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INTEGRATION AND STUDENT RETENTION: AN ANALYSIS OF  
DIFFERENCES BETWEEN PERSISTERS AND LEAVERS FROM AN  
INTEGRATED BUSINESS ADMINISTRATION COLLEGE PROGRAM

By

Archibald S. Prescod

A Thesis Presented to  
The Faculty of Graduate Studies  
University of Manitoba

In Partial Fulfillment of the Requirements for a  
Masters Degree in Education

September, 1989

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## ABSTRACT

The purpose of this study was to examine selected aspects of retention and withdrawal patterns among a group of academically disadvantaged adult students, many of whom did not complete high school matriculation, to determine if there were observable differences in integration. These students were enrolled in a pilot project in Business Administration at the community college level.

Data for the study were obtained from two sources, a 34 item questionnaire and the student records. From the collected information, three main integration indexes were constructed to determine the respondents' level of integration with the academic, social and institutional systems at the institution. In concert with the integration indexes, five background characteristics, age, sex, marital status, family size and highest school grade completed were examined.

The study found that students who enrolled in the course with a grade ten level of education or less had an equal chance of graduating. Fifty percent of the graduates began the course with a grade ten or less standing. The graduation rate was 40 percent. Older students, 24 years of age or older tended to persist more than younger students. Young females without children were the most prone to dropout. The next highest group were younger married males.

The study found that academically disadvantaged adults

can succeed if the minimum time allowed to complete the course work is increased by 50 percent. The students who benefited most from this integrated type approach are those truly committed to acquiring a postsecondary education.

The study found that there was a high level of friendship associations among the students, but many of them did not often participate often in the organized activities for students.

Finally, two of the three indexes were able to detect differences in integration between graduates and non-graduates.

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## CHAPTER 1

### INTRODUCTION

This chapter provides a basic introduction to the problem examined in this study. It contains a section outlining the rationale and the background of the study.

#### Rational for the Study

Although postsecondary education in Canada became more accessible to a greater number of people during the 1960's (Anisef, 1984), the participation and completion rates of disadvantaged groups -aboriginal peoples, immigrants and lower social status non-natives- have been low. But over the past decade there have been increased efforts to augment the number of disadvantaged people who not only register for, but complete postsecondary training. These efforts are the result of several social and political developments.

The failure of the formal education system in Canada to equip Native students with the knowledge and skills they need to function adequately in a society that is undergoing fundamental social and economic changes is well documented. Among those authors who have studied this issue are Hawthorn (1967), Cardinal (1977), Sealey and Kirkness (1974), Kirkness

(1980); and organizations like The National Indian Brotherhood (1972) and The Manitoba Indian Brotherhood (1972).<sup>2</sup>

These studies were of immense value as they led to a better understanding of native educational needs. More importantly, the chronic lack of success by native students in the field of education resulted in the publication of a position paper by the National Indian Brotherhood in 1972 entitled "Indian Control of Indian education". The following year the Federal Government, which is responsible for native education, established a new policy for native education. In that policy, the government granted native people partial control over their own education. In short, the government accepted the basic goals outlined in the position paper.

This neoteric approach to native education reflected a radical change in the government's approach to its charge. The policy not only allowed Native people partial control of their education, but it also emphasized the need to develop programs to meet the educational needs of native communities (Canadian Education Association, 1984). In short, the policy recognized the need to create training opportunities for Natives at the postsecondary level.

The other development that contributed to the effort to increase the participation of disadvantaged adults in the post secondary system was the 1969 election of a New Democratic

Party (NDP) administration to office in Manitoba. The NDP brought with them to office a philosophy that advocated the inclusion of disadvantaged groups at all levels of the post secondary system (Anisef, 1985).

The desire to increase the involvement of disadvantaged groups in postsecondary education is commendable, but the barriers that contribute to their withdrawal from the formal school system have to be addressed if they are to benefit from this effort. Sociologists, in seeking to explain why students from disadvantaged backgrounds tend to be less successful with school work, have lower educational and occupational aspirations than students from middle and upper class backgrounds, theorized that these differences are associated with language skills, values, and ethnicity (Anisef, 1982).

It is commonly accepted that a child's values and language skills are initially acquired from the family. How closely related those skills are to the ones used in the school appears to be dependent on the family's social status (Mackinnon and Anisef, 1979). Since language is the medium through which most school activities are conducted, children from disadvantaged backgrounds appear to be handicapped in the acquisition of language skills that are suitable for school. As a result, when they participate in learning activities, they tend not to integrate well. They tend to decelerate and

3  
eventually stop attending school.

Research indicates that ethnicity can have both negative and positive influences on a student's education. Carlton (1977), suggested that the Canadian policy of multiculturalism allows minorities to cling strongly to their customs, but that practice may create certain inequalities for the group's members in terms of academic and social integration. Academic and social integration refers to the child's ability to meet normal cognitive and behavioral standards while maintaining its cultural link. The student may experience difficulty with the language and social practices that are common in the school and the adults are likely to have difficulty in the same areas in their dealings with the larger society.

On the other hand, Pike and Zureik (1978), reporting on an analysis of patterns of socialization among lower socio-economic status Italians in Toronto, questioned the validity of studies that suggest strong adherence to family oriented ideology acts as an inhibitor of social integration. These writers view strong adherence to cultural ideology as an important motivational force because the individual's social aspirations are admired, and strived for by most group members. The individual who is able to advance within the

larger society becomes a role model for the group.

Hyman (1979), examined the influence of cultural and social status in terms of American aspirations and concluded that middle class parents instil a set of values and ideological perspectives that emphasize educational and occupational success which result in high academic achievements.

As a whole, differences in language skills, value systems, as well as educational and occupational goals of disadvantaged groups and those on which the education system is fashioned help contribute to the low participation and completion rates of disadvantaged groups in education. Sealy and Kirkness (1973) point to a conflict between the school system and the students' background as the main cause of the poor educational performance by native students.

The difference that exist between native students and the grade school system that caused them to withdraw prematurely continued at the postsecondary level.<sup>4</sup> Among the efforts to help boost the number of native people entering postsecondary training in Manitoba was the establishment of The Community College ACCESS Program (CCAP). The purpose of a program such as CCAP is to help minimize the differences that exist between the disadvantaged students' background and the established practices at the institution. This is important because in a



study of student attrition, Churchill and Iwai (1981) found that the students' use of institutional facilities is an important element in understanding persistence. This finding seems to suggest that if a program like CCAP is to bridge the gap between the students' background and the college system, the students must feel a sense of congruence with the program's environment to use the services that are provided.

Social, cultural, and institutional differences are not easily overcome, but the social and political climate of the 1980's in Manitoba have provided an opportunity to address some of these issues. To date, no one has undertaken a study aimed at examining the differences that exist between disadvantaged students who persist in an Integrated Business Administration (IBA) course at the postsecondary level and those who desist. This study is undertaken with the intention of examining these differences.

#### BACKGROUND OF THE STUDY

In Manitoba there have been a number of programs especially designed to help disadvantaged adult learners. Academically disadvantaged adults learners are defined as individuals who were not successful in the secondary school system. They generally tend to be from minority groups, recent immigrants, and others with limited resources, or

inadequate life skills. Most of these programs have been attached to, but are not necessary an integral part of, an institution of higher learning. Coordinated by the Post Secondary Career Development (PSCD) branch of the Manitoba Department of Education, these programs are intended to help disadvantaged learners grapple with the exigencies of college and university life.

This study focuses on one aspect of one of these programs. The program is called the Community College ACCESS Program (CCAP) and the specific focus of this study is the Integrated Business Administration (IBA) course.

As indicated earlier, the purpose of CCAP is to assist disadvantaged learners to enter, and to succeed in, the post-secondary education system. To help realize this goal, financial, academic and social supports are provided while the learners are enrolled at Red River Community College (RRCC).

CCAP is accessible to adult learners who because of social or economic limitations, lack of formal education, residency in a remote area of Manitoba, or due to cultural or economic factors, have not had an opportunity to obtain a post secondary education. Although CCAP is open to anyone who meets its criteria, preference has been given to applicants of aboriginal ancestry. Initially, CCAP was restricted to selecting applicants of aboriginal ancestry and were residents

of northern Manitoba. Today CCAP has accommodation for some southern students.

In terms of the supports provided by CCAP, each student receives a bi-weekly stipend. Tuition fees, books, and a small allowance for supplies are provided. Individual tutorials, personal counseling, relocation, budgeting skills, interpersonal skills, and day-care assistance where needed are also available.

