THE DEVELOPMENT OF AN INVENTORY TO MEASURE

RETURNING ADULT STUDENT ADJUSTMENT AT

SELECTED MIDWEST TWO-YEAR COLLEGES

By

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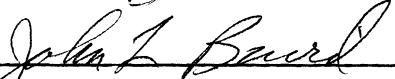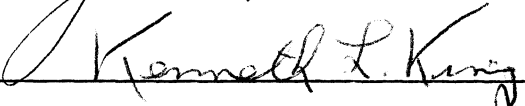DOCTOR OF EDUCATION
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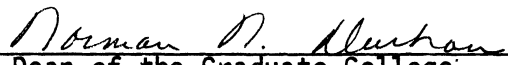SELECTED MIDWEST TWO-YEAR COLLEGES

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ACKNOWLEDGMENTS

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CHAPTER I

INTRODUCTION

Colleges today are experiencing a change in the composition of their student population. No longer is the typical student a full-time resident between the ages of 18 and 22. At Northeastern Oklahoma A & M College, for example, the mean student age is now 27. With this increase in the adult student population come special challenges (Kegel, 1977).

Typically, adults returning to formal education feel insecure, doubtful, or anxious. These feelings are due in part to their felt inability to successfully record useful notes, concentrate on studies, listen effectively, and satisfactorily complete examinations. Having been away from the learning environment for many years, they feel their abilities to learn may have atrophied (Tyron and Sy, 1977).

Adults often have special financial, career, or personal counseling needs. Single female students with families have especially unique needs. Often, adults who attend evening classes only are not informed of the college services available and, as a result, may not receive needed assistance.

Many adults returning to college must maintain their economic security with a part or full-time job. This demand on time and energy, when coupled with family needs and college course studies, often causes stress, fatigue, and anxiety. Students without stress and time

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management skills suffer more than those with such skills (Holtzclaw, 1980).

Because of their age, family, or work involvement, adults in the college environment often feel isolated from the other students. There are few, if any, groups with which the adult can identify or join for emotional, personal support (Rawlins, 1979).

As the number of adults in colleges increases, accommodations should be made to help insure their success. Some institutions of higher education have made provisions to meet the needs of adult students. They have provided special counseling, alerted faculty advisers to anticipate adult needs, or offered special adult orientation programs. In some cases, nothing is done to accommodate the adult learners and they must adjust on their own the best they can. It would be of value to determine the degree to which adults make this adjustment. Such information could give counselors, faculty, and administrators an estimate of how effectively they are meeting the needs of returning adult students.

Statement of the Problem

In attempting to locate an instrument suitable for measuring adult student adjustment to college, the Eighth Mental Measurements Year Book (Buros, 1978) was examined. No such instrument was found. However, the "College Student Satisfaction Questionnaire" was listed, and an attempt was made by the researcher to evaluate this instrument. A current copy of the "College Student Satisfaction Questionnaire" was requested from Central Iowa Associates, publishers of the

questionnaire. The company was no longer at the address listed and no forwarding address was given.

An attempt was made to locate the "College Inventory of Academic Adjustment." The company which published this instrument is still in business, but no longer offers the test and had published nothing to take its place. Apparently, no instrument now exists to measure student adjustment, much less adult student adjustment. Tyron and Sy (1977, p. 481) recommended that: "A suitable instrument for measuring the study orientation of older students should be developed."

The problem of this study was that no instrument had been developed to measure returning adult students' perceptions of potential adjustment problems such as the student's self-perceived ability to:

1. Study college course materials

2. Learn from lectures and classes

3. Identify and utilize existing college services

4. Manage stress resulting from college, family, and/or work

5. Manage study, family, and/or work time

6. Register and enroll in college courses

Purpose of the Study

The purpose of this study was to develop an inventory to measure returning adult student adjustment at selected Midwest, two-year colleges. The instrument that was developed measured only the adult students' self-perception of their adjustment regarding personal study and learning skills, knowledge of services offered by the college, personal stress and time management skills, and their perceived adjustment to college.

Research Questions

This research will answer the following questions:

1. Can experts in adult continuing education and counseling identify and agree upon items of an inventory which are relevant to adult college student adjustment?

2. Can an instrument be developed which will reliably (internal consistency) measure adult college student adjustment?

3. Can an instrument be developed which will have content validity as a measure of adult adjustment to college?

4. Can subsets or factors of adult college student adjustment be identified and empirically verified?

Scope and Limitations

The scope of this study was limited to the development of an instrument to measure adjustment of adult students attending 21 selected Midwest colleges throughout four states in the spring semester of 1985. The generalizability of the instrument to populations outside this group is therefore somewhat limited. It did not assess college services, orientations, counseling or advising effectiveness, or special accommodations made for returning adult students.

No attempt was made to determine what factors affected student adjustment. No effort was made to determine if faculty or counselor attitudes toward returning adults, or other factors had any effect on students' adjustments.

The instrument did not address factors outside the college influence. For example, no effort was made to determine the spouse's effect (if any) on the adjustment of the returning adult.

Definition of Terms

Some terms and phrases are particular to this study and are listed below. Other terms which are used are more common but may need clarification or limitation for the purposes of this study.

Adjustment to College: Adapting to the college environment as measured with a Likert-like inventory, the "Adult College Student Adjustment Inventory," specifically developed for this study.

Adult College Student Adjustment Inventory: This instrument identified the returning adult college students' self-perceived ability to study and learn college-level material, to identify and locate college services, to manage personal stress and time, and to feel confident with their college adjustment (Appendix H).

Adult Full-Time Students: Students who are 25 years of age or older and enrolled in 12 or more semester hours.

Experts in Adult Continuing Education: Counselors or continuing education staff who have been fully employed, professionally addressing adult student adjustment problems for two or more years.

Inventory: A group of scales or subscales made up of individual response items. In this study, the terms "inventory" and "instrument" are used interchangeably.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Demographers find the median age of citizens throughout the country to be increasing. This change accounts for an increase in the ratio of the number of adults returning to colleges and universities to the number of younger students (Kimmel, 1976). Because institutions of higher education have, in the past, focused most of their attention to younger students, needs of the older, adult students were not met. Specifically, adult students returning to school often had difficulty making satisfactory adjustments to their new environment (Holtzclaw, 1980; Lance, Lourie, and Mayo, 1979; Rawlins, 1979).

This literature review is divided into the five following categories:

1. Background for research
2. Study and learning skills
3. College services
4. Stress and time management skills
5. Adult college student adjustment

Background for Research

The rising median age of Americans has an influence on the

institutions that serve the country. This section examines how this impact is affecting colleges and universities and why they must adjust.

Information obtained from the 1980 Census (U.S. Bureau of the Census, 1980) has been used to help identify trends for education planners. Much of that information indicates an increase in the number of adults in the country, which has implications for colleges. The information can help understand present student populations as well as predict, with some certainty, what the student age will be in the near future (Kimmel, 1976).

The 1980 Census indicated that the baby boom of the 1960's will be entering middle age in the 1980's and 1990's. By the year 2000, the number of adults aged 35-44 will have increased 40%, from about 25 million in 1980, to 41 million. In examining the median age of adults during this time period, the median age of Americans was 27.9 in 1970. If fertility rates do not increase, in 1990 it will be 32.8, and in 2000, it will have risen to 33.5 (U.S. Bureau of the Census, 1980).

Holtzclaw (1980) also referred to the rising number of adults and suggested an effect on education:

> Demographic and technological changes are contributing
> to the growth of a new learning society. Demographi-
> cally, the United States is becoming a nation of adults.
> In 1970, 52% of the country's population was under age
> twenty-nine. By 2000, the United States will shift to
> an adult majority when those over 30 will constitute 57%
> of the population. Technologically, expansion of knowl-
> edge will make many career educations obsolete in five
> to ten years. It is clear now that no education will
> last a lifetime (p. 355).

Worthington (1982) also suggested that an increasing number of adults will need additional education in the future:

. . . during the last two decades of this century adult
and continuing education will be in the forefront of a
massive expansion of adult learning. By 2000 A.D., the
population of this country will be dominated by persons
in their middle years. Evidence is clear that adult
education is growing at a 12 percent per annum rate
compared with a 2 percent growth in elementary and
secondary education (p. 1).

There are several reasons for an increase in adult and continuing
education. Darkenwald and Merriam (1982) pointed out that adults now
have more money and available time to invest in education. They also
noted that the more education an adult has, the more likely he is to
continue his education throughout his life.

The U.S. Bureau of the Census (1980) indicated that there is a
definite trend toward more adult education. The median number of
years of schooling completed by adults in 1940 was 8.6. That number
has increased to 12.5 in 1979. Furthermore, over the same time span,
the percentage of adults 25 and over who completed four or more years
of college rose from 4.6 to 16.4. If more adults receive a college
education, and there are more adults, then higher education can anti-
cipate a continued rising number of adult students. Darkenwald and
Merriam (1982, p. 6) concluded that "While adult education never was a
marginal part of the education of the American public, today its
significance is greater and more widely acknowledged than ever before."

Acknowledging the increase in adults attending college, Reehling
(1980) indicated that a greater portion of those returning adults are
women:

More adult students are attending colleges and universi-
ties than ever before. In 1972, students 25 years of
age and older represented 30% of all students attending
colleges; by 1977, their proportion had increased to 40%
of total college enrollments. The enrollment of adult
women students 25 years old and over increased by 106%.

This figure triples that of 34% for male students in the
same age group and time period (p. 481).

It was noted that the community college had a rise in the number of female students. Of the total two-year college student enrollment, 7% are adults over the age of 25. Of these, over half (54%) are women. Furthermore, two-year colleges had a rise in the number of total adult students returning to school. It is expected that between 1985 and 1990, the enrollment of four-year colleges will decrease by a quarter million students, and two-year colleges will gain 150,000 students (The 1984 NEA Almanac of Higher Education, 1984).

In the years 1978 to 1980, Northeastern Oklahoma A & M College had 50% of their student population comprised of 18- and 19-year-old students and 15% comprised of adults over the age of 30, according to Angle (1984). By the years of 1981 to 1983, Angle noted that the populations had shifted to 44% younger and 22% older students.

With this influx of older students into college, several adjustments should be made to accommodate these students. One of the needs many adults returning to college feel is important is to improve their study and learning skills. Authorities verify this need, as shown in the next section.

Study and Learning Skills

Some adults returning to school after many years have deficits in study and learning skills. These deficiencies may cause anxiety, feelings of insecurity, and self-doubt. For some, this may only be a felt problem, while for others it may constitute a real concern for which remedial assistance would be in order. Without help or assistance in

improving their study and learning skills, some adults may experience
failure and drop out of college. Sikula (1979) believed that adults
returning to college may be subject to greater rates of failure be-
cause they are unprepared for the experience:

> It is questionable as to whether or not the positive
> effects of granting academically unprepared students
> permission to take university courses outweighs the
> negative. For most students, opportunities to take
> university courses result in another experience of
> failure. Mounting negative experiences do little to
> constructively answer life adjustment questions: e.g.,
> 'Who am I?' 'What significant things can I or will I
> be able to contribute to society?' 'How will I survive?'
> 'How can I obtain lifetime job security?' (p. 7).

