-esteem in relation
to academic performance. Underlying this dimension is often a failure syndrome that indicates a marked discrepancy between the stabilized perception of what a individual believes that he/she can achieve satisfactorily and her idealized perception of her expectations concerning what his teachers or parents maintain that he/she can do. This attitudinal pattern can become generalized to a self-concept indicative of feeling oneself to be an unworthy individual ridden with guilt with a possible need for self-punishment or even self-destruction.

C. Academic Interest and Satisfaction. This third dimension portrays the sheer love of learning and pleasure gained by individuals in doing academic work and in studying new subject matter, an affective state much like that realized by the dedicated scholar who gains tremendous satisfaction in working in the library, in reading great books, in writing research papers, and in conceptualizing new theories or explanations for observed phenomena—an intrinsic motivation involving learning for its own sake.

D. Leadership and Initiative. This fourth factor appears to represent those behavior patterns and perceptions that are associated with star-like qualities, in which an individual has an opportunity to demonstrate his/her mastery of knowledge, to help others, to give direction to group activities, to become the respected expert whom others consult, to put forth (hopefully diplomatically) sound suggestions for classroom activities reflecting the consensus of other people in the group, to exhibit a willingness to take the initiative in starting a project or assignment—either an individual or group endeavor—and to follow it
through to successful completion, and to take pride without display of conceit of one's capabilities to do a job quickly and well.

E. Identification vs. Alienation. This fifth dimension is intended to represent the extent to which an individual feels that he/she has been accepted as part of the academic community and has been regarded by his/her teachers and peers as a significant person who is respected for their own personal worth and integrity as a human being, in contrast to a feeling of being isolated or rejected in the academic environment—a feeling manifested by hostility toward the academic institution and its members—fellow students, teachers, counselors, administrators, and significant others; alienation embodies considerable resentment if not even defiance of regulations and rules of the school campus.

Differential weights are assigned to responses to indicate the extent to which the examinee perceives that each statement describes his/her own characteristics or degree of identification with the activity portrayed by the item. All items are so worded that the "Seldom" or "Never" alternatives would receive two or one points, respectively, and that the "Always" or "Very Often" choice would obtain five or four points, respectively, in the scoring process. With each of the five factor scales, the possible range of scores would be from a minimum of 16 to a maximum of 80 points for Form H.

Demographic Data Sheet

The demographic data sheet and the structured interview sheet were prepared by the researcher. The demographic data sheet requested the following information: ethnic origin, age, and educational aspiration (See
Appendix A). The structured interview sheet, which was used to obtain more information, included four questions (See Appendix C).

**Procedure**

The subjects included in this study were students who were randomly selected from various psychology courses. The course lists were obtained from the Registrar and the researcher then engaged the participants in the study. At that time, a cover letter was distributed and read inviting their participation, explaining the general purpose of the study, the extent of the involvement requested and information pertaining to confidentiality (See Appendix B). Additionally, the telephone number of the researcher was included in the cover letter in order to be available for calls or questions that might arise by those completing the instruments. Those who chose to be involved in this study then received the demographic sheet and instruments. To gain qualitative information, some demographic sheets contained questions that pertained to individual experiences that may have encouraged or discouraged self-directedness along with characteristics the participants felt were pertinent to enhancing self-directedness. These particular demographic sheets were distributed randomly to every tenth participant. There were no names, social security numbers, or other identification used to single out or reveal the identity of the respondents. The only identifier for the survey was a return postcard where the participants could list their name (optional) and permanent address if they would like a copy of the results. Participants were also informed of the date
the study results would be available to them and results were mailed to those participants requesting them.

Data Analysis

Pearson Product-Moment Correlation Coefficients were calculated to test the five sub-hypotheses used to study the relationship of self-concept and self-directedness. The five dimensions of self-concept were individually correlated to the self-directedness scores by using the same correlational analysis. The second and third hypothesis were treated by t-tests. These tests were used to investigate the difference between age categories and self-directedness (hypothesis 2); and age categories and self-concept scores (hypothesis 3).

The fourth and fifth hypotheses were analyzed using Pearson's Product Moment Correlation Coefficients to study the relationship of educational aspiration to self-concept (hypothesis 4); and educational aspirations to self-directedness scores (hypothesis 5). The criterion for rejecting the fourth hypothesis was the significance beyond the .05 level.

Partial correlations, were then used to further analyze the data. The Pearson correlation coefficient was used to assess the relationships between two particular variables. Since some of the correlation may have been influenced by the presence of a third variable, it was desirable to express the degree to which this may be true. The partial correlation coefficient is a statistic that was used to conduct this assessment (J. Veale, personal communication, November, 1995). A partial correlation is a correlation between two variables after the researcher statistically removes or subtracts the linear effect of one or more other variables.
(Vogt, 1993). For further discussion of partial correlation statistics, see Appendix E.

Qualitative analysis were also conducted to glean information from the structured interview process.
Chapter 4

Results

The main purpose of this study was to investigate the relationship of community college women's self-directedness and their self-concept. The preceding chapter focused upon the methodology used in the study, with a description of the instruments used, selection of subjects, research design, and procedures for collection and analysis of the data. This chapter presents and discusses the results of this investigation.

To present the data obtained in an effective manner, this chapter is organized around descriptive data and the five specific hypothesis of the study. Each of the hypothesis is tested, and the findings related to its testing are presented. In addition to the quantitative data, a qualitative evaluation is included.

Data were obtained by administering the Dimensions of Self-Concept (DOSC) and the Oddi Continuing Learning Inventory (OCLI). Information regarding age, ethnic group and educational aspirations were placed on the student's demographic information sheet. The sample included women students enrolled in psychology classes at Des Moines Area Community College.

Data were collected during the fall semester of the 1994-95 academic year. Of 107 individuals assessed, 106 were included in the study. The number of usable responses was limited to respondents who completed both instruments and the demographic data sheet in their entirety.
Variables Summary

The questionnaire asked respondents to enter their age as determined by four groupings. Out of 106 total responses, there were 27 (25%) students in the 18-22 age category; 25 (24%) in the 22-25 age category; 21 (20%) in the 26-31 age grouping; and 33 (31%) students listed their age under the 31 and above age category (See Table 1). A total of 52 (49%) were classified for this study as traditional students by combining the first two age groups, and 54 (51%) were classified as non-traditional students by the combination of the latter two age groups.

Table 1. The distribution of population according to age

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<thead>
<tr>
<th>Age level</th>
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<th>Percent responding</th>
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<tr>
<td>18-22</td>
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<td>22-25</td>
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<td>Total</td>
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</tbody>
</table>
Respondents were asked to list their ethnic background under one of five listings. Of the 106 respondents, 94 (89%) listed White Non-Hispanic; 6 (6%) listed Black Non-Hispanic; 3 (3%) under Hispanic; 2 (2%) chose American Indian/Alaskan Native; and 1 (1%) Asian/Pacific Islander (Table 2).

Table 2. Ethnicity of students

<table>
<thead>
<tr>
<th>Ethnic background</th>
<th>n</th>
<th>Percent responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Non-Hispanic</td>
<td>94</td>
<td>88</td>
</tr>
<tr>
<td>Black Non-Hispanic</td>
<td>6</td>
<td>06</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
<td>03</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>2</td>
<td>02</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>1</td>
<td>01</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td></td>
</tr>
</tbody>
</table>

Educational aspirations as defined for this study is the level of education that a student would like to obtain. There were 48 who chose to obtain an associate degree and 5 chose no degree which combined to a total of 53 (50%) under the associate category. There were 35 (33%) respondents who chose a bachelor's degree. The post-bachelor's category indicated a combination of 12 master's degree and 6 doctorate degrees for a total of 18 (17%) (Table 3). The sample
selected indicated a low presentation of respondents in the no degree, master's and doctorate categories. If the non-degree students were to be included in the analyses, they needed to be included in a group with a higher n in order to maximize statistical power. Also, combining the non-degree with associate degree students made more sense than any other form of consolidation due to the fundamental similarities. To maintain sufficient cell size for statistical power, categories were combined.

