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ABSTRACT

         This study focused on the adjustments nontraditional female
students who return to college must make in order to complete their studies.
The study examined the influence of a 3-hour orientation program for such
students to see of the seminar would increase the coping skills and decrease
the anxiety levels of nontraditional female students, most of whom had been
away from academic settings for some time. Eleven female nontraditional
students were asked to participate in the orientation class. Control groups
were 22 participants with no orientation seminar and 25 students who had been
enrolled in a 10-week orientation seminar offered the prior year.
Participants completed a measure of state-trait anxiety and a coping
resources inventory. Participants in the three groups did not show
significant differences in coping skills, and state anxiety levels did not
differ significantly. Results do suggest that the anxiety-reducing skills
taught in the two seminars did help participants deal better with long term
stress than those who received no orientation. Five appendixes contain forms
used in the study and supplemental information. (Contains 9 tables and 91
references.) (SLD)

A Dissertation

entitled

THE EFFECTS OF AN ORIENTATION SEMINAR

ON NON-TRADITIONAL FEMALE STUDENTS

INITIATING COLLEGE STUDIES

by

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as partial fulfillment of the requirements of

the Doctor of Philosophy Degree in

Guidance and Counselor Education

Adviser   Martin Ritchie, Ed.D

Graduate School

The University of Toledo

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To my husband, Howard,
and my children,
Kim and Kara:
Your unconditional love
and support made this
accomplishment possible.
To Mimi and Father who
never tired of saying how
proud they were.

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To all my colleagues and friends at the College for
their continuous encouragement and suffering through
the "good and bad" times with me.

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CHAPTER ONE

INTRODUCTION

Statement of the Problem

The developmental importance of coping skills, stress, and social support associated with starting and finishing college studies has been examined from a wide variety of perspectives (Dohrenwend & Dohrenwend, 1974; Holmes & Rahe, 1967; Kasl, 1987; Selye, 1976).

This study focused on the adjustments non-traditional female students who return to a college or university setting must make in order to complete their studies. Research indicates that first-year traditional undergraduate students (18-23 years old) who took an orientation course were able to better adapt to the university setting and had higher success and retention rates than students who choose not to enroll in the orientation course (Gordon & Grites, 1984).

In order to facilitate undergraduate student integration into the university setting and augment retention rates, today almost 48 percent of all institutions of higher learning in the United States offer an introductory course on how to cope with the requirements of

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university study (Polson & Erickson, (1988). Retention rates increased as a result of these courses, indicating that students learn better coping skills, experience less course related stress, and create a better support system within the institution by taking the course, which translates into long-term college adjustment and a high level of commitment to their studies (Gordon & Grites, 1984). Research indicates that traditional students who are required to take a freshmen seminar have higher retention rates (Pascarelli & Chapman, 1983). Similar orientation seminars are not generally offered or required for non-traditional students who appear to be better prepared to handle college work because of life experience.

Apps (1987) predicts that by 1992, 49 percent of all college students will be 25 years old or older and that 47.9 percent of these older students will be attending school part-time. In addition, by the year 2000, 75 percent of all employed American workers will need to be re-trained. Adults will be faced with transitions which will require different services and schedules than those previously offered to traditional students.

A survey of institutions of higher learning in the United States by Polson and Erickson (1988) found that most universities and colleges do not provide counseling services for non-traditional students. Academic advisors usually were not available during evening hours or weekends, and

child care was not provided by the university. Ironside and Carley (1986) reported that non-traditional students received most of their emotional support from campus associations of older students, provided these organizations were available.

Student self-help relationships and their relevance to psychological and physical well being have also been the focus of many studies examining stress. The literature emphasizes the role of social support in alleviating the negative effects of stress. Social support systems include friends, spouses, and relationships in the community. Haan (1982), Lieberman (1982), and Will and Langer (1980) are among those who suggest that people who have good social support systems are more capable of adapting to stressful events. Included in this population would be non-traditional female students.

The returning non-traditional female student has most likely been out of any academic environment for years, while raising a family, being employed, and pursuing other interests. She will have most likely forgotten how to adapt to an academic setting and learn about the various resources available on campus as well as to learn new study skills. Fulfilling the roles of mother, wife, employee, and student creates stress and requires support from within the university as well as from peers and family (Egan, 1989; Girves & Wemmerus, 1988; Golden & Wiersma, 1978; Kahnweiler &

Johnson, 1980; Kaplan, 1982; Levinson, Darrow, Klein, Levinson & McKee, 1978; Sheehy, 1977; Stein & Weidman, 1989).

Purpose of the Study

This study examined the influence of a three-hour orientation program presented to non-traditional female students who are taking classes at a Community and Technical College at a University in northwest Ohio. A non-traditional student is defined as a female over 25 years of age with less than 30 hours in college classes completed. The experimental group were volunteers recruited for a three-hour orientation seminar. The control groups consisted of students who identified themselves on the demographic sheet as having taken the University's ten-week orientation seminar in the past year and those participants who had never been enrolled in an orientation seminar. The control group participants were students in two introductory biology classes.

The purpose of the study was to find out if a three-hour orientation seminar would increase coping skills and lower anxiety levels of non-traditional students and find out if a small group setting would establish a support system among peers. As the literature indicates, a social support system among peers on campus is conducive to successful learning and graduation. The orientation included a presentation by the University Counseling Center

which gave an overview of resources available to assist the
non-traditional female student to succeed in college.
Forty-seven students in two sections of the introduction to
biology classes were asked to fill out Spielberger's "State
Trait Anxiety Inventory (form Y, 1983) and Hammer and
Marting's "Coping Resources Inventory" (1985) during the
first week and last week of classes (pre-test, post-test).

Eleven non-traditional female students from the
Introduction to Social Services, and Introduction to
Business Management classes were solicited and asked to
participate in the three-hour orientation which was held in
the first week of classes. This was the experimental Group
3. The two control groups were comprised of 22 participants
who had no orientation seminar (Group 2) and 25 participants
who had been enrolled in a ten-week orientation seminar
offered by the college during the previous year (Group 3).

The mean age of participants in the three-hour
orientation Group 1 was 37 years old; the mean age of Group
2 (no orientation) was 34.7 years old; the mean age of
Group 3, who had the ten-week orientation, was 31.4 years
old.

A series of one-way ANOVA's were utilized for all
statistical analysis in this study. The collected data were
analyzed using the Statistical Package for Social Sciences
(SPSS-X).

A comparison of the results of the groups was used to

determine whether an orientation seminar lowered anxiety
levels and raised coping skills and to better determine
whether the exposed students felt they had a better support
system among themselves and at the institution. As a result
of this study a formal orientation seminar might be
considered as an integral part of the admissions
requirements for non-traditional students.

A limitation to the study is that retention rates will
not be available on this student population because the ten-
week fall quarter that this study took place in may not be
sufficient to obtain useful retention data.

Need for the study

Many transitions are required for women to become
successful university students. The transitions may include
financial status, daily routines, social interactions,
anxiety over achievement, and stress about family life.
These transitions may create stress which could lead to
physical or psychological disorders. Non-traditional female
students may be exposed to a set of life changes which may
produce stress and which may lead to illness or dysfunction.
Goplerud (1980) states that "given the substantial empirical
support for links between major life changes and a long list
of health and emotional disorders, it is not surprising that
entrance to college may mark the beginning of a period of
high risk for physical and psychological problems among
first year students" (p.283). Goodman, Sewell and Jampoll

(1984) cite clinical information of university students which indicate that psychological stress inhibits learning and that this stress may require counseling.

The relationships between life events, stress, coping skills, and social support for non-traditional female students is worthy of inquiry. The results of the study will help identify resources to assist the female student in adapting to her new environment by providing a support system within the university which may alleviate anxiety and stress which in turn, may increase retention rates. Literature on non-traditional female student retention and attrition is scarce. This study may initiate a system of tracking these students from the point of entry to graduation at an institution.

Research Questions

This study examined several questions involving changes in lifestyles for the entering freshmen female students. The research questions asked in this study were:

1. Will coping resources and strategies increase as a result of an orientation for non-traditional female students?

2. Will an orientation reduce anxiety levels in non-traditional female students?

3. Will non-traditional female students meet more often socially with their classmates as a result of the seminar?

4. Will non-traditional female students in the three-hour

orientation seminar engage in more out-of-classroom research with each other than with the control groups?

5. Will students in the three-hour orientation use the Counseling Center as frequently, as the students in the control groups?

Null Hypotheses

The following null hypotheses were tested in this study:

1. Ho: There will be no difference in coping skills between participants in the orientation seminar and the control groups.

2. Ho: There will be no difference in anxiety levels between the orientation group and the control groups.

3. The non-traditional female students in the experimental group will engage in the same amount of socialization as the control groups.

4. Ho: The non-traditional female students in the experimental group will engage in the same amount of out of classroom research as the non-traditional female students in the control groups.

5. Ho: The experimental group participants will use the Counseling Services as often as the control group participants.

Justification for the Study

The link between life events, stress, coping skills, and social support is acknowledged by research, as is the

fact that initiating college studies can expose an
individual to stressful events and activities. Lowered
anxiety levels of non-traditional female students may
prevent adverse consequences if an orientation about
available resources is offered to incoming students.
Subsequent steps can be taken to increase support systems
within the institution. With this data we may be able to
establish a research foundation for future tracking and
retention research on non-traditional female students.

Definition of Terms

The following terms are used in this study. The
definitions which follow the terms give the intended
meanings of the words as used in this study.

1. mid-life: past child-bearing age.

2. mentor: a professional who takes special interest in a
younger person who studies in the same field.

3. social support: someone giving emotional support,
providing tangible help, and giving information on how to
cope. Person has a sense of belonging to a reciprocal
network of shared obligations (Elliot & Eisendorfer (1982).

Organization of the Thesis

The purpose of the study was briefly introduced in
Chapter I. Relevant literature is reviewed in Chapter II
and methodology and design is explained in Chapter III.
The results of the quantitative data and a narration of the
ancilliary questions are presented in Chapter IV. In

Chapter V research findings, conclusions and implications
for further research will be discussed.

CHAPTER 2

REVIEW OF THE LITERATURE

Review Methodology

This chapter will review the literature
concerning the main topics of this study. Theoretical
literature on the developmental profile of women is reviewed
first. Literature on informal and formal contacts with
faculty in relation to academic and social integration is
reviewed. Next, literature on peer support and the role of
a mentoring relationship is examined. Recommendations made
by the "Project on the Status of Women" (1980) will also be
discussed. Ideas regarding possible areas of future
research will conclude the chapter.

This study focuses on non-traditional female students
entering college. A study by Epstein (1986) indicates that
the majority of all American college students are women.
Polson and Erikson (1988) and Roehl and Okun (1984) found
that adult women have a greater need for university services
and social support than their male counterparts. In spite of
their greater needs and numbers, however, research on female
non-traditional students is surprisingly scarce.

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The two issues that will be examined in this study are how stress and university orientation programs shape the experience of the female student, and whether the latter can be used to reduce the former.

A variety of indexing publications, including Dissertation Abstracts International, Psychological Abstracts, Social Abstracts, ERIC on CD-ROM, and the card catalog, were used to find literature on topics related to the study.

In Search of a Developmental Profile

It is first necessary to examine the existing research in an attempt to create a developmental profile of non-traditional female students. A study by Kahnweiler and Johnson (1980) examines the developmental profile of the middle-aged female student in the university setting. The developmental concerns include feelings, attitudes, and issues that characterize a particular stage or period of life. The transition of returning to school may trigger many feelings. In their study, Kahnweiler et al. (1980) found that when women return to school, many tend to: (a) reappraise the past, (b) modify their life structure, and (c) continue the individuation process.

These three concepts were integrated with other developmental models by Gould (1972), Lowenthal, Chiriboga and Thurnher (1975) and Wiersma (1978), who describe seven feelings that the student may experience:

(1) The student has introspective concerns, in which she examines her emotional state and mental state and processes, according to Gould (1972) and Neugarten (1968).

(2) She has physical development and appearance concerns, such as the desire to retain youthful attractiveness, which according to Levinson, (1978), Lowenthal et al. (1975), Murphy, (1976), Neugarten, (1968) and Troll, (1975), may be associated with menopause (Neugarten, 1968).

(3) Another feeling the student often experiences is a preoccupation with time limitations. She may become more aware of her own mortality, and wonder how long she will live. These feelings may promote an active time to achieve goals, according Murphy, (1978) and Neugarten, (1968).

(4) Sadness and confusion, combined with a sense of freedom, is associated with the changing role of mother for the student, as reported by Bart, (1971) and Golden and Wiersma, (1978) and Likert, (1967) and Lowenthal et al.(1975).

(5) Markus (1976) and Sheehy (1977) write about the student's concerns as she relies more on her husband for functional and emotional support while she struggles to develop her career. Marital friction often results if the husband withdraws his support for his spouse (Markus, 1976; Sheehy, 1977).

(6) The student may be concerned about changes in the

support she receives from her children and aging parents.
She may experience guilt because of these concerns,
according to Gould (1972).

(7) Feelings of uniqueness may make the student feel
isolated and as if no one has ever felt the way she feels.
She may perceive a lack of support from others (Golden &
Wiersma, 1978) because she feels she is separated from
others.

It is apparent, then, that many developmental issues
emerge in the lives of women returning to school. A number
of other researchers have also helped provide a basis for a
developmental profile of the returning non-traditional
female student.

Kahnweiler et al. (1980) state that the returning
student ponders the future while she reflects on her goals.
Many models of mature female students have focused on
student characteristics, financial support, student
perceptions of faculty, program satisfaction, and social
support as predictors of success in college study (Girves &
Wemmerus, 1988). Tinto (1975) describes the relationship
between student background and educational expectations,
commitment, and the characteristics of the institution.
Tinto's model suggests that the attributes of the university
determine the initial commitments of the student both to the
goal of graduation from college and to as the desire to
attend a specific institution.