In 1984 an agreement between CCAP and the Business Administration Department at RRCC resulted in a project known as the Integrated Business Administration (IBA) course. The purpose of this course is to provide an opportunity for individuals who have an interest in studying Business Administration (BA) but were unable to satisfy the normal academic entrance requirement at RRCC.<sup>5</sup>

It was agreed that the main difference between the normal BA course and the IBA course would be the minimum time required to complete them. The course materials, and the academic standards are the same for both courses. The minimum time required to complete the BA course is two years while that for the IBA course is three years. With this approach, the learners are involved in upgrading activities while registered in three college courses during the first two trimesters. For example, the three registered courses in the

first trimester could be: Introduction to Business, Marketing, and Mathematics. The upgrading component could consist of Communications, Reading Comprehension, and Group Dynamics. Due to the design of the course and the pace at which the learning material is delivered, it takes two years to complete the material that is covered in the first year of the normal BA course. The final year's activities are the same for both courses. Thus, a traditional course has been redesigned to meet the needs of a non-traditional clientele without altering the materials used or the evaluation criteria. Only the minimum time needed to complete the course was extended giving the learners more time to absorb the learning material.

A maximum of twenty-five students may be selected for this course. Each class was comprised of CCAP students and students who had applied to RRCC but did not meet the normal entrance requirement. The latter are termed provincial entry students. The project is managed by CCAP therefore, with the exception of financial supports the provincial entry students receive all the same supports as CCAP students.

#### Purpose of the Study

The purpose of this study was to examine selected aspects of the retention and withdrawal patterns of students who

enrolled in the IBA course in 1984 and in 1985. These students were scheduled to graduate in 1987 and 1988 respectively.

In any attempt to explain students' departure from college, an important consideration appears to be their integration with various aspects of the college environment. The individual's integration into the environment at the institution appears to be influenced by his/her background characteristics and dispositions (Tinto, 1975:93). In other words, Tinto argued that there must be an environmental fit between the student and the learning institution for persistence to occur. He stressed that the individual's grade point average (GPA) at the learning institution is an indication of academic integration; that social integration can be determined by the student's interaction with his/her peers and instructors; and that the student's satisfaction with the institution indicates institutional commitment. In other words, if a student is able to meet the minimum academic standard to maintain enrollment then academic integration is said to exist. When the student is able to develop comfortable relationships with his/her peers and instructors, and feels at ease using the services provided by the college, social.

As the data for this study was collected after the participants were scheduled to graduate, and since the

supports provided by CCAP are directly related to participation in the IBA program, students do not have the option of choosing another institution from which to acquire their Business diploma and at the same time receive CCAP's support, institutional commitment is not considered in this study. Instead institutional integration -the students perception regarding the helpfulness of their instructors and the usefulness of the services provided by CCAP- are substituted.

Specifically, this study seeks to address the following questions.

1. Are there recognizable differences between those learners who persist in the IBA course and those who withdraw in terms of academic, social, and institutional integration?
2. How do selected background characteristics such as age, sex, marital status, family size and pre-college education encourage or inhibit students' integration at the community college level.

### Research Questions

This study attempts to answer the following questions:

#### 1a. Academic Integration

-Do graduates and non-graduates differ in terms of academic integration with regards to the grade point average (GPA) received at the end of first and third trimesters of the program?

- Are there differences between graduates and non-graduates regarding their perception of their own intellectual growth?
- Would academic accomplishment prior to enrolment in the IBA course contribute to a difference in persistence between graduates and non-graduates?

1b. Social integration

- Is there a difference between graduates and non-graduates in terms of academic social activities such as; working on or discussing, academic assignments in study groups?
- Are there differences between these two groups of students regarding the amount of time they participated in purely social extra-curricular activities?
- Is there a difference between graduates and non-graduates in terms of friendliness with their peers?

1c. Institutional integration

- Is there a difference between the two groups of learners with regards to the helpfulness of their instructors and the usefulness of the services provides by CCAP?

Method of the Study

The information needed to address these questions was collected partly through a questionnaire and partly by the use of student records. A questionnaire was distributed to forty of the forty-three educationally disadvantaged students who enrolled in the IBA course during the first two years of its existence (1984 and 1985) at Red River Community College in Winnipeg, Manitoba. Thirty-four of the forty-three students

were of aboriginal background. Thirty-five of the forty-three students dropped out of grade school before completing grade twelve; nine of whom did not complete grade ten. Half of whom were of traditional college students age -23 years old or younger. The other half were 24 years of age or older.

A questionnaire package was mailed to all participants whose current address was known to the researcher. The survey was conducted fifteen months after the scheduled graduation date for the first intake of students, and three months after the scheduled graduation date of the second intake. As a result three students could not be contacted. The number of students in the 1984 and 1985 intakes was twenty-two and twenty-one respectively.

In terms of the literature review, information about disadvantaged adults at the postsecondary level in Canada is meager. Therefore, this study draws on a body of literature relating mostly to general student attrition. Tinto's model of student attrition acts as the theoretical framework for this study.

#### Significance of the Study

Many researchers have tried to determine if personal characteristics are associated with dropping out, few others, among them (Tinto 1975) have examined the process of



withdrawal in a manner that might provide an explanation of why these characteristics are important. This study attempts to link these two approaches as a means of understanding student withdrawal.

According to Anisef (1985), the policies to foster growth in higher education in Canada were based on two basic premises. The first premise was that "higher education was the key to economic productivity". The second was that "the returns to the individual and to society would be higher than any other type of investment" (Anisef, 1985:1-2). Furthermore, improving accessibility to higher education was seen as a major means of catering to the rising social aspirations and of increasing the economic prospects of the culturally and socially disadvantaged, as well as other regional groups across Canada (Anisef, 1985:2).

The results of this study may be useful to anyone involved in providing educational services to disadvantaged adults. If we accept the position of Brundage and Mackeracher (1980:7) that each learner brings a unique model of reality to the learning situation, (s)he brings unique needs and goals. The educational system therefore, must be prepared to accept, respect, and accommodate these individual needs and goals. To be able to accommodate those needs and goals, those responsible for providing such services must have a sound

understanding of the differences that exist among the students in order to help them to realize their goals. This study will endeavour to provide information on the differences that exist between students who persist and those who desist. This information will also be useful in the selection and registration process, as well as to instructors and counselors who are in direct daily contact with the students.

Some of the findings will benefit those who have to deal with adult learners that have been out of the learning environment for many years and have returned for retraining. Also, some of the findings may be applicable to the general student population and may help in reducing the general attrition rate.

Finally, this study will add to the penurious literature on academically disadvantaged learners in the postsecondary system. It will also provide information on an education program specifically designed to help disadvantaged people to persist at the postsecondary level.

#### Limitations of the Study

This study is restricted to those students who obtained support from, or were attached to, CCAP and were initially registered in the IBA course at RRCC in either September of 1984 or 1985. They were scheduled to graduate in June 1987

and 1988 respectively. The two groups total 43.

The number of participants in this study is rather small because of the experimental nature of the project. Consequently, the differences between graduates and non-graduates in the test of some of the constructs are low. The results of this study are limited by the problems associated with data collection by questionnaire with respect to the following:

- a. the content and structure of the questionnaire
- b. the ability of the respondents to decode accurately the questions and to provide complete responses
- c. the willingness of the respondents to be candid with each response
- d. locating all former students
- e. the interpretation of the data by the researcher.

Finally, since the study focuses on a group of academically disadvantaged students in a pilot project the results of the study should only be generalized with caution.

#### DEFINITIONS OF TERMS

##### 1. ACADEMIC INTEGRATION

Academic integration refers to the ability, or the willingness of students to meet the minimum standard of performance to maintain enrollment at the institution.

2. ACCESS/CCAP

Abbreviations for The Community College ACCESS Program.

3. A DROPOUT

A dropout is an individual who has withdrawn from the IBA course before graduating and has no immediate plans to return to a program of studies.

4. INSTITUTIONAL INTEGRATION

Institutional integration refers to the students perception of congruence with the services offered at the institution.

5. INTEGRATED BUSINESS ADMINISTRATION COURSE (IBA)

A course in business administration with a lower academic entrance requirements but have the same exit academic standards as the normal BA course. However, the completion time is three years (30 calendar months).

6. NORMAL BUSINESS ADMINISTRATION COURSE (BA)

A course in business administration requiring a Manitoba grade 12 standing and requires two years to complete (20) calendar months.

7. A PERSISTER

Anyone who registered in the IBA course at RRCC in either September, 1984 or 1985 and graduated in either June, 1987 or 1988 or was enrolled in a course at the time of writing -Fall, 1988.

#### 8. SOCIAL INTEGRATION

Social integration refers to the level of interaction which occurred between the student and his/her peers and instructors.

#### 9. STOPOUT

A stopout is any individual who withdrew from the IBA course before graduating, but had re-entered the post secondary system by the time this study was conducted.

#### ORGANIZATION OF THE REMAINDER OF THE THESIS

Chapter 1, the introductory chapter, is followed by a review of the available literature pertaining to the study in Chapter 2. In this chapter a brief summary and explanation of the research and professional writing on student attrition are presented. Chapter 3 provides an explanation of the method used in conducting the study. The results of the survey, the related discussion, and an explanation about the construction of each integration index are provided in Chapter 4. Chapter 5, the final chapter, takes the form of a general conclusion of the study, and offers some recommendations and suggestions for contemplation by those interested in adult education.