Some of the learning and study experiences encountered in college
are more difficult than what the returning adult expected. Some may
find memorizing and taking examinations too demanding. Some may not
be prepared to spend hours of reading and studying. Many find that
writing reports or term papers requires skills they no longer possess
or may have never acquired (Simpkins, 1980).

Fisher (1977) also believed that adults returning to college have
a lack of efficient study habits. He strongly encouraged most adults
returning to college to take a short course on study and learning
skills or at least to read a text on the subject.

Some authors feel that an important aspect of any education is
learning how to learn. Knowles (1975), for example, believed that
adults should be taught how to learn on their own. He is convinced
that adults in today's society must learn how to learn by themselves.
He exclaimed that: "It is a tragic fact that most of us only know how
to be taught; we haven't learned how to learn" (p. 14). It seems
apparent that an attempt to earn a college degree should begin with a

Most adult educators believe that the adult is self-directed and self-oriented. Once shown what is expected and how they can accomplish it, adults should be freed in order to learn on their own. Adults are independent and often quite capable of managing their own learning. If adults are given the basic learning and study skills, then they, on their own, can and usually will complete their learning experience successfully (Darkenwald and Merriam, 1982).

Therefore, one of the major goals of education, adult education in particular, should be the training of adults to learn on their own. Cross (1982) stated:

> I believe that the single most important goal for educators at all levels and in all agencies of the learning society is the development of lifelong learners who possess the basic skills for learning plus the motivation to pursue a variety of learning interests throughout their lives (p. 249).

College Services

College services provide essential and helpful assistance to students during the period they are with the institution. While some may not be absolutely crucial to the student's success, they often make the college experience more tolerable. Some of the needs of students are psychological as well as physical. Knowles (1980) cited the adult student's need for security as being important. He believed that we learn better when we are familiar with our surroundings, know where to find things, and have a feeling that we know where we are going. It seems obvious that adults in the new atmosphere of a college campus need some orientation to the setting to become comfortable, know where things are, and know how to get help from the various services provided.

Unfortunately, many colleges and universities do not have an orientation for adults. Once enrolled and registered, adult students find themselves forced to manage on their own. Many will continue throughout the college experience without knowledge of services, counseling, financial assistance, or child care facilities. Such information is often received by word-of-mouth from other students. However, not all institutions of higher education are this short-sighted (Kimmel, 1976; Rawlins and Davies, 1981).

Services provided for students at universities and colleges are typically geared to the younger, traditional student. As administrators become more aware of the needs of adults, they also become aware of the built-in bias of the institutional system. As a director of college-level placements, Kimmel (1976) described some conditions at his college as roadblocks to adult students. After completing his study, Kimmel observed that college services should begin to note the needs of adults for adjustable services at the library, for health and counseling care, for dining facilities, and for providing day (and night) child care.

Of concern to some college administrators has been the reason(s) for adult student drop out. One researcher, Fitch (1983), found that retention and persistence in college is largely determined by the student's confidence with his/her career choice decision. If the student is well pleased and certain of the career choice, there is a greater likelihood that he/she will complete college. Thus, there is an obvious need for the nontraditional student to receive guidance counseling or at least be made aware of the service. If the adult student is not informed of this service, he/she may discontinue the college experience.

Time can be a problem for an adult student with family responsibilities and a full- or part-time job. Often, the adult student cannot give unreservingly of his/her day time hours. Rawlins and Davies (1981), in studying attitudes and perceptions of 57 adults returning to college, found that: "Over half of the participants indicated that when a problem arises they waste much time trying to find the office or person to provide the appropriate service" (p. 13). They went on the explain that ". . . there seems to be a need to help over thirty learners become aware of the services available to them" (p. 13). In an earlier study of 40 adult students attending the University of Nebraska-Lincoln, Rawlins (1979) discovered that, among other things, adults did express a need to learn more about services available to them. If known, adults can self-correct problems with their college experiences.

Even when the adult knows of a service that will meet a need and avails him/herself of the service, time management can still be a problem. If adults are given stress and time management skills training at the outset of the college experience, the transition to the environment could be better made on their own.

Stress and Time Management Skills

Change is an integral part of life. It is nearly a cliche that the only thing certain in life is change. Midlife adults certainly have their share, with family, personal, and career adjustments. Toffler (1970) stated that:

> Change is life itself. But change rampant, change un-
> guided and unrestrained, accelerated change overwhelming

not only man's physical defenses but his decisional
processes--such change is the enemy of life (p. 786).

Adults returning to college may feel the change and adjustment at times
to be overwhelming. This change is often accompanied with personal
stress.

Personal stress can be a problem, depending on the training of
the individual in how to manage stress. Some are better equipped than
others. Those poorly equipped might gain from training in stress
management techniques (Roehl, 1980).

Adult students, in addition to the pressures of course study and
preparation, often have family and financial worries to contend with.
These pressures, as reported by returning adult students, occasionally
erupt as a personal crisis, causing the adult to withdraw from college.
Professional, personal guidance services could assist the adult with
these stress-related problems (Turner and Helms, 1982).

Adults may have another stress factor that younger students may
not have: higher levels of personal goal achievement. As Berkove
(1976) found in her study of 361 women returning to college, they place
heavy burdens and demands upon themselves--demands to be "supermom,"
"superwife," and now "superstudent."

The problem of student drop out caused by time/stress conditions
is confirmed in another study by Reehling (1980). Reehling found that
men had more time/stress-related problems than did women attending
college.

Malin, Bray, Dougherty, and Skinner (1980) clarified sex differ-
ences with a study of 746 computer-selected students over the age of
25. Their research revealed that men had less success in college than

women, as measured by grade point average and their own self-reported satisfaction with college. If men and women students returning to college could be taught to better manage their time, they may also be able to better manage stress, and conceivably more adults would continue their college until successful completion.

A large number of returning adults have stated that they would use time and stress management training. Lance, Lourie, and Mayo (1979) found that 3% of the males and 31% of the females would use time management training. His study of 2,958 adults over the age of 24 who were returning to college also found that 36% of the males and 47% of the females indicated that they would attend a workshop on anxiety reduction. As Griffith (1974, p. 198) stated: "People need to feel they can cope, and the place to start that feeling is in the schools."

Some authors feel strongly regarding the impact stress can and does have on adults making life adjustments. Trollan (1982) pointed out the importance of making satisfactory adjustments and made a special appeal to adult educators:

> Perhaps the greatest danger to the survival of civiliza-
> tion is not environmental pollution, nuclear warfare,
> population explosion or natural resources depletion, but
> the inability of man to cope with the changing world.
> The awesome goal for the adult educator in modern soci-
> ety is to help humankind to gain the necessary competen-
> cies to function adequately with perpetual change (p. 3).

Trollan believed that with proper training, stress can be managed and that adult educators should endeavor to provide such training. Certainly, when adults are first returning to college is a propitious time. The literature citing the need for special adult orientation is abundant (Tyron and Sy, 1977; Rawlins, 1979; Fisher, 1977; Knowles,

1975; Darkenwald and Merriam, 1982; Cross, 1982; Rawlins and Davies, 1981).

Adult College Student Adjustment

Adults returning to college feel different and are different. They have different attitudes, different goals, and different personal life experiences on which to base their college experience. Lance, Lourie, and Mayo (1979) made a thorough study of the returning adult and his/her expectations. They found that colleges and universities have not kept pace with adult student needs. They also found that adults who had been away from the educational system for years had considerable doubts and fears about their abilities to adjust to college. These adjustments are difficult. The changes brought on in one's life when starting back to college full time can be overwhelming; however, it need not be this way. Colleges can make accommodations for the returning adult. Lance, Lourie, and Mayo explained that special orientation programs would help. This was one of the most desired items indicated by returning adults. By actual tabulation, 65% male and 69% female students said that they would use, or might use, a specialized credit course for reentering students.

When surveying returning adults, Rawlins (1979) found that one of the most desired services was an orientation of some type. She believed that "Orientation sessions would help the adults to feel secure and familiar with the university setting as their college careers were begun" (p. 141).

Some advisers mistakenly feel that because they are older, adult students are somehow "college wise." As Bauer (1981) pointed out:

"Adult students and their advisors sometimes erroneously assume that age positively correlates with understanding university procedures and processes" (p. 236). To help the older student, Kegel (1977) proposed that special student-orientation programs be instituted which would address the special needs and problems of returning adults.

If providing an orientation for adults is of value, then there should be some evidence. One would expect, for example, that grade point average would be raised. Browne (1978) tested a special orientation program for traditional students. He used volunteer faculty as special advisers to the incoming freshmen and instructed them to give study skills tips and personal counseling as needed on an individual basis. His results did not indicate any significant difference between the control and treatment groups in grade point average. One of the recommendations that he made, however, was to increase the amount of time spent on learning strategies, and a more formal setting.

Another study used upperclassmen as peer "big brother" and "big sister" counselors to incoming freshmen (Patton, 1980). Her study also found no significant difference in first semester grade point averages. It should be noted, however, that no attempt was made to give students training in study skills, either formally or informally.

Using a prescribed format, Dowden (1981) did find a significant relationship in grade point averages and the control and treatment groups. He concluded from his study of 328, randomly selected entering freshmen that participation in an orientation program did enhance academic achievement by raising their grade point averages. There appears to be a correlation between certain types of orientations and

academic achievement. How adults might be affected by such a program is not clear from evidence supplied by the literature.

It is clear that adults are concerned about their grades, perhaps more so than younger students. Rawlins (1970) found that older adults felt an urgency to achieve superior grades. As one student in her study said: "If I was going back after all these years, I wanted it to be with a big splash of getting straight A's" (p. 140). With this intense concern for high achievement, it is apparent that the adult would seek skills that would better enable their success.

If the adult places such high standards on him/herself, there is the possibility of self-perceived failure. This could be especially critical during the adult student's initial encounter with the college experience. Kidd (1973) believed that too high expectations, without techniques for coping, could cause adults to drop out. He believed that the institution should strive to reduce tension and stress on the returning adult by reducing competition, reducing to a minimum the number of courses during the first semester, and by choosing courses that are less strenuous. Such actions could allow the adult to "settle in" to the experience and have a greater probability of success. It is assumed that with success would come a higher retention rate.

Retention appears to be a significant problem with the adult students. Kegel (1977), in describing a situation with which he was familiar, related that only one-third of the adult students enrolled for fall classes were in attendance the following spring.