Barnett (1982) suggests that college study requires serious adjustments in life style, financial status, isolation, and stress levels. Adjustment to college requires a change in coping behaviors, according to Munson, Pemble and Turner (1981).

Several researchers discuss the differences between the experiences of men and women. The Project on the Status and Education of Women (1982) reports that "women's educational experiences may differ considerably from those of men, even when they attend the same institutions, share the same classrooms, and work with the same faculty advisors" (pp. 1-2). Because of their nurturing instincts, women may be more susceptible to stressful experiences than men (Hobfoll, 1987). Kaplan (1982) found that while female students suffered emotional strain from their attempts to integrate home and school responsibilities, men rarely experience as much difficulty in joining their academic and family lives.

Behaviors characteristic of Loevinger's conformist stage (externally influenced), conscientious stage (self-directed, purposeful behavior), and linking transitional levels (self-awareness and individualism) become apparent in a study by Kuh and Thomas (1983). In this study older students were more cognizant of the role that opportunity and chance play in life. Chickering's (1969) vectors of autonomy, identity, interpersonal relations, and purpose have contributed to the redefinition

of self and of the purposeful independence common to female students.

It is evident, then that considerable work has been done in an effort to create a developmental profile of non-traditional female students. At this time the quality and characteristics of interaction between returning female students and university faculty will be examined.

Student-Faculty Interaction

Lange (1980) views the college experience as a rite of passage into the world of professional development of a successful woman. Virtually all researchers agree that good student-faculty interaction is essential to the academic and personal success and well-being of the returning female student.

Faculty support is critical to the success of the student. According to Barger et al. (1983), student-faculty interaction is an important source of encouragement and support. Stansbury (1986) advocates creating a supportive environment for women students by improving the quality of relations with the advisor and faculty member. Many studies describe a correlation between a student's relationship with faculty and the success of the student (Girves et al. 1988; Baker 1981; Mallinckrodt, Leon & Fretz, 1983). Female students experience stress and lack of motivation due to lack of encouragement from male peers and faculty members.

Pascarella and Chapman (1983) emphasize the importance

of informal student contacts with faculty members and of

social integration. Student, faculty, and peer interactions

are good predictors of retention of female students.

Studies indicate that female students are disadvantaged in

their academic pursuits because the quality of their

relations with faculty advisors are lower than those

experienced by men (Baker, 1982; Girves & Wemmerus, 1988;

Polson & Erikson, 1988; Stansbury, 1986).

Girves and Wemmerus (1988), Polson and Erikson (1988)

stress student participation in their own education as a

means of improving student satisfaction and as a way of

increasing retention rates. Stein and Weidman (1989)

investigated student participation in scholarly activities

and students' perceptions of both their academic program and

of the degree of faculty encouragement. A strong positive

correlation was found between informal student-faculty

interaction and students' commitment to their program as

reflected by their attendance. Not surprisingly, the number

of informal interactions decreases as the size of an

institution increases. The existence of informal student

support groups tends to increase retention rates.

According to Lange (1980) and Rosen and Bates (1987)

the student who begins college study after being employed

will experience a loss of social status, lower income and

decreased self-esteem. Female students are vexed by the

expectation to perform independently while they are in a

dependent position socially, intellectually, and financially (Rosen & Bates, 1987). The student is required to largely surrender her decision-making powers and accept diminished control over her life activities, within as well as outside of the institution. Students who view themselves as independent and self-supporting as related to their former employment status often find it difficult to accept the dependency and subordination that college study involves.

The general belief on the part of faculty that the interference of other responsibilities into a student's studies indicates a lack of commitment fuels the flames of self-doubt for female students. Married female students with children are particularly prone to problems reconciling conflicting demands, as they try to integrate their roles as wives and mothers (Coser & Rokoss, 1971). Female students may experience developmental processes found to characterize several chronological periods of development. A student's age is a reliable indicator of the kinds of mental issues facing the student. The college study experience appears to be a distinctive stage in the student's life. Yalom, (1975) describes the college experience as a rite of passage into the world of professional identity. In addition, new students must learn the norms from the existent student subculture, as well as the new jargon and power structures of college.

Egan (1989) describes the resocialization system as

that in which the "formal purpose is to make up for or correct some deficiency in earlier socialization" (p. 201). Perspectives are formed and manipulated by a certain academic discipline rather than built on previous experiences that requires a new vision of the self. The attainment of the new identity suggests that old identities, beliefs, and values must be abandoned.

A study by Speer and Dorfman (1986) investigated factors related to personal and professional development in mature female students. The strongest correlates of rated level of personal development were: (a) support from classmates; (b) desire for intellectual stimulation; (c) desire for career identity; and (d) desire for a meaningful role.

The perception of faculty members as being sources of power and expertise is an important element in the academic life of the female student. Goplerud (1980) contends that a student's adaptation to a university environment is determined by the extent to which students feel accepted and respected by members of the faculty, and by the degree to which the students are able to relate to the faculty as friends and colleagues, rather than inapproachable superiors.

Supports such as academic advising, career planning and placement, flexible scheduling, and contacts with faculty members have been found to be important factors in the

student's development. Reentry workshops, orientation
programs, personal counseling, and financial aid also
contributed to the student's development (Hendel, 1983;
Kirk & Dorfman, 1983). Supports offered by the institution
while the woman was in college have been associated with
positive personal and professional outcomes after
graduation.

It becomes clear that the new student must not only
learn her field, but also learn to play the role of student
in the socialization structure. In order for a female
student to achieve the goal of finishing a degree, a system
of continuous mentoring and extensive faculty and peer
support has been advocated in order to ensure that entering
female students will have the tools and personal commitment
to see their goals fulfilled (Baker, 1981; Lange, 1980).

Mentoring

Mentoring has been widely discussed as a career
development device in Levinson, Darrow, Klein, Levinson and
McKee (1978) "Seasons of a Man's Life." Men over the age of
40 rarely have a mentor. After that age they have
sufficient professional experience and do not need a
relationship with a mentor.

Baker (1981) studied and determined the importance of
the mentor in the college setting for women. Through
supporting the student the mentor helps her realize her
goals. Kahnweiler and Johnson (1980) found that almost 75%

of women returning to school after age 30 have a mentor.
Fisher-Thompson (1982) recommends that women students seek
out mentors in their own department. Professors of female
students need to be aware of their potential significance as
mentors in supporting students. Professors are urged to
develop a sensitivity to students' progress in the life
cycle. Recognition of the stressors of transitional periods
and of developmental tasks would provide a basis for more
effective services.

In their investigation of corporate-world mentoring,
Merriam, Thomas and Zeph (1987) discovered that entry-level
employees benefitted considerably from the insights and
guidance of their superiors. If mentoring was successful in
the corporate world, it could hold great potential for
higher education.

Cameron (1978) found that interaction between faculty
members and students had an important impact on the
student's future employment. A study by Melillo (1981)
focused on how mentors influenced the career development of
women who became members of academia. Mentor influence was
significantly correlated with career identity. However,
issues regarding the most effective form of mentoring in a
faculty/student environment have not been addressed by
researchers. Evaluations of both formal and informal
mentoring are needed before such programs should be widely
implemented.

Aguilar-Gaxiola (1984) describes similar findings in the positive career development of both men and women who had mentors. It was found that mentors tend to choose proteges who are similar to themselves or with whom they can identify. Although women seem to need mentors more than men, women are less likely to have mentors, due to the scarcity of females in the corporate world and academia. Yet having a female role model to identify with seems to be an important factor in the professional development of a successful woman.

Women are more likely to choose a mentor on the basis of personal knowledge, while men base their choice on the basis of reputation. The average age of mentees was found to be between 20 and 30 years old. However, studies indicate that women do not seek a mentor until the midlife stage of development, while men generally experience a mentoring relationship during early adulthood. Women who have followed traditional life paths will be, developmentally speaking, at least 10 years behind a man of the same chronological age. Men over the age of 40 rarely have a mentor. At that stage they have sufficient professional experience and do not need a relationship with a mentor.

It becomes apparent that mentors are important for female students for support in order to realize their academic goals. Women who have had mentors and who become

professionals in their field usually become mentors
themselves (Aguilar-Gaxiola, 1984; Baker, 1981;
Fisher-Thompson, 1982; Kahnweiler & Johnson, 1980; Merriam,
Thomas & Zeph, 1987) and have a strong positive influence on
their mentees.

Peer Support

Peer advisors have been used in undergraduate
institutions to help incoming freshmen adjust to their new
environment. Effective coping includes modeling from
seasoned students to new students which will facilitate the
entrance of new students into the student subculture.
Decoster (1985) describes a peer-designed advising program
in which juniors and seniors help freshmen respond to
difficulties they face. A follow-up questionnaire indicates
that 92 percent of the freshmen report that their peer
advisors helped them adjust to campus life, and 91 percent
said the program reduced the need to seek other counseling
services.

Another study conducted by Ragle and Krone (1985)
had peer advisors place telephone calls to first-semester
freshmen as a form of continuing orientation. A follow-up
questionnaire showed that female students reacted positively
to the calls, indicating that they felt free to talk about
their concerns with peer advisors. The calls provided an
effective method not only for the conveyance of information
and for referrals, but also for personalizing a large

university environment.

If peer advisors are effective for undergraduate students, there is reason to believe that this may similarly benefit non-traditional female students. Peer support has been shown to have a positive influence on students. A description of several peer support programs will be discussed later in this chapter.

Social Support System

Research in the area of stressful life events has demonstrated a positive relationship between the effects of social support and coping strategies on individual well-being. Although they are two distinct variables, social support and coping strategies have similar functions as mediating factors in stress reduction. As a result, social support and coping strategies are studied in reference to their relationship to the stress process.

There is some disagreement among researchers, however, as to what constitutes social support and how it affects well-being. Thoits (1982) posits that there are serious, unresolved problems with the empirical literature on social support because social support has been inadequately conceptualized and operationalized. Turner (1983) states that "most definitions of social support have focused on the helping elements and processes of the social-relational systems in which the individual is located" (p.108). Kaplan and Schneider (1977) imply that definitions of social

support fall into two frameworks. Support may be in the form of gratification of one's basic social needs as supplied by environmental sources, or support may be seen as the presence or absence of psychosocial support resources from significant others. According to Simpson (1980) family, neighbors and friendship groups have positive effects on stress reduction.

Schaeffer, Coyne and Lazarus (1981) differentiate between three types of social support: emotional, tangible, and informational. Emotional support is comprised of intimacy, attachment, reassurance, and the opportunity to confide in and rely upon someone else. Emotional support also gives the person a feeling of being loved and cared for, and of belonging to a group. Tangible support is a direct form of monetary or material aid and provision of services. Information support includes the provision of information and advice to help solve problems or to provide feedback about how an individual is feeling.

Cobb (1976) described social support as one's perception of the world. According to Cobb (1976) social support is viewed as belonging to one or more of three classes, namely:

> Information leading the subject to believe
> that he or she is cared for and loved.
> Information leading the subject to believe
> that he or she is esteemed and valued.

Information leading the subject to believe

that he or she belongs to a network of

communication and mutual obligation. (p. 300)

Cobb wrote it is the individual's personal experience and

subsequent perception which determine that this social

support is helpful.

Elliot and Eisendorfer (1982) interpret aspects of

social support as follow:

Giving emotional support by showing

concern and caring, indicating that

the person is valued, by providing a

sympathetic ear. Conveying a sense of

belonging by participating in a reciprocal

network of shared obligations.

Providing tangible help when needed, and

suggesting information about how to cope.

(p. 167)

Seashore (1980) describes social support as "a resource

pool drawn on selectively to support me in moving in a

direction of my choice and leaves me stronger" (p. 156).

Simpson (1980) found that social support acts like a

"buffer" to potentially stressful events, such as

unemployment and that it averts acute stress.

Haan (1982) posits that "social support must go beyond

tender care, and includes help in sorting out the

implications of one's experience, discarding one's

exaggerations and distortions, and consensually validates the reality of one's reactions and situations" (p. 259). Will and Langner (1980) found that persons exposed to high stress who had social supports such as marriage partners or community resources had lower levels of symptomatology in comparison with those that lacked social support.

The thesis that social support buffers the effects of life events has been questioned by Payne and Jones (1987). The authors posit that "support for the buffering hypothesis is weak, and probably not greater than would be expected by chance" (p. 195). Other studies support this limitation because of methodological limitations and a lack of understanding of the conditions that determine the effectiveness of support.

By analyzing the types of life events they experience and the social support systems present, counselors may be able to help re-entering women become less at risk of depression symptoms. A preventive program designed to identify social support systems could be used to buffer the effects of negative life experiences to the school experience.

It appears that college study is a process of resocialization rather than developmental socialization (Egan, 1989; Lange, 1980; Rosen & Bates, 1987). Family, neighbors and friendship groups have been found to have positive effects on non-traditional female students.

The Role of Stress

Non-traditional female students find that entering college can be very stressful in terms of academic expectations and performance, and social stressors of maintaining interpersonal relationships (Bentley, 1988; Goplerud, 1980). Adjustment to college has been shown to involve a shift in coping behaviors (Munson, Pemble & Turner, 1981). Due to different lifestyle roles and pressures there may be different types or amounts of stress influencing women. Dublon (1983) defines role conflict as a situation in which an individual has too many responsibilities. Research on stress and the married student indicates that the family becomes an integral part of the stressors during the examination period and in general during college.

McLaughlin (1985) posits that for married students, "stressors are multifaceted because the problems facing the student, affect the family as well" (p. 488). The married student may experience more stress due to the impact of her interaction with partners and children. Married female students with children are both the most dissimilar and the most stressed group in comparison to males and single females (Hobfall, 1987). Kaplan (1982) found that female students suffered more emotional strain from their attempts to integrate home and school responsibilities. In addition, to academic work, female students assume more responsibility

for housework than their male peers (Stansbury, 1986).

Problems facing the married female student may be due
to the demanding and 'all absorbing' nature of college,
compared to the average nine-to-five job. A college
education may be a more stressful experience for married
women than for persons of other groups.