CHAPTER ONE: NOTES

1

The term aboriginal peoples refer to native people who are classified as Treaty, and Non-Treaty Indians, Inuit, and Metis.

2

The National Indian Brotherhood and the Manitoba Indian Brotherhood have both been renamed. They are now The Assembly of First Nations and The Assembly of Manitoba Chiefs respectively.

3

The normal rate of progress for students in the grade school system is to complete one grade of schooling per year. When a student progress at a slower rate (s)he is said to decelerate.

4

By 1981, only 2 percent of Canadian Natives had university degrees according to the Globe and Mail (Dec. 3, 1983).

5

The normal requirement for entry to the Business Administration course at Red River Community College is Manitoba high school matriculation or its equivalent.

CHAPTER 2

REVIEW OF THE LITERATURE

Student attrition is a continuing concern at the post-secondary level. A considerable amount of research and writing has been done on the issue. From that repertoire, this researcher was able to cull relevant information for this study. The literature on disadvantaged adult students in post-secondary education is sparse, as a result the majority of the review in this chapter relates to the issue of general student attrition at the postsecondary level. This study uses Tinto's model of student attrition as its principal theoretical reference, but also draws from other studies relevant to the topic.

Most of the literature reviewed was significant to various aspects of attrition and was therefore relevant to the study. In this chapter, brief summaries of those works are given. The chapter has three parts. In Part 1, a general over view of the literature on attrition is given, as well as some professional views on what should be done to help educationally disadvantaged students adjust to college work. Part 2 provides a synopsis of Tinto's model and four other related studies. Part 3, the final section, is devoted to a discussion about the constructs used in this study.

PART 1

General Overview of Attrition

Every year thousands of students in Canada register at various postsecondary institutions. In the 1986-87 academic year, 796 400 students enrolled in full time postsecondary courses; 321 000 and 475 400 students enrolled at community colleges and universities respectively. In Manitoba, 3 897 students enrolled in community college courses while there were 17 515 university under-graduates in 1986-7 (Statistics Canada, 1987).

Numerous studies have been conducted and many theories developed, but only limited progress has been made in reducing student attrition (Garrison 1987). Past studies have looked at persistence/attrition behaviour of participants in non-credit university courses (Boshier 1973); preparation for General Educational Development (GED) test (Darkenwald and Gavin 1987); while the majority of researchers focused on university and community college students. Among the researchers in the United States of America (USA) who have examined the issue of attrition are Astin (1975); Tinto (1975); Pascarella and Terenzini (1977); Pascarella, Duby, and Iverson (1983); Noel (1985) Parcarella, Smart, and Ethington (1986) and Voorhees (1987). Among those who have researched the issue in Canada are Koodoo (1982); and Campbell (1984).



Most of the studies examined how well traditional students integrate with their postsecondary learning environments. The traditional postsecondary education system is designed primarily to serve those who have matriculated from the secondary school system. When matriculation was the only route of admission to the postsecondary system, it was assumed that once a person was admitted success was assured through self-discipline and self-motivation. These attributes were assumed to lead to academic success (McKenzie and Mitchinson 1988). As a consequence of these premises, and entrance requirements, participation by academically disadvantaged adults was severely restricted if not denied.

However, economic and social events since World War II have resulted in modifications to the admission criteria (Cross 1971; Anisef 1985). Between 1946 and the 1950's, there was a demand for a highly skilled work force in Canada. To meet that demand, Canada relied heavily on immigration as the domestic supply of skilled workers was extremely low (Peitchinis 1971:3). Also, during the high unemployment of the late 1950's and early 1960's it became apparent that there was a direct relationship between the level of education one had, and the likelihood of being unemployed (Peithchinis 1971).

Those economic and social conditions were severe enough

to engender the Federal Government to increase financial assistance to postsecondary students. This in turn resulted in an increased effort by postsecondary institutions to change the admission criterion so that a broader range of students could pursue postsecondary education through mature student entry.

Cross (1981) argued that the institutions' initial response to adult entry student was to admit them to the system, but once there the students were subjected to the same traditional curriculum and teaching methods as the matriculated entry students. As a result, the gap between the matriculated and the non-matriculated entry students increased rather than decreased. Equal access, she stressed, cannot be equated with equity of opportunity. She defined equity as the accessibility and availability of learning opportunities (Cross 1981:46). Thus, although accessibility was enhanced the system remained the same. Consequently, for the educationally disadvantaged student, access to the postsecondary system was likened to "a revolving door".

Literature that is specifically concerned with the attrition or persistence of non-traditional, or academically disadvantaged adult students at the postsecondary level is meagre. The majority of this literature is either critical of the institutions for admitting such students, or conversely

for not offering them sufficient help. Those who are critical of the institutions for admitting such students generally express concern about the maintenance of scholastic standards (Cohen 1975; Bercuson et al.. 1984). The other critics cite a lack of academic and personal supports for the new clientele (Dugan 1970; Cross 1971).

A general study of attrition indicated that in the USA., approximately 60 per cent of university students complete their degrees. Further, only 44 per cent of any cohort completed the degree requirements in the minimum time specified (Astin 1975:10; Tinto 1987:15). However, of the remaining 56 per cent, 61 per cent eventually graduated, but it took as many as nine years to do so (Tinto 1987:17).

At the community college level in the USA, the rate of attrition is much higher. About 59 per cent of these students withdrew before completing their studies (Astin 1975:111). A review of Canadian literature indicated that attrition rates at the post secondary level are in the region of 50 per cent (Gomme and Gilbert 1984). At Red River Community College (RRCC), the institution which the students in this study attended, the attrition rate in 1984-85 academic year was 44 percent (Data obtained from RRCC registrar's office in a telephone conversation).

Although universities and community colleges in Canada

have provisions for admitting non-matriculated adult learners, Statistics Canada does not collect information on the manner in which students are admitted to institutions of higher learning. Darling (1985) surveyed forty-four registrars and admission officers at various institutions across Canada regarding the bases on which students are admitted. He concluded that fewer than five per cent of full time students are admitted to the postsecondary system without high school matriculation (Darling 1985:91).

The literature shows that both matriculated and non-matriculated students are prematurely withdrawing from their studies for various reasons. Some transfer to other institutions, others re-enter the system at a later date, while others stay away completely (Cross 1981; Tinto 1987).

As a result of the high number of withdrawals, those concerned with the plight of students advocated a shift in the priority of the postsecondary system. They argue that the priority in higher education should shift from one of equal access to education, to one of equal educational opportunity. These critics have suggested interventional programs designed to help retain those students who would benefit from such assistance, especially those who, if left on their own limited resources, may dropout (Dugan 1970; Cross 1971; Gomme and Gilbert 1984). On the other hand, critics of the egalitarian

approach are asking serious questions about who should be educated and why. Some writers are calling for a return to elitism, or at least to a much higher degree of student selectivity (Gould 1972:24; Bercuson et al. 1984).

The traditional education system, according to Cross (1971), has failed many academically marginal students in the past. It is her contention that until there is a deliberate attempt by decision makers to grapple with the problem of student integration, the probability of success for many disadvantaged learners will continue to be low. Providing access without catering to the immediate academic and personal needs of these students will only cause their educational experience to be a frustrating one. According to Dugan:

The basic priority today should be to provide superior and creative educational offerings and services in order to allow disadvantaged youth to compete fairly. Academic standards will not suffer from the attention paid to the needs of the disadvantaged. In fact, the educational experience of all students will be enhanced by careful attention to new programs and new directions for meeting the needs of the disadvantaged (Dugan 1970:49).

Although Dugan's comments were in reference to the situation of the youth in the USA in the 1970's, these comments appear relevant to the situation of the disadvantaged student in Manitoba's postsecondary system.

In summary, the ideas expressed in this section are all relevant to this study. The ideas envisioned by both Cross

and Dugan are similar to the educational philosophy used in the IBA course. The students' personal and financial needs are addressed; the curriculum is designed so that the students have more time to grasp the concepts that must be understood; thus, providing a more realistic chance for the students to integrate academically, may help social and institutional integration.

Even the concerns expressed by Gould, and Bercuson et al. are also addressed. These authors expressed concern about academic standards. While these writers are concerned with the academic standards of students on entry, the philosophy of the IBA course places more emphasis on GPA performance each trimester and on competency at graduation.

Finally, not all students who are accepted into the system will integrate, as a result those students who are unwilling or unable to meet the minimum standards needed to maintain registration are encouraged to withdraw. Also, some students may find the IBA course unsuitable, in such instances students are encouraged to withdraw from the course and register in a discipline more suited to their interest.

PART 2

Tinto's (1975) Model of Attrition

Most of the research on student attrition in the past decade makes reference to a theoretical model advanced by Tinto. Building on the earlier work of Spady (1970), the Tinto (1975), model avers that the degree of congruence between the student and the institutional environment is the critical element in understanding persistence/withdrawal behaviour. The model portrays the process not as one which can be determined by a single variable, but as a multi-faceted procedure. Students are seen as coming to the institution with various background characteristics (age, sex, ethnicity, pre-college performance, parents' educational background, and social economic status etc.,). These traits are identified as contributing to the student's level of initial commitment both to the goal of graduating and to the particular institution.