In a survey of adult student attrition, Sikula (1979) found an 89.5% attrition rate of adult students aged 21 or older between the fall and spring semesters. It would seem that administrators and faculty

should be concerned and should institute conditions which reduce this high drop out rate.

Cross (1982) believed that adults should experience success during the initial contact with the institution. Her theory regarding adult chain-of-response behaviors indicated that when adults achieve one "success" or achievement, another change of behavior will be linked to that event. Thus, success would breed success and the adult student would be stimulated to continue his/her college work. If the adult can see self-gain and self-improvement through a personal, non-threatening, confidence-building orientation program, then perhaps he/she will be more likely to complete the whole plan of study. Haight (1982) found, in his study, that such was the case. He reported that an orientation course at an art college reduced the attrition rate after three semesters from 25 to 20.4%.

In a doctoral dissertation study, Dickson (1979) found that an orientation for adults did significantly raise retention. Her study also revealed that adult students preferred small group, experience-sharing methods over the more traditional delivery techniques. Adults appeared to want small group interaction.

Knowles (1980) believed that adults desire small groups and discussion techniques to satisfy their need for affection. He described adults as social creatures who seek out others to share interests, experiences, joys, and sorrows. It is during the first weeks of reentering college that the adult may feel most isolated, bewildered, and in doubt. It is this time that he/she most wants to share experiences. The small group is one method by which this sharing can be achieved and should be included in an orientation program.

Rawlins (1979), in her study of adult attitudes when returning to college, found a very high priority in the desire to have some opportunity for socializing. She believed the reasons for this desire were the feeling adults had that they were different from others. She believed adults were concerned about their ability to relate well with younger students. They felt they would be conspicuous, stand out like "sore thumbs," and be rejected because of their age. Such feelings gave cause for anxiety and tension for the returning students.

One study by Hooper and March (1980) found that women had an even greater adjustment problem in returning to college than did men; in particular, those who were parents. They observed that most colleges and universities are designed to serve students 18 to 20 years of age, who live on-campus, who are supported financially by someone, and who are able to attend full-time classes. They observed that single-parent women students met none of these criteria. Hooper and March developed a special re-entry program for single female parents. The program used the small group format. They described the results of the program as very positive and rewarding for themselves and the student women as well. They concluded that adult women do have different needs that should be addressed by institutions of higher education.

Roehl (1980) came to the same conclusion as Hooper and March (1980). Roehl described the reentering woman's self-concept as low, her previous social contacts as limited, and previous experiences resulting in success from her own efforts as minimal. Under these conditions, the reentering woman adult students is anxious and filled with self-doubt. Roehl described how the reentry woman can overcome these problems by becoming involved with peer groups for support,

feedback, and improving one's self-concept. Byrne's (1980) study confirmed that a special orientation course for adults increased their self-confidence.

Knowles (1980) had a great deal to say about the proper learning climate for adults: ". . . the psychological climate should be one which causes adults to feel accepted, respected, and supported" (p. 47). Whether in the first hour or first few weeks, the adult must be made to feel that he/she can cope with the situation. As Knowles concluded:

> I am convinced that what happens in the first hour or so of any learning activity (course, seminar, workshop, institute, tutorial, etc.) largely determines how productive the remaining hours will be. I see the setting of a climate that is conducive to learning as perhaps the single most critical thing I do as a facilitator of learning (p. 224).

How can educators know if they are setting the proper climate on the college campus? How can faculty know their efforts to help the adult "fit in" are of value? How can counselors be certain they are addressing the adult's peculiar psycho/social needs? How can service agencies of the college determine if they are responding satisfactorily to the adult's special needs? How can administrators be confident the college is accommodating this increasingly larger segment of the student population? It seems that there is a need for an instrument which can measure the adult college student's adjustment.

Development of an Instrument

The attitude-type inventory is a proven research tool. Its use as a device to measure attitudes and interests has gained respectability. It is a direct method which can sample a broad spectrum of

perceptions and attitudes, yet can yield objective, quantifiable scores and provide for group comparisons (Aiken, 1971; Anastasi, 1968).

An inventory appeared to be a logical selection as a device to assess adult college student adjustment. Key (1984, p. 105) explained that: "Inventories are instruments that attempt to 'take stock' of one or more aspects of an individual's behavior rather than to measure in the usual sense." In this study, the inventory was designed to "take stock" of behavior (college student adjustment) of a defined group (returning adult students).

Key (1984) further described the inventory as having the advantage of being economic, simple, and objective. However, he cited validity as being a major disadvantage. "The difficulty of validating inventories limits their use as scientific measurements" (Key, 1984, p. 105). In addressing this issue, the researcher exercised several steps (described in Chapter III) to insure the most valid instrument possible. Specifically, these were:

1. Exhaustive use of the literature and other sources to identify adult student adjustment problems

2. First semester adult students will verify item applicability

3. Use of a panel of experts in adult student adjustment (James, 1984)

4. Pilot testing at the first and fifteenth weeks of the semester to identify change in student attitudes or adjustments (Thompson, 1984)

The inventory in this study used scaled items. Key (1984) described the scale as:

> A scale is a set of numerical values assigned to sub-
> jects, objects, or behaviors for the purpose of quanti-
> fying and measuring qualities. Scales are used to
> measure attitudes, values, and interests. They measure
> the degree to which an individual possesses the charac-
> teristics of that interest (p. 105).

Specifically, the objective-type scale used in this study for the inventory development was a Likert-like scale, as described by Aiken (1971). The development of this scale was done in the hope that educators could better meet the needs of adult students returning to college.

<div align="center">Summary</div>

It is clear that there is an ever-increasing number of adults attending college. Institutions of higher education have perhaps not provided the kinds of support to this group that they should. Partic- ular concerns of adults relate to their felt inability to study and learn as well as they once did or as well as they would like. Because some adults may have family or work responsibilities in addition to their college studies, they feel personal stress and time pressures more than do younger students. In the college environment, adults often feel alienated and without friends to share their unique con- cerns or feelings. These problems for adults constitute potential adjustment concerns which, if addressed by the institution, could ease the adult student's entry into college. In order to determine the degree of adult student adjustment to college, an inventory should be constructed.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this chapter is to describe the development of the
"Adult College Student Adjustment Inventory." Validation and pilot-
testing procedures are described, and preliminary subset identifica-
tion is provided.

Design

Instrument Development

From a survey of the literature, 65 potential adjustment problems
were identified (Holtzclaw, 1980; Kimmel, 1976; Lance, Lourie, and
Mayo, 1979; Rawlins, 1979; Roehl, 1980; Tyron and Sy, 1977). In order
to verify if these were indeed adjustment problems experienced by
adults, these items were presented to 35 adult students attending the
1984 summer semester at Northeastern Oklahoma A & M College. The
items were written as a statement, and the students were asked to
simply respond "yes" or "no" if it was or had been an adjustment
problem for them when they returned to college. Of the 65 items, 64
were scored as an adjustment problem by 20% or more of the students.
Thus, one item was eliminated. (The 65-item "Yes/No" instrument is in
Appendix A.)

The 64 items were reworded for clarity, an equal number written positively and negatively, then randomly selected for order for the Likert-like questionnaire. (This pilot-test instrument is in Appendix B.)

First Validity Check--35 Adults

The purpose of this check was to determine if the inventory would question adult student problems. A comments section was placed at the end of the questionnaire and students' comments were carefully noted. This check also identified items which had extreme answer score patterns.

Procedures

During the 1984 summer semester, volunteer students from freshman English classes at Tulsa Junior College were asked to participate in the study by completing the 64-item questionnaire. Students were allowed to take the instrument home and return it at a later time.

Subjects

Twenty-five, full-time adult students over the age of 25 volunteered to complete the inventory. Gender, grade point average, or socioeconomic factors were not considered nor screened for. It was assumed that these students were representative of adult students in most Midwest, two-year colleges.

Findings or Results

The score sheets were machine-read by the Oklahoma State

University Bureau of Tests and Measurements. A tally sheet showed scoring patterns of the items and those which had little spread, especially those with no extreme (5 to 1) responses, were reworded.

Second Validity Check--Panel of Experts

Procedures

A panel of adult, continuing education experts was selected to examine the 64-item pilot-test instrument for:

1. Appropriateness. (Is this a problem for adults?)

2. Wording. (Is the item worded clearly and concisely?)

3. Item Missing. (Was an adult problem not addressed?)

Each member was provided a copy of the instrument and a stamped, self-addressed envelope for the instrument's return, with their comments. This procedure was concurrent with the first validity check.

Subjects

The panel of 10 experts were selected from persons who were: (1) working full-time professionally with adult continuing education students in a college environment, (2) had been in such a capacity for two or more years, and (3) agreed to examine and help with the development of an instrument to measure adult college student adjustment. (The panel's names, titles, and addresses are in Appendix C.)

Findings or Results

Comments and contributions made by the panel provided valuable information with which rewording and clarification was accomplished on many of the instrument's items. (Selected comments from the panel are in Appendix C.)

Using results of the two validity checks, the 64-item pilot-test was reworded, clarified, and refined. This instrument was then administered at three different colleges as a pilot study.

Pilot Study--Three Colleges

The purpose of the pilot study was to check wording of the inventory's items. It also permitted the researcher to identify problems with administration, collection, and scoring of the inventory.

Procedures

The 64-item Pilot Study Instrument (Appendix D) was given to volunteer students at Tulsa Junior College, Coffeyville Community College, and Northeastern Oklahoma A & M College during the fall, 1984 semester. It was felt that these three colleges represented different sized institutions, rural and urban settings, and would render results typical to those found in most Midwest, two-year colleges. Sixty-nine students participated, which provided a data base for statistically analyzing the items in the instrument.

Subjects

Classes at the three colleges were randomly contacted to locate adult students which would represent a cross-section of those attending. Students who were asked to volunteer had to meet the following criteria:

1. Full-time college attendance
2. First time ever attended college full-time

3. Carrying a 12-hour load or more

4. Aged 25 years or older

Again, gender, grade point average, or socioeconomic factors were not considered.

Findings or Results

The 69 total questionnaires gathered by representatives at the three colleges were machine-scored by the Oklahoma State University Bureau of Tests and Measurements. The Item Analysis Scaling Program (Oklahoma State University, 1982) was used to statistically evaluate the individual items to the overall test reliability. (The correlation of each item to the overall instrument data is shown in Table VIII, Appendix D.)

Many students made comments about their feelings and adjustment problems in returning to school. These comments, with the item analyses, were used to rewrite and further refine the instrument used in the main study. In developing the main study instrument, 12 items showing low correlations (.399 or lower) were deleted. Two registration subset items were added (numbers 13 and 24) to the main study instrument. Additionally, three items (numbers 26, 41, and 51) were reworded from positive to negative, negative to positive, and negative to positive, respectively, for clarity. The word "little" was added to item 41, in anticipation of a better correlation. Rearranging of the items was necessary to prevent repetition of subset items within the instrument. (The revised main study instrument administered in the 1985 spring semester is in Appendix E.)