According to Solmon (1976), women take longer to
complete a college degree and are more likely to drop out.
An explanation is warranted to elaborate on the attrition of
women in college. In addition, women are more likely to
suffer from stressors related to conflicting roles between
their professional and personal lives.

One method of dealing with stress is the study group.
The group can provide students with emotional support and
social outlets to help them through the first year.
Part-time students may not have as much social support as
day students, since many of the part-time students have no
time in their schedules to be a part of a study group.

As a result part-time students may experience more
intense isolation and lack of reinforcement than day
students (Gutierrez, 1985; Koeske & Koeske, 1989). Koeske
and Koeske (1989) cite that full-time students with part-
time jobs had fewer resources at their disposal to deal with
the greater demands they faced than their colleagues who
didn't work.

In conclusion, the non-traditional female student

in that they have to take care of a home, children, college study and work. A support system on the campus for these students is essential and has been found helpful for students on campuses where these services are offered.

Coping

Coping according to Meichenbaum (1983), is the "response made by an individual when he encounters a situation with a potentially harmful effect" (p.69). The author cites three types of coping: an individual's attempts to change the situation and solve the problem; when, after the stressful event the person tries to alter the meaning of the situation or attempts to control stress after the emergence of stress" (p. 74). Denial is a certain kind of coping with stress which allows a person to accept certain parts of the stressor, while simultaneously denying other parts of it.

Lazarus and Folkman (1984) define coping "as constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). Individual coping styles could include problem solving skills, social skills, social support and even existential beliefs.

Other authors, such as Pearlin and Schooler (1978) and Fleishman (1984), have focused on the protective function of coping behaviors. One coping mechanism is to neutralize the

problematic aspects of an experience by perceptually controlling the significance of the experience. Fleishman (1984) suggests that the impact of coping on an individual may depend on the social setting as well as on the characteristics of the individual. Coping strategies are more effective when the individual is confronted with problems in the interpersonal realm such as the family, and less effective when confronted with more inpersonal problems, such as those related to the individual's occupation (Pearlin & Schooler, 1978).

There appear to be individual differences in how the female student perceives and reacts to life transitions and events and the coping mechanisms that are used. Female students may experience separate and varied academic and personal stressors. Each student reacts differently to an academic work load and to the sense that she does not have enough time to get things done.

A recommendation by Whitman, Spendlove, and Clark (1984) for counselors is "... to provide students with a feeling of control over their education, information about what to expect, and feedback regarding what can be done to improve their performance" (p.3). As a result, they write, students would meet with early success, which would encourage active coping and enhance their ability to deal with the actual stressful situations.

Orientation Programs

To meet the increasing demands of adult learners for educational opportunities some colleges and universities have initiated innovative orientation programs.

Institutions must be more responsive to the needs of non-traditional female students. Orientation programs for female students are recommended and should include a tour of the campus and an introduction to the university's library facilities and other support services that are available on the campus. Another element of the orientation might include a presentation about what to expect to the student's family.

An exemplary program at the University of Michigan addresses concerns on financial aid, affirmative action, job hunting, stress management, safety and self-defense, and planning for the future, all from the perspective of the mid-life woman. Registration is free and child care is provided.

Another program that is offered to students is on the campus of Memphis State University. "Warmline" is a program involving graduate students counseling returning students. Students in the Theories of Counseling classes have been receiving extra credit for off-campus counseling assignments. The trained counselor in the counseling center trains and supervises students who sign up for "Warmline" counselors. Each semester student counselors re-evaluate

trains and supervises students who sign up for "Warmline" counselors. Each semester student counselors re-evaluate the model and offer suggestions of ways to improve the program and training.

The above programs have been lauded by non-traditional female students as very helpful because social support plays an important role in buffering the effects of stress. Further studies are needed to investigate the kind of support that would be helpful to female students. One possibility might be to have programs initiated by students and perpetuated by the students themselves. Methods of bringing people together early in their college career could be established inexpensively and easily. An example of the latter was given earlier under the heading of "peer support" where regular phone contact was maintained in the first semester of college entrance.

Justification of the Study

Female students initiating college study must cope with many demands, and they experience much stress. A strong social support system is essential in order for an individual to be able to cope with these stressors. Peer support is crucial for incoming female college students.

Support programs at institutions of higher learning have been tried and appear to be effective. Such programs, however, are scarce. This study will contribute to a research base to measure the effectiveness of support

be developed as a result of this study at this institution. Ultimately this may lead to a database that could identify the needs of non-traditional female students and provide them with the necessary support systems on campus and help them realize their goal of a college degree.

CHAPTER 3

METHODOLOGY

Overview

This study measured the anxiety level and coping skills
in non-traditional female students who had been in college
for less than three quarters. The differences between
coping skills and anxiety levels at the beginning and end of
the quarter of students who were exposed to a three-hour
orientation seminar were compared to the coping skills and
anxiety levels of a control group of students who were not
exposed to the orientation seminar and a group of students
who had taken a ten-week orientation seminar during the past
year.

The study also analyzed other variables, such as
interactions among the members of the experimental group and
the amount of interactions among the members of the control
groups. In addition, the study analyzed the usage of the
Counseling Center and established correlations between these
factors and levels of anxiety and support. Spielberger's
(1983) State-Trait Anxiety Inventory (Form Y) and Hammer and
Marting's (1985) Coping Resources Inventory, a participant
consent form, (Appendix A) a researcher-developed
questionnaire (Appendix B) a demographic data sheet

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y(Appendix C) and an evaulation form (Appendix D) will be used in the study. A manual for the three-hour orientation can be found under Appendix E.

Justification of a three-hour orientation is based on research done by ACT (American Testing Company, Princeton, N.J.). ACT developed a complete set of basic reading, math and writing tests for Community Colleges which includes advising, registration and a brief orientation. These "Success Seminars" have proven to improve retention rates among incoming freshmen considerably over the students first year of studies.

This study has non-traditional female students as the population of interest. A non-traditional female student is defined as a female over the age of 25 who has not been to college before and has less than 30 hour in a program of study completed at the University and has not been exposed to an orientation seminar. These women are by nature very busy and will not have time to spend more than three extra hours away from home. Based on the above data, there is justification to keep the orientation time to a three-hour maximum.

Profile of the Participants

Non-traditional female students at a Community and Technical College in N.W. Ohio, in the Biology, Social Services, and Introduction to Business Management classes comprise the population of interest. The participants had

earned less than 30 credit hours of course credit for an associate's degree or anticipated bachelor's degree. Group 1 consisted of participants who had undergone the three-hour orientation and the mean age was 37 years. Group 2 had participants who did not receive an orientation seminar of any kind and the mean age was 34.7 years. Group 3 was comprised of participants who had been enrolled in the university's ten-week orientation seminar. The mean age was 31.4 years.

Selection of Population

The criterion for selection of participants in this study were non-traditional female students in the Community and Technical College. Most of these students have worked for many years and are going to college to improve their skills and to increase their work opportunities for advancement. These non-traditional students balance their home and college responsibilities. The students generally lack social connnections on campus as well as knowledge of support services. The experimental group was comprised of 11 non-traditional female students and two control groups of 22 and 25 non-traditional female students. These students were asked to participate by this researcher in the following manner.

The researcher asked for permission from the faculty member to come into two classes of Introduction to Social Services and Business Management to explain the research and

asked for 11 female volunteers. The explanation was as follows:

> I am a doctoral student in the process of writing my
> dissertation. I have been a non-traditional student
> for many years and understand the difficulties that
> this group has in adapting to the academic environment,
> with the many demands that we have upon our time at
> home, work and in college. I would have benefitted
> from a seminar style orientation in the beginning of my
> studies in which the services on campus would have been
> explained as well as to have a support group of other
> women I might have studied, done research with and
> share my concerns. Many times I thought I was the only
> person that was experiencing these feelings of
> isolation and did not know where to turn for help. By
> talking to other students in my classes, I found out
> that I was not alone. We had a lot in common. As a
> result I would like to give a group of non-traditional
> female students a three-hour orientation to the
> University. Due to the nature of my study, I need a
> group of 10 to 12 female students whom I would like to
> invite to come and be part of this orientation. I would
> like to ask for volunteers who would be willing to spend
> three hours with me at a mutually agreeable time on
> campus. I will be happy to repeat this if anyone else
> would like to attend a similar seminar at a later date

at a mutually agreeable time.

In the biology classes I explained the above and asked the following; Today I would like to ask all of you to fill out a consent form and the two inventories that I have here. At the end of the quarter I will ask all of you who filled out the inventories today to fill them out again for comparisons and a researcher developed questionnaire (appendix B). There are no risks involved. Your participation is entirely voluntary. Thank you so very much for considering participating in this study.

This introduction will be followed by distributing the STAI and CRI, filling out of the inventories and collection of the filled out forms.

The three-hour orientation seminar with the 11 volunteer students took place in the tutoring area at the College and consisted of several activities. A manual of contents of the activities that took place in the orientation can be found under Appendix E. An activity designed to help students become acquainted with one another was followed by a representative of the counseling services who gave a brief explanation of services offered. The facilitator shared some experiences of being a student herself and offered suggestions to questions the participants had. A short closing activity tied the seminar

together. On a voluntary basis participants exchanged
telephone numbers for future socialization or study support.
Participants were asked to fill out a program evaluation
(appendix D) before leaving.

<div align="center">Method of Administration</div>

Once the 11 participants had volunteered, a time and
place was established for the orientation seminar. Three
groups were analyzed. Group 1 consisted of volunteer female
students who attended a three-hour orientation to the
college in the first week of the fall quarter. Group 2 was
composed of students who were enrolled in a biology class
and the students had never attended an orientation seminar.
Group 3 consisted of students who were enrolled in the same
biology class as Group 2, but had been required to enroll in
an orientation seminar in a preivous quarter during the
previous year due to low test scores.

The collection of data took place in two biology
classes during classtime. Participants completed an
informed consent form, the Coping Resources Inventory, the
State-Trait Inventories, and a researcher-constructed
demographic data sheet and questionnaire. A general
explanation of the study was given and guidance on the
completion of the inventories was provided. This procedure
was repeated in the last week of the ten week quarter. Pre-
test and post-tests were administered to all three groups
within a three-day period during the same week.

Participants in this study numbered 57 non-traditional female students. The average age in Group 1 was 37, Group 2, 34.7, and Group 3, 31.4 years old.

Instrumentation

The State-Trait Anxiety Inventory, Form Y, (STAI) (Spielberger, 1983) and the Coping Resources Inventory by Hammer and Marting (1985) were used in the study. The STAI evaluates current individual anxiety levels, and serves as an aid to anxiety-prone students. The Coping Resources Inventory measures the individual's resources for coping with stress. The results identify both the resources a subject has developed for coping with stress, as well as those that are less developed. The researcher-developed questionnaire provided information on how many times the students met outside of classroom to socialize and do out-of-classroom research together. In addition, the questionnaire asked how many times the students used the Counseling Services during the quarter. The results were compared to the control groups who filled out the same questionnaire (appendix B) at the end of the quarter.

State and Trait Inventory

The State-Trait Anxiety Inventory, Form Y, is a self-evaluation questionnaire that consists of a 20-item paper-pencil test. It measures two aspects of anxiety: state (also called S-anxiety, which is the current level of anxiety, or the transitory feelings of fear which most

people occasionally experience) and trait (also known as T-anxiety, which is anxiety-proneness, or the relatively stable tendency of an individual to respond anxiously to a stressful situation).

The State-Trait Anxiety Inventory (Spielberger, 1983), the most widely-used test to measure anxiety (Chaplin, 1989), measures anxiety as a situation-specific response. The A-Trait scale was designed to measure anxiety as a stable response, regardless of specific situational factors. The scale will be used to assess anxiety proneness and the intensity of reactions to anxiety.

Trait anxiety also reflects individual differences in the frequency and intensity with which anxiety states have been manifested in the past. It measures the probability that S-Anxiety will be experienced in the future. The stronger the anxiety trait, the more probable that the individual will experience more intense elevations in S-Anxiety in a threatening situation.

The T-Anxiety scale asks the subject to indicate how he or she "generally" feels, while the S-Anxiety scale asks the subject how she feels "at a particular moment in time" (Spielberger, 1983). Each item is rated on a four-point intensity scale, labeled "Not At All," "Somewhat," "Moderately So," "Very Much So." Respondents indicate their response by filling in the appropriate bubble on the answer sheet. The STAI was designed for high school

students and adults, but it is written at the sixth-grade
reading level.

Both the S- and T-Anxiety level scores have a range
between 20 and 80, with a higher score indicating a higher
level of anxiety. The manual provides extensive normative
interpretation information. Both percentiles as well as
standard (T) scores are presented for working adults
(subdivided by age and gender), high school and college
students, and several other specific groups.

The STAI was developed with painstaking care, and
earns high marks for technical merit. The internal
consistency of the Trait-anxiety scale, as indexed by
coefficient alpha, ranges from 0.89 to 0.91 for all tested
groups. The range for the State-Anxiety scale is between
0.86 and 0.95 (Chaplin, 1983).

The stability of the STAI scales was determined by
tests given to samples of high school and college
students, with test-retest intervals ranging from one
hour to 104 days (Chaplin, 1989). The magnitude of the
reliability coefficients decreased as the interval length
increased. For the Trait-anxiety scale the coefficients
ranged from 0.65 to 0.86, and between 0.16 and 0.62 for the
State-Anxiety. This low level of stability for the
state-anxiety scale is to be expected, since responses to
the questions on this scale are intended to reflect the
influence of the transient situational factors that exist at

the time of testing. In fact, if the test-retest reliability of the State-anxiety scale were not lower than the reliability of the Trait-anxiety scale, the construct validity of the scales would be suspect.

Although the STAI was originally developed to study the relationship between anxiety and learning, its generality as a measure of state and trait anxiety makes the test useful in nearly all situations in which these contructs are of interest. Some of the research areas include the relationship of anxiety to achievement in school and the effect of social support on anxiety. The STAI could be useful in evaluating anxiety reduction techniques and determining the effect on anxiety of changes in the school or work environment.