Table 3. Educational aspirations of respondents

<table>
<thead>
<tr>
<th>Educational aspiration</th>
<th>n</th>
<th>Percent of those responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate and no degree</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>35</td>
<td>33</td>
</tr>
<tr>
<td>Post-bachelor's degree</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td></td>
</tr>
</tbody>
</table>

Descriptive data for each of the five scales or factors of the DOSC is discussed below. The high, average, and low figures are based on the normative data in the technical manual in the form of means and standard deviations for the five scales on Form H. High and low designations were determined to be one standard deviation above or below the mean respectively.
The first factor, level of aspiration, is manifested in patterns of behavior that portray an academic activity of individuals that is consistent with their perception of their potentialities in terms of scholastic aptitude or of past current attainments. Forty-three (81%) of those who listed associate degree scored average or high; twenty-eight (80%) of those selecting bachelor's degree scored average or high; and 13 (72%) of those choosing post-bachelor's degrees scored in the average or high categories (Table 4).

Table 4. Level of aspirations of respondents

<table>
<thead>
<tr>
<th>Level</th>
<th>Associate (n = 53)</th>
<th>Bachelor's (n = 35)</th>
<th>Post-Bachelor's (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>High</td>
<td>7</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Average</td>
<td>36</td>
<td>68</td>
<td>20</td>
</tr>
<tr>
<td>Low</td>
<td>10</td>
<td>19</td>
<td>7</td>
</tr>
</tbody>
</table>

The second factor, anxiety, reflects behavior patterns and perceptions associated with instability, a lack of objectivity, and a exaggerated concern about tests and the preservation of self-esteem in relation to academic performance. It will be recalled that a high score in anxiety is expected on logical grounds to be related to a relatively low degree of success in learning on
the part of many students. Thirteen (25%) of those who listed associate degree scored high; four (12%) of those selecting bachelor's degree scored high; and three (17%) of those choosing post-bachelor's degrees scored in the high category (Table 5).

Table 5. Anxiety levels of respondents

<table>
<thead>
<tr>
<th>Level</th>
<th>Associate (n = 53)</th>
<th>Bachelor's (n = 35)</th>
<th>Post-Bachelor's (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>High</td>
<td>13</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Average</td>
<td>27</td>
<td>50</td>
<td>18</td>
</tr>
<tr>
<td>Low</td>
<td>13</td>
<td>25</td>
<td>13</td>
</tr>
</tbody>
</table>

The third dimension, academic interest and satisfaction, portrays the sheer love of learning and pleasure gained by individuals in doing academic work and in studying new subject matter. Thirty-six (68%) of those who listed associate degree scored average or high; thirty (86%) of those selecting bachelor's degree scored average or high; and 14 (78%) of those choosing post-bachelor's degrees scored in the average category (Table 6).
Table 6. Academic Interest and Satisfaction of respondents

<table>
<thead>
<tr>
<th>Level</th>
<th>Associate (n = 53)</th>
<th>Bachelor's (n = 35)</th>
<th>Post-Bachelor's (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>High</td>
<td>1</td>
<td>02</td>
<td>3</td>
</tr>
<tr>
<td>Average</td>
<td>35</td>
<td>66</td>
<td>27</td>
</tr>
<tr>
<td>Low</td>
<td>17</td>
<td>32</td>
<td>5</td>
</tr>
</tbody>
</table>

Leadership and initiative, the fourth factor, appears to represent those behavior patterns and perceptions that are associated with star-like qualities, in which an individual has an opportunity to demonstrate mastery of knowledge, to assist others, and take pride without display of conceit. Twenty-nine (55%) of those who listed associate degree scored average or high; twenty-six (75%) of those selecting bachelor's degree scored average or high; and 12 (67%) of those choosing post-bachelor's degrees scored in the average or high categories (Table 7).
Table 7. Leadership and Initiative of respondents

<table>
<thead>
<tr>
<th>Level</th>
<th>Associate (n = 53)</th>
<th>Bachelor's (n = 35)</th>
<th>Post-Bachelor's (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>High</td>
<td>1</td>
<td>02</td>
<td>3</td>
</tr>
<tr>
<td>Average</td>
<td>28</td>
<td>53</td>
<td>23</td>
</tr>
<tr>
<td>Low</td>
<td>24</td>
<td>45</td>
<td>9</td>
</tr>
</tbody>
</table>

The fifth dimension, Identification verses Alienation, is intended to represent the extent to which an individual feels accepted as part of the academic community and is respected for personal worth and integrity as a human being, as opposed to feelings of isolation or rejection in the environment. Fifty-two (98%) of those who listed associate degree scored average or high categories; thirty-five (100%) of those selecting bachelor's degree scored average or high; and 18 (100%) of those choosing post-bachelor's degrees scored in the average or high categories (Table 8).
Table 8. Identification vs. Alienation of respondents

<table>
<thead>
<tr>
<th>Level</th>
<th>Associate (n = 53)</th>
<th>Bachelor's (n = 35)</th>
<th>Post-Bachelor's (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>High</td>
<td>49</td>
<td>92</td>
<td>31</td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
<td>06</td>
<td>4</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>02</td>
<td>0</td>
</tr>
</tbody>
</table>

Analysis of Research Questions

The Statview Data Analysis Program (Feldman & Gagnon, 1991) was used to perform the analysis of the data collected for use in this study. The dependent variable was self-directedness scores as measured by the OCLI. The seven independent variables were: level of aspiration, anxiety, academic interest and satisfaction, leadership and initiative, and identification and alienation as measured by the DOSC; educational aspirations and age. The probability of a Type 1 error that the researcher was willing to risk in rejecting the null hypotheses was set at .05.

The OCLI scores ranged from a low of 64 to a high of 153 (maximum possible, 168) with a mean of 120.57. The DOSC Level of Aspiration subscale (16 items) scores ranged from 37 to 79 (maximum score possible, 80) with a
mean score of 60.29; Anxiety subscale (16 items) ranged from 17 to 77 (maximum possible, 80) and a mean of 42.79; Academic Interest & Satisfaction subscale (16 items) scores ranged from 33 to 72 (out of 80) with a mean of 49.35; Leadership & Initiative subscale (16 items) ranged from 22 to 68 (out of 80) and a mean score of 42.44; and the Identification & Alienation subscale (16 items) scores ranged from 20 to 77 (maximum possible, 80) with a mean score of 55.54. The mean scores and standard deviation scores of the respondents on the Oddi Continuing Learning Inventory and the Dimensions of Self Concept instruments are presented in Table 9 and Table 10 respectively.
Table 9. Oddi Continuing Learning Inventory Means and Standard Deviation

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>120.57</td>
<td>17.29</td>
</tr>
<tr>
<td>Age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>117.13</td>
<td>20.02</td>
</tr>
<tr>
<td>Non-Traditional</td>
<td>123.91</td>
<td>13.60</td>
</tr>
<tr>
<td>Educational Aspiration:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>115.40</td>
<td>16.88</td>
</tr>
<tr>
<td>Associate</td>
<td>117.81</td>
<td>17.55</td>
</tr>
<tr>
<td>Bachelor’s</td>
<td>123.06</td>
<td>17.12</td>
</tr>
<tr>
<td>Master’s</td>
<td>125.42</td>
<td>16.64</td>
</tr>
<tr>
<td>Doctorate</td>
<td>123.00</td>
<td>18.93</td>
</tr>
</tbody>
</table>
### Table 10. Dimensions of Self Concept Means and Standard Deviation