Using information from the literature, subsets or subscales were identified. These subscales are keyed to the main study instrument used in the spring of 1985 and are in Appendix F. It was anticipated that these subsets or subscales would correlate well with the overall instrument and would reflect reliably the adult student's adjustment. They were:

Study Skills. Those skills the student must have or use away from school to prepare for quizzes and tests.

Time Management. The student's effective use of study, work, and recreation time.

Stress Management. The skills of the student to manage work, school, and family pressures.

College Services. The student's knowledge and use of services provided by the college.

Learning Skills. Those skills the student must use during class lectures, laboratory experiments, or discussions to better retain the information.

Registration. The knowledge and ability of the student to register him/herself in college courses.

Main Study--21 Colleges

Procedures

The last phase of the study selected two-year colleges from the

four states geographically surrounding the researcher's residence: Kansas, Oklahoma, Arkansas, and Missouri. The researcher wrote all two-year colleges in these four states. Twenty-one of the 57 colleges contacted participated in the study. The initial contact was made to the presidents of the colleges, asking for their participation and the name of a contact person to help with the project. Although 21 colleges provided January student participation, only 10 responded to the follow-up questionnaire in May. Follow-up letter appeals were sent to all 21, and telephone inquiries were made to all nonresponding colleges. No more questionnaires were received. (Participating colleges are shown in Appendix G.)

Subjects

At each college, project personnel obtained the inventories from the students. They were asked to insure that the students were: (1) adult, aged 25 or older; (2) entering college full-time (12 or more credit hours); and (3) entering college for the first time. Students were allowed by some project personnel to take the inventory home, complete it, and return it later. Others had the students fill out the inventory under their supervision at the institution. Data on gender, grade point average, socioeconomic status, or other factors were not collected.

Treatment of the Data

The 1985 spring main study inventory was administered to 244 adult students at the 21 colleges. Of these, only 156 were valid because of item omissions. The inventories from the 156 subjects were

statistically analyzed with an item analysis using the Oklahoma State University Item Analysis Scaling Program (Oklahoma State University, 1982). Factor analysis used the Statistical Package for the Social Sciences (Norusis, 1985) and an Equimax Rotation. The Cronbach's Co-efficient Alpha was used to demonstrate subscale intercorrelations. A t test was used to determine if a significant difference existed between male and female participants. The t test was also used to compare the mean scores of those students' who took the first and follow-up tests, in order to determine if changes in adjustment oc-curred. Students who received an orientation program and those who did not were compared with the t test to determine if orientations affected student adjustment.

CHAPTER IV

PRESENTATION OF FINDINGS

Introduction

This chapter will present information obtained from the "Adult College Student Adjustment Inventory" as presented to the 156 subjects at 21 colleges in the previously identified four states.

Descriptions of Student Participants

Of the 244 inventories obtained, 156 were used and 88 were rejected because of missing items. Of the 156 completed inventories: 86.4% managed a household--13.6% did not; 31.4% received a freshman orientation--68.6% did not; .7% expected a grade point average of 1, 6.8% expected 2, 63% expected 3, and 29.5% expected a grade point average of 4 (on a scale of A=4); 70.9% strongly expected to gradate, 17.9% thought they would graduate, 6.6% were not sure they would, and 4.6 doubted if they would graduate; 41.7% were presently full- or part-time employed--58.3% were not; the mean age of the responding group was 33.4 years; and 32.1% were male--67.9% were female. It was assumed that this is representative of students attending these colleges. The usual caveats must be observed because of the large number of incomplete forms (37%). (Some students who did not complete the inventory may be very different from the remainder; therefore, the obtained sample may not be representative.)

Findings and Inventory Refinement

An item analysis of the 55 main study inventory items enabled the researcher to arbitrarily remove all items with correlation coefficients below .555. This was done in order to reduce the length of the instrument. This removed items 7, 14, 16, 17, 19, 20, 22, 29, 30, 39, 41, 45, 49, and 50, leaving an inventory containing 41 items with which to work. (The data analysis is presented in Table I.)

This 41-item instrument was subjected to a principal components factor analysis, followed by an Equimax Rotation. The purpose of this factor analysis was to provide construct validation for the original six subsets (Cronbach and Meehl, 1957). (The factor analysis for the 41 items is in Table II.) It was apparent, based on the factor analysis, that the learning and study skills subsets grouped together and a decision was made to combine these two. By using another item analysis using a cut-off of $r=.530$, another downward adjustment was made in the total number of the inventory, and a 28-item inventory was identified. Again, the purpose of this second analysis was to remove items from the scale. A factor analysis of these items (Table III) clearly identified the subscales. Items 2, 35, and 40 were removed because they did not correlate with the subscales. (Each of the subscales are described in detail in Table IV.)

A $\underline{t}$ test was used to compare follow-up scores to the first test in January. The data indicated a positive adjustment or change in all subsets and the total, with the college services showing a significance at the 0.5 level. (The $\underline{t}$ test data are in Table V, Follow-up Test Data.) The $\underline{t}$ test was also used to compare male/female students to

TABLE I

MAIN STUDY INVENTORY--55-ITEM ANALYSIS

ITEM	PART	CORR.(TOTAL)	CORR.(PART)
1	1	0.444	0.676
2	2	0.282	0.633
3	3	0.362	0.559
4	1	0.451	0.665
5	4	0.420	0.609
6	5	0.552	0.652
7	3	0.150	0.323
8	1	0.617	0.674
9	1	0.633	0.769
10	3	0.450	0.700
11	1	0.580	0.591
12	5	0.456	0.604
13	6	0.521	0.744
14	3	0.481	0.468
15	6	0.588	0.720
16	2	0.284	0.510
17	1	0.421	0.475
18	5	0.457	0.603
19	4	0.428	0.518
20	3	0.331	0.399
21	1	0.524	0.590
22	3	0.348	0.463
23	2	0.314	0.575
24	6	0.510	0.688
25	3	0.417	0.690
26	4	0.527	0.706
27	6	0.360	0.589
28	5	0.538	0.649
29	3	0.285	0.350
30	3	0.455	0.498
31	1	0.635	0.763
32	5	0.601	0.706
33	4	0.378	0.667
34	3	0.332	0.571
35	5	0.616	0.756
36	6	0.316	0.621
37	2	0.519	0.634
38	3	0.427	0.666
39	2	0.172	0.511
40	2	0.565	0.554
41	3	0.000	0.000
42	2	0.594	0.701
43	4	0.490	0.732
44	5	0.556	0.640
45	6	0.366	0.531
46	4	0.446	0.674
47	5	0.553	0.555
48	4	0.358	0.578
49	3	0.567	0.465
50	3	0.440	0.388
51	4	0.378	0.641
52	1	0.523	0.669
53	5	0.576	0.731
54	2	0.551	0.667
55	4	0.388	0.713

TABLE II

FACTOR ANALYSIS--41-ITEM SCALE

Factor 1		Factor 2	
Item	Loading	Item	Loading
53	-.654	46	.773
52	-.637	45	.737
01	-.621	33	.693
09	-.608	51	.621
32	.602	55	.614
31	.586	43	.611
35	.567	26	.606
04	.543	27	-.479
44	.539	05	.436
28	.476		
12	-.469		
06	-.468		
08	-.460		
21	.389		

Factor 3		Factor 4	
Item	Loading	Item	Loading
42	-.736	13	.753
54	-.675	24	.711
37	.626	14	.558
49	-.615	15	.548
40	-.542		
47	-.481		
17	.449		
18	.387		
50	-.367		
29	-.341		

Factor 5		Factor 6	
Item	Loading	Item	Loading
10	-.740	39	.729
25	-.670	23	-.589
34	-.656	20	.532
38	-.591	02	-.507
11	-.481	07	-.468
03	-.446	16	.450
30	-.432	36	-.387
22	-.398		

determine if a significant difference existed, and none did (Table VI, Male/Female Differences Data). A t test did reveal a positive, significant difference between those students who received an orientation and those who did not (Table VII, Orientation Data).

Summary

Initial factor analysis of the 55-item instrument did not reveal a cohesive subset paradigm. However, by removing items having low correlation to the overall instrument, a pattern did begin to form. Subsequent adjustment by item removal did yield an instrument which has high reliability and is concise. (Subscale and total reliability coefficients are shown in Table IV.)

TABLE III

ROTATED FACTOR MATRIX FOR 28-ITEM SCALE

Factor 1		Factor 2	
Item	Loading	Item	Loading
52	-.698	46	.790
01	-.692	33	.710
31	.674	43	.687
44	.670	51	.658
32	.667	26	.628
04	.609	55	.552
53	-.601		
35	.557		
08	-.531		

Factor 3		Factor 4	
Item	Loading	Item	Loading
54	-.726	25	-.796
42	-.682	10	-.781
37	.643	38	-.748
40	-.641	34	-.647
		03	-.634

Factor 5		Factor 6	
Item	Loading	Item	Loading
13	.826	02	.667
24	.786		
15	.634		

TABLE IV

FACTOR LOADINGS AND SUBSCALE RELIABILITIES

FACTOR 1: LEARNING AND STUDY SKILLS

Rank	Factor Loading	#	Item	(r=0.857)
1	.790	31	I am able to study well for quizzes.	
2	-.747	52	I have trouble remembering what I read.	
3	.744	44	I am able to remember course materials for exams.	
4	.737	32	I can concentrate well on what I am reading.	
5	.711	8	I am able to organize my materials well for exams.	
6	-.704	1	I learn what I am supposed to, but my mind just "goes blank" on exams.	
7.	-.676	53	I have trouble sorting out the important from the unimportant points in reading assignments.	
8	.644	4	I believe my mind is as good now as it was when I was in high school.	

FACTOR 2: COLLEGE SERVICES

Rank	Factor Loading	#	Item	(r=0.814)
1	.744	43	I am familiar enough with the college to get most of the services I need.	
2	.742	46	I know where to go for career counseling.	
3	.735	26	I know where to go for additional study materials for my major.	
4	.711	33	I know where I can go on campus for personal counseling.	
5	.703	55	I know how to obtain information on other colleges or universities.	
6	.692	51	I know where to go for financial assistance.	

TABLE IV (Continued)

FACTOR 3: TIME MANAGEMENT SKILLS

Rank	Factor Loading	#	Item
1	−.888	54	I have trouble forming habits that will help me better manage my time.
2	−.866	42	I have trouble using my time effectively.
3	.821	37	I am able to organize my time well.

FACTOR 4: STRESS MANAGEMENT SKILLS

Rank	Factor Loading	#	Item (r=0.792)
1	−.782	25	I feel I have to prove to everyone (or someone in particular) I am intelligent.
2	−.779	10	I have to do well because my friends and family are watching me to see how I do.
3	.757	38	I do not feel the need to prove to anyone or someone in particular) I can be successful.
4	.712	3	I do not have to prove to anyone that I can get though college.
5	−.682	34	I have to prove to myself I can get through college.