According to the model, those background traits and initial commitments are associated with, and affect the student's academic and social integration at the institution which ultimately contributes to his/her decision to persist, or to withdraw. The greater the degree of social and academic integration, the greater is the resultant commitment to the goal of graduating. Conversely, the less the individual

integrates with the academic and social systems of the institution the greater is the probability for withdrawal (Tinto, 1975; Spady, 1971).

Not surprisingly, the popularity of the model has resulted in it being the subject of considerable research. Some of those who have tested different parts of, and sometimes, the whole model are Pascarella and Terenzini (1977); Getzlaf, Sedlacek, Kearney, and Blackwell (1984); Pascarella, et al. (1986); and Voorhees, (1987). With the exception of Voorhees' study, these writers generally agree that the model is useful as a theoretical device for explaining student persistence/withdrawal behaviour from both residential and non-residential institutions. A few of them however, questioned the effect of some constructs in explaining attrition/withdrawal behaviour. A summary of these studies and their findings are here given.

#### Pascarella and Terenzini (1977)

This study examined one of the constructs from the Tinto model; namely, that there is a difference between persisters and voluntary dropouts with regard to the patterns of informal interaction between freshmen students and faculty. It was a longitudinal study on freshmen at Syracuse University in New York during the 1975-76 academic year. The university had an



undergraduate enrollment of about 10 000 students, 2 400 of whom were freshmen. A computer was used to select a random sample of 1 008 of the freshmen. The data were collected at three different intervals: just prior to the commencement of classes, during the school year, and in the fall of 1976. Those students who did not register in the subsequent academic year -1976- were considered as dropouts. By the time the last data collection was done there were 344 of the original students remaining.

The study used a six item questionnaire to test the type and frequency of student/faculty interaction. The authors found that not all types of student/faculty contacts were of equal importance in assisting academic and social integration. Of the six types of contacts tested it was found that interaction relating to intellectual or course related matters clearly showed the most discrimination between persisters and voluntary leavers. The second most discriminating interaction related to discussions about students career concerns. These contacts were strong enough for the researchers to verify the usefulness of Tinto's model regarding that construct. The other items: help in resolving personal problems, discussion of a campus problem or to socialize informally, showed modest relationships to persistence.

Finally, they suggested that in terms of student/faculty

informal interaction and persistence, the first year experience makes a significant contribution beyond the influence of initial student characteristics. They believed that certain students' personal issues cause them to seek out help from some faculty members. As a result of that initial contact close relationships with faculty beyond the classroom were developed. As a result, these interactions generally tend to increase the level of academic and social integration and the likelihood of persistence. Other students who did not have cause to seek help often did not develop close relationships with faculty.

Getzlaf et al. (1984)

This study was used to test the ability of Tinto's model to discriminate persisters from withdrawers among freshmen who, without being in academic difficulty, voluntarily withdrew from Washington State University (WSU). The focus of the study was to identify those voluntary withdrawees who transferred to other institutions and those who withdrew from the postsecondary system.

The study found Tinto's model to be an empirically useful device for studying persistence/attrition behaviour. They also found that when academic aptitude and previous school performance are controlled, the change in cumulative GPA from

high school to college showed a marked difference between persisters and withdrawees.

There were two groups in this study. The attrition group consisted of 237 students who enrolled in the spring of 1978, but did not re-enrol in the following fall. The other, group (controlled) was comprised of 234 students who enrolled in the spring of 1978, and did re-enrol in the subsequent fall.

The study utilized both pre-college data and a survey. The survey consisted of items relating to the students' reasons for leaving and covered personal, institutional, academic and social matters. The instrument was sent six months after the end of the 1978 spring semester. The response rate was 63 percent.

Tinto's model of undergraduate attrition was tested by operationalizing five of the seven constructs: family background and individual attributes, past educational experience and goal commitment, institutional commitment, academic, and social integration.

The reachers found that the main difference between the two groups was the drop in the cumulative GPA from high school to college within the attrition group. This finding demonstrates the importance of one of Tinto's main contentions about academic integration: perceived academic and intellectual development. The study supports Tinto's argument

that if the student thinks that there is a marked decline in his/her academic performance (s)he is more likely to depart.

The study also found that those who dropped out of higher education seem to have lower academic ability, perform poorer at college, were less academically, and socially integrated than those who transferred to another institution.

Finally, the researchers found that when compared to the control group of persisters, the attrition group as a whole, had lower academic ability, performed poorer in their previous schools, had a greater GPA decline from high school to college and had a lower commitment to the institution they attended. Thus, the main constructs of the Tinto model were validated by this study.

Another of Pascarella studies was centered on community colleges in the United States. It is therefore important to note here that two year community colleges in the United States perform a totally different function than do community colleges in Canada. In the United States community colleges generally provide a direct link to the senior or four year universities. In Canada, Community Colleges do not function as a direct link to the university system except in the provinces of Alberta, British Columbia and Quebec. Community Colleges in Canada grant diploma and certificate accreditation

in technology, health care and trades.

Pascarella, et al., (1986)

This study was concerned with the persistence/attrition pattern of students who began their postsecondary education at two year community colleges in the United States with the intention of obtaining at least an undergraduate degree. The study was used to test the usefulness of Tinto's theoretical model as a means of examining persistence/attrition behaviour from the postsecondary.

The researchers found the model to be useful in analysing persistence/attrition from the postsecondary system. Their findings confirmed the importance of the student/environment fit as the dominant factor in degree persistence. Measures of academic and social integration showed the most consistent pattern of positive direct effects on persistence. On the other hand, they concluded that pre-college traits indirectly influenced degree persistence.

Two sets of data were collected for this study: one in 1971, the other in 1980. The first sample consisted of 10 326 students who initially registered at 85 community colleges in the United States in the fall of 1971, with the intent of obtaining a bachelor's degree. A follow-up survey was done in the winter of 1980, nine years after those individuals first

registered. Thus, it was a longitudinal study. The final survey yield a sample of 825 students (418 men and 407 women).

Five constructs of the Tinto model were used: (1) background characteristics (2) initial commitments (3) academic and social integration (4) initial institution commitments and (5) persistence/withdrawal behaviour.

The results revealed that 53 percent of the respondents to both samples had completed their B.A. degrees within the nine years. Another 15 percent of the males and 17 percent of females respondents were still actively pursuing their undergraduate degrees.

The researchers found three variables to have positive effects on persistence for both sexes. For men, there were academic, institutional, and social integration. For women, there were academic, and social integration, as well as socioeconomic status.

Only four background characteristics and initial commitments appear to influence persistence. For men, secondary school achievement had a positive direct effect on persistence, but male degree completion was negatively influenced by commitment to initial institution. For women, socioeconomic status had a positive direct effect on degree completion.

Finally, the study did not find a single background trait

or initial commitment to show a consistent pattern of positive direct effect across both persistence measures for each sex (Pascarella et al. 1986:64).

Voorhees (1987)

The purpose of this study was to investigate the effect of community college students' background characteristics on their persistence. The author of this study was concerned that all the attrition models were centered on the younger, more typical university student 18 to 24 years of age. Voorhees felt that since community college students are generally older and enroll in academic activities for a wider range of reasons than do university students a study of these students was warranted.

This researcher's findings were inconsistent with Tinto's results. The study examined the effect of the main constructs used in Tinto's model on persistence at junior college. He did not find GPA, informal interaction with instructors -academically or socially- to positively affect persistence. Voorhees found academic integration to be independent of persistence. He also found that females persisted more than males. Reasons for enrolling and intent to return were found to have direct positive influence on persistence.

The sample for this study consisted of 369 new and

continuing students who were enrolled at a suburban community college which had a total enrollment of 5 700 students in 1984. The participants were randomly selected from one of 56 classes that wrote the American Testing Program's Student Opinion Survey. This form which is used at two year colleges, is a standardized instrument aimed at obtaining profiles of student attitudes and opinions. The study group was representative of the student body with respect to ethnicity. The demographic characteristics of all the students enrolled at the college were compared with those of the study group. The result indicated that females were slightly under represented (58.4 percent to 61.4 percent) within the sample group.

Because enrollment patterns at community colleges are not necessarily sequential, persistence was operationalized as re-entry in either the spring, or the fall of 1985 semesters. In other words, a student who is currently registered may not return next term, but may re-enter in some subsequent term.

The study found that 243 students (63.4 percent) re-entered during the allotted time span and 135 students (36.6 percent) did not return during either semester. As this study did not control for academic dismissal, it was impossible to differentiate between voluntary and involuntary withdrawal.



The important findings of this study relating to persistence were sex, purpose for enrolling, and intent to return. The study found sex to be a significant factor in persistence. It found that females persisted at a higher rate than males regardless of full or part-time status. The retention figures for full time students were 71.8 and 60.8 percent for female and male respectively. For part-time students the figures were 69.4 and 46.3 percent for female and male respectively.