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Means</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level of Aspiration:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>60.29</td>
<td>9.82</td>
</tr>
<tr>
<td>Traditional</td>
<td>59.15</td>
<td>9.94</td>
</tr>
<tr>
<td>Non-Traditional</td>
<td>61.39</td>
<td>9.68</td>
</tr>
<tr>
<td><strong>Anxiety:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>42.79</td>
<td>13.31</td>
</tr>
<tr>
<td>Traditional</td>
<td>44.10</td>
<td>12.90</td>
</tr>
<tr>
<td>Non-Traditional</td>
<td>41.54</td>
<td>13.69</td>
</tr>
<tr>
<td><strong>Academic Interest &amp; Satisfaction:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49.35</td>
<td>8.33</td>
</tr>
<tr>
<td>Traditional</td>
<td>47.98</td>
<td>8.76</td>
</tr>
<tr>
<td>Non-Traditional</td>
<td>50.67</td>
<td>7.77</td>
</tr>
<tr>
<td><strong>Leadership &amp; Initiative:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>42.44</td>
<td>8.97</td>
</tr>
<tr>
<td>Traditional</td>
<td>43.87</td>
<td>8.99</td>
</tr>
<tr>
<td>Non-Traditional</td>
<td>41.07</td>
<td>8.83</td>
</tr>
<tr>
<td><strong>Identification &amp; Alienation:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>55.54</td>
<td>7.15</td>
</tr>
<tr>
<td>Traditional</td>
<td>54.77</td>
<td>6.68</td>
</tr>
<tr>
<td>Non-Traditional</td>
<td>56.28</td>
<td>7.57</td>
</tr>
</tbody>
</table>
The results which follow are organized by the hypothesis under investigation which are restated in the null form for the purpose of statistical analysis.

**Hypothesis 1:**

Existing self-directed learning theory suggests that self-image and self-directedness are related to one another (Carlow, 1967; Eldred, 1977). It is suggested that as adults become more self-directed, they will have better and more complete self-concepts, and may regard themselves as worthy persons.

**H0 1:** There is zero correlation between all item self-concept scores and self-directedness scores.

In order to analyze and understand the relationship between adults' self-concepts and their self-directedness more completely, each variable of the Dimension of Self-Concept was used as a subhypothesis for the first main hypothesis. To examine the sub-hypotheses, the total OCLI scores of the sample were correlated with the total score of each of the five dimensions of the DOSC. A Pearson's product moment correlation (r) was used to investigate the five sub-hypotheses. Table 11 presents the correlation coefficients of the five subhypotheses, with their significance levels indicated by asterisks.
1. There is no significant relationship between level of aspiration and self-directedness.

The results indicate that there is a correlation of .137 between these variables. This is not statistically significant at the .05 level thus the first sub-hypothesis will not be rejected, identifying that there is no relationship between level of aspiration and self-directedness.

2. There is no significant relationship between anxiety and self-directedness.

The correlation of -.523 was statistically significant at the .05 level. The correlation coefficient of determination was .273. Observing a relationship of the magnitude indicated by r was highly unlikely if the second sub-hypothesis were true. Consequently, rejecting the null and accepting the alternate hypothesis was considered.

3. There is no significant relationship between academic interest and satisfaction and self-directedness.

Results show that there is a statistically significant positive correlation of .441 between academic interest and satisfaction and self-directedness and a correlation coefficient of determination of .195. Thus the null hypothesis was rejected and the alternative hypothesis was considered.
4. There is no significant relationship between leadership and initiative and self-directedness.

The correlation of .518 was statistically significant at the .05 level of significance. The correlation coefficient of determination was .268. Observing a relationship of the magnitude indicated by r was highly unlikely if the null hypothesis were true. Consequently, rejecting the null hypothesis and accepting the alternate was considered.

5. There is no significant relationship between identification versus alienation and self-directedness.

The results indicate that there is a correlation of .194 between these variables. This is not statistically significant at the .05 level thus the null hypothesis will not be rejected, identifying that there is no relationship between identification vs. alienation and self-directedness.
Table 11. Correlations between the five dimensions of self-concept and a measure of self-directedness.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>n</th>
<th>r</th>
<th>r²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Aspiration</td>
<td>106</td>
<td>.137</td>
<td>.019</td>
</tr>
<tr>
<td>Anxiety</td>
<td>106</td>
<td>-.523*</td>
<td>.273</td>
</tr>
<tr>
<td>Academic Interest &amp; Satisfaction</td>
<td>106</td>
<td>.441*</td>
<td>.195</td>
</tr>
<tr>
<td>Leadership &amp; Initiative</td>
<td>106</td>
<td>.518*</td>
<td>.268</td>
</tr>
<tr>
<td>Identification &amp; Alienation</td>
<td>106</td>
<td>.194</td>
<td>.038</td>
</tr>
</tbody>
</table>

* p < .05, two-tailed

The results indicate that there are positive, statistically significant relationships between the factor heading of self-concept scores and total self-directedness, and the self-concept sub-scores known as anxiety, academic interest & satisfaction, and leadership & initiative. However, there are no statistically significant relationships between self-directedness and level of aspiration or self-directedness and identification & alienation. When looking at a multiple regression model for self-directedness and the three significant factors of self-concept, the model accounts for approximately 43% of the variance associated with self-directedness. The multiple regression model accounts for a
statistically significant portion of the variance, \( F = 25.293, \)  
\( \text{DF} = 3,102; p < .0001 \). That is, the proportion of variance accounted for, 43\%, is more than you would expect just by chance alone. A multiple regression model for self-directedness and all five factors of self-concept accounted for approximately 43\% of the variance associated with self-directedness. This model also accounted for a statistically significant portion of the variance, \( F = 14.963, \text{DF} = 5, 100; p < .0001 \).

Hypothesis 2

Ho 2: There is no significant difference between age categories in terms of self-directedness mean scores as measured by the Oddi Continuing Learning Inventory.

In order to test this hypothesis, respondents were separated into traditional (18-25) and non-traditional (26 plus) age groupings. The second hypothesis was treated by a t-test analysis to determine whether the traditional students were any different from the non-traditional age students in terms of self-directedness. As analysis indicated, the t value obtained for the age categories is -2.036 with a probability level of .044. The t table value at the .05 level of significance is 2.000. Thus the obtained t value exceeds the .05 level of significance, indicating that there is a significant statistical difference between traditional and non-traditional students in terms of self-directedness with non-traditional students scoring higher. Consequently, rejecting the null hypothesis and accepting the alternative hypothesis was considered.
Hypothesis 3

H0 3: There is no significant difference between age categories in terms of DOSC mean scores.