FACTOR 5: REGISTRATION AND ENROLLMENT

Rank	Factor Loading	#	Item (r=0.879)
1	.885	13	I understand the "Semester Class Schedule" well enough to enroll without help
2	.824	24	I am able to complete the registration forms without help.
3	.785	15	I understand the college catalog pretty well.

*Factor reliabilities are expressed in Cronbach's Coefficient Alpha.

TABLE V

FOLLOW-UP TEST DATA

Subscale	t Value		Mean	Standard Deviation
LSSKILL	1.61	first test	17.4483	3.858
		follow-up	16.5862	4.113
SERVICE	0.31	first test	12.3276	2.774
		follow-up	12.1897	2.976
TIMEMGT	0.80	first test	7.2241	1.845
		follow-up	6.9655	1.991
STRESS	0.52	first test	11.1897	3.029
		follow-up	10.9483	3.886
REGIST	0.71	first test	5.7414	1.617
		follow-up	5.5690	1.677
TOTAL	1.23	first test	53.9310	9.184
		follow-up	52.2586	10.566

*N=58

TABLE VI

MALE/FEMALE DIFFERENCES DATA*

Subscale	t Value		Mean	Standard Deviation
LSSKILL	0.69	males	17.7800	4.037
		females	17.3113	3.855
SERVICE	0.45	males	12.7200	2.588
		females	12.5094	2.951
TIMEMGT	1.46	males	7.5000	1.619
		females	7.0755	1.835
STRESS	1.53	males	12.1000	2.971
		females	11.3113	3.047
REGIST	0.87	males	6.0400	1.414
		females	5.8113	1.768

*N=males, 50; females, 106.

TABLE VII

ORIENTATION DATA*

Subscale	t Value		Mean	Standard Deviation
LSSKILL	1.30	orientation	18.0417	4.058
		no orientation	17.1333	3.856
SERIVCE	-2.97**	orientation	11.5833	2.759
		no orientation	13.0190	2.801
TIMEMGT	-0.95	orientation	6.9792	1.907
		no orientation	7.2857	1.719
STRESS	-0.73	orientation	11.2917	2.902
		no orientation	11.6667	3.103
REGIST	-0.56	orientation	5.7708	1.491
		no orientation	5.9238	1.758

*N=orientation, 48; no orientation, 105.

**t significant at the 0.5 level.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The nature of this study was one of utilitary pursuit in developing an instrument that could be used to help educators identify and quantify problems with returning adult college student adjustment at their institutions. Several conclusions and recommendations can be made from the findings and from the instrument that was developed.

Summary

A thorough examination and review of the literature revealed that there is a substantial change in the age of students entering colleges today. There are more older students and there are more adults with college degrees seeking even more education. Furthermore, this trend is expected to become larger throughout the next two decades. Some institutions are operating in much the same fashion they did when most students were 18 to 20 years of age. It seems clear that with the rise in the number of adult students attending colleges, some changes need to be made. It is apparent from the research of returning adult students that the services do not fit their needs. Clearly, they have special needs which are not being met. It was the purpose of this study to identify quantifiable adult college student adjustment

problems and to incorporate them into a concise, reliable instrument for use by professional educators.

A review of the literature provided a battery of potential problem areas. These were verified with adult students attending two-year colleges. A panel consisting of 10 professional educators working with adult college students examined and verified that the original pool of 65 items were indeed adjustment problems for many returning adult students. A pilot-test was accomplished to further verify, improve, and refine the instrument. The main study consisted of administering the refined 55-item inventory to 156 full-time, adult students attending 21 two-year colleges in a four-state area of the Midwest. The results of these completed questionnaires were statistically examined and the instrument was further refined from the 55-item, six subscales, to an instrument with 25 items and five subscales (Appendix H).

Conclusions

The adjustment problems of adults returning to college can be identified, quantified, and placed into five discrete subscales with a total of 25 items. The subscales are: (1) Learning and Study Skills, (2) College Services, (3) Time Management, and (5) Registration. An instrument can be developed and refined which will reliably measure these problems. The instrument is appropriate for both male and female students. It also identifies a significant, positive effect of orientations on adult student adjustment. The instrument can be used to help administrators and faculty provide better orientation programs for adult full-time students.

Recommendations for Use of the Inventory

During the pilot study, an introductory letter was attached to each questionnaire explaining its purpose (Appendix D). During the main study, no such letter was attached because it was assumed that the responsible person at the cooperating colleges would introduce and explain the inventory in a like manner. It could be that such a letter or standardized instructions would help improve the return rate and reduce the number of omissions of items on the questionnaire of further research efforts.

There are several possible uses for the instrument. The first would be a general, overall evaluation of how well the institution is meeting the needs of returning adult students. This information could be used to improve the overall climate, attitudes, and sensitivity of administrators, faculty, and staff to the adult college student.

Each subscale has a potential for institutional improvement. Learning and study skills for older students is clearly a problem that should be addressed. Research indicates that it is the most desired help by returning adult students. An orientation program which would provide instruction in these skills seems to be in order. As a minimum, adult students should be made aware of library resources to enable them to improve their self-study learning and study skills. This instrument can help determine present weaknesses in this area and the effectiveness of corrective measures taken.

College services, such as the library, counseling centers, and financial offices, should be made known to the student. What specific services they can provide and how they can better serve the unique

adult students' needs should be made clear. Some colleges provide a brochure describing the services. Most adult students manage families, and many work full- or part-time. All college services should be made available at hours usable to the adult student. The "Adult College Student Adjustment Inventory" college services subscale can help administrators and staff make necessary adjustments to improve services for adult students.

Time and stress management skills' training should be made available for those students desiring such training. Again, the subscale of the inventory which measures time and stress management skills can be used to evaluate program or training effectiveness.

Registration and enrollment, while not a major problem for the returning adult student, does appear to be an annoyance. For adults who manage a family and are working part- or full-time, waiting in line to register or enroll can be particularly aggravating. Registrars should examine ways to make enrollment and registration easier for the working adult. Innovative registration procedures include enrollment forms at convenience stores, cut-out sections from newspapers, and telephone registration. This instrument could be helpful in measuring the effectiveness of registration procedures.

The literature is consistent showing need for special adult-orientation programs. This instrument could be helpful in determining the effectiveness of such a program. It is possible that adult college student adjustment problems will change over time. Problems, once resolved, could, at a later date, recur. The inventory could be used to examine change and to make necessary, ongoing adjustments.

Implications for Further Research

It is apparent to this researcher that considerably more students taking the inventory to establish normative data would be of value. While a population of 156 is satisfactory for the instrument development, norming is essential to establish parameters for satisfactory/ unsatisfactory adult college student adjustment. This information is essential for individual or group evaluation.

Administrative use of the instrument would signal to faculty and staff the importance of recognizing, and responding to, the special adult college students' needs. Some faculty and staff believe that because these students are adults, they should "automatically" know how to study, which college services are available and where they can be found, and how to effectively manage their time and stresses. Research does not support this notion, and sensitivity to the adult student could be stimulated through the use of this inventory.

In reviewing the literature, the researcher noted that there were several different approaches to adult-student orientation. Some used small group techniques; others used peer guidance; and many used more conventional, traditional methods. It appears that additional research in this area is needed to identify which orientation is most effective for a particular institution. It would seem that different types of colleges (liberal arts, technical, or business emphasis schools) would benefit from evaluating their peculiar orientation program. Normative data for different types of institutions using the "Adult College Student Adjustment Inventory" would be of value.

This study was limited to administration of the inventory to two-year colleges. Much of the research with adult students has been at

four-year institutions, and it seems clear that these colleges have the same problems as do two-year schools. The inventory needs to be normed by administration at four-year institutions as well, to enable broader use of the instrument.

Additionally, the study limited adult student participants to full-time students only. Do part-time adult students share some of the same concerns? It would be helpful to determine what problems or adjustment concerns adults attending evening classes may have. This instrument might be effective in gauging these areas as well, or it could be used as the basis for the development of an entirely different inventory.

As with any research or with the development of an instrument that "wasn't there before," the possibilities and potentials for further research may not be identified until the inventory is field-applied. With such use and application, other unseen research avenues may appear.

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APPENDIXES

APPENDIX A

NEO A & M YES/NO QUESTIONNAIRE

July 18, 1984

Dear Adult College Student:

I am developing a questionaire which will be used to determine how well adults adjust to college. I hope you will take a few minutes to help me.

The first step in writing this questionnaire is to make certain the items on it are indeed problems that adults have had in returning to school. I have attached a list of questions for you to check, YES or NO, if it has been a problem for you. The information you give will enable me to take a more formal step in developing the questionnaire.

I wish I could take you out for a steak dinner for helping me--I wish I could take myself out for a steak dinner! The best I can give is a big "THANK YOU!" Perhaps some adult students in the future will be better served through this questionnaire. For them I thank you too.

If you have questions about this effort and its results, I would be glad to discuss it with you.

Sincerely,

Ray McCalment
Northeastern Oklahoma A & M College
Miami, Oklahoma

ADULT COLLEGE ADJUSTMENT QUESTIONNAIRE
AND RESPONSES

As an adult returning to school, do you feel that you--

YES	NO	
17	17	doubt your ability to do college level work?
18	17	don't think as well as you think you should?
9	25	might be too old to learn well enough for college?
8	27	may be too old when you finish college?
23	12	may be embarrassed if you are unable to answer a teacher's question in class?
23	12	are anxious and nervous about returning to school?
7	28	are not able to keep up with the younger students?
23	12	are not able to concentrate on the instructor's lectures as well as you would like?
17	18	cannot keep up with the teacher?
20	15	are not able to listen in class as attentively as you feel you should?
24	11	are not able to sort out the important from the unimportant points in the professor's lectures?
17	18	have trouble keeping up with reading assignments?
14	21	are not able to read college-level texts as well as you would like to?
25	10	read, but have trouble remembering what you read?
26	9	have trouble concentrating on what you are reading?
17	18	are not able to sort out the important from the unimportant points in the reading assignments?
19	16	don't organize your thinking well enough to take clear, concise notes?
15	20	have trouble organizing your study materials?
21	14	will not be able to remember well enough for exams?
13	22	have trouble organizing your materials to study for exams?