When the constructs of GPA, amount of informal interaction between student and faculty outside the classroom, and time spent studying, which according to Tinto help academic integration, were analysed, they were found to be independent of persistence.

Another finding of this study showed a significant association between purpose for enrolling and persistence. There was no association between minority status and persistence. The least persistence was found among students who indicated "self improvement" and "others" as their purpose for enrolling. There was no association between satisfaction with the college and persistence. Those students who planned to return the next term did so regardless of their satisfaction or dissatisfaction with the instruction.

In summary, all the studies reviewed in this section

except one, viewed Tinto's model as a conceptually and empirically useful means of studying student persistence/attrition behaviour. The one study, Voorhees', appears to negate the usefulness of the model in the junior college setting.

The reviewed studies showed that the model was tested in both junior and senior college settings. It was used to examine persistence/attrition behaviour from a single institution, and from the postsecondary system as a whole. In each case, persistence/attrition behaviour was found to be associated with the student's level of integration.

How well a student integrates with the institution's environment was shown to be related to academic integration. If the student is able and willing to satisfy the minimum standard needed to maintain enrolment, social and institutional integration may occur. Academic integration is the one variable that appears to have a direct positive influence on persistence at the institution even at junior colleges. Three of the four studies cited confirmed the validity of the model.

Voorhees tested a number of constructs from the Tinto model and did not find them to have a direct positive effect on persistence. He found academic integration to be independent of persistence. In other words, most community

college students were able to satisfy the academic requirements needed to maintain enrolment but did not remain enrolled at the institution at which they first entered the postsecondary system. This result is not unexpected considering that community colleges in the USA function as the first step in the postsecondary system for many students especially the academically and socially disadvantaged (Astin 1975). To obtain their first degree these students have to transfer to a senior college. In describing junior college students Cross (1979b) described them as having lower educational and occupational aspirations than their peers who begin their education at four year colleges.

Perhaps if Voorhees were to do a longitudinal study of the respondents to his study five years hence, he may find that although they had withdrawn from the junior institutions they persisted in the postsecondary system. Pascarella et al. (1986) did such a study and found that community college students do persist in the postsecondary system even if they withdraw from junior colleges.

Finally, the literature showed that the influence of background traits on persistence/attrition behaviour varies from student to student (Spady 1971, Tinto 1975 Bean 1980; Pascarella et al. 1983). Given the above findings, it is clear that there will be differences among the participants

of the IBA course. Although these IBA students maybe disadvantaged in terms of language skills and lower educational and occupational aspirations than students who follow the normal BA course the effect of their background traits on persistence/attrition is worthy of investigation.

### PART 3

#### Constructs Used in the Study

It is clear from the literature that no single factor can explain student attrition at the college level. There is a lack of homogeneity among students who withdraw from college in terms of scholastic skills, social maturity or background traits. Yet there is compelling evidence to indicate that students' persistence/attrition behaviour can only be understood in terms of the students' environmental fit. Research suggest that the degree of fit between the student and the college environment may be influenced by background characteristics.

Research indicates that academic integration has the greatest direct positive effect on persistence at senior colleges (Pascarella et al. 1983), but is independent of persistence at junior colleges (Voorhees 1987). Institutional integration also has a direct positive effect on persistence

(Churchill and Iwai 1981; Tinto 1987). Social integration on the other hand does not appear to have a consistent positive effect on persistence (Spady 1971; Tinto 1975). These findings are associated with senior colleges. At the junior college level, integration in any of the constructs listed here appear to be independent of persistence.

Tinto's model which was developed from data obtained from students at a residential institution showed social integration to be useful, but not essential for persistence to occur (Spady 1970; Tinto 1975; Pascarella et al. 1986). For some students, females in particular, social integration had a direct positive influence on persistence (Pascarella et al. 1986:67).

Since the impact of social integration on persistence appears to vary, that variation could be attributed to background characteristics. The remainder of this chapter provides information as to why some variables that are associated with the model are excluded from this study, and a discussion about those that are included.

Before elaborating on the effects of background characteristics and other variables associated with persistence/withdrawal behaviour of students enrolled in the IBA course at RRCC, it should be noted that economic status will be excluded from this study and ethnicity will be

examined in a different manner than has been done in previous studies. Economic status is excluded because the intent of CCAP is to help economically disadvantaged people. Hence, applicants from upper and middle income households are automatically screened out. Previous studies have used ethnicity or culture, to compare the academic success of minority groups with that of the dominant group. That will not be done in this study as over 90 percent of the study group are of aboriginal origin. Instead, the degree to which the learners integrate into an educational system which is culturally different from their own has been considered.

#### Academic Integration

The literature depicts student persistence/attrition behaviour as a dynamic interplay of academic and social skills, background characteristics and institutional standards. Academic integration according to Tinto (1975), is the ability of the learner to meet the minimum academic requirements to maintain enrollment at the institution at which (s)he is enrolled. There are two basic measures of academic integration. First, integration into the academic system at an institution is measured in terms of the grades and GPA the faculty assigns to the individual. The second measure of academic integration is the student's perceived

intellectual growth (Tinto, 1975:104). Grades are seen as an indication of the learner's willingness to meet the academic standards specified by the institution (Spady, 1970). Grades, according to Tinto, represent an extrinsic reward which is bestowed on the individual for participating in the academic activities of the college. On the other hand, intellectual growth is the learner's intrinsic indicator of congruence with the institution's academic standards. There appears to be a direct relationship between the student's perceived intellectual development and persistence.

Although many studies have shown grade performance to be the single most important predictor of persistence (Astin, 1975; Tinto, 1975; Pascarella, et al. 1986) it has also been noted that many of those who voluntarily depart had received grades that were equal to, and sometimes better than, those who persisted (Tinto 1975). Tinto suggests that when a learner receives a high grade, but that grade is not perceived by the learner as a true reflection of his/her intellectual growth, the possibility of that person withdrawing from that institution.

Both grades and the student's perceived intellectual development appear to influence persistence, therefore both of these constructs are used as indicators of academic integration. The GPA received by each student at the end of

the first and third trimesters of the program are also used as indicators of academic integration. These two periods were chosen because research indicates (Pascarella et al.1986) that most withdrawals occur in the first year of college attendance.

### Social Integration

The learner's integration into the social system at the institution has been identified by researchers (Tinto, 1975; Pascarella, 1986) as positively influencing persistence. Social integration is identified as the interaction between the individual and those around him/her, staff and peers, with whom (s)he must associate while at college. Both the individual and those around him/her have varying traits. Social integration is measured in terms of the individual's perception of the level of congruency between himself/herself and the social environment at the institution. It results mainly through informal peer group association, (semi-formal extra-curricular activities) with instructors and office staff (Tinto, 1975:107). Spady (1971) found that the notion of social integration is directly associated with persistence. Spady went on to suggest that even if an individual perceives the social climate at the institution to deviate from his/her social values, that will not lead to departure if social



congruence can be obtained via friendship associations. In other words, a person must find some socially compatible group with which to establish membership. If the learner perceives that social incongruence exists with the main culture at the college, but is able to identify with some sub-cultural group on or off campus, then persistence is likely to continue.

A sub-cultural group is a minority group in which the student is able to establish membership. Such groups may be found on or off campus. Generally, one should have little difficulty in finding such a group on campus as few general purpose postsecondary institutions are so small or so homogeneous that only the main culture exists. Actually, many universities encourage the establishment of sub-cultural groups. Sub-cultural groups play an important role in alleviating academic and social incongruence (Tinto, 1987).

Not only is association in a sub-cultural group linked with persistence, but so is participation in extra-curricular activities. Participation in both formal and semi-formal college activities are believed to provide a link to the social and academic systems of the institution. Some researchers believe that extra-curricular activities provide opportunities for learners to interact with faculty and staff in an informal manner and also to forge social and academic alliances with peers. Such activities are associated with

increased persistence, thus reducing the probability of early departure (Spady, 1971; Tinto, 1987).

### Institutional Integration and Isolation

Although there are opportunities to form personal associations through extra-curricular activities and sub-cultural groups, some students remain isolated from those around them. Institutional isolation, according to Tinto (1987), is another probable cause of student withdrawal. Institutional isolation occurs when an individual is unable to establish a personal bond strong enough for membership in any of the institution's communities (Tinto, 1987). Because CCAP provides special services to its students, institutional integration in this study relates to the students' perception of the helpfulness of their instructors and the usefulness of services provided by CCAP. A measure of these constructs may help to explain their degree of fit with the institutional environment at RRCC.