The manual recommends that the State-Anxiety scale be administered first, since State-Trait Anxiety theory suggests that there will be unilateral carry-over between measures of State and Trait Anxiety. Since State-Anxiety measures are sensitive to testing conditions, prior completion of a Trait-Anxiety measure may affect responses to a State-Anxiety scale.

However, if one wishes to move from such relative, aggregate interpretations to statements about "individual" levels of anxiety, the test has fundamental problems similar to those of other personality measures. The meaning of an individual's score on the STAI cannot be readily deduced by

referring to either the normative data or to the correlates of that score. One individual's definition of "Very Much So" or "Somewhat" is likely to be different from another test-taker's interpretation. Norms and correlation coefficients are aggregate statistics which do not have any meaning at the individual level. The testing manual discourages score interpreters from making deductions about any particular tested level of anxiety.

The Trait-Anxiety scale is related to general feelings of dissatisfaction with one's self, not to anxiety alone. In addition, the construct of trait anxiety has not been well defined in relation to other personality constructs. Scores on the Trait-Anxiety scale are related to state anxiety only in situations where one's self-esteem is threatened.

Coping Resources Inventory

Understanding stress and its relationship to health has become the focus of increasing efforts on the part of clinicians and researchers (Dohrenwend & Dohrenwend, 1980; Rabkin & Struening, 1976; Selye, 1976). The Coping Resources Inventory was developed to provide a standardized measure of coping resources that may prove important in mediating the stress response. Research over the past two decades shows that the occurrence of major life changes is linked to negative health outcomes. Life events are seen as stressful because they demand changes in the environment

that are sufficient in magnitude to require social and psychological adjustment and can be considered to be potentially threatening to an individual.

Coping resources are defined as characteristics that enable a person to handle stressors more effectively, experience fewer or less intense symptoms upon exposure to a stressor, or recover faster from exposure. The emphasis is on the mediating role that resources are believed to play in the coping process. A resource is defined by Baum and Singer, (1982) as "a social and psychological prophylaxis that can reduce the likelihood of stress induced disease" (p. 344). Individuals with low resources, however, have been described as vulnerable and fragile (Kessler & Essex, 1982), while those with high resources have been characterized as resilient (Kessler & Essex, 1982), and hardy (Kosaba, 1979). It is important to distinguish between coping resources and other mediating variables, because in the literature coping resources have been used interchangeably with coping strategies (Menaghan, 1983). While it is obviously true that strategies function as resources for dealing with stressors, it confuses the issue when resources are treated as a distinct class of variables in research. It is possible, however, for a strategy used by an individual to cope with a stressor to become a resource through prolonged successful use.

According to Zeidner and Hammer (1990) jogging

may be   employed as a strategy for coping with a particular
stressful event.   A person who has maintained a continuous
program of jogging may be better able to deal with stress
than one who only engages in the activity when already under
the influence of a stressor.   For a strategy to function as
a resource, a considerable amount of time, effort, practice,
and probably success in employing the strategy is required.
However, different strategies can be tried, tested, and then
discarded in favor of others.

The Coping Resources Inventory (CRI, Hammer &
Marting, 1985) is used to identify resources. The CRI is a
60-item instrument that measures resources in five
domains: cognitive, social, emotional, spiritual/philo-
sophical, and physical.   For each of the 60 items
respondents use a four-point scale to indicate how often
they have engaged in the behavior described in the past six
months.   Scores for each scale are simply the sum of item
responses, with negatively-worded items recoded.   In
addition to the five individual scores, a total resources
score is computed by summing the five scale scores.   The
higher the scale score, the higher the resources.   Following
is a brief definition of the five CRI scales:

(a) Cognitive (COG): measures the extent to which
individuals manifest a positive sense of self-worth, a
positive outlook toward others, and a general sense of
optimism.   The role of positive self-concept in adaptation

has been documented by Pearlin and Schooler (1978). A representative item is, "I feel as worthwhile as anyone else."

(b) Social (SOC): The degree to which individuals are imbedded in social networks that are able to provide support in times of stress (e.g."I am part of a group, other than my family, that cares about me").

(c) Emotional (EMO): The degree to which individuals are able to accept and express a range of affect, based on the premise that a range of emotional responses aids in ameliorating long-term negative consequences of stress (e.g. "I can cry when sad").

(d) Spiritual/Philosophical (S/P): The extent to which actions of individuals are guided by stable and consistent values derived from religious, familial, or cultural tradition, or from a personal philosophy. Such values may serve to define the meaning of potentially stressful events and to prescribe strategies for responding effectively (e.g. "I know what is important in life").

(e) Physical (PHY): The degree to which individuals engage in health-promoting behaviors believed to contribute to increased physical well-being (e.g. "I exercise vigorously 3-4 times a week"). Physical well being is thought to decrease the level of negative response to stress or to enable faster recovery. It may also help to attenuate potentially chronic stress-illness cycles resulting from

negative physical responses to stressors that themselves then become major stressors.

The reliability of the total resources score for two samples of junior-high and high school students was 0.89 and 0.92. As expected, reliabilities of the short subscales were lower, ranging from 0.56 to 0.82 in one sample and 0.72 to 0.85 in the other. When the CRI scores were compared with self-rating of coping resources, the correlations of the same trait across methods provided evidence for convergent validity, with correlations among methods ranging from 0.61 to 0.80 (Zeidner & Hammer, 1990). Additional evidence is provided in the manual for the discriminant validity of the scale through comparing a series of target groups and controls. To date, test-retest data are available on only one sample of high school students. These students were tested over a six-week period using identical forms of the CRI. The reliability estimates indicate that the CRI scale scores are reasonably stable over this period of time (Zeidner & Hammer, 1990). More samples are needed to provide stability estimates for other ages and for samples over differing time periods.

The strongest test of validity of any coping measure is its ability to predict symptoms of stress over time. Theoretically, higher resources should be associated with fewer symptoms. Professionals can suggest to individuals that high resources may help lessen some of the negative

psychological and physical impact of stressors. Sometimes just identifying the fact that they have relatively high resources can be a useful intervention. This not only increases feelings or perceptions of self-esteem, but also provides a starting point for selecting coping strategies in specific situations. Clinically, however, it is more helpful to focus initial interventions on moderate level resources which can be improved over a shorter period of time. The strength of the CRI is the separate profiles provided for men and women. Normative interpretations may be most useful for identifying individuals who are especially vulnerable to stressors and who may be at-risk for a stress-related disorder.

Because of inadequate size and lack of diversity of the normative samples currently available for the CRI, normative interpretations should be made with extreme caution. No decision about an individual should be made solely on the basis of a normative interpretation of any CRI scale. An interpretation of any low score must be made in the context of the individual's family, job, physical, and psychological health (Hammer, 1986). No score should be interpreted in isolation.

Hammer (1986) did a study on coping resources of college students. Subjects completing the CRI were 179 college students from two Midwestern universities. There were 126 females (72%) and 48 males (28%) in the sample.

The internal consistency reliability estimates for the
sample of college students ranged from alpha .77 for the
Physical scale to alpha .84 for the Emotional scale. The
alpha for the total score was .92.

A multivariate analysis of variance was performed to
examine the coping resources of the various subgroups within
the total sample. The results were that students in the low
stress group had significantly higher scores on all scales
than did the high stress group. Students who reported
themselves as healthy had significantly greater scores on a
scales then the ill group. Students who experienced high
levels of stress and described themselves as healthy had
significantly higher levels of resources scores than did the
high stress, ill group.

Compared to a group of non-client college students
the group of counseling center clients had significantly
lower resources on the Cognitive and Emotional scales. The
clients also had significantly lower total resource scores
than the non-clients. Consistent with other studies of
coping, female college students had significantly higher
resource scores on the Social, Emotional, and Spiritual
scales than did the males (Hammer, 1986).

Research Design

The research design of this study was quasi-
experimental. The participants in Group 1 attended the
three-hour orientation seminar. Group 2 and Group 3 were

the control groups. Group 2 had never taken an orientation
seminar and Group 3 had been enrolled in an official ten-
week orientation seminar at the University. Groups 2 and 3
only filled out the inventories. In this method the
"objective was to achieve an understanding of possible
cause-and-effect patterns among several variables" (Borg &
Gall, 1979, p. 474).

Data Analysis

    A series of one-way ANOVA's were utilized for all
statistical analysis in this study. Information on
counseling services use and participant social and out-of-
classroom research interactions from the
researcher-developed questionnaire were compiled and
analyzed.

    Hypotheses of the study were tested for significance
in the following ways:

1. The hypothesis on coping resources according to the
manuals instructions.

2. The hypothesis on anxiety levels will be computed
according to the manual's instructions.

3. The hyposthesis about the participants frequency of
social and research interactions will be computed according
to the Likert interval scales.

4. The hypothesis on how many times a participant used the
Counseling Center will be computed.

Limitations of the Study

The generalizability of conclusions drawn from this study to the population of interest are limited in that the school used for the samples is in a specific geographic area. The assumption that the school represents average non-traditional female students permits tentatively applying conclusions drawn from the sample to the population of interest.

Number of participants in the study was limited due to the limited size of the program. The power of the statistical procedures used in analyzing the data was reduced because of sample size. Availability of larger samples for similar studies would enhance the credibility of the findings. However, at the end of the Winter quarter a follow-up questionnaire to the experimental group participants might reveal a "sleeper effect." In other words, the usefulness of the orientation information may only become apparent and useful at a later date and in subsequent quarters. The results of this follow-up questionnaire may be used to augment this study and an attempt will be made to publish this study with the added information.

Caution needs to be taken with the STAI in that the Trait-anxiety scale may not be measuring what it purports to measure. Caution needs to be taken with the CRI as well. Because of the small sample and lack of diversity of the

normative samples currently available for the CRI, normative
interpretations should be made with extreme caution.
Fake-good profiles are possible and the appearance of such a
profile suggests that further careful assessment of the
individual's coping resources should be done.

Limitations of any self-report measure are present in
both the STAI and CRI scores in this study. Borg and Gall
(1979) describe the disadvantage of self-report instruments
"in that we can never be sure of the degree to which the
subjects' responses reflect his true attitudes" (p. 275).
By assigning a number to the questionnaires it is assumed
that the anonymous and confidential method of collecting
data will allow participants to give a true reflection of
their beliefs and attitudes.

With the increase of non-traditional female students in
colleges and universities the results of this study may
stress the importance of a formal orientation to an
institution of higher learning and thereby reduce stress and
increase coping skills and strategies in addition to
providing a social support network among the students
themselves. This study may support the premise that an
orientation for non-traditional students will increase
retention rates. As a result this study may become the
basis to establish a research foundation for future
tracking and retention of non-traditional female students
and establish a formal orientation program for all incoming

students.

CHAPTER 4

RESULTS

The purpose of this study was to investigate whether a three-hour orientation would benefit non-traditional female students, as compared to students who had no orientation seminar at all and compared to students enrolled in a ten-week orientation seminar.

The study investigated whether a three-hour orientation would increase coping skills, social interaction, cooperation among students (in research projects) with classmates, frequency of use of the Counseling Services and decrease anxiety levels.

The Coping Resources Inventory by Hammer and Marting (1985) and Spielberger's (1983) State-Trait Anxiety Inventory were the scales used for quantitative data gathering and to gauge differences between the groups tested. In addition, three researcher-developed questions were used, which were answered on a Likert scale.

The hypotheses stated in Chapter I were tested for significance using a one-way ANOVA. Results of the study are presented individually for each stated research hypothesis. Ancilliary questions are addressed in qualitative narration. A demographic description of the participants will precede the

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hypotheses. Data on age, employment, and majors of study were collected and will be presented at this time.

Demographics of Research Participants

Research participants were non-traditional female students who had earned less than 30 credit hours of course credit for an associate's degree or anticipated bachelor's degree at a community college in northwest Ohio. The mean age of participants in the three-hour orientation (Group 1) was 37 years; for the group that did not receive an orientation (Group 2) the mean age was 34.7 years. The mean age of the group that received the 10-week orientation (Group 3), was 31.4 years. Group 1 had 45.5 percent unemployed and 54.5 percent employed students. Natural science majors (which includes nursing, respiratory, and cardiovascular majors) comprised 54.4 percent of the first group, 27 percent majored in business management, and 18 percent were undecided. Group 2 had 57.8 percent unemployed and 42.1 percent employed students; 100 percent were natural science majors. Group 3 had 68.4 percent unemployed and 31.5 percent employed students; 89.4 percent majored in natural science, and 10.5 percent were undecided.

Eleven participants volunteered for the three-hour orientation (Group 1). The two control groups were comprised of 19 participants who had no orientation seminar (Group 2), and 23 participants who had been enrolled in a ten-week orientation seminar offered by the college (Group 3).

Research Hypotheses

Five research hypotheses were proposed. They addressed coping skills, State and Trait anxiety levels, amount of social interaction and out-of-classroom research among students and the frequency of use of the Counseling Center. Each hypothesis will be explained individually, accompanied by the results of the statistical analysis of the hypothesis.

Coping Skills Inventory

The first null hypothesis of this research study stated that there would be no difference in coping skills between the three groups in the pre-test and the post-test inventories. A one-way ANOVA analysis showed no difference between the three groups computed (pre-test: $F = 1.35$, $N = 55$, $p > .05$, post-test: $F = 1.56$, $N = 48$, $p > .05$). The mean of each group at the pre-test level indicated a large difference between the two control groups, 170.50 and 157.05 of Groups 2 (no orientation) and 3 (ten-week orientation) respectively and between Groups 1 (three-hour orientation and 3 (ten-week orientation) (170.00 and 157.05), indicating that Groups 1 and 2 had higher coping skills in the beginning of the quarter. At the post-test level of the coping skills inventory there was a large differential between the experimental group and the two control groups. Table 1 shows a comparison between the pre- and post-test means.