In testing this hypothesis, respondents were again separated into traditional (18-25) and non-traditional (26 plus) age groupings. The third hypothesis was treated by a t-test analysis to determine whether the traditional students were any different from the non-traditional age students in terms of self-concept. To obtain a better understanding of any differences, scores on the five dimensions of self-concept are compared, and results are included in Table 12. Inspection of Table 12 shows that traditional students are not much different from non-traditional students in terms of self-concept. The obtained t values were not statistically significant.
Table 12. Differences in age categories in a measurement of self-concept.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>n</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Aspiration</td>
<td>106</td>
<td>-1.174</td>
<td>.243</td>
</tr>
<tr>
<td>Anxiety</td>
<td>106</td>
<td>.99</td>
<td>.325</td>
</tr>
<tr>
<td>Academic Interest &amp; Satisfaction</td>
<td>106</td>
<td>-1.674</td>
<td>.097</td>
</tr>
<tr>
<td>Leadership &amp; Initiative</td>
<td>106</td>
<td>1.613</td>
<td>.110</td>
</tr>
<tr>
<td>Identification &amp; Alienation</td>
<td>106</td>
<td>-1.087</td>
<td>.280</td>
</tr>
</tbody>
</table>

* p < .05

Hypothesis 4

H0 4: There is no significant association between educational aspirations and self-concept scores.

To examine this hypothesis, the total educational aspirations of the 106 respondents are correlated with each factor of the Dimension of Self Concept instrument. To examine this hypothesis, the educational aspirations of the sample were correlated with the total score of each of the five dimensions of the DOSC. A Pearson's product moment correlation (r) was used to investigate the null hypothesis. The critical value at the .05 level of significance is listed as
Table 13 presents the correlation coefficients of the five subhypothesis, with their statistical significant levels indicated by asterisks.

Table 13. Correlations between the five dimensions of self-concept measure and educational aspirations.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>n</th>
<th>r</th>
<th>r²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Aspiration</td>
<td>106</td>
<td>.06</td>
<td>.004</td>
</tr>
<tr>
<td>Anxiety</td>
<td>106</td>
<td>-.06</td>
<td>.004</td>
</tr>
<tr>
<td>Academic Interest &amp; Satisfaction</td>
<td>106</td>
<td>.193*</td>
<td>.037</td>
</tr>
<tr>
<td>Leadership &amp; Initiative</td>
<td>106</td>
<td>.169</td>
<td>.028</td>
</tr>
<tr>
<td>Identification &amp; Alienation</td>
<td>106</td>
<td>-.046</td>
<td>.002</td>
</tr>
</tbody>
</table>

*p < .05, two-tailed

The results indicate that there is a statistically significant relationship between the self-concept factor of academic interest & satisfaction and educational aspirations. However, there are no statistically significant relationships between educational aspirations and level of aspiration, anxiety, leadership & initiative, or identification & alienation (Table 13).
Hypothesis 5

H0 5: There is no significant association between educational aspiration and self-directedness scores.

To examine this hypothesis, the educational aspirations of the sample were correlated with the total OCLI scores. A Pearson's product moment correlation \( r \) was used to investigate the null hypothesis. The correlation, .149, is a small positive coefficient. This suggests that there is little positive linear correlation between the measure of educational aspiration and the measure of self-directedness. The critical value at the .05 level of significance is listed as .1946. The results indicate that there is no statistically significant correlation between educational aspirations and self-directedness in this sample.

Partial Order Correlations

Given the number and types of variables in the study, it seemed appropriate that a partial correlation analysis be used to control for spurious effects or the possibility of the correlational results being influenced by the presence of a third variable. The partial correlation coefficient is the correlation derived from the process of partialing out of age and educational aspirations. Table 14 presents a view of significant zero-order correlations; partial correlation results with the age variable controlled for; and partial correlation results with educational aspirations controlled.

Results indicated that the elimination or partialing-out of the third variable (age or educational aspiration), had no significant change in the zero-order
correlations. In other words, the original correlational relations were uncomplicated by considering the variables of age and educational aspirations. The results are consistent with other analyses conducted for this study.
Table 14. A comparison of zero-order and partial correlations.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Zero-order correlations (n = 106)</th>
<th>Partial correlations with age removed (n = 106)</th>
<th>Partial correlations with educational aspiration removed (n = 106)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-directedness and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>-.523*</td>
<td>-.516*</td>
<td>-.513*</td>
</tr>
<tr>
<td>Academic Interest &amp; Satisfaction</td>
<td>.441*</td>
<td>.423*</td>
<td>.425*</td>
</tr>
<tr>
<td>Leadership &amp; Initiative</td>
<td>.518*</td>
<td>.566*</td>
<td>.506*</td>
</tr>
<tr>
<td>Anxiety and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Interest &amp; Satisfaction</td>
<td>-.188</td>
<td>-.175</td>
<td>-.192</td>
</tr>
<tr>
<td>Leadership &amp; Initiative</td>
<td>-.430*</td>
<td>-.445*</td>
<td>-.427*</td>
</tr>
<tr>
<td>Academic Interest &amp; Satisfaction and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership &amp; Initiative</td>
<td>.510*</td>
<td>.549*</td>
<td>.494*</td>
</tr>
</tbody>
</table>

* p < .05, two-tailed
Qualitative Analysis of Data

The goal of this type of qualitative analysis was to address some issues in a more in-depth manner. This particular inquiry generates knowledge pertaining to a variety of issues. These include individual definitions of what self-directedness is, individual perceptions of self-directedness, experiences that may have influenced their level of self-direction, and personality characteristics they deem as being advantageous to developing a sense of self-directedness. This was done by having every tenth respondent complete a structured questionnaire that asked the following questions:

1. Please explain your definition of what it means to be self-directed?

2. Do you see yourself as being self-directed?
   On a scale of 1-10 where would you place yourself?

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?

4. What experiences have you had that have discouraged self-directedness?

5. What particular personality characteristics do you feel are necessary for being self-directed?
The respondents for the qualitative analysis included five (45%) students in the traditional age category and six (55%) in the non-traditional age category. Ethnicity consisted of ten (91%) white non-hispanic; and one (9%) black non-hispanic. Educational aspirations of this limited sample included one (9%) non-degree; five (46%) associate degree; three (27%) bachelor's degree; and two (18%) master's degree (See Table 15). The qualitative analysis, which included randomly selected respondents, yielded a demographic distribution similar to the total subjects.
Table 15. Descriptive analysis of limited sample

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>Percent responding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age category:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Non-traditional</td>
<td>6</td>
<td>55</td>
</tr>
<tr>
<td><strong>Ethnicity:</strong></td>
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<td></td>
</tr>
<tr>
<td>White Non-Hispanic</td>
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</tr>
<tr>
<td>Black Non-Hispanic</td>
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<td>09</td>
</tr>
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<td><strong>Educational Aspiration:</strong></td>
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<td></td>
</tr>
<tr>
<td>No degree</td>
<td>1</td>
<td>09</td>
</tr>
<tr>
<td>Associate degree</td>
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<td>46</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>Master's degree</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>
Individual qualitative assessment sheets are included in Appendix F. Results of the qualitative analysis include the following themes:

**Theme 1**: Self-directedness is defined as the process of identifying needs and wants. A majority of the respondents indicated that setting and accomplishing goals in an independent fashion was a part of their definition for self-directedness. Some specific examples as paraphrased by the researcher include:

- Having an inner drive to make and accomplish goals
- Set goals and work to accomplish them
- Knowing yourself and accomplishing goals on your own
- Being able to see what needs to be done and doing it without being reminded
- Having a sense of who you are and not being influenced by others
- Knowing what goals are and being solely responsible for result

Individual perceptions of self-directedness included seven respondents indicating yes; three stating no; and one sometimes. The range in answers on the 1-10 scale were from 4 to 9. There did not seem to be any pattern to individual perceptions of self-directedness by degree or age categories.