A lack of fit between a student and the institution can be attributed to a number of factors which can vary from student to student, as well as the programs offered at the particular institution (Rugg 1982:235). Rugg did a longitudinal study in which he made a comparison of minorities and non-minorities at the University of Mississippi in 1977,

and found that the institutional climate for minorities at that university was quite good. The study showed that the institution focused its attention on helping minority students to maintain their academic eligibility. This measure was very important in maintaining persistence because the study noted that even though many minority students were averaging C's, they tended to persist more than non-minority students with similar academic standing. The study suggested that special programs and counseling were associated with increased persistence even though the students' academic scores were average. Thus, the study groups' perception of the services provided by CCAP is important to this study.

In conclusion, academic, social, and institutional integration are three important indicators for understanding student persistence/attrition behaviour. Academic and institutional integration appear to be more vital to student persistence than social integration. The most significant of these indicators is academic integration. The student must satisfy the basic academic requirements of the institution to remain enrolled. Since the role of CCAP is to help the IBA students adjust to college life, the students' perception of those services is used as an indicator institutional integration. The degree to which a student integrates with the campus environment is influenced by the student's disposition.

The student's disposition is in turn a reflection of his/her background characteristics. The background characteristics that are used in this study are discussed in the next section.

### BACKGROUND CHARACTERISTICS

The complexity of human behaviour is phenomenal. It is the complex nature of human behaviour that is at the centre of the attrition issue (Garrison, 1987). The degree to which an individual finds congruence with the institutional setting is generally influenced by his/her past experiences and value system. Therefore, in a study of student attrition at the college level it seems appropriate to examine some selected background characteristics. In this section, five background traits are examined; namely, age, sex, marital status, family size, and highest school grade completed.

#### Age

The average community college student enters the post-secondary system at a later age than senior college students (Voorhees 1987). The entry age of junior college students range from eighteen to over thirty, with a mean age being less than twenty-two.

An applicant seeking entrance to RRCC must be sixteen years of age or older (RRCC admissions application, 1988).

Since IBA students range in age from eighteen to forty-five, with a mean age of 25, the influence of age on persistence/withdrawal behaviour was considered as a useful construct as the average age of the IBA students is greater than that of other RRCC students. To determine the relationship between age and persistence twenty-three years of age was chosen as the point of division between older and younger students. Students between the ages of eighteen and twenty-three years of age are considered as younger: those twenty-four years or more are classified older. The younger or traditional students tend to commence their postsecondary education sometime between the eighteenth and twenty-third birthdate; the majority of whom complete their studies by age twenty-three (Cross 1981). In trying to determine the influence of age on persistence/ withdrawal behaviour, a brief review of some of the literature on intellectual growth and aging is provided.

Chronological age and maturity are not entirely congruent, but years of experience seems to influence maturity. Therefore, when older adults seek academic opportunities in traditional daytime programs, their academic performance equals, and often surpasses, that of younger students (Kasworm 1980:35).

In reviewing the literature on learning deficits and

aging, Kidd noted that prior to E. L. Thorndike findings, it was generally accepted in society that there was rapid intellectual growth up to about age sixteen, followed with continued growth but at a much reduced rate to about age twenty and there after, decline at a moderate but steady rate (Kidd 1973:78).

In 1928 Thorndike conducted a series of experiments with people of various ages to measure their level of intellectual growth. He concluded that intellectual growth progresses rapidly throughout the teens, and thereafter declines at approximately one percent per year until the late forties (McClusky, 1980). Thorndike placed the peak of this growth as occurring between age 16 and 22. Both Kidd's and McClusky's writings indicate that age is not a barrier to learning. Thus, there seems to be an association between academic success and a learner's integration at an institution.

Although age does not appear to negatively influence intellectual growth, it appears to influence persistence/attrition behaviour. Most studies relating to persistence/attrition behaviour make reference to age (Astin 1975; Tinto 1975; Pascarella et al. (1986). Age is examined in this study to determine if it has any influence on persistence/attrition behaviour because about half of the students in this study are 24 years of age and older.

Often older students have family responsibilities. Those family obligations can have either a positive or a negative effect on persistence depending on the individual and the circumstance. Many adult students view the opportunity to attend college as a chance to obtain marketable skills that would enable them to provide a better quality of life for their family. Even though the demands of college work maybe in conflict with immediate family responsibilities, some students are able to adequately meet both obligations and persist to graduation. On the other hand, there are others who have expressed the same sentiments about postsecondary training and improved family life, but withdrew prematurely citing family obligations as the cause. These comments are based on the writer's observations of, and conversations with, academically disadvantaged adult students over the past decade.

### Sex

This section of the study looks at some of the literature relating to sex to determine if it influences premature departure. The literature is unclear on this issue. Studies conducted in the late 1960's and early 1970's showed that men generally persisted more than women indicating that there may be a relationship between sex and persistence (Astin, 1975; Spady, 1970; Tinto, 1975). They argue that of the students

who departed voluntarily, a greater proportion were women. They suggested that men are more likely to view graduation as being directly related to occupational opportunities, thus the need to persist. Women on the other hand, attend college mainly for intellectual growth (Tinto, 1975:101). One might explain these results in terms of the accepted classification, or stereotyping, of sex roles during that period.

Later studies seem to question seriously, if not negate those earlier findings. Two later studies, one by Bean (1980) and the other by Voorhees (1987) have produced conflicting results. In a study of university students Bean found that sex did not appear to significantly influence persistence/attrition behaviour. Voorhees, on the other hand studied persistence patterns among community college students and found that females persisted more than males. There does not appear to be conclusive evidence that sex alone significantly influences persistence/attrition behaviour. One possible explanation for Voorhees' findings could be attributed to a shift in societal values of the current decade. Because career bound women are more readily accepted in today's society, women are now competing in higher education to improve their job prospects in a way similar to men. Sex in combination with other background characteristics may influence persistence/attrition behaviour.



### Marital Status

Since about half of the students in this study are older adults, some of whom have family commitments, this section of the study is concerned with determining if there is a difference between graduates and non-graduates with respect to marital status. Institutions of higher education in the 1980's are confronted with the task of devising ways of dealing with the needs, expectations and motives of both the younger adult students as well as those of the older learners. The main difference between these two age groups is the commitment of the older learner to the multiple responsibilities of family and employment which are often in competition with the demands of college life.

Entry to college requires that individuals partially separate themselves from past forms of associations and patterns of behaviour. The degree to which adult learners can separate themselves from established family routines and responsibilities may greatly determine persistence/withdrawal behaviour. Allotting time for class attendance, studying, and completing assignments often require changes in parental roles. As a result, a strain in the marital relationship may occur (Huston-Hoburg and Strange, 1986).

Some research suggests that it is more difficult for older adult married women to participate in higher education

than it is for men. Women seemed to receive more emotional support from their friends and peers than from their spouses. Conversely, female spouses seemed to provide more emotional support to their student husbands. The division of household tasks also seemed to continue along traditional lines. Women while studying, continue to have greater responsibility for child care, cooking, and other household tasks than men (Huston-Hoburg and Strange, 1986).

A study of non-traditional students who attended the University of Manitoba found that the majority of the learners felt that their family life was challenged. About 47 percent or 9 of 19 students felt that going to school had a negative effect on their spousal relationship. It was also noted that when the spouse was a male without postsecondary training, the personal growth of the female learner often seemed to threaten the spouse (Degen, 1985:11).

For most married CCAP learners, higher educational opportunity does not require only changes in family routine, it means relocating from a rural or remote community to an urban setting. For any family, but especially a family headed by a single parent -usually a female- the adjustment is most profound. It requires locating baby sitters, registering children at school, learning the bus routes, as well as their new surroundings while grappling with school work.

### Family Size

As half of the study group has children it is important to determine if family size has any effect on persistence. Family size, like other individual characteristics should not be a significant indicator of persistence/attrition behaviour. However, when considered with other factors, family size may be influential in the decision to participate or to withdraw. For example, in some situations the number of children in a family may prevent a learner from participating in study groups especially if the group meets outside of school hours. In such a situation a person with two or three children may find it difficult to locate someone who is willing to look after the children. The same may be said for other social activities. If a learner is unable to attend social functions or participate in study groups a sense of isolation may ensue.

A feeling of isolation may contribute to premature departure. Conversely, if the opposite occurs then the possibility of persistence may be enhanced.

### Pre-college Education

Most of the major studies on attrition have devoted some discussion to the students' academic accomplishments prior to enrollment in the post secondary system (Spady, 1971; Tinto, 1975; Koodoo, 1982). As many of the students in this study

did not complete high school it seems even more important to determine if there is an association between the amount of schooling these students acquired prior to enrollment in the IBA course and their level of persistence. Current research does not clearly indicate a direct link between pre-college educational level and persistence. In Tinto's model, academic performance in grade school, which was measured by grade point average or class rank, was viewed as an important indicator of future academic performance in college (Spady, 1971; Tinto, 1975). Tinto noted that the individual's ability to do college work was nearly twice as important in accounting for early departure as was social status (Tinto, 1975:100-2).

In conclusion, the reviewed literature on background characteristics indicates that cumulative background traits may indicate an association with persistence/attrition behaviour. But due to the complexity of human behaviour, neither a student's age, sex, marital status, size of family, or prior educational accomplishment examined in isolation may not be able to show an association with persistence/attrition behaviour.