State-Trait Inventory

The second null research hypothesis was that there would be no difference in anxiety levels, pre- or post-test, between the

three groups. The inventory consisted of two parts: State,
which asked participants how they felt at the moment they were
completing the inventory form, and Trait, which asked
participants to evaluate how they felt in general. A one-way
ANOVA analysis of the State inventory showed no significant
difference between the three groups (pre-test: $F = .944$, $N = 57$,
$p > .05$, post-test: $F = .753$, $N = 46$, $p > .05$). Higher figures
indicate higher levels of anxiety. Table 2 shows the pre- and
post-test State mean and standard deviations for the three
groups.

A one-way ANOVA analysis of the Trait inventory showed no
significant difference between the groups (pre-test: $F = 2.42$, N
$= 58$, $p > .05$; post-test: $F = .553$, $N = 46$, $p > .05$). However,
the mean of group 1 shows a high pre-test anxiety level and
reaches almost significance in comparison to groups 2 and 3.
Table 3 shows the pre-test and post-test means and standard
deviations for the three groups.

Socialization

The third null hypothesis stated that all students would
engage in the same amount of social interaction. The question
was answered on a Likert scale. The higher the number the more
socialization there was among students. A one-way ANOVA analysis
revealed that there was a significant difference between the
groups $F = 4.33$, $N = 47$, $p < .05$ level). A post-hoc test
indicated that Group 3 was significantly different from Group 2.
Group 2 was not different from Group 1 and Group 3 was

significantly different from Group 1. Table 4 shows the mean and standard deviations of each group.

Out-of-Classroom Research

The fourth null hypothesis stated that the experimental group would do as much out-of-classroom research as the two control groups. A one-way ANOVA analysis indicated that there was no significant difference between the three groups (F = .303, N = 48, p > .05) A higher score indicates more out-of-classroom interaction. Table 5 shows the mean of each group and standard deviations.

Use of Counseling Services

The fifth null hypothesis stated that there would be no difference in the frequency by the participants of the university's Counseling Services. A higher score indicates more use of the services. A one-way ANOVA showed no significant difference in the use of the Counseling Services for the three groups (F = 1.16, N = 46, p > .05). Table 6 indicates the mean for each group and standard deviations.

Summary of the results

Four of the null hypotheses for the statistical analyses of the five research hypotheses cannot be rejected. Hypothesis three can be rejected, however.

In the first hypothesis participants in the three groups did not show significant differences in coping skills. The hypothesis was tested with a one-way ANOVA which resulted in a non-significant F-value (F= 1.56). It could not be shown that

exposure to an orientation increased coping skills in the experimental group.

In the second hypothesis the differences between the three groups in the State anxiety levels did not differ significantly. The null hypothesis could not be rejected. The hypothesis was tested for significance with a one-way ANOVA which resulted in a value of F=.75, which is non-significant. The Trait anxiety levels were tested with a one-way ANOVA which resulted in a F-value of .55. This is statistically non-significant.

The third hypothesis tested out-of-classroom socialization between the three groups. A one-way ANOVA resulted in a significant F -value of .433. The null hypothesis was rejected. Group 3 had significant more social interaction than Groups 1 and 2.

The fourth hypothesis concerned the frequency with which participants engaged in out-of-classroom research. The hypothesis was tested for significance with a a one-way ANOVA which resulted in an F-value of .30. The null hypothesis could not be rejected. No significant difference in out-of-classroom research was found between the three groups.

The last hypothesis concerned the frequency with which participants used the University's Counseling Services. A one-way ANOVA showed no significant difference at a F-value of 1.16. The null hypothesis could not be rejected. It could not be shown that the three-hour orientation Group 1, which was exposed to a presentation by the Counseling Services, used the service more

frequently than the control groups.

Given above were the data collected and statistical analyses for the five research hypotheses posed for this study. The hypotheses and statistical analyses were given. Conclusions drawn from the statistics performed on data gathered will be discussed in the next chapter. The final chapter of this research will also contain discussions, implications, and recommendations for future research.

Tables 7, 8 and 9 show the Coping Resources, State and Trait Inventory means pre- and post-test of the three groups in graph form. The graphs indicate the interaction of the three groups. The graphs show that the ten-week orientation period of Group 3, appears to have taught students better coping skills, and lowered their State and Trait anxiety levels. This could be due to more effective teaching skills or content area of the curriculum of the ten-week long orientation in which studnts are taught anxiety reducing methods, time management and study skills.

These study strategies and anxiety reducing methods could serve as a guideline for the content of the three-hour orientation seminar for non-traditional students if this is offered on a regular basis.

CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

Summary of Project

Following will be a concise summary of the different aspects
of the study researched. The problem, approach to the problem,
procedures, interpretations, and the results of the study will be
presented. Conclusions, implications, and recommendations based
on the study will conclude the chapter.

Problem

Research has shown that 48 percent of colleges and
universities in the United States offer an orientation seminar
for freshmen (Delworth & Hansen, 1989). Research done by
Pascarelli and Chapman (1983) and Tinto (1975) indicate a higher
retention rate among students enrolled in freshmen seminars.

The key issue addressed in this study was to ascertain the
importance of an orientation seminar for incoming non-traditional
female students. Focusing on this population is based on the
increase of non-traditional female students into college.

Today's community college students are mostly non-
traditional older students (average age is presently 29 years old
and rising yearly returning to the academic environment after
years of working or raising a family. Reading, writing, and math

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skills have generally been under-utilized and their study skills
have become rusty. At the college where this investigation took
place, students with low scores on a basic reading, writing and
math assessment test are required to enroll in a quarter-long
orientation seminar. Students with scores above the norm are not
required to enroll in the seminar.

Approach to the Problem

In order to assess qualitatively whether students benefit
from a freshmen seminar, two inventories on coping skills and
anxiety levels were used in this study. Students with high
assessment test scores might be better prepared to enter college
studies because they have better coping skills. Students with
low scores generally have difficulty in handling the daily
stresses of college classes and homework due to study skills
deficiencies. These students' coping skills may increase due to
the freshmen seminar, in which they are taught study skills, time
management, and how to deal with test anxiety. To assess
students' coping skills Hammer and Marting's (1985) Coping
Resources Inventory was used.

The null hypothesis stated that there would be no difference
in coping skills in participants (Group 1) who had a three-hour
orientation seminar, which was offered to them on a voluntary
basis, and the two control groups (Group 2 no orientation, and
Group 3 ten-week orientation).

The second null hypothesis stated that there would be no
difference between the three groups in anxiety levels. The State

and Trait Inventories by Spielberger (1983) were used to determine the anxiety levels of the participants. Three researcher-generated questions were posed to students with replies reported on a Likert scale.

The null hypotheses of these questions were that there would be no difference in the frequency of social interaction or out-of-classroom research or use of the Counseling Services between the three groups.

Throughout this discussion the reader must bear in mind that the small sample size may have had an influence on the outcome of the data.

Procedures

Participants in this study were female students in two biology classes (control groups) and volunteer female students recruited from an Introduction to Social Services and an Introduction to Business Management class at the college for the experimental group. Participants qualified for the study if they were over 25 years old with less than 30 quarter hours in their college program.

Three groups were analyzed. Group 1 consisted of volunteer female students who attended a three-hour orientation to the college in the first week of the fall quarter. Group 2 was composed of students who were enrolled in a biology class who had never attended an orientation seminar. Group 3 consisted of students who were enrolled in the same biology class as group 2 students, but who had been required to enroll in an orientation

seminar in a previous quarter during the previous year due to low test scores.

The collection of data took place in two biology classes during classtime. Participants completed an informed consent form, the Coping Resources Inventory, the State-Trait Inventories, and a researcher-constructed demographic data sheet and questionnaire. A general explanation of the study was given and guidance on the completion of the inventories was provided. This procedure was repeated at the end of the ten-week quarter.

The collected data were analyzed using the Statistical Package for Social Sciences, (SPSS-X).

Results

Participants in this study numbered 57 non-traditional female students. The average age in group 1 was 37, group 2, 34.7, and group 3, 31.4 years old. Twenty-seven percent of the participants of Group 1 were majoring in business management, 18 percent were undecided, and 54.5 percent were natural science majors (which includes nursing, respiratory and cardiovascular). In this group 54.5 percent were employed and 45.5 percent were unemployed. All of the participants in Group 2 were majoring in natural science, and 42.1 percent were employed and 57.8 percent were unemployed. In Group 3 89.4 percent of the participants were majoring in natural science and 10.5 percent were undecided. In this group 31.5 percent were employed and the remaining 68.4 percent were not.

The results upheld four of the null hypotheses. No

significant differences were found in pre-test post-test means in coping skills, anxiety levels, out-of-classroom research, or the use of the Counseling Services between the three groups. Group 3 had significantly more social interaction with peers. The post-test coping skills of the Group 2 (never had an orientation) decreased slightly, though not significantly. These students had not been exposed to any strategies to cope with stress. The post-test coping skills of Group 3, increased which could be attributed to the orientation seminar in which the participants were taught tools to handle multiple stresses.

Group 1 in the pre-test of the Trait inventory almost reached significant levels. These students had volunteered to attend the orientation and had many questions about rules and procedures at the college. Post-test means in anxiety levels in this group fell a significant 21 points, however, in comparison to Groups 2 and 3 which only changed slightly.

The importance of the inability to reject the stated null hypotheses will be discussed in the following section as well as the significance of hypothesis 3 which can be rejected.

The coping skills of Groups 1 and 2 in the pre-test were similar but 13 points higher than Group 3, which could be attributed to the fact that the assessment test scores of these students were higher. These students would have better coping skills as a result of previous work experiences or characteristics that enabled them to handle stressors more effectively.

The decrease in the mean score of 15 points in coping skills of Group 2 (no orientation) in the post-test inventory is surprising. The significant drop could be attributed to the fact that the post-test was administered the week before exams. All groups had the post-test in the last week of the Fall quarter within a three-day period. A factor of importance might be that these students have never been taught how to handle test-anxiety. As a result this group may have had higher anxieties about the upcoming exams compared to Groups 1 and 3.

Group 3, which had a ten-week orientation in which the participants learned study skills and how to handle test anxiety, showed a significant rise in mean score (9.5 points post-test, indicating better coping skills) in coping skills in comparison to Groups 1 and 2. Group 1 (3-hour orientation) improved slightly in coping skills mean, but not significantly.

Conclusions

The results of the analyses of the data pre-test, post-test of the Coping Resources Inventory and the State-Trait Inventory indicate that the test tools used were adequate to measure participants' coping skills and anxiety levels.

Test-retest data on the CRI to date, have only been available on one sample of high school students. Zeidner and Hammer (1990), however, posit that the reliability estimates indicate that the CRI scale scores are reasonably stable over a six-week period. It can be concluded that the results obtained in this study can be accepted as presented.

The test-retest reliability of the STAI indicates that the outcome scores on the State-anxiety have to be lower than the scores on the Trait-anxiety. The State anxiety pre-post test scores in this study were indeed both lower than the Trait anxiety inventory.

The STAI manual states that the STAI can be useful in evaluating anxiety reduction techniques and in determining the effect on anxiety of changes in the school or work environment.

Conclusions from the above could be interpreted as follows: that the participants in the three-hour orientation and 10-week orientation did benefit from the information presented and skills taught to reduce anxiety, and that the two groups had learned and put into practice their coping skills by identifying coping resources to help them through difficult times.

The post-test mean on the State rose 4.2 and 1.6 points for groups 1 and 3, indicating a higher anxiety level the week before exams when the inventory was administered. The CRI mean rose by 2 points for Group 1 and 9 points for Group 3, indicating higher coping resources recognition. The participants in Group 2, who had never had an orientation, experienced a drop of 0.5 points in the post-test mean for the State, but the CRI mean dropped by 15 points, indicating that this group could not identify their coping resources to reduce stress.

The mean for the Trait pre-test mean for Groups 1 and 3 were 17 and 13.5 points higher on anxiety levels than Group 2. However, the post-test mean for Groups 1 and 3 dropped by 21.5

and 6.5 points respectively, and the post-test mean rose by 6.3

points for Group 2. This indicates that Groups 1 and 3 initially

experienced more anxiety over a period of time, but at the end of

the quarter appeared to be experiencing less stress over a period

of time. Group 2 experienced more stress over time during the

quarter.

The conclusion could be drawn that the anxiety-reducing

techniques taught in the orientation seminars for Groups 1 and 3

helped students deal better with long term stress, whereas the

students in Group 2 had not been exposed to this information.

Discussion

Each of the research hypotheses that was tested in this

study will be discussed. Closing this section will be an

explanation of ancillary questions posed on the researcher-

developed questionnaires.

Null Hypotheses

Each of the research hypotheses will be discussed for the

conclusions and implications from the data of the study. The

first null hypothesis stated that there would be no difference in

coping skills between participants in the orientation seminar and

the two control groups. The null hypothesis could not be

rejected.. No statistically significant difference was found for

the 3 groups in pre-test post-test coping skills. Even though

Groups 1 and 2 had the same pre-test mean score and Group 3 a

mean score 13 points below the other two groups, this was not

statistically significant. Group 3 increased their post-test

mean score by 9.5 points and Group 2 dropped in post-test mean
score 15 points, this was not statistically significant. As was
alluded to earlier, the reader could attribute this
insignificance to the small sample size available.

As was stated above, no statistically significant
differences were found for the second hypothesis. The null
hypothesis stated that no differences would be found in anxiety
levels between the three groups. The null could not be rejected.
No assertion can be made that the orientation made a significant
difference in lowering present anxiety levels. However, Group 1
with the three-hour orientation had a very high pre-test Trait
mean in comparison to Group 2. With a mean of 81 this reached
almost to significant levels as the mean was 17 points above the
mean of Group 2 and 3.1 points above the mean of Group 3.