**Theme 2**: Experiences that tended to encourage self-directedness center around being successful and independent. There did not seem to be significant differences between those that perceived themselves as self-directed and those that did not. Some specific examples as paraphrased by the researcher include:
• Being told I was stupid made me want to prove I could succeed
• Being successful in the accomplishment of tasks
• Figuring out things on my own and not asking for help
• Going to college and realizing that no one can earn the grade except me
• Being divorced and responsible for children

Theme 3: Experiences that tend to discourage a sense of self-directedness are failures and lack of support from significant others. Interestingly enough, those who spoke of self-esteem issues and non-supportive significant others also perceived themselves as not being self-directed. Specific examples include:

• Classes where I thought material was too much to handle
• My parents or others making all the decisions about my future
• Failures and letting myself and others down
• Lack of self esteem and having a non-supportive family
• Being told I have limits and discouraged by significant others

Theme 4: Experience with confidence and self-reliance are perceived as being necessary characteristics of self-directedness. Some of the characteristics listed by the respondents include:

• self-esteem
• self-confidence
• motivation and adaptability
• will-power
• rational and objective thinking
Summary

This chapter presented and discussed the data which were collected in this study. The data analyzed and described the relationship of adult women's self-concept and their self-directedness in learning. Also differences in age groups and educational aspirations were discussed. The organization was based on the five hypothesis of the study followed by a qualitative assessment. A summary of the findings of this study, and conclusions drawn from the data collected, are included in Chapter 5. Implications and recommendations that the data hold for research and practice are also considered.
Chapter 5
CONCLUSIONS

Introduction

The purpose of this chapter is to summarize the study, offer findings, implications and present recommendations for further research. In the initial section, the purpose and procedure of the study is presented; the second section summarizes the findings of the study; the third section offers conclusions that may be relative to the findings; the fourth section suggests implications; and the final section offers recommendations.

Purpose and Procedure

The purpose of this study was to describe and analyze the relationship of community college women's self-concept and self-directedness. It was also an attempt to identify differences that occur by age and educational aspirations. It is expected that the results will contribute to a growing body of research relative to self-directed learning, will provide a comparison between traditional and non-traditional age women, and will contribute additional information to those involved in the development of more responsive learning environments for adult learners.

Relevant literature and research related to self-concept and self-directedness were reviewed to support the need and overall rationale of the study.

Two instruments and a demographic informational sheet were used to collect data for the study. One was the Dimensions of Self Concept developed and
tested by Michael, Denny, Knapp-Lee, and Michael (1984). The DOSC was
developed to measure non-cognitive factors associated with self-esteem or self-concept in an educational setting.

The second instrument was the Oddi Continuing Learning Inventory. It was
developed and tested by Lorys Oddi (1984). The OCLI is the newest measure
to identify self-directed continuing learners.

The participants included in this study were 106 women community college
students who were selected from various psychology courses. An explanatory
cover letter was distributed and read. Those that chose to be involved in this
study then received the demographic sheet and instruments. To gain qualitative
information, some demographic sheets contained questions that pertained to
individual experiences that may have encouraged or discouraged self-
directedness along with characteristics the participants felt were pertinent to
enhancing self-directedness. These particular demographic sheets were
distributed to every tenth participant. Participants were also informed of the
date the study results would be available to them and results will be mailed to
those participants requesting them.

Summary of Findings

As individual factors, the DOSC scales of Anxiety, Academic Interest &
Satisfaction and Leadership & Initiative all had significant correlations with self-
directedness.

The correlation coefficient of determination (r²) for anxiety was -.273 which
indicates that 27% of the variance of self-directedness levels can be predicted
by anxiety levels. The r² for leadership & initiative was .268, indicating that 27%
of the variance in self-directedness may be predicted by the level of leadership and initiative shown by individuals. Academic interest & satisfaction indicated an $r^2$ of .195, which suggests that 20% of self-directedness may be predicted by the level of academic interest and satisfaction of an individual. The amount of total variance shared by the three dimensions of self-concept that proved to be statistically significant was 42.7, indicating that 43% of the variance in self-directedness may be predicted by levels of anxiety, leadership & initiative, and academic interest & satisfaction. The total amount of variance shared by all five of the dimensions of self-concept was 42.8, indicating that 43% in self-directedness may be predicted by all the dimensions.

Traditional and non-traditional students differed in terms of self-directedness with non-traditional students being more self-directed; however, traditional and non-traditional students were similar in terms of self-concept.

Evidence was provided to suggest an significant association between educational aspiration and academic interest and satisfaction. However, there was no indication of any significant relationship between educational aspirations and level of aspiration, anxiety, leadership and initiative, or identification vs. alienation. Educational aspirations did not appear to have any significant relationship to self-directedness in this sample.
Discussion

The following are major conclusions drawn from the findings of the study. They are limited to the sample studied; however, the reader may be able to draw some generalizations applicable to other community college populations which may assist in creating a more responsive learning environment for women. Based on the literature review, this study was initiated to assess the relationship between self-concept and self-directedness in community college women.

It can be concluded from this study that there are relationships between particular dimensions of the self-concept of adult, women students and their self-directedness in learning. The results demonstrate that there are three factors of the DOSC instrument, anxiety, leadership & initiative, and academic interest & satisfaction, which correlate with self-directedness. Adults who gain the ability to direct and organize their own lives and learning tend to consider themselves more as worthy persons in every aspect of life. Malcom Knowles (1975) has suggested that when students are self-directed, they gain knowledge more easily and retain it for a longer period of time.

The particular scales of the DOSC that predicted best have to do with perceptions of emotional stability, opportunities for becoming expert, and the sheer love of learning, and these are worth further comment. Specifically, factors of anxiety, leadership & initiative, and academic interest satisfaction, are associated with self-directedness. Further analysis indicated that the proportion of variance, 43%, is more than would be expected by chance alone. Although the statistically significant linear correlations were not extremely
strong, the practical significance should be kept in mind. Even though the
relationship is not extremely strong, the students impacted are well worth
assisting. It should also be emphasized that other predictors of self-directedness
should be explored.

Many researchers believe that a modest amount of anxiety is facilitative to
the learning process but that a substantial amount or a complete lack of anxiety
is likely to be associated with diminished performance (Morris, 1993). Mention
should be made of the fact that in recent years measures of anxiety have been
receiving much attention by specialists in learning, most of whom agree that
anxiety, or more accurately the lack of anxiety, is related to the degree of
success in academic performance (Michael, et al., 1989). The negative
correlations indicate that as anxiety goes down, self-directedness goes up.
Lowered anxiety levels may suggest higher levels of self-concept. This study
also indicated that those whose educational aspirations were associate degrees
had much higher anxiety scores than other categories. This may suggest that
returning to college or beginning college is very anxiety-producing and for
educators to be particularly aware of techniques to help lessen anxiety.

There also appears to be a difference in the ability levels of older and
younger adult students to direct their own learning. Non-traditional women are
more self-directed than traditional women students. This conclusion agrees with
much of the research that supports the theory that self-directedness may
increase with age. Older adults can be more easily involved in self-directed
learning activities and may be more capable of organizing and directing their
learning experiences without continuously referring to others. On the other
hand, younger adults may be less able to plan and direct their learning activities
by themselves and may look to others for help and direction. This finding maybe less of a reflection on motivation and more of a reflection of cohort differences in educational access for women. Educational access may be better for the generation of young women who are currently seeking higher education. It also seems possible that only the most self-directed learners may make commitments of time and energy that are involved in transitioning to higher education environments while simultaneously balancing other life responsibilities (e.g. family; work).

Non-traditional and traditional women students appear to have approximately the same level of self-concepts. The five factors of self-concept measured by the DOSC indicated no measurable differences between the two groups.