## CHAPTER 3

### METHODOLOGY

This chapter provides a profile of the subjects, the instrument used, and the manner in which the data were collected. An analysis of the responses as well as a brief statement about the non-respondents are provided. Finally, descriptive and inferential statistics are used to analyze the data to determine if there are differences between graduates and non-graduates of the IBA program.

### SUBJECTS

This study is concerned with a group of adult learners who enrolled in a pilot project known as the Integrated Business Administrated program in 1984 and 1985 at Red River Community College, Winnipeg, Manitoba; and were either supported by, or attached to, the Community College ACCESS Program. The total enrolment for the two intake periods is 43; 24 females and 19 males.

Of the 43 who enrolled, 22 entered in 1984 -11 men and 11 women. In the following year 21 students enrolled in the program -eight men and 13 women. These data are presented in Table 1.

TABLE 1  
TOTAL ENROLLMENT BY YEAR AND SEX

	1 9 8 4		1 9 8 5		Total 84/85	
	No.	Percent	No.	Percent	No.	Percent
Male	11	50	8	38	19	44
Female	11	50	13	62	24	56
Total	22	100	21	100	43	100

At the time the data for this study was collected -Fall, 1988- student records indicate that the status of the 43 enrollees is as follows: 17 graduated, three interrupted their studies, three transferred to other disciplines and the

TABLE 2  
STATUS OF ALL ENROLLEES AS REPORTED AT TIME OF STUDY

	1 9 8 4		1 9 8 5		Total
	Male	Female	Male	Female	
Graduates	4	5	2	6	17
Stopouts	0	1	1	1	3
Transferred	0	0	1	2	3
Non-graduates	7	5	4	4	20
	11	11	8	13	
Total	22		21		43

remaining 20 are classified as non-graduates. This information is summarized in Table 2.

Two main classifications of the subjects are used in this study: graduates and non-graduates. To do this those who were referred to in Table 2 as 'stopouts and transferred' are excluded from the main data analysis because they cannot be considered as either a dropout or as a graduate. Because they represent a special type of dropout they are discussed under a separate heading in Part 3 of chapter 4.

#### The Instrument

Drawing from the work of Astin (1975), Tinto (1975), Koodoo (1984), and Voorhees (1987) a 34 item questionnaire was constructed by the researcher.

The questionnaire was divided into four main sections: academic, social, and institutional integration plus background characteristics. Questions designed to measure academic integration included such items as whether or not the subjects graduated, how satisfied they were with the grades assigned, and their perception of their intellectual growth. Also included in the academic index are data from student records relating to highest school grade completed and college grade point average. The social integration index examined information about academically social and purely

social activities. The former is a measure of how often students discussed or worked on academic assignments in study groups. The latter relates to the respondents involvement in purely social activities pertaining to college life. Also, the students' perception of the friendliness of their peers is considered. These three sets of data are combined to give the overall social integration measure. Institutional integration variables analyzed the learners' perception regarding the helpfulness of their instructors, and the usefulness of the services offered by The Community College ACCESS Program. Background characteristics includes such variables as age, sex, marital status, family size, and pre-college grade completion.

The instrument used to collect the data is in Appendix B. The letter which accompanied the instrument is in Appendix A. and the follow-up letter is in Appendix C.

#### Pilot Testing of the Questionnaire

The instrument was pilot tested among four current IBA students, two instructors and an administrator. The students were asked to determine the clarity of the questions, the time it took to complete the questionnaire, and to identify any questions by which they felt threatened. The instructors and the administrator evaluated the instrument in terms of its



adequacy to obtain the information needed for the study (i.e. were there ambiguous questions, should there be other responses).

#### Procedure Relating To Data Collection

Since this study involved human subjects the the approval of the Faculty of Education Ethics Committee was sought prior to any data collection. While awaiting that approval, this researcher telephoned all the former students who were still living in Winnipeg to alert them of the planned study and to solicit their participation. It became evident from the telephone survey that locating some students would be difficult as several of them had changed their addresses since their association with the IBA program. Attempts were made to locate them by networking among other students. The effort was fruitful, but not totally so: it was impossible to locate three of the students.

The approval of the ethics committee was obtained in late September 1988. On September 30, a total of 40 questionnaires was mailed.

A letter explaining the purpose of the study was affixed to the questionnaire. It asked the subjects to complete and return the instrument by October 14, 1988, in the stamped self-addressed envelope. Also, a postage paid postcard on

which the subjects were to indicate if they would like a copy of the survey results was included. The post card with a return address was to be mailed under separate cover.

#### Response Rate

By the end of the first deadline (October 14, 1988) fifteen completed questionnaires (eight graduates and seven non-graduates) and two uncompleted ones stamped address unknown (one graduate and one non-graduate) were returned .

The twenty-three students who had not responded by the first deadline were sent another questionnaire package on November 1, 1988 with a letter encouraging them to complete and return the instrument by November 16, 1988. Again, stamped self-addressed envelopes were provided.

By November 17, thirteen more completed surveys were returned, five from graduates and eight from non-graduates.

During the third week of November eight telephone calls were made to non-respondents urging them to complete and return the survey material. No further attempts were made to contact non-respondents after November 25, 1988, but the last completed instrument was received on December 6, 1988. By this date four more completed instruments were received (one graduate and three non-graduates. Table 3 provides a summary of the response rate.

A response rate of 80 percent was realized. This is a high response rate especially considering the geography and life style of the many subjects.

TABLE 3  
RESPONSE RATE FOR IBA GRADUATES AND NON-GRADUATES

	Number Sent	Number not located	Number returned	Response rate for located students
Graduates	17	1	14	87.5 %
Non-graduates	25	1	18	75.0 %
Total	42	2	32	80.0 %

Many of the students who have returned to their families are living in isolated communities. The communities to which some of them have returned have no all weather roads. The mail has to be flown in. As a result, mail service is limited to once or twice a week. Also, some of them depend on fishing and trapping for their livelihood. For example, when telephone contact was established with the communities of two students, it was learnt that they were on the trapline and were not expected back home until three weeks hence.

### Non-respondents

There were eight non-respondents to this survey when the two unopened questionnaire packages are included, -three graduates and five non-graduates. Although this is only a difference of two between the groups, the result tends to be consistent with the findings of previous studies. For example, Koodoo (1982:66), noted that non-graduates are more likely to be unhappy with their college experience. Thus, they are more likely to treat a request to complete a survey as another intrusion into their lives which must be resisted.

### Data Treatment

The data from the questionnaire was coded and entered on a master sheet. The design of the master sheet reflected the questionnaire layout. An ascending order ciphering system was used to code the question responses to the master sheet. In other words, "strongly disagree" the lowest possible response was coded 1 while "strongly agree" the highest possible response was 4 with "disagree" and "agree" being assigned 2 and 3 respectively.

Two types of data treatment were done; significant tests and percentages. The data for each element of the integration indexes were divided into two groups -graduates and non-graduates. Then the mean and standard deviation were found.

Null and alternate hypotheses were determined and a one-tail test of the means of the two populations (graduates and non-graduates) at the 95 percent confidence interval was done to find the actual difference between the means. The critical value for 't' was found from a set of statistical tables. The critical value was used to determine if a difference exist. When the calculated value is greater than the critical value a difference between the groups was said to exist. On the other hand, when the critical value is greater than the calculated value, no difference exist.

Percentages were used in analysing the data relating to background characteristics. All calculations were done using a pocket calculator with a statistical mode. The tabulated results can be found in tables 4 through 14.

## CHAPTER 4

### DISCUSSION AND FINDINGS: PART ONE

#### Introduction

This chapter provides a discussion of the collected data and the findings of the study. It is concerned with a comparative analysis of the integration patterns of graduates and non-graduates who participated in a pilot project which was aimed at providing postsecondary training to academically disadvantaged adults. The focus of this chapter is to identify and discuss any differences that exist between graduates and non-graduates in terms of academic, social and institutional integration. The second part of the chapter examines the background characteristics of the students and tries to determine what effect, if any, those background traits appear to have on persistence/ attrition behaviour. The third and final part of the chapter is devoted to two special types of premature departures.

#### Academic Integration

This section is concerned with determining if any differences appear to exist between graduates and non-graduates in terms of academic integration. Eight measures of

academic integration are presented in this index. The first three measures of the index are constructed from the students' responses to four questionnaire items (Questions 1.2 to 1.5) dealing with their perception of their academic performance in the program. Because some earlier studies suggest that there is a relationship between persistence and a student's level of academic preparation (Spady, 1971; Tinto, 1975), grade school completion data which were obtained from student records have been included in this index. Another item used in this index that was obtained from student records is GPA scores. Since people vary in their adjustment to new situations, it seemed prudent to consider two sets of first year GPA scores. Scores from the end of the first and third trimesters of the program were chosen. This index is used to determine if there are differences between graduates and non-graduates and to see if those differences were associated with persistence/attrition behaviour. Before the index is analysed, an explanation of its construction is given.