In contrast, the post-test mean dropped by 21 points for
Group 1, and 5 points for Group 3, whereas Group 2 raised the
mean by 6.3 points. The higher the score the more anxiety is
present in an individual. The post-test was administered one
week before exams. It might be construed that the orientation
seminar had some influence on reducing anxiety in participants
because of exposure to anxiety reducing strategies.

The third null hypothesis stated that there would be no
difference in socialization among participants in the three
groups. Group 3 approached significant levels in having more
social interaction with classmates than Groups 1 and 2. The null
could be rejected. Students in Group 3 with the 10-week

orientation have classes on a daily basis which generally leads
to more interaction and closer peer relationships. As a result
these students may continue friendships during subsequent
quarters or find it easier to socialize with peers in general.

The average age of the participants in Group 3 was younger
at 31.4 years old, in comparison to Group 1 (37.0) and Group 2
(34.7).

Null hypothesis four stated that the participants in the
experimental group would engage in the same amount of out-of-
classroom research as the control groups. The null hypothesis
could not be rejected. Mean scores for each group show that
Group 3 again had a higher mean than Groups 1 and 2, though it
did not reach significant levels. The formal 10-week orientation
requires students to work cooperatively on research projects.
These study habits may continue to influence cooperative studying
in subsequent quarters.

The fifth and final hypothesis stated that the experimental
group would use the counseling services as often as the control
group participants. The null hypothesis could not be rejected.
None of the groups used the counseling services very often.

It might be hypothesized that these students have a good
social support system either in their home environment, at their
workplace or among their friends - people with whom they can
share their problems. From this researcher's experience the non-
traditional female student is fairly self-sufficient in her
personal needs, and she generally has her own support systems to

draw on. Most likely they work full-time and have very little time to spend on anything else but school, homework, children and chores of a household.

Questions posed by this researcher revealed the following data. Though not part of this study participants voluntarily provided data on marital status which are given in Table 7. The data will be discussed to compare this information with possible linkage between stress and marital status.

The question of whether stress is related to marital status arises after an examination of this data. McLaughlin (1985) posits that for married students "stressors are multifaceted because the problems facing the student affect the family as well" (p. 488).

Married female students with children are both the most dissimilar and the most stressed group, in comparison to all males and single females. Group 3 had a large percentage of married students and the means for this group in all three categories on the pre-test were higher than the other two groups. The post-test means improved in coping resources and lowered in general anxiety and stress levels. It could be hypothesized that marriage and being a student may cause more stress at the beginning of the quarter because the whole family has to adjust to different meal times and or absence of mother at mealtimes, whereas at the end of the quarter the social support systems (a husband, for example) may have taken over some of the daily household routines and/or child care thus causing post-test

stress levels to be lower.

Noteworthy here is that 63.6 percent of the participants in the experimental group were separated or divorced. The Trait pre-test mean was the highest in this Group. Being separated or divorced might have an influence on anxiety and stress levels.

Data from the evaluation of the three-hour orientation show that participants were unanimous in their belief that the three-hour orientation was well worth their time. They did not think three hours was excessive, and said they would recommend future students to attend a seminar if it was offered.

Suggestions for improvements which were made by the students are the following:

* Place for book bags (so they don't have to carry them around all day)

* Special seats reserved for heavy students (this concern was expressed by 30 percent)

* One staff member at the college who can be approached by students at any time for questions of an academic nature

* Importance of friendly people in front-line positions

Following will be recommendations for possible future studies.

Recommendations

This study has not proved that an orientation will benefit non-traditional students greatly who have high assessment scores.

From previous research done in the early 80s at this college, it became apparent that students with low assessment scores who were required to enroll in a ten-week orientation and basic reading, writing, and math courses, were more likely to finish their two-year associate's degree versus students who did not place into these courses. This research indicates that Group 3 overall seemed to benefit from the information presented in the 10-week orientation.

Based on this research and this study this researcher believes that a formal 10-week orientation seminar for students with low reading, writing, and math assessment scores should continue to be required. It is also believed that a shortened version of an orientation could be offered to a select population of students who have scores close to the cut-off scores on the assessment test and to students who choose to enroll in such an orientation seminar. Student recommendations for the content of this shortened seminar should be solicited and adjustments should be made according to the needs of the students.

The three-hour orientation did appear to lower anxiety levels and raised coping skills, and the information disseminated helped the students identify support systems available at the college. The students enjoyed the social interaction during the seminar and expressed their pleasure of having been invited to participate. Several participants mentioned that they did not feel that they "belonged" to the college and were not important to faculty and staff. They were pleased that they now knew a

person who was interested in their concerns and to whom they could turn in times of need. In view of the retention research which advocates frequent formal as well as informal interaction between students, staff and faculty, this seminar seemed to address this important issue as well.

It is recommended that a future study use a larger sample size to make the data analysis more robust. Tracking the participants over several college quarters will establish a research base for retention and graduation data. This study will continue into the winter quarter in order to gather re-enrollment data.

A recommendation to the community college may be made to assess coping resources and skills among the nursing students in their first year of study. It was noted that individual scores of nursing students on the CRI were extremely low, indicating poor cognitive understanding of self. This recommendation would be made in spite of the caution that the CRI manual urges in interpreting individual scores (Hammer, 1986).

In the helping professions, such as nursing, cardiovascular and respiratory therapy, understanding of clients and patients is important and this can only be obtained by having a good self-concept and understanding of oneself as a professional in the field.

Limitations

This study was worthy of an inquiry. A larger sample size might have given more significant results. One cannot

comfortably generalize from the present obtained data. Future research should not include the post-test data for the Coping Resources Inventory until the instrument has been tested for test-retest reliability on a larger sample and over a longer period of time (Zeidner & Hammer, 1990).

Future Research

Outcomes of future research could be used to identify students with low coping resources and help them in recognizing their individual strengths and support them in learning how to lower stress levels and strengthen coping skills as identified by the CRI.

Future research should continue to include the identification of the needs of the ever increasing non-traditional university or college female population. Those needs can be identified by simple questionnaires that can be distributed to second quarter students enrolling in classes. At that point students are aware of the obstacles and pitfalls and can make recommendations for appropriate changes.

A data base has been established with this study for future tracking and retention purposes. It is recommended that this data base be continued so that added data can become a source for retention and attrition research at the college.

Retention data are scarce at most colleges. It is hoped that this study may add to the scarce existing data base and be an example for other institutions.

A follow-up on re-enrollment figures in the Winter quarter

of the three groups revealed that close to 90% of each group was

re-enrolled in classes.

APPENDICES

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APPENDIX A

Informed Consent Form

Title of Project: The effect of an Orientation Seminar on non-traditional female students, initiating college course-work.

Project Investigator: Martha L. Iskyan

Project Adviser: Dr. Martin H. Ritchie

This reserach project is undertaken to assess the benefits of a three-hour orientation seminar for female students. The Coping Skills scores and the Anxiety Scale scores will be analyzed for their relationship to one another and how this knowledge may benefit students in the future. Participants are asked to complete two then-minute measures: The State Trait Anxiety Inventory and the Coping Resources Inventory.

The subject is 18 years of age or older.

The subject by her signature indicates willingness to participate in this project. **Participation is voluntary, and participants may withdraw at any time without penalty. The identity of the participant will be held confidential.**

The participant consents to providing the following demographic data: Age, Occupation, Field of Study, credit hours taken, and whether she has had an official orientation before.

There are no known risks associated with participation in this research project.

I understand the project and the nature of my participation. I hereby agree to participate on the basis of the above description.

_____   _____

Signature   Date

Y

APPENDIX B

Questionnaire

Please circle the appropriate box:

1. How often did you meet socially with your classmates?

    little   1 2 3 4 5 6 7 8 9 10   great deal

2. How many times did you meet with your classmates outside of class this quarter to do research or discuss class-work?

    little   1 2 3 4 5 6 7 8 9 10   great deal

3. Have many times did you use the Counseling Services on campus this quarter?

    little   1 2 3 4 5 6 7 8 9 10   great deal

4. I would welcome any comments you may have.

    Thank you very much for answering these questions.

If you have any questions or would like to talk to me about concerns you may have, please do not hesitate to call me at: 537-3008.
Martha Iskyan,
Counselor
University of Toledo,
Scott Park Campus, LRC 213.

APPENDIX C

Demographic Data Sheet

Age (# of years at last birthday):   -------25-29

------30-39

------40-49

------50+

Sex:_____F _____M

Type of Occupation:_____Position held:_____

Part-time student_____   Full-time student_____

Which program are you currently enrolled in? _____

What is your major? _____

How many hours completed to date? _____

Have you taken University Studies at Com Tech or participated in any other orientation at UT?   Yes_____   No_____

If "YES", how long ago? _____

Thank you very much for your participation.

APPENDIX D

Program Evaluation

Please circle appropriate number.

1. Was the orientation worth your time?

    little   1 2 3 4 5   great deal

2. Was three hours too much?

    yes   no

3. Would you recommend future students to taken an orientation?

    yes   no

4. What suggestions would you make for planning future orientation
    programs?

5.   Do you anticipate using the Counseling Services this fall
quarter now that you know what services they offer?
            yes   no

6. I would welcome any comments and/or suggestions you may have to
improve or modify the orientation seminar.

Thank you so much for your time and cooperation. This information
will be very helpful to decide upon future orientation programs.

If you have any further questions or concerns, please feel free to
contact Martha Iskyan, at 537-3008, University of Toledo, Scott
Park Campus.

APPENDIX E

A MANUAL FOR A THREE-HOUR ORIENTATION
FOR
NON-TRADITIONAL FEMALE STUDENTS

9:00 to 9:15 am   Registration, Filling out of Consent Form
                   (Appendix A). Refreshments

9:15 to 9:30 am   Introductory words by Presenter

9:30 to 10:00am   Get Acquainted Activity

10:00 to 10:30am   Presentation by Representative from Counseling
                        Services.   Questions and Answers Welcome

10:30 to 11:00am   General Information about University, i.e.
                        How to read the class schedule, how to delete
                        grades, other services available
                        how to calculate GPA, how to obtain transcript.
                        Questions Welcome Anytime.

11:00 to 11:10am   BREAK for refreshments

11:10 to 11:40am   Group activity to interact with group members and
                        create a sense of support.

11:40 to 11:50am   Wrap-up.   Exchange of names, addresses and
                        telephone numbers if desired.

The get acquainted activity will consist of the participants
sitting in a circle and a person tells the group her name and a
word or sentence that tells something specific about herself. For
example: My name is Martha, and I have a white rabbit as a pet.
The person next to Martha will repeat what Martha said and then add
her own name with something specific about herself.   The next
person repeats what was said by Martha and the next person and then
includes herself, etc.   This continues until all persons have had
a aturn.   Each participant may help the other in remembering what
was said before.

This is a terrific "ice-breaker" as each person may help the other
and creates a sense of bonding and the participants get to know a
little about each other in a more specific non-threatening way.

The Representative of the Counseling Center will explain the
Services offered at the Center and entertain questions.

General information about the University can be adapted to the
needs and desires of the specific group and specific College on the
Campus.

The group activity will consist of the following:
Each member write down a word that indicates a feeling. Each member folds the paper and puts it in a hat which is in the middle of the group. Then each member is asked to pick a paper out of the hat and read the word and tell the group what kind of meaning that word has for herself.
Other members of the group may ask non-intrusive, non-threatening questions about that word. Other members may chime in and say yes that is what I think that word means, or no, that word means to me this or that.
The object of this activity is to elicit interaction and dispel the sense of "uniqueness" and relief to realize that one is "not alone, or weird in feeling or thinking this way."
The facilitator of the group must be aware that one person alone is not under scrutiny for any length of time but that everyone gets a chance to read her word and talks about it.

If there is time, each group-member could be asked to guess who it was that wrote down the word.

The general wrap-up will consist of asking if any one has any specific questions or concerns about anything that was covered that morning.

Then the participants are asked to fill out the evaluation (Appendix D).

REFERENCES

Aguilar-Gaxiola, S. (1984, April). The roles of mentors in the lives of graduate students. Paper presented at the annual meeting the American Educational Research Association, New Orleans, LA.

Aneshensel, C. S., & B. R. Pearlin, (1987). Structural contexts of sex differences in stress. In R. Barnett, L. Biener, & C. Baruch (Eds), Gender and Stress, New York: Free Press.

Apps, J. W. (1987). Analyzing higher continuing education. In D. L. Boggs (Ed.), Proceedings of the Golden Anniversary Conference on Graduate Study in Adult Education. Columbus, OH: The Ohio State University.

Baker, C. (1981, August). Self-renewal and the life cycle. Implications for men and women in administration. Paper presented at the National Conference of Professors and Education Administration. Seattle, WA.

Barger, R. B., & Chamberlain, J. (1983). Advisor and advisee issues in doctoral education. Journal of Higher Education, 54, 407-431.

Barnett, R. C., & Baruch, G. K. (1987). Social roles, gender, and psychological stress. Gender and Stress New York: Free Press.

Barnett, S.(1982). New Brains for old bodies: The impact of emotional and physical stress during the Ph.D. process. In S. Vartuli (Ed.), The Ph.D. experience: A Woman's

point of view (pp. 61-69).

Bart, P. (1971). Depression in middle-age women. In V.

Gormack & B. K. Moran (Eds.), Women in a sexist

society. New York: Basic Books.

Baum, A., & Singer, J. E. (1982). Psychological aspects of

health, stress, and illness. In A. H. Hastorf, & A. M.

Isen (Eds.), Cognitive social psychology. New York:

Elsevier.

Bentley, D. (1988). Perceived stress in law, medical,

and science graduate students: impact of social support,

lifestyle and personality variables (Doctoral

dissertation, University of Kansas, 1989). Dissertation

Abstracts International, 9024146.

Borg, W. R., & Gall, M. D. (1979). Educational research:

An introduction (3rd ed.), New York: Longman.

Cameron, S. (1978). Women, faculty in academia:

Sponsorship, informal networks and scholarly success

(Ph.D. dissertation, University of Michigan, Ann Arbor,

1978). Dissertation Abstracts International, 39, 5971A.