As an adult returning to school, do you feel that you--

YES	NO	
13	22	know the subject, but "freeze up" at exam time?
4	31	don't have the mental ability to pass the exams?
25	10	cannot study as well as you would like to for quizzes?
21	14	your mind will simply "go blank" at test time?
26	9	can get yourself enrolled without too much trouble?
25	10	know who to ask for help at registration time?
26	9	can read and understand the college catalog, and apply it to your program of study?
27	8	have one or two advisers or counselors you can rely on for help with your program of study?
26	9	know where to go for career counseling or guidance?
21	14	know how to obtain information on other colleges or universities?
15	20	know how to get college credit for experience or knowledge you may already have?
24	11	know where to go for financial assistance?
19	16	know where to go for personal counseling?
21	14	know where to go for additional study materials in your field?
23	12	are thoroughly familiar with the library's services?
12	23	know what to do if you have a problem with an instructor?
22	13	are familiar enough with the college to obtain the services you need?
26	9	spend more time studying and less with your family than you feel you should?
24	11	spend money on college that should be spend on the family?
24	11	spend more time on studies and less time on personal leisure or recreation than you would like?
19	16	lack the ability to plan and organize your time well?

As an adult returning to school, do you feel that you--

YES	NO	
18	17	tend to take on too many projects and overload yourself?
15	25	are unable to form habits that will help you better manage your time?
15	20	lack the ability to organize and prioritize your work and studies?
35	0	don't seem to have the time to do all the things you want to do?
12	23	may not have the time or energy to get through college?
16	19	have trouble sorting life out and keeping everything straight?
23	12	have trouble managing your finances?
14	21	may be unable to cope with the personal pressures and stresses of college?
20	15	control your negative thoughts well?
23	12	try to be a "perfectionist" most of the time?
30	5	must get the best grades you can in every course you take?
27	8	tend to put too much pressure on yourself to do well in college?
23	12	have to prove to someone (or everyone) that you can get through college?
25	10	have to prove to yourself you can get through college?
20	15	show everyone (or someone in particular) you are not dumb or stupid?
26	9	have to do well because your family, friends, and others are watching you and have an interest in you?
22	13	have more personal pride than most people, and will get good grades to show it?
19	16	have problems juggling college responsibilities with the expectations of your spouse or mate?
17	18	will be seen as "different" by most instructors and younger students because of your age?

As an adult returning to school, do you feel that you--

YES NO

15   20   are embarrassed in class when asking questions?

10   15   may look ridiculous in class with younger students?

17   18   are not a part of the "college set?"

 8   27   might intimidate or threaten younger teachers by your presence?

25   10   have two or three other students your age you can share ideas and feelings with?

Do you now, or did you have at any time during your first few weeks of classes, adjustment problems that are not listed above? If so, please list them below.

THANK YOU!

APPENDIX B

FIRST VALIDITY CHECK

FIRST VALIDITY CHECK (35 Adults)

ADULT COLLEGE STUDENT ADJUSTMENT INVENTORY

Circle below your feelings about your adjustment to college.

SA = STRONGLY AGREE, A = AGREE, U = UNDECIDED, D = DISAGREE, AND
SD = STRONGLY DISAGREE

1. I learn what I am supposed to, by my mind just
    "goes blank" on exams.   SA A U D SD

2. I don't seem to have the time to do all the
    things I need to do.   SA A U D SD

3. I don't have to prove to anyone that I can get
    through college.   SA A U D SD

4. I believe my mind is as good now as it was when
    I was younger.   SA A U D SD

5. I am thoroughly familiar with the services of
    the library.   SA A U D SD

6. I am able to sort out the important from the
    unimportant points of the lectures.   SA A U D SD

7. I tend to put too much pressure on myself to
    do well in college.   SA A U D SD

8. I am able to organize my materials for exams
    as well as I would like.   SA A U D SD

9. I think I can keep up with the younger stu-
    dents in class.   SA A U D SD

10. I have to do well because my family and friends
    are watching me to see how I do.   SA A U D SD

11. I have doubts about my ability to do college
    level work.   SA A U D SD

12. I am not bothered or feel ridiculous in
    classes with younger students.   SA A U D SD

13. I can read and understand the college catalog
    pretty well.   SA A U D SD

14. I tend to take on too much and overload myself. SA A U D SD

15. I have trouble keeping up with the reading
    assingments.   SA A U D SD

16. I don't listen as attentively as I should. SA A U D SD

17. I'm not sure what to do if I have a problem with an instructor. SA A U D SD

18. I don't have much trouble managing my finances. SA A U D SD

19. I believe I am able to keep up in class. SA A U D SD

20. I feel I have to show everyone (or someone in particular) that I'm not dumb or stupid. SA A U D SD

21. I am not embarrassed if I can't answer a teacher's question in class. SA A U D SD

22. I spend more time studying and less with my family than I feel I should. SA A U D SD

23. I don't have problems juggling my college responsibilities and the expectations of my spouse or mate. SA A U D SD

24. I don't know where to go for additional study materials in my subject of study. SA A U D SD

25. I'm not confident who to rely on to advise and counsel me about my plan of study. SA A U D SD

26. I am able to read college-level texts without too much difficulty. SA A U D SD

27. I spend money on college that should be spent on my family. SA A U D SD

28. I am pretty anxious and nervous about returning to school. SA A U D SD

29. I am able to study as well as I would like for quizzes. SA A U D SD

30. I don't feel I intimidate or threaten instructors that are younger than me. SA A U D SD

31. I concentrate alright on what I am reading. SA A U D SD

32. I have some trouble controlling my negative thoughts and feelings. SA A U D SD

33. I know where I can go on campus for personal counseling. SA A U D SD

34. I have to prove to myself that I can get through college.   SA A U D SD

35. I am able to organize my thinking well enough to take clear, concise notes.   SA A U D SD

36. I believe I can cope with the personal stress and pressure of going to college.   SA A U D SD

37. I have more personal pride than most people and will get good grades to show it.   SA A U D SD

38. I am able to plan and organize my time well.   SA A U D SD

39. I know the material, but "freeze up" at exam time.   SA A U D SD

40. I am not embarrassed to ask questions in class.   SA A U D SD

41. Studies don't take away from my personal leisure or recreation time.   SA A U D SD

42. I have trouble getting enrolled and registered.   SA A U D SD

43. I have trouble concentrating on the class lectures.   SA A U D SD

44. I have trouble organizing my study materials.   SA A U D SD

45. I don't think I need to get the best grades I can in every subject I take.   SA A U D SD

46. I think I have the ability to prioritize and organize my work and studies.   SA A U D SD

47. I don't think I am too old to attend college.   SA A U D SD

48. I am familiar enough with the college to get all the services I need.   SA A U D SD

49. I have two or three other students my age I can share ideas and feelings with.   SA A U D SD

50. I am able to remember well for exams.   SA A U D SD

51. I am not sure who to ask for help when registering for classes.   SA A U D SD

52. I know where to go for career counseling or guidance.   SA A U D SD

53. I have trouble forming habits that will help
    me manage my time better.   SA A U D SD

54. I tend to be a "perfectionist" in most of the
    things I do.   SA A U D SD

55. I feel like I'm part of the "college set."   SA A U D SD

56. I don't know how to obtain information on
    other colleges or universities.   SA A U D SD

57. I know how to get college credit for what I
    know or experience I have had.   SA A U D SD

58. I have trouble sorting life out and keeping
    everything straight.   SA A U D SD

59. I feel I might be too old when I finish
    college.   SA A U D SD

60. I don't think I'm seen as "different" by
    instructors or younger students because of
    my age.   SA A U D SD

61. I'm not sure where to go to obtain financial
    assistance or guidance.   SA A U D SD

62. I read, but have trouble remembering what I
    read.   SA A U D SD

63. I have trouble sorting out the important from
    the unimportant points in the reading assign-
    ments.   SA A U D SD

64. I believe I will have the time and energy to
    get through college.   SA A U D SD

DEMOGRAPHIC DATA

(NOTE: This information will be held in strictest confidence. I need
your name, phone number, and address only to contact you at a later
date if you need to retake the questionnaire.)

Name _____ Phone (____) _____
Mailing Address _____
                        Street   City   State   Zip
Sex ____ Age ____ Are you employed? _____ Hours/Week? _____
Have you attended college before? _____ Year? _____
Do you manage a household/family? _____
Full- or part-time student?   _____
Major or field of study?   _____
COMMENTS:

APPENDIX C

PANEL OF EXPERTS AND PANEL'S COMMENTS

PANEL OF EXPERTS AND THEIR COMMENTS

Georgiana Shick Tryon, Ph.D.
Director, Counseling Center
Fordham University
Bronx, New York 10458

Comments: None

Melanie Rawlins, Ph.D.
Associate Professor (Consultant, Registered Psychologist)
Eastern Illinois University
2525 Salem Road
Charleston, Illinois 61920

Comments: Item #4:   too old when I finish college--for what?
             Item #7:   redundant
             Item #9:   redundant
             Item #27:   "I'm not confident who to rely on to. . ."
                         change to: "on whom to rely for. . ."
             Change "should" to "can" or "will" in items #10, #37,
                and #39
             Item #55:   reword to make two questions
             Item #61:   the word "ridiculous" is too extreme
             A "write-in" or "comments" section should be written
                in the demographic section

Marie Basler
Student Activities Director
040 Student Union
Oklahoma State University
Stillwater, Oklahoma 74078

Comments: Make all the questions in the positive, rather than
                alternating positive and negative
             The questions do address problems adult students are
                having
             Disagree with use of descriptors such as "pretty
                anxious," "too old," and "some trouble"--too
                ambiguous
             Grammatical errors in eight items
             Recommend getting someone on committee who is research-
                oriented

Joyce Russell, Ed.D.
Student Counselor
Tulsa Junior College
909 S. Boston
Tulsa, Oklahoma 74119

Comments: Change some of the stress-related questions to: "I
                would be interested in attending a stress management
                workshop"

Russell Comments, Continued

Change some of the time management-related questions
to: "I would be interested in attending a time man-
agement workshop"
Add: "I need someone to talk to about my stress over
school"
Add: "I know a significant person to talk to about
family stress"
Add: "I will receive emotional support from my sig-
nificant other"

John Hough
Director, Continuing Education
Coffeyville Community College
Coffeyville, Kansas 67337

Comments: None

Frank Veeman, Ed.D.
Director, Continuing Education
Butler County Community College
Eldorado, Kansas 67042

Comments: "Looks like a good study--go for it!"
Several items are repetitious (#3, #4, #7, #9, #12,
#13, #15, #37, and #47)

Edward Berger, Dean
Continuing Education
Hutchinson Community College
Hutchinson, Kansas 67501

Comments: None

Henry Singer, Ed.D.
Headquarters, 381st Combat Support Group
McConnell Air Force Base
Kansas 67221

Comments: Questions were easy to understand and appropriate to
the study
Move the demographic data to the front of the form
Include question(s) on rationale for the students
taking the class

Jane Morgan
Continuing Education Counselor
Hutchinson Community College
Hutchinson, Kansas 67501

Comments: Some questions, if given before a student enrolled,
might make him/her anxious about returning

Morgan Comments, Continued

        No questions addressed child care
        No questions addressed where the student could receive
           remedial help with studies

Juanita Dixon
Student Counseling
Northeastern Oklahoma A & M College
Miami, Oklahoma 74354

Comments: No questions addressed the question of spouse support,
          especially when the wife returned to school and the
          husband stayed home
          Grammatical or wording changes recommended on items
          #1, #7, #15, #27, #30, #37, #44, #51, #54, #55, #56,
          and #64.