While there is a significant amount of research that indicates self-concept is positively associated with educational aspirations in community college students, the only factor of self-concept that indicated any significant relationship to educational aspirations in this study was academic interest and satisfaction. The dimension, academic interest and satisfaction, portrays the sheer love of learning and pleasure gained by individuals in doing academic work and in studying new subject matter. Such satisfaction might be expected to lead to greater self-confidence and motivate students to exercise initiative and attempt leadership responsibilities. Eighty out of 106 respondents scored average or higher on the academic interest & satisfaction portion of the DOSC instrument. Although, the relationship is low in statistical significance, the practical significance may be of more value. Because there is a high percentage of first year college students who never receive their degree, it seems educators need to be aware of how to instill a love of learning within
students. Not only might that encourage students to attend and participate in class more often and fully; it may also motivate them to complete degrees. In other words, if the love of learning truly can be instilled in students, maybe students will remain more engaged in their educational experience.

In this sample, there was no indication of any significant relationship between educational aspiration and self-directedness; however, only a few individuals indicated post-bachelors aspirations, so this may not be an optimal assessment.

The goal of this research project was to gain more information about women who attend community colleges by investigating relationships between self-directedness and self-concept; any relationships between age and self-directedness and self-concept; and possible relationships between educational aspirations and self-directedness and self-concept. In doing so, it is important to be aware of other important findings that resulted from the percentages of women who fell into the low categories in each of the four factors on the Dimensions of Self-Concept instrument, as well as those who scored in the high level on the Anxiety factor. While the percentages were not overwhelming, each of the factors, with the exception of Identification vs. Alienation, reported several students scoring in category levels that warrant concern. Because self-concept is associated with self-directedness, activities that may be useful in raising student self-concept in specific factor categories will be discussed in the implications section.
Implications

The purpose of this study was to gain more information concerning women, particularly community college women. The positive relationship of adult women's self-directedness and their self-concept suggests the increased responsibility educators must assume in assisting students in areas of personal growth. In many educational environments, a greater emphasis is on the cognitive domain; however in assisting individuals regarding feelings and self-understanding, it may be prudent to place emphasis on the affective domain as well. According to this study, it is important to instill a love of learning in our students, allowing ample opportunities for leadership activities, as well as being aware of what manageable anxiety levels may be.

As this study, and previous studies have indicated, many adult students are self-directed in learning. Unfortunately, methodologically in many courses, much emphasis is still on lectures and teacher-directed methods. Thus, being aware of the self-directed phenomenon may mean that teaching methods that optimize learner involvement are more attuned to how adults learn more effectively. Furthermore, if self-directedness and self-concept are associated, as is indicated by this study and others, then it may be facilitative to include more affective-related components into the classroom.

These results are very important to anyone who works with adults, particularly adult women. Being more attentive to the psychological characteristics of adults helps them to grow. Encouraging self-directedness, in turn, may assist adults to be more productive citizens and to be more satisfied
with their lives. Individuals with higher self-concepts are more independent, less anxious, more creative, and have a higher interest in lifelong learning.

The OCLI and the DOSC are valid instruments that can be useful for adult educators. These instruments are easily administered and interpreted; thus facilitating their usefulness in understanding more of the affective characteristics of students and being able to intervene, if necessary, to enhance total learning experiences.

This research will add to the very limited body of knowledge concerning and applying to community college women. The results of this research indicate that the majority of these women have a positive self-concept, at least in the five dimensions explored. Overall, the lowest percentage (66%) was reported in the Leadership and Initiative category, so activities that encourage this dimension may be important. Of specific interest was the overall score in the Identification vs. Alienation category. The score of 99% suggests the women in this study strongly identify and feel accepted in this particular learning environment. Feelings of acceptance and regard by educators and peers as a significant person who is respected for their own personal worth and integrity as a human being would seem to contribute to an enhanced level of self-concept.

Although the majority of individuals reported higher levels of self-concept when compared to the norming tables in the testing manual, it is as important to recognize those who fell into the lower category of the five factors of the DOSC (See Tables 4 through 8). There are specific activities that educators can exert in assisting individuals to enhance their self-concepts.

Change is a continuous phenomenon in every society. Lifelong learning is needed to assist people to adapt to change. As lifelong learning opportunities
continue to expand, it is important to recognize the characteristics of adult
learners and to effectively meet the challenges these characteristics may
present.

Below are suggestions for ways of possibly improving certain dimensions of
self-concept, as indicated by the DOSC, in terms of specific activities that may
be initiated in an educational setting. While this particular study determined that
the specific dimensions of anxiety, leadership & initiative, and academic interest
& satisfaction were better predictors of self-directedness than identification &
alienation and level of aspiration, it seems important to include suggestions for
improving all five dimensions of self-concept (Michael, et. al., 1989). Concrete
suggestions are made below regarding what educators may do to assist in the
improvement of self-concept. Flexibility in use of any suggestion is important.

**Level of Aspiration** -- In the event that an individual scores in the bottom third of
a distribution of norm group scores, certain steps may need to be taken. A few
possible actions may include:

1. **Explore with the individual any previous academic difficulty or
   psychological dissatisfactions generated in previous courses.**

2. **Reinforce with positive comments**
3. Capitalize on manifestations of creative behavior or ingenuity in problem solving with encouragement of those patterns showing interest in class activities.

4. Explore alternative assignments and encourage student to select an area in which he/she shows an interest.

5. Avoid sarcasm

6. Show genuine interest by giving individual a few extra minutes of personal attention.

Anxiety -- Educators should probably pay attention to individuals who score in the top third of the distribution in the anxiety level of the instrument. In instances where anxiety is problematic, the educator can initiate some of the following steps:

1. Endeavor to improve communications with individuals and permit an accurate reassessment of expectations.

2. Provide individuals who are desirous for self-understanding pamphlets about mental health and use of defense mechanisms from which they may gain considerable personal insight regarding the dynamics of behavior.
3. Indicate expectations of performance levels so that anxious individuals may feel somewhat assured.

4. Assist individuals in identifying sources of anxiety, modify the immediate learning environment to minimize feelings of anxiety.

5. Use alternative assignments as a way to regain lost points if they have "blown" a prior exam.

6. Counting only the best 8 out of 10 exam scores is another alternative to minimize anxiety and maximize motivation.

At times, the failure syndrome underlying individual anxiety constitutes a major block to changing the self-concept. An educator who is confronted with an individual without insight of the dynamics underlying the problem, may have to encourage that individual to seek professional mental health assistance.

**Academic Interest & Satisfaction** -- Many of the suggestions listed under Level of Aspiration can also apply to individuals who exhibit a lowered level of academic interest & satisfaction. In addition, some of the following recommendations may be helpful:

1. Minimize pointless "busy-work" and repetitive activity (diminished returns in learning are achieved from frequent repetitive tasks).
2. Encourage creative or divergent approaches to problem-solving activities and assignments.

3. Carry out evaluative experiences that have relevance and correspond to individualized objectives.

4. Encourage individuals to select projects of interest to them, but at the same time setting realistic expectations that are clearly understood.

5. Allow students to work at their own (accelerated) pace on instructional packages in lieu of conventional assignments.

6. Allow students to submit test questions for exam use, when possible.

7. Encourage individual participation in decision-making activities of particular concern to them.

The above recommendations do not need to lead to an abrogation of the responsibility of educators. Developing a flexible framework, in consultation with the individual, is an emotionally satisfying, democratic activity from which everyone can benefit.