Carkuff, R. R., & Anthony, W. A. (1979). The skills of

helping: An introduction to counseling. Amherst, MA:

Human Resource Development Press.

Chaplin, W. (1983). State Trait Anxiety Inventory. Palo

Alto, CA: Consulting Psychologists Press.

Chaplin, A. (1989). State Trait Anxiety Inventory.

The Eighth mental measurement yearbook. Highland

Park, N.J. The Gryphos Press.

Chickering, A. W. (1969). Education and identity.

San Francisco: Jossey Bass.

Cobb, S. (1976). Social support as a moderator of

life-stress. Psychosomatic Medicine, 38, 300-314.

Coser, R. C., & Rokoss, G. (1971). Women in the

occupational world: Social disruption and conflict.

Social Problems, 18, 535-554.

Decoster, D. (1985). A peer designed peer advisement

program. Journal of College Student Personnel, 1, 73-

74.

Delworth, U., & Hanson, G. (1989). Student Services:

A handbook for the Profession. San Franscisco: Jossey

Bass Publishers.

Dohrenwend, B. S., & Dohrenwend, B. P. (EDS), (1974).

Stressful life events: Their nature and effects. New

York: Wiley & Sons.

Dohrenwend, B. S., Dohrenwend, B. P., Dodson, M., &

Shrout, P. E. (1984). Symptoms, hassles, social

supports, and life events: Problem of confounded

measures. Journal of abnormal psychology, 93(2), 222-

230.

Eckenrod, J., & Gore, S. (1981). Stressful events and

social support: The significance of context. In B.

Gottlieb (Ed.), Social networks and social support

(pp. 43-69). Beverly Hills: Sage.

Egan, G. (1986). <u>The skilled helper: A systematic</u>
   <u>approach to effective helping</u> (3rd ed.). Monterey:
   CA. Brooks and Cole.

Egan, J. M. (1989). Graduate school and the self: A
   theoretical view of some negative effects of professional
   socialization. <u>Teaching Sociology, 17,</u> 200-208.

Elliott, G. R., & Eisendorfer, C. (Eds.) (1982). <u>Stress</u>
   <u>and Human Health Analysis and Implications of Research</u>.
   New York: Springer Publishing Company.

Epstein, H. V. (1986). The older college student. A
   changing American tradition. <u>International Journal</u>
   <u>of Lifelong Education, 5,</u> 33-43.

Esperon, J. (1986). Social support over a life transition:
   College graduation. <u>Journal of Counseling and</u>
   <u>Development, 4,</u> 20-33.

Fisher-Thompson, J. (1982). Re-entry woman and graduate
   school. <u>Field Evaluation Draft</u>. Association of American
   College, Washington, D. C.

Fleischman, J. A. (1984). Personality Characteristics
   and Coping Patterns. <u>Journal of Health and Social</u>
   <u>Behavior, 25,</u> 229-244.

Follett, C. V., Andberg, W. L., & Hendel, D. D. (1982).
   Perceptions of the college environment by women and
   men students. <u>Journal of College Personnel, 23,</u> 525-531.

Girves, J. E., & Wemmerus, V. (1988). Developing models of
   graduate student degree progress. <u>Journal of Higher</u>

Education, 59, (2), 163-189.

Golden, S., & Wiersma, J. (1978, June). Facilitating
    psycho-social transitions in normal adult development:
    The implication of intervention through in-depth research
    studies and counseling. Paper presented at the Vermont
    Conference for the primary prevention of psycho-
    pathology. Vermont.

Goodman, S. H., Sewell, D. R., & Jampoll, R. C. (1984).
    On going to the counselor: Contributions of life stress
    and social supports to the decision to seek psychological
    counseling. Journal of Counseling and Psychology, 31(3),
    306-313.

Goplerud, E. N. (1980). Social support and stress during
    the first year of graduate school. Professional
    Psychology, 11, 283-290.

Gordon, V. N., & Grites, T. J. (1984). The freshmen seminar
    course: Helping students succeed. Journal of College
    Personnel, 25, 315-320.

Gould, R. L. (1972). The phase of adult life: A study
    on developmental psychology. American Journal of
    Psychiatry, 129, 521-533.

Gutierrez, F. J. (1985). Counseling law students.
    Journal of Counseling and Development, 64, 130-133.

Haan, N. (1980). The assessment of coping, defense, and
    stress. In L. Goldberger & S. Breznitz (Eds.),
    Handbook of Stress: Theoretical and Clinical Aspects.

(pp. 254-269). New York: The Free Press.

Hammer, A. L., & Marting, M. S. (1985). <u>Manual for Coping Resources Inventory</u>. Palo Alto, CA: Consulting Psychologists Press.

Hammer, A. L. (1986, April). Coping resources of college students.

Paper presented at the annual meeting of the American College Personnel Association, New Orleans.

Hays, R. G., & Oxley, D. (1985). Social network development and functioning during life transition. <u>Journal of Personality and Social Psychology, 50</u>, 305-313.

Hendel, D. (1983). Adult women's perceptions of continuing education for women. <u>Journal of the National Association for Women Deans, Administrators and Counselors, 46</u>, 38-42.

Hirsch, B. J. (1979). Psychological dimensions of social networks: A multimethod analysis. <u>American Journal of Community Psychology, 7</u>, 263-277.

Hite, L. M. (1985). Female doctoral students: Their perceptions and concerns. <u>Journal of College Student Personnel, 26</u>(1), 4-26.

Hobfall, S. E. (1987). The ecology of stress and social support among women. In S. E. Hobfall (Ed.), <u>Stress, social support and women</u>. New York: Hemisphere Publishing Co.

Holmes, T. H., & Rahe, R. H. (1967). The social

readjustment rating scale. Journal of Psychosomatic Resources, 11, 213-218.

Ironside, D. J., & Carley, R. J. (1986). An open door is not enough: A report of a survey of support services for adult learners in universities. Canadian Journal of University Continuing Education, 12, 3-19.

Kahnweiler, J., & Johnson, P. (1980). A mid-life developmental profile of the returning woman student. Journal of College Student Personnel, 9, 414-419.

Kandel, D., Davies, M., & Raveis, V. (1985). The stressfulness of daily roles for women: Marital, occupational and household roles. Journal of Health and Social Behavior, 26, 64-78.

Kaplan, N., and Schneider, J. (1977). Affective sensitivity Scale, Form E. A-2. Ann Arbor, MI: Mason.

Kaplan, S. R. (1982). A feminist Cinderella tale: Women over thirty in graduate school and professional school. Ann Arbor, MI: Mason

Kasl, S. V. (1987). Methodologies in stress and health: past difficulties, present dilemmas, future directions. In S. V. Kasl & G. L. Cooper, (Eds.), Stress, and Health: Issues in research methodology (pp. 307-318). New York: John Wiley & Sons.

Kessler, R. C., & Essex, M. (1982). Marital status and depression. The importance of coping resources. Social Forces, 6, 484-507.

Kirk, L., & Dorfman, J. (1983). Satisfaction and role
strain among middle-age and older re-entry women
students. Educational Gerontology, 9, 15-29.

Koeske, R., & Koeske, G. (1989). Working and non-working
students: Roles, support and well-being. Journal
of Social Work and Education, 25(3), 244-256.

Kosaba, S. C. (1979). Stressful life events, personality
and health: An inquiry into hardiness. Journal of
Personality and Social Psychology, 37(1), 1-11.

Kuh, G. D., & Thomas, M. L. (1983). The use of adult
development theory with graduate students. Journal
of College Student Personnel, 24, 12-19.

Lange, S. (1980). An anxiety-support model for graduate
education. Journal of College Student Personnel,
24, 20-24.

Lazarus, R. S., & Folkman, S. (1984). Coping with
adaptation. In W. Doyle Gentry (Ed.), The handbook
of behavioral medicine (pp. 282-32). New York:
Guilford Press.

Levinson, D., Darrow, C., Klein, E., Levinson, M., &
McKee, B. (1978). Seasons, of a man's life. New York:
Knopf.

Lieberman, M. A. (1982). The effects of social support on
responses to stress. In L. Goldberger & S. Breznitz
(Eds.), Handbook of stress: Theoretical and clinical
aspects (pp. 764-784).

Likert, L. G. (1967). Conversations with returning women students. Ann Arbor: University of Michigan Press.

Lowenthal, M. F., Thrnher, M., & Chiriboga, D. (1975). Four stages of life: A comparative study of men and women. San Francisco: Jossey Bass.

Makosky, V. P. (1980). Stress and the mental health of women: A discussion of research and issues. In M. Guttentag, S. Salasin, & D. Belle (Eds.), The mental health of women (pp. 111-128).

Mallinckrodt, B., Leong, F. T., & Fretz, B. R. (1983). Stress management, support and resource groups for graduate students. Maryland. (ERIC Document Reproduction Service, No. ED 240426).

Markus, H. (1976). The return to school. Educational Horizons, 54, 172-176.

McLaughlin, M. C. (1985, November). Graduate school and families: Issues for Academic departments and university mental health professionals. Journal of College Student Personnel, pp. 488-491.

Meichenbaum, E. G. (1983). Individual coping efforts and family studies. Conceptual and methodological issues. Marriage and Family Review, 6, 113-135.

Melillo, D. (1981). Role model and mentor influence on the career development of academic women. Ph.D. dissertation. United States International University. Dissertation Abstracts International, 42, 3401B.

Menaghan, E. G. (1983). Individual coping efforts and
     family studies. Conceptual and methodological issues.
     Marriage and family review, 6, 113-135.

Merriam, S., Thomas, T., & Zeph, C. (1987). Mentoring
     in higher education: What we know now. Review of
     Higher Education, 11(2), 199-200.

Munson, C., Pemble, P., & Turner, T. (1981). Study of
     the effects of entering graduate school on marital
     couples. Unpublished manuscript, George Williams
     College.

Murphy, P. P. (1976). The mid-life crisis retrospect:
     An analysis of some recollections of specific emtional
     concerns expressed during middle age. Doctoral
     dissertation, Florida State University. Dissertation
     Abstracts International, 37, 5331B.

Neugarten, B. (1968). Middle age and aging. Chicago:
     University of Chicago Press.

Pascarella, E. T., & Chapman, D. W. (1983). A multi-
     institutional, pathanalytic validation of Tinto's model
     of college withdrawal. American Education Research
     Journal, 20, 87-102.

Payne R. L., & Jones, J. G. (1987). Measurement and
     methodological issues in social support. In S. Kasl
     & C. Cooper (Eds.), Stress and health: Issues in
     research methodology. Chichester: John Wiley & Sons.

Pearlin, L. I., & Schooler, C. (1978). The structure of

coping. _Journal of Health and Social Behavior, 19_, 2-21.

Polson, C. J., & Erikson, J. P. (1988). The impact of administrative support and institutional type on adult learner services. _NACADA Journal, 8_(2), 7-16.

Project on the Status of Women (1980, 1986). Association of American Colleges, Washington, D.C.

Project on the Status of Women, (1982). _The classroom climate: A Chilly one for women?_ Association of American Colleges, Washington, D.C.

Ragle, J., & Krone, K. (1985). Extending orientation: Telephone contacts by peer advisors. _Journal of College Student Personnel, 1_, 80-81.

Roehl, J., & Okun, M. (1984). Depression symptoms among women re-entering college: The role of negative life events and family social support. _Journal of College Student Personnel, 5_, 251-254.

Rosen, B., & Bates, A. (1987). The structure of socialization in graduate school. _Sociological Inquiry, 1_, 71-84.

Schaeffer, C., Coyne, J. C., & Lazarus, R. V. (1981). The health related function of social support. _Journal of Behavioral Medicine, 4_, 381-406.

Seashore, C. (1980). Developing and using a personal support system. In J. Adams (Ed.), _Understanding and managing stress._ (pp. 155-160) San Diego: University Associates, Inc.

Selye, H. (1976). <u>Stress in health and disease</u>. Boston: Butterworth.

Sheehy, G. (1977). <u>Passages: Predictable crisis of adult life</u>. New York: E.P. Dalton and Co.

Simpson, M. E. (1980). Societal support and education. In I. Kutash, L. Schlesinger & Associates (Eds.), <u>Handbook on stress and anxiety</u>. (pp. 451-462). San Francisco: Jossey-Bass.

Solmon, L. C. (1976). <u>Male and female graduate students: The question of equal opportunity</u>. New York: Praeger.

Speer, L. J., & Dorfman, L. T. (1986). The outcomes of re-entry education: Personal and professional development in middle-aged and older graduate women. <u>Educational Gerontology, 12</u>, 253-265.

Spielberger, C. D. (1983). <u>Manual for the State Trait Anxiety Inventory</u>. Consulting Psychologists Press, Inc. Palo Alto, CA.

Stansbury, K. (1986, April). <u>Self-confidence and assertiveness in academic work for men and women graduate students in science and engineering</u>. Annual meeting of the American Research Association, San Francisco, CA.

Stein, E., & Weidman, J. C. (1989, March). <u>Graduate student scholarly activities: Gender and perceived program support</u>. Annual meeting of the American Educational Research Association. San Francisco, CA.

Thoits, P. (1982). Multiple identites and psychological

well-being. <u>American Sociological Review, 48</u>, 174-187.

Tinto, V. (1975). Limits of theory and practice in student
attrition. <u>Journal of Higher Education, 53</u>, 687-700.

Troll, L. (1975). <u>Early and middle adulthood: The best
is yet to be - maybe</u>. Monterey, CA: Brooks-Cole.

Turner, R. J. (1983). Direct, indirect, and moderating
effects of social support on psychological distress and
associated conditions. In Kaplan, H. (Ed.),
<u>Psychological stress trends in theory and research</u>.
New York: Academic Press.

Vaux, A. (1985). Variations in social support associated
with gender, ethnicity, and age. <u>Journal of Social
Issues, 41</u>, 89-110.

Ware, R., Barr, J., & Boone, M. (1982). Subjects, change
in small group processes: An experimental investigation.
<u>Small Group Behavior, 13</u>(3), 395-401.