APPENDIX D

PILOT-STUDY INSTRUMENT AND ITEM

ANALYSIS DATA

August 27, 1984

Fellow Adult Student:

I am completing my doctorate degree in adult and continuing edu-
cation at Oklahoma State University. My dissertation is the develop-
ment of an instrument to measure adult adjustment in returning to
college. I need your help to test and prove the questionnaire.

I ask that you be carrying at least 12 credit hours and be at
least 25 years of age.

Please fill out the attached questionnaire according to how you
feel about your experience of returning to college. How you answer in
no way affects your status as a student. The results are used only to
help design the questionnaire.

As a part of this development project, you will be asked to take
the same questionnaire again later in the semester.

Thank you very much for your help!

Sincerely,

Raymond D. McCalment
Doctoral Candidate, OSU
800 24th Avenue, S. W.
Miami, Oklahoma 74354

ADULT COLLEGE STUDENT ADJUSTMENT INVENTORY

Circle below your feelings about your adjustment to college.

SA = STRONGLY AGREE, A = AGREE, D = DISAGREE, AND
SD = DISAGREE

1. I learn what I am supposed to, but my mind just
"goes blank" on exams.   SA A D SD

2. I do not seem to have the time to do all the things
I need to.   SA A D SD

3. I do not have to prove to anyone that I can get
through college.   SA A D SD

4. I believe my mind is as good now as it was when I
was in high school.   SA A D SD

5. I am fairly familiar with the services of the
library.   SA A D SD

6. I am able to sort out the important from the unim-
portant points of lectures.   SA A D SD

7. I tend to put too much pressure on myself to do
well in college.   SA A D SD

8. I am able to organize my materials well for exams.   SA A D SD

9. I think I can keep up with the younger students
in class.   SA A D SD

10. I have to do well because my family and friends
are watching me to see how I do.   SA A D SD

11. I have doubts about my ability to do college-
level work.   SA A D SD

12. I feel comfortable being in classes with younger
students.   SA A D SD

13. I understand the college catalog pretty well.   SA A D SD

14. I tend to take on too much and overload myself.   SA A D SD

15. I have trouble keeping up with reading assignments.   SA A D SD

16. I do not listen as attentively as I should   SA A D SD

17. I am not sure what to do if I have a problem with
an instructor.   SA A D SD

18. I do not feel much personal stress over financial problems.   SA A D SD

19. I believe I am able to keep up in most of my classes.   SA A D SD

20. I am embarrassed if I cannot answer a teacher's question in class.   SA A D SD

21. I spend more time studying and less time with my family than I feel I should.   SA A D SD

22. I feel I have to prove to everyone (or someone in particular) that I am intelligent.   SA A D SD

23. I think I can manage my college responsibilities and the expectations of my spouse or mate.   SA A D SD

24. I am not sure where to go for additional study materials for my major.   SA A D SD

25. I am not confident on whom to rely for advice about my major.   SA A D SD

26. I am able to read college-level texts without too much difficulty.   SA A D SD

27. I feel I spend money on college that should be spent on my family.   SA A D SD

28. I am nervous about returning to school.   SA A D SD

29. I am able to study well for quizzes.   SA A D SD

30. I do not feel that I intimidate or threaten instructors that are younger than me.   SA A D SD

31. I can concentrate well on what I am reading.   SA A D SD

32. I know where I can go on campus for personal counseling.   SA A D SD

33. I have to prove to myself that I can get through college.   SA A D SD

34. I am able to organize my thinking well enough to take good notes.   SA A D SD

35. I believe I can cope with the personal stress of going to college.   SA A D SD

36. I feel I need to get good grades.   SA A D SD

37. I am able to organize my time well.   SA A D SD

38. I do not feel the need to prove to anyone (or to someone in particular) that I can be successful.   SA A D SD

39. I am not embarrassed to ask questions in class.   SA A D SD

40. Studies do not take away from my personal time.   SA A D SD

41. I have trouble getting registered and enrolled.   SA A D SD

42. I have trouble concentrating on class lectures.   SA A D SD

43. I have trouble organizing my study materials.   SA A D SD

44. I do not think I need to get high grades in every subject I take.   SA A D SD

45. I think I have the ability to organize my work and studies.   SA A D SD

46. I do not believe I am too old to attend college.   SA A D SD

47. I have trouble using my time effectively.   SA A D SD

48. I am familiar enough with the college to get most of the services I need.   SA A D SD

49. I know two or three students my age with whom I can share feelings.   SA A D SD

50. I am able to remember course materials for exams.   SA A D SD

51. I am not sure who to ask for help when enrolling in classes.   SA A D SD

52. I know where to go for career counseling.   SA A D SD

53. I have trouble prioritizing my work and studies.   SA A D SD

54. I tend to be a perfectionist in most of the things I do.   SA A D SD

55. I feel like I am a part of the "college set."   SA A D SD

56. I do not know how to obtain information on other colleges or universities.   SA A D SD

57. I know how to obtain college credit for previous experience or training.   SA A D SD

58. I have trouble sorting out my life.   SA A D SD

59. I feel I might be too old to be employable when
    I finish college.   SA A D SD

60. I do not think I am seen as "different" by younger
    students or instructors because of my age.   SA A D SD

61. I am not sure where to go for financial assistance. SA A D SD

62. I have trouble remembering what I read.   SA A D SD

63. I have trouble sorting out the important from the
    unimportant points in reading assignments.   SA A D SD

64. I believe I will have the time to get through
    college.   SA A D SD

65. I have trouble forming habits that will help me
    better manage my time.   SA A D SD

DEMOGRAPHIC DATA

(NOTE: This information will be held in strictest confidence. I need
your name, phone number, and address only to contact you at a later
date for a retake.)

Name _____ Phone ( )_____
Mailing Address_____
                    Street   City   State   Zip
Sex___ Age___ Are you employed?_____ Hours/Week?_____
Have you attended college before?_____ Year?_____
Do you manage a household/family?_____
Major or field of study?_____
Did you receive a freshman orientation at this college?_____
COMMENTS:

TABLE VIII

PILOT-STUDY ITEM ANALYSIS DATA

ITEM	CORR.(TOTAL)	CORR.(PART)
1	0.513	0.575
2	0.372	0.654
3	0.406	0.667
4	0.329	0.591
5	0.497	0.671
6	0.553	0.698
7	0.240	0.412
8	0.606	0.624
9	0.598	0.738
10	0.620	0.742
11	0.621	0.746
12	0.494	0.360
13	0.505	0.663
14	0.136	0.408
15	0.403	0.558
16	0.354	0.413
17	0.364	0.430
18	0.417	0.425
19	0.369	0.556
20	0.516	0.535
21	0.268	0.486
22	0.575	0.696
23	0.239	0.390
24	0.505	0.777
25	0.440	0.676
26	0.464	0.637
27	0.255	0.512
28	0.549	0.579
29	0.612	0.611
30	0.275	0.300
31	0.544	0.718
32	0.516	0.723
33	0.455	0.514
34	0.484	0.574
35	0.310	0.105
36	0.060	0.290
37	0.396	0.539
38	0.510	0.687
39	0.404	0.304
40	0.134	0.470
41	0.537	0.744
42	0.643	0.673
43	0.673	0.732
44	0.158	0.497
45	0.278	0.303
46	0.259	0.347
47	0.426	0.471
48	0.258	0.659
49	0.254	0.241
50	0.646	0.643
51	0.511	0.763
52	0.422	0.704
53	0.460	0.579
54	0.111	0.376
55	0.160	0.116
56	0.612	0.798
57	0.403	0.461
58	0.466	0.384
59	0.498	0.541
60	0.238	0.392
61	0.568	0.567
62	0.586	0.764
63	0.591	0.720
64	0.334	0.264
65	0.578	0.594

APPENDIX E

MAIN STUDY INSTRUMENT

ADULT COLLEGE STUDENT ADJUSTMENT INVENTORY

Circle below your feelings about your adjustment to college.

SA — Strongly Agree   A — Agree   D — Disagree   SD — Strongly Disagree

1. I learn what I am supposed to, but my mind just "goes blank" on exams. SA A D SD

2. I do not seem to have the time to do all the things I need to. SA A D SD

3. I do not have to prove to anyone that I can get through college. SA A D SD

4. I believe my mind is as good now as it was when I was in high school. SA A D SD

5. I am fairly familiar with the services of the library. SA A D SD

6. I am able to sort out the important from the unimportant points of the lectures. SA A D SD

7. I tend to put too much pressure on myself to do well in college. SA A D SD

8. I am able to organize my materials well for exams. SA A D SD

9. I think I can keep up with the younger students in class. SA A D SD

10. I have to do well because my family and friends are watching me to see how I do. SA A D SD

11. I have doubts about my ability to do college level work. SA A D SD

12. I have trouble concentrating on class lectures. SA A D SD

13. I understand the "Semester Class Schedule" well enough to enroll without help. SA A D SD

14. I feel comfortable being in classes with younger students. SA A D SD

15. I understand the college catalog pretty well. SA A D SD

16. I tend to take on too much and overload myself. SA A D SD

17. I have trouble keeping up with reading assignments. SA A D SD

18. I do not listen as attentively as I should. SA A D SD

19. I am not sure what to do if I have a problem with an instructor. SA A D SD

20. I do not feel much personal stress over financial problems. SA A D SD

21. I believe I am able to keep up in most of my classes. SA A D SD

22. I am embarrassed if I can not answer a teacher's question in class. SA A D SD

23. I spend more time studying and less time with my family than I feel I should. SA A D SD

24. I am able to complete the registration forms without help. SA A D SD

25. I feel I have to prove to everyone (or someone in particular) I am intelligent. SA A D SD

26. I know where to go for additional study materials for my major. SA A D SD

27. I am not confident on whom to rely for advice about my major. SA A D SD

28. I am able to read college level texts without too much difficulty. SA A D SD

29. I feel I spend money on college that should be spent for my family. SA A D SD

30. I am nervous about returning to school. SA A D SD

31. I am able to study well for quizzes. SA A D SD

32. I can concentrate well on what I am reading. SA A D SD

33. I know where I can go on campus for personal counseling. SA A D SD

34. I have to prove to myself that I can get through college. SA A D SD

35. I am able to organize my thinking well enough to take good notes. SA A D SD

36. I have little trouble getting registered and enrolled. SA A D SD

37. I am able to organize my time well. SA A D SD

38. I do not feel the need to prove to anyone (or to someone in particular) I can be successful. SA A D SD

39. Studies do not take away from my personal time. SA A D SD

40. I have trouble organizing my study materials. SA A D SD

41. I do not think I need to get high grades in every subject I take. SA A D SD

42. I have trouble using my time effectively. SA A D SD

43. I am familiar enough with the college to get most of the services I need. SA A D SD

44. I am able to remember course materials for exams. SA A D SD

45. I know who to ask for help when enrolling in classes. SA A D SD

46. I know where to go for career counseling. SA A D SD

47. I have trouble prioritizing my work and studies. SA A D SD

48. I know how to obtain college credit for previous experience or training. SA A D SD

49. I have trouble sorting out my life. SA A D SD

50. I feel I might be too old to be employable when I finish college. SA A D SD

51. I know where to go for financial assistance. SA A D SD

52. I have trouble remembering what I read. SA A D SD

53. I have trouble sorting out the important from the unimportant points in reading assignments. SA A D SD

54. I have trouble forming habits that will help me better manage my time. SA A D SD

55. I know how to obtain information on other colleges or universities. SA A D SD

DEMOGRAPHIC DATA

(NOTE: This information will be held in strictest confidence. Your name, phone number, and address are needed only to contact you at a later date for a retake.)