Leadership and Initiative -- Individuals placing in the lower third of the scoring norms can likely be assisted in several ways. In addition to some of the
suggestions that have been made in relation to the prior factors, the following ideas might be entertained:

1. Find individual activities in which they might excel and demonstrate their competence to others.

2. Arrange group activities so individuals have specific group-chosen responsibilities for which they have a high potential for success.

3. Encourage peer tutoring

4. Set up academic contests, games, or puzzles for which an individual has the potential of being a star in the team effort.

Popularity is closely related to leadership in that gifted students and many slower-learning students are not too popular with others. Educators may be limited in what they can do to facilitate popularity, except to the extent that they can manipulate the social environment to allow the individual with a relatively low perception of his/her popularity to work with more out-going well adjusted individuals who tend to be more positive and supportive of others rather than critical and hostile. Several of the previous suggestions may be useful in enhancing popularity of individuals.

Identification vs. Alienation -- Many sources can be traced to feelings of alienation someone may possess. Both superior students and less able
students could become alienated in terms of the presence of unfavorable factors that have been previously mentioned in relation to the other four dimensions of the scales. In addition to the previous recommendations, the following suggestions may be helpful:

1. Approach alienated students in an open and warm manner to discuss mutual problems of concern. Listen and be attentive in a constructive way while the individual goes through a therapeutic process of unloading his/her troubles.

2. Invite individuals to make suggestions regarding what strategies they would like to follow in meeting mutually agreed upon objectives.

3. Identify and engage individual in some form of constructive activity in which he/she has the opportunity to demonstrate competence and receive positive recognition.

4. Sustained personal interest in alienated individuals can be expected to strengthen self-concept.

5. Make special efforts to show how knowledge can be applied to future occupational endeavors as a method of eliciting greater interest on the part of an individual.
As a result of the findings of this study, the following recommendations are made:

1. Additional research should be conducted on the relationship of women's self-directedness and self-concept in other academic environments. Four year colleges and Universities should be researched to allow for a greater pool of information concerning women.

2. Similar research should be conducted using different variables such as family background and learning styles.

3. A qualitative study should be conducted to gain a more in depth understanding of the contexts of women's lives that may contribute to self-directedness and self-concept.

4. Research is needed to examine the academic success of highly self-directed adults compared to lower self-directed adults.

5. A similar research study should be done as a longitudinal study to identify the degree and direction of change in self-directedness.
References


Carlow, C. D. (1967). A study of variables within the method of individually
guided discovery in secondary school mathematics. Unpublished doctoral
dissertation, Syracuse University.

Chene, A. (1983). The concept of autonomy in adult education; A philosophical

Smith (Ed.), Helping adults learn how to learn, San Francisco: Jossey-Bass.

Bass.

University of California Press.

Fraser (Eds.), Individualized instruction: A book of readings. Columbus, Ohio:
Merrill.


Research, 3, 694-696.


Cook-Freeman, B. (1980). Women against women: The rise of antifeminism.
Paper presented at the annual meeting of the American Political Science Association,
Washington, DC.

Cronbach, L. J. (1967). The logic of experiments on discovery. In L.S. Shulman
and E.R. Keisler (Eds.), Learning by discovery: A critical appraisal. Skokie, IL:
Rand McNally.

R.H. Dave (Ed.), Foundations of lifelong learning (pp. 186-234). Oxford,
England: Pergamon Press.

and their implications for teaching. Lifelong Learning: An Omnibus of Practice
and Research, 10 (7), 4-7.


APPENDIXES
APPENDIX A: DEMOGRAPHIC DATA SHEET
Demographic Information Sheet

Age: __________

Ethnic Group: (circle one)

Asian/Pacific Islander
American Indian/Alaskan Native
Black Non-Hispanic
Hispanic
White Non-Hispanic
Other American Minority__________________________

Educational Aspirations: (Circle one)

No degree
Associate degree
Bachelor's degree
Master's degree
Doctorate
APPENDIX B: STATEMENT OF REQUEST TO SUBJECTS
September 5, 1994

Dear Student:

I am conducting a survey of community college students in order to gather data on their experiences relating to self-directedness and self-concept.

You have been included in this survey. Your participation is voluntary and you may withdraw at any time. You may be assured that your responses will remain completely confidential. Your name will never be placed on any of the instruments. The procedure outlined below describes what the study will require of you, if you decide to participate.

You will be asked to complete a demographic questionnaire, an Oddi Continuing Learning Inventory (OCLI), and a Dimension of Self-Concept (DOSC) Instrument. Responding should take less than 30 minutes of your time, but it will be critical to the success of the study. There will be no names, social security numbers, or other identification used to single out or reveal the identity of the respondents. If you are interested in receiving a summary of the results, please write your name (optional) and permanent address on the return postcard and return to me at your convenience. At the conclusion of the study, prior to December 1996, I will mail copies of the results to those interested.

If you have any questions about this dissertation study, please ask or call at a later date if questions or concerns arise. Your cooperation is greatly appreciated.

Sincerely,

DONNA ADKINS
APPENDIX C: QUALITATIVE INFORMATION QUESTIONNAIRE
1. Could you explain your definition of what it means to be self-directed?

2. Do you see yourself as being self-directed?

   On a scale of 1-10 where would you place yourself?

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?

   What experiences may have discouraged self-directedness?

4. What are particular personality characteristics that you feel are necessary for being self-directed?
APPENDIX D:
To be completed by the Investigator:

Date Submitted: September 1994

Proposal Title: Interaction aspects of self-concept that are associated with self-esteem

Investigator: [Signature]

Faculty research advisor: (for student research): Dr. [Signature]

Return to: 

[Signature]

1316 47th St

Street Address of Campus Office

Des Moines, IA 50311

City, State, Zip (if off campus)

To be completed by the Human Subjects Research Review Committee Member:

Date received: 11-1-94

Decision:

[Signature]

Approval, no risk

[Signature]

Approval, minimum risk

[Signature]

Approval, subjects at risk, but benefits outweigh risks

[Signature]

No approval. Subjects at risk or proposal does not adequately address risks, benefits or procedures.

Reasons for Disapproval:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Suggested Changes:

________________________________________________________________________

________________________________________________________________________

Reviewer: [Signature]

Date: 11-1-94
APPENDIX D: PARTIAL CORRELATION STATISTIC
Partial Correlation: Definitions, Calculation Formula, and Tests of Significance

Definitions and Calculation Formula

Let three variables of interest be denoted \(X_1\), \(X_2\), and \(X_3\). Suppose one is primarily interested in the first two of these, while the third is a demographic or other variable that may be related to either or both of the first two. The Pearson correlation coefficient for the correlation between \(X_1\) and \(X_2\) is denoted \(r_{12}\). Some of this correlation may be due to the correlation of either \(X_1\) or \(X_2\) with \(X_3\). It is desired to assess the degree to which this is true. The partial correlation coefficient is a statistic that can be used to conduct this assessment.

The partial correlation between \(X_1\) and \(X_2\) after removing the effect of \(X_3\), denoted \(r_{123}\), is the correlation between the residuals of \(X_1\) and \(X_2\) after removing the linear effect of \(X_3\) from each. In words, it is the correlation between what remains of \(X_1\) and \(X_2\) after eliminating the variability in each due to the third variable \(X_3\). The process is sometimes referred to as “partialling out” the third variable \(X_3\). The process is sometimes referred to as “partialling out” the third variable \(X_3\). The calculation formula for \(r_{123}\) in terms of the simple or “zero-order” correlations follows.

\[
(1) \quad r_{123} = \frac{r_{12} - r_{13}r_{23}}{\sqrt{1 - (r_{13})^2} \sqrt{1 - (r_{23})^2}}
\]

The squared partial correlation, \((r_{123})^2\), represents what \(X_3\) adds to the explanation of the variability in \(X_1\) (over and above what \(X_3\) provides) as a fraction of the variability in \(X_1\) that is unexplained by \(X_3\). (Professor Richard Warren, Lecture Notes in Applied Regression, Iowa State University, 1967).