Whitman, N. A., Spendlove, D. C., & Clark, C. h. (1984).
<u>Student stress: Effects and solutions</u>. (Report No.
ISBN-0-913317-11-X) Washington, DC: National Institute
of Education. (ERIC Document Reproduction No. ED
246832).

Wiersma, J. A. (1978). <u>A phenomenology of self-change:
Women at mid-life</u>. University of Michigan center for
continuing education for women.

Will, T. A., & Langer, T. S. (1980). Socio-economic status
and stress. In I. Kutash, L. Schlesinger (Eds), <u>Handbook</u>

on stress and anxiety. (pp. 159-173).

Zeidner, M, & Hammer, L. (1990). Life events and coping

resources as predictors of stress in adolescents.

Personality and Individual Differences, 7, 693-703.

TABLES

TABLE 1

Coping Skills Inventory Means of Three Groups

	3-hour Orientation Group 1	SD	No Orientation Group 2	SD	Orientation Group 3	SD
Pre-	170.00	26.70	170.50	22.70	157.05	36.24
Post-	172.30	18.63	155.53	28.12	166.73	26.57

TABLE 2

State Inventory Means of Three Groups

	Group 1	SD	Group 2	SD	Group 3	SD
Pre-	55.00	26.32	60.48	28.32	69.00	30.83
Post-	59.30	28.20	59.52	31.65	70.60	31.29

TABLE 3

Trait Inventory Means of Three Groups

	Group 1	SD	Group 2	SD	Group 3	SD
Pre-	81.18	13.18	64.29	29.21	77.90	25.79
Post-	60.60	29.71	70.58	28.28	72.35	30.67

TABLE 4

Social Interaction Means

	Group 1	SD	Group 2	SD	Group 3	SD
Mean	1.61	1.72	2.22	1.72	3.90	3.20

TABLE 5

Out-of-Classroom Research

	Group 1	SD	Group 2	SD	Group 3	SD
Mean	2.10	2.24	2.64	2.85	2.85	2.39

TABLE 6

Use of Counseling Services

	Group 1	SD	Group 2	SD	Group 3	SD
Mean	1.30	.67	1.63	1.75	2.23	2.20

Table 7

Pre-Test - Post-Test State
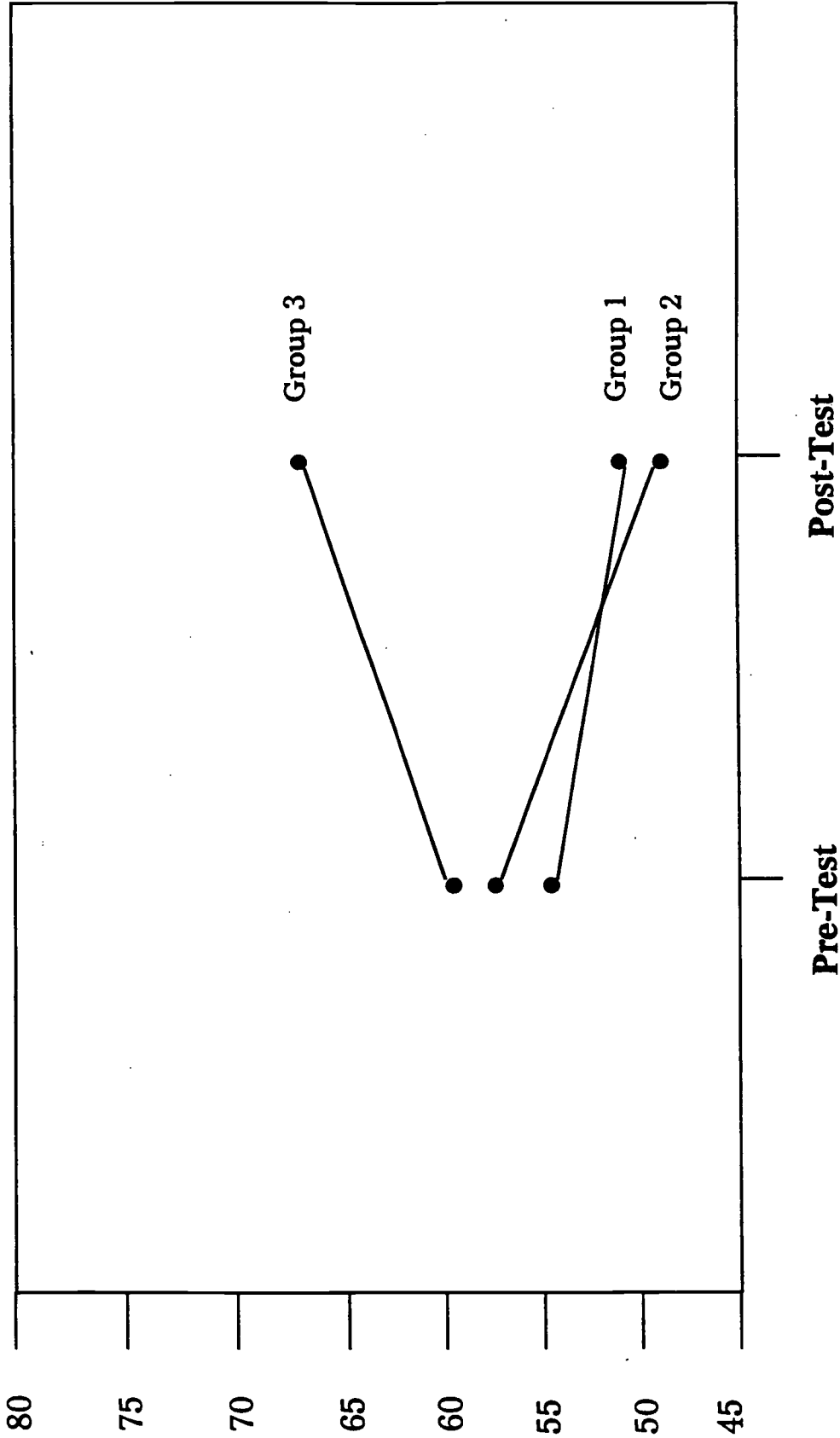
Interaction between Group 1 and 2. Meaning:
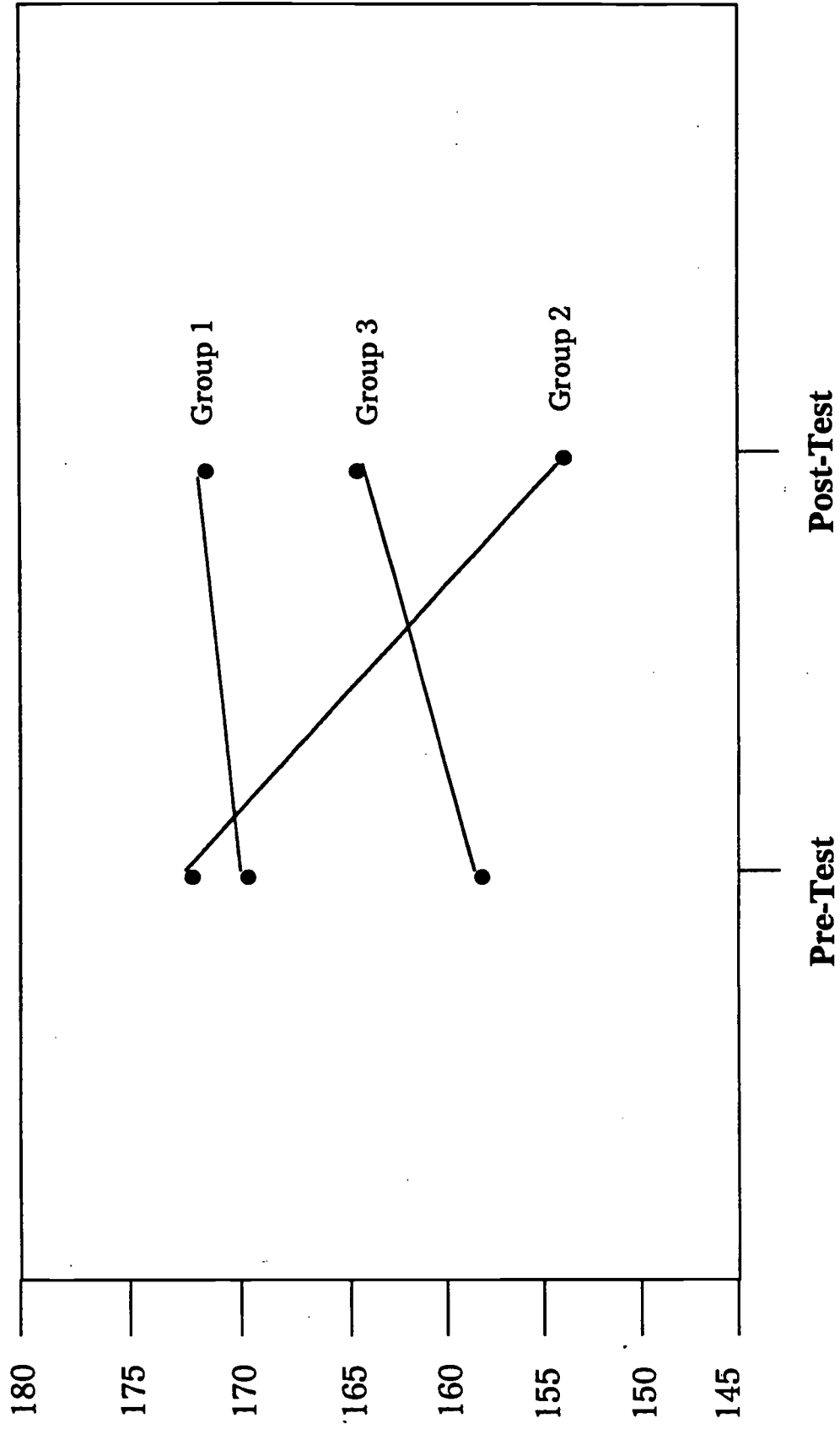Longer orientation period taught better coping skills, more effective teaching

Pre-Test - Post-Test Trait
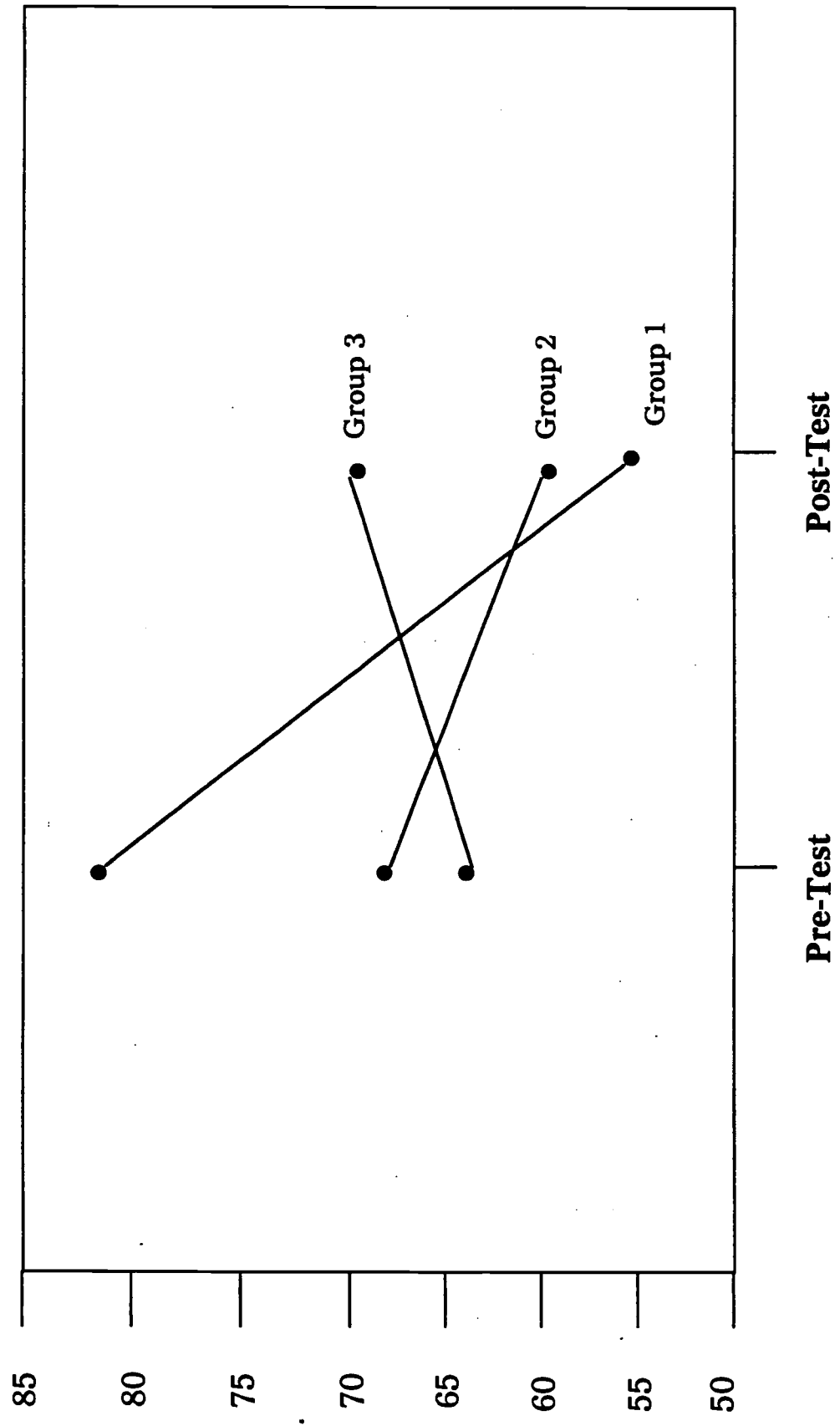
Table 8

Interaction between all 3 groups.

Table 9

Coping Resources

Group 1

Group 3

Group 2

Pre-Test

Post-Test

180
175
170
165
160
155
150
145

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