Name_____Phone__1-(___)_____

College_____

Mailing Address_____
          Street   City   State   Zip

Sex_____Age_____Are You Employed?_____Hours Per Week?_____

Have You Attended College Before?_____Year?_____

Do You Manage A Household/Family?_____

Major Field Of Study?_____

Did You Receive A Freshman Orientation At This College?_____

On a four point scale (A=4, B=3, etc.) what do you expect your grade point average to be when you graduate?_____

If you have taken college courses before, what is your grade point average now?_____

How strongly do you feel that you will graduate? ☐Very Strongly ☐Strongly ☐Not Sure ☐Doubt if I will graduate.

Comments:

APPENDIX F

ADULT COLLEGE STUDENT ADJUSTMENT

INVENTORY--KEY INDEX

ADULT COLLEGE STUDENT ADJUSTMENT
INVENTORY—KEY INDEX*

SS = Study skills   Q.# 1,4,8,9,11,17,21,31 and 52.
     (9 items)

TM = Time management   Q.# 2,16,23,37,39,40,42 and 54.
     (8 items)

SM = Stress management   Q.# 3,7,10,14,20,22,25,29,30,34,38,
     (14 items)   41,49 and 50.

SV = College Services   Q.# 5,19,26,33,43,46,48,51 and 55.
     (9 items)

LS = Learning Skills   Q.# 6,12,18,28,32,35,44,47 and 53.
     (9 items)

RG = Registration   Q.# 13,15,24,27,36 and 45.
     (6 items)

*55 ITEM INVENTORY: SPRING 1985

APPENDIX G

PARTICIPATING COLLEGES

PARTICIPATING COLLEGES

Allen County Community College
3 Kenwood Circle
Iola, KS 66749
Dr. Jack T. Lundy   1-316-365-5116

* Arkansas State University-Beebe
Box H
Beebe, AR 72012
William L. Erwin, Ph.D.   1-501-882-6452

Butler County Community College
901 S. Haverhill Road
El Dorado, KS 67042
Dr. Jerrilee Mosier   1-316-321-5083   Ext. 133
Frank C. Veeman   1-316-681-3522

* Carl Albert Junior College
P.O. Box 606
Poteau, OK 74953
Dr. Jerry Williams   1-918-647-2124   Ext. 256

Colby Community College
1255 S. Range
Colby, KS 67701
Carol Marie Spenier   1-913-462-3984   Ext. 280

* Conners State College
College Road
Warner, OK 74469
Bill Martin   1-918-465-2951

Crowder College
Rt 6
Neosho, MO 64850
Jack Divine   1-417-451-3584

El Reno Junior College
Box 370
El Reno, OK 73036
Dr. Duane Anderson   1-405-262-2552

Fort Scott Community College
2108 S. Horton
Fort Scott, KS 66701
D.P. VandeWynkel   1-316-223-2700

* Garland County Community College
Mid America Park
Hot Springs, AR 71913
Charlotte Hobgood   1-501-767-9371   Ext. 234

* Independence Community College
P.O. Box 708
Independence, KS 67301
Evelyn Musgrove   1-316-331-4420

Jefferson College
P.O. Box 1000
Hillsboro, MO 73050
Dr. James E. Selby   1-314-789-3951

Labette Community College
200 S. 14th
Parsons, KS 67357
Phillip Barry, Ph.D.   1-316-421-6700

* Murray State College
Tishomingo, OK 73460
George W. Douglas   1-405-371-2371 Ext. 201

North Arkansas Community College
Harrison, AR 72601
Jerry Cash   1-501-743-3000

Northern Oklahoma College
Tonkawa, OK 74653
Mr. Cortlandt Frye   1-405-628-2581

* Phillips County Community College
P.O. Box 785
Helena, AR 72342
Steve Jones   1-501-338-6474

Pratt Community College
Highway 61
Pratt, KS 67124
Jo Easter   1-316-672-5641

* Rich Mountain Community College
601 Bush Street
Mena, AR 71953
Janice M. Baldwin   1-501-394-5012

* Rogers State College
Will Rogers and College Hill
Claremore, OK 74012
Mrs. Debbie Goodman   1-918-341-7510

* Western Oklahoma State College
2801 North Main
Altus, OK 73521
Dr. James K. Fritze   1-405-477-2000 Ext. 202

NOTE: "*" indicates the 10 colleges who participated in the
      follow-up, spring 1985.

APPENDIX H

ADULT COLLEGE STUDENT ADJUSTMENT INVENTORY AND

ADMINISTRATION INSTRUCTIONS--FINAL DRAFT

FINAL DRAFT
ADULT COLLEGE STUDENT ADJUSTMENT INVENTORY

Circle below your feelings about your adjustment to college.

SA — Strongly Agree   A — Agree   D — Disagree   SD — Strongly Disagree

1. I learn what I am supposed to, but my mind just "goes blank" on exams.　SA A D SD

2. I do not have to prove to anyone that I can get through college.　SA A D SD

3. I believe my mind is as good now as it was when I was in high school.　SA A D SD

4. I am able to organize my materials well for exams.　SA A D SD

5. I have to do well because my family and friends are watching me to see how I do.　SA A D SD

6. I understand the "Semester Class Schedule" well enough to enroll without help.　SA A D SD

7. I understand the college catalog pretty well.　SA A D SD

8. I am able to complete the registration forms without help.　SA A D SD

9. I feel I have to prove to everyone (or someone in particular) I am intelligent.　SA A D SD

10. I know where to go for additional study materials for my major.　SA A D SD

11. I am able to study well for quizzes.　SA A D SD

12. I can concentrate well on what I am reading.　SA A D SD

13. I know where I can go on campus for personal counseling.　SA A D SD

14. I have to prove to myself that I can get through college.　SA A D SD

15. I am able to organize my time well.　SA A D SD

16. I do not feel the need to prove to anyone (or to someone in particular) I can be successful.　SA A D SD

17. I have trouble using my time effectively.　SA A D SD

18. I am familiar enough with the college to get most of the services I need.　SA A D SD

19. I am able to remember course materials for exams.　SA A D SD

20. I know where to go for career counseling.　SA A D SD

21. I know where to go for financial assistance.　SA A D SD

22. I have trouble remembering what I read.　SA A D SD

23. I have trouble sorting out the important from the unimportant points in reading assignments.　SA A D SD

24. I have trouble forming habits that will help me better manage my time.　SA A D SD

25. I know how to obtain information on other colleges or universities.　SA A D SD

●●

DEMOGRAPHIC DATA (NOTE: This information will be held in strictest confidence.)

Name_____Phone__1-(___)_____

College_____

Mailing   Address_____
　　　　　　　　　Street　　　　　　　　　　City　　　　　　　State　　　　　Zip

Sex_____Age_____Are You Employed?_____Hours Per Week?_____

Have You Attended College Before?_____Year?_____

Do You Manage A Household/Family?_____

Major Field Of Study?_____

Did You Receive A Freshman Orientation At This College?_____

Comments:

ADULT COLLEGE STUDENT ADJUSTMENT INVENTORY
ADMINISTRATION AND SCORING INSTRUCTIONS

1. This inventory is designed to measure adjustment of adult college students returning to college that are:

   a. Aged 25 or older
   b. Attending college full-time (12 credit hours or more)
   c. Beginning college full-time, for the first time

2. Students may take the instrument home to complete, or may complete it during class time. Because it is short (25 questions), only a short time will be required.

3. Score all items on the questionnaire as:

   SA = 4, A = 3, D = 2, and SD = 1

   EXCEPT items 1, 5, 9, 14, 17, 22, 23, and 24, which are worded negatively. Score them as follows:

   SA = 1, A = 2, D = 3, and SD = 1

4. Total the score of the student's questionnaire. The mean score for the 154 students who initially took the inventory was: 54.7. One standard deviation was 9.0. Therefore, students who score 54.7 or better are adjusting better than those who score below. Students who score 63.7 or better would be adjusting well; those scoring 45.7 or below would be having trouble adjusting.

5. In order to establish normative data, please forward your results to:

   Raymond D. McCalment, Ed.D.
   Occupational and Adult Education
   Oklahoma State University
   Stillwater, OK 74078

VITA ⊃

Raymond D. McCalment

Candidate for the Degree of

Doctor of Education

Thesis: THE DEVELOPMENT OF AN INVENTORY TO MEASURE RETURNING ADULT
STUDENT ADJUSTMENT AT SELECTED MIDWEST TWO-YEAR COLLEGES

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Fort Scott, Kansas, November 19, 1936,
the son of Loren A. and Mildred R. McCalment. Married to
Hilda C. Fisher on June 29, 1954. Three daughters: Car-
rie J., Cheryl L., and Rhonda S.; one son, Russell W.

Education: Graduated from Tulsa Central High School, Tulsa,
Oklahoma, in May, 1954; received Bachelor of Science degree
in Education from University of Arkansas in May, 1978; re-
ceived Master of Science degree in Education from Pitts-
burg State University in May, 1980; completed requirements
for the Doctor of Education degree at Oklahoma State Univer-
sity in July, 1985.

Professional Experience: Technical Instructor, Curriculum Writer,
Supervisor, and Course Planner, United States Air Force,
1955 to 1971; Director, Keesler Air Force Base Drug and
Alcohol Abuse Control Program, 1971 to 1973; Adviser, Air
Training Command Staff Headquarters, Drug and Alcohol Abuse
Control Programs, 1973 to 1975; Health and Physical Science
Public School Teacher, 1977 to 1980; Director, Department of
Refrigeration and Air Conditioning Technology, Northeastern
Oklahoma A & M College, 1980 to present.