The above definition and formula may be readily extended to partial correlations between two variables where one removes the effects of more than one variable. (Ferguson, 1971, pp. 390-392.)

Tests of Significance

The test of the statistical significance of \(r_{123}\) may be accomplished by a t-test. The following statistic

\[
(2) \quad t = \frac{r_{123}}{\sqrt{(1-r_{123})^2/(N-3)}}
\]

has a Student’s t distribution with \(N - 3\) degrees of freedom.

The above formula may be readily extended to test the statistical significance of a partial correlation between two variables removing the effects of two or more other variables. The only difference is the denominator of the denominator of the above formula, which becomes \(N - (k + 2)\), where “\(k\)” denotes the number of variables one “partials out.”
References


APPENDIX F: INDIVIDUAL QUALITATIVE ASSESSMENTS
1. Could you talk to me about your definition of what it means to be self-directed?

To me, self-directed would be to set goals according to what you feel is best for you, to plan how to achieve those goals, and then to act on that plan. You would use others for help along the way, but primary motivation would come from yourself.

2. Do you see yourself as being self-directed? Yes

On a scale of 1-10 where would you place yourself? 9

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?

a. The chance to experience success and competency in confidence in myself.

b. The chance to make progressively more decisions in my life.

Discouraged self-directedness?

1. Over bearing boss or supervisor

2. When my confidence was shaken for a while, like after a failure (usually temporal)

4. What are particular personality characteristics that you feel are necessary for being self-directed?

1. Assertive

2. Self-Confidence

3. Willing to take risk
1. Could you explain your definition of what it means to be self-directed?
   Motivated based on my choices of what I would like to do.

2. Do you see yourself as being self-directed?  **Now, yes**
   On a scale of 1-10 where would you place yourself?
   8

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?
   Having children and realizing that unless I'm happy, they won't be happy, and having worked at a career for 19 years that made me less than happy.

   Discouraged self-directedness?
   - Fear of failure
   - Fear of changing paths, causing more time and $ wanting to make my parents happy

4. What are particular personality characteristics that you feel are necessary for being self-directed?
   - Assertiveness
   - Self-confidence
1. Could you talk to me about your definition of what it means to be self-directed? To know what you want the outcome of your actions to be, and to know you are the sole person responsible for reaching that end result. Taking the necessary steps to make something happen.

2. Do you see yourself as being self-directed? Yes.
On a scale of 1-10 where would you place yourself? 8½

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?
I've been in college, the military, married, but I think that being a mother did it for me. When I realized that it was just me and my kids, it clicked, what direction and what action I needed to follow.

Discouraged self-directedness? The military was a disappointment for me. The system didn't allow me to be the person that took the initiative and make things happen. They were into the hierarchy and I was an adult when I went in.

4. What are particular personality characteristics that you feel are necessary for being self-directed? I've learned to function with a lot outside approval. I make my decisions and try very hard to stick by them and for the other hand try and admit to myself when I've made the wrong choice.

5. Are there other things we haven't touched on that you feel might encourage you or someone else to be more self-directed? You don't always look outside one's self for assistance. If you just get quite and listen the answer is already there waiting for you.
1. Could you talk to me about your definition of what it means to be self-directed?

To make a decision to better yourself and for personal reasons rather than make someone else's decisions.

2. Do you see yourself as being self-directed? Yes, your own.

On a scale of 1-10 where would you place yourself? 8

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?

Going to college. In class, no one can earn the grade but yourself. In a social atmosphere you are the one who decides whether to drink or do drugs, or have casual sexual relationships. Discouraged self-directedness?

My parents have their own idea about my future. I had to fight to go to the school I wanted. The major I want...

4. What are particular personality characteristics that you feel are necessary for being self-directed?

Independence
Security
Friendly
HAPPY
1. Could you talk to me about your definition of what it means to be self-directed?

2. Do you see yourself as being self-directed? On a scale of 1-10 where would you place yourself?

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed? Discouraged self-directedness?

4. What are particular personality characteristics that you feel are necessary for being self-directed?

5. Are there other things we haven't touched on that you feel might encourage you or someone else to be more self-directed?
1. Could you explain your definition of what it means to be self-directed? I'm not sure what type of answer you're looking for. But the best answer I can give is: I think of being self-directed as finding yourself and your goals on your own. No one pushing you to be someone or something you aren't.

2. Do you see yourself as being self-directed? Yes, in some aspects. On a scale of 1-10 where would you place yourself?

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?

   I guess moving to a new place has caused me to be self-directed in some ways. I found that people here do things basically the same way the next person does them. I've never been discouraged self-directedness. Sometimes I believe wanting to pick another place has drawn me away from being self-directed.

4. What are particular personality characteristics that you feel are necessary for being self-directed?

   I believe you need to be strong-willed, outgoing and you try not worry about what anyone else thinks of you.
1. Could you talk to me about your definition of what it means to be self-directed?

2. Do you see yourself as being self-directed? Yes
On a scale of 1-10 where would you place yourself? 7

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?
Achieving good grades and doing well in every course I take.

Discouraged self-directedness?
Unable to understand new information

4. What are particular personality characteristics that you feel are necessary for being self-directed?
Responsible, energetic, reliable
1. Could you explain your definition of what it means to be self-directed?
   Self-directed to me means knowing what you want to do, knowing how to deal with everyday occurrences on your own, and being able to do things you didn't know you could according to the limits of your ability.

2. Do you see yourself as being self-directed?
   Sometimes
   On a scale of 1-10 where would you place yourself?
   7

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?
   I'm just a very independent person who tries to do things on my own. Being from a divorced family has made me strong and determined.

   Discouraged self-directedness?
   Feeling like I'm not strong enough or not enough at times.

4. What are particular personality characteristics that you feel are necessary for being self-directed?
   Independence
   Opinionated / but not so much that others can't express their opinion
   Determined
1. Could you talk to me about your definition of what it means to be self-directed?
   
   Self directed means I know myself, my needs and desires, and have the ability to make positive forward moves.

2. Do you see yourself as being self-directed? No
   
   On a scale of 1-10 where would you place yourself? 5

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?
   
   The need to become self-directed in order to support myself now that I am on my own has been a major motivation.

   Discouraged self-directedness?
   
   My own negative thoughts hold me back.

4. What are particular personality characteristics that you feel are necessary for being self-directed?
   
1. Could you explain your definition of what it means to be self-directed?

To have a good plan for the future, making sure you get goals and work towards them.

2. Do you see yourself as being self-directed?

No

On a scale of 1-10 where would you place yourself?

5

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed?

High school activities

Discouraged self-directedness?

I hate doing school work. I always just did enough to get by.

4. What are particular personality characteristics that you feel are necessary for being self-directed?

Self-power. You have to push yourself all the time.
1. Could you explain your definition of what it means to be self-directed? Want out of life to know what you want. To not let other influence your decisions.

2. Do you see yourself as being self-directed? J8 On a scale of 1-10 where would you place yourself? 4

3. What experiences have you had in school or elsewhere that may have encouraged you to become self-directed? In college I have become more self-directed. Because I have more self-confidence therefore I make more of my own decisions. Discouraged self-directedness? Failures.

4. What are particular personality characteristics that you feel are necessary for being self-directed? Assertiveness Self-confidence hard-driven motivated