The academic integration index is a composite of four questionnaire items, two GPA scores and the highest school grade completed prior to enrolment in the IBA course. The questionnaire items used a four point Likert scale response category. The lowest possible score on the index is 4 and the highest is 16. The actual range of reported scores was from 6

to 16. The lowest possible GPA scores is zero and the highest is 4. The actual GPA scores at the end of the first trimester ranged from 0.71 to 4.00; the first year GPA scores ranged from 1.00 to 4.00. The lowest school grade completed prior to enrolment in the IBA course was grade 6 and the highest grade 12. (See Table 4)

The first three calculations in Table 5 deal with academic integration; each has a different mean for the non-graduates. In the first calculation all respondent scores were included. For this calculation the transferees and the stopouts were considered as dropouts. In the second calculation the transferees were excluded, and for the third calculation both transferees and stopouts were excluded.

The transferees -students who had left the program to work in other disciplines- and stopouts -students who withdrew from the program but returned by the time the survey was done- were included in the first two calculations to see what effect they would have on the test result. Since the transferees and stopouts has average to high levels of integration, their inclusion in the calculations tended to skew the results. As these students have continued with their training they represent a unique kind of dropout and were therefore excluded from other calculations and considered separately later in the chapter.



TABLE 4

GRADUATES AND NON-GRADUATES ENTRY GRADE LEVEL AND  
GPA SCORES FOR FIRST TRIMESTER AND FIRST YEAR

Graduates			Non-graduates		
Grade	GPA Scores		Grade	GPA Scores	
Level	Trimester One	Trimester Three	Level	Trimester One	Trimester Three
10	3.64	4.00	11	2.57	1.00
10	3.57	3.75	12	2.14	2.67
11	1.86	3.67	10	2.50	
9	3.86	3.80	11	0.71	
12	2.43	2.67	7	1.57	3.17
10	2.14	2.40	11	1.00	2.00
12	4.00	3.90	10	2.00	1.00
12	4.00	3.65	12	1.14	2.50
8	3.71	3.75	9	3.29	2.00
10	3.50	3.10	9	2.71	1.25
11	3.50	2.60	9	3.64	3.55
12	1.29	2.33	12	1.86	2.15
11	3.57	4.00			
6	1.57	2.17			

The fourth and fifth calculations reflect the respondents scores to questionnaire items (Question 1.2 and 1.4) regarding satisfaction with grades received, and perceived intellectual growth respectively.

#### Academic Integration Index

When the transferees and stopouts are excluded from the cumulative academic integration index a difference of  $t=4.226$  was observed to exist between the graduates and non-graduates (Table 5). Also, when the constructs are examined separately, difference were found to exist in areas dealing with trimester three GPA scores, perceived intellectual growth, satisfaction with grades received, and first trimester GPA scores'. No difference was found to exist in terms of the 'highest school grade completed' prior to enrolment in the IBA program.

An analysis of Table 5 shows that of the eight constructs used to test academic integration, the greatest difference  $t=5.38$  between graduates and non-graduates was recorded when both the transferees and the stopouts were included in the calculations.

A further analysis of the responses indicated that the three transferees all had average to above average academic scores. These students represent a unique category of non-graduate and were excluded from any further integration

indexes and are considered separately later in the chapter.

The next highest difference  $t=4.981$  was observed when the stopouts were excluded. Since the three stopouts continued with their postsecondary education at a later date, they also are a special kind of dropout and are addressed later in the chapter.

When the stopouts and transferees were excluded from the calculations, a new mean, and standard deviation for non-graduates were found to be 9.42 and 2.46 respectively. These data showed a mild drop in the difference  $t=4.22$  between the two groups.

Of the other constructs, trimester three GPA scores revealed a difference of  $t=3.68$ , followed by perceived intellectual growth  $t=3.59$ , and satisfaction with grades received  $t=3.443$ .

These results are consistent with Spady's (1971) finding which showed that when there is positive interaction between the individual student and the particular college environment, there is a strong possibility for integration with the academic system at the college to occur. Tinto (1987) echoes a similar refrain. He argued that when there is a lack of academic 'fit' between the individual and the institution withdrawal will occur.

TABLE 5  
ACADEMIC INTEGRATION INDEX

CONSTRUCTS	Graduates		Non-Graduates		Significant test	
	M	Sd	M	Sd	Critical Value	Actual Value
Academic Integration All Respondents	13.5	1.5	9.78	2.2	1.7	5.38
Academic Integration with Transferees Removed	13.5	1.5	9.8	2.37	1.703	4.98
Academic Integration with Transferees and Stopouts Removed	13.5	1.5	9.42	2.46	1.711	4.226
Satisfaction with Grades Received	3.14	0.64	2.17	0.80	1.711	3.443
Perceived Intellectual Growth	3.57	0.50	2.83	0.55	1.711	3.59
Highest School Grade Completed	10.3	1.67	10.0	1.41	1.711	0.49
GPA at End of First Trimester	3.05	0.93	2.09	0.86	1.711	2.72
GPA at End of Third Trimester	3.27	0.67	2.19	0.76	1.711	3.68

### Perception of Grades Received and Intellectual Growth

Tinto (1975) identified two distinct types of academic integration: the grades awarded by the institution and the student's perception of his/her intellectual growth (Questions 1.2 and 1.4). These data were analysed separately and the results appear as the fourth and fifth constructs of the academic index. Each of these questions had a possible range of scores of 1 to 4.

With regards to question 1.2 '...I was satisfied with my performance in the course', four graduates strongly agreed, eight agreed and two disagreed. In terms of non-graduates, one strongly agreed, eight disagreed, and three strongly disagreed with the statement. A significant test revealed a difference between the two populations of  $t=3.44$ . This test confirmed that which seemed obvious, that the graduates integrated better than the non-graduates with the academic standards established at RRCC.

When the data for question 1.4 '...I was satisfied with my intellectual growth...' was separately analyzed, it showed a slight increase in the difference  $t=3.59$  between the two groups. The graduates' actual scores for this question were 3 and 4; (agree and strongly agree). Six agreed and eight indicated strong agreement with the statement. On the other hand, one non-graduates strongly agreed, eight agreed, three

disagreed.

Although the cells are small, the results indicate differences between graduates and non-graduates in terms of academic performance in the course and perceived intellectual growth. The results for the non-graduates did not appear to support Tinto's (1975) finding that perceived intellectual growth has a positive effect on persistence. The majority of non-graduates agreed with the statement about their intellectual growth yet did not persist. This seems to indicate that perceived satisfaction with intellectual growth does not consistently influence academically disadvantaged adults to persist.

#### Highest School Grade Completed

Both Spady (1971) and Tinto (1975) argued that the student's inability to meet the academic standards at the college often results in early departure. Yet they pointed out that grade school academic achievement is not a constant predictor of persistence. To determine the influence of grade achievements on persistence/attrition behaviour, the highest level of formal schooling completed by the respondents were examined. When the data was analyzed no difference was found to exist between the groups  $t=0.49$ .

A closer examination of Table 4 shows that four

graduates and three non-graduates had grade twelve standing, three graduates and three non-graduates had completed grade eleven, four graduates and two non-graduates had grade ten standing, three graduates and four non-graduates had less than a grade ten standing.

The result is consistent with Tinto's finding cited at the beginning of this section.

As 10 of the 14 graduates (71 percent) could not gain admission to the normal Business Administration course at RRCC due to academic entrance requirements, these results show that integration programs have played a special role in the postsecondary education system, especially for academically disadvantaged adults who are prepared to work towards integrating with the academic standards established at the institution.

Because some students successfully completed the IBA course with less than a grade 12 education, this seems to suggest that other factors which were not considered in this study may have influenced persistence. Whatever influenced their persistence seems to have affected their level of academic performance because all of the graduates performed above the minimum GPA level of 2.00 required for graduating.

### Grade Point Average as an Index of Academic Integration

Another measure associated with academic integration is GPA. Spady (1970) identified grades as being the most tangible award the college can grant to a student for participating in the college's principal activity. For a student to maintain enrollment status, (s)he must perform at a level that is equal to, or better than, the minimum standard established at the institution.

Two examinations of GPA performance are provided, the intent of which is to provide an indication of the how well the students integrated with the academic requirements at RRCC. The first measure focuses on how the students' were performing by the end of the first trimester in the course, and the second measure shows their performance at the end of the third trimester of the program.

Since people adjust to new circumstances at different rates, the author felt that these two periods would offer a realistic view of the students' integration with the academic standards of the college.

At RRCC the minimum GPA a student must obtain to continue enrollment is 1.00. A GPA of 1.00 is considered to be marginal, 2.00 is average, 3.00 is good and 4.00 is excellent.



Grade Point Average at the End of the First Trimester

Using grade point average (GPA) as a measure of the respondent's academic integration with the established system at RRCC, Table 5 show that at the end of the first trimester graduates had out performed non-graduates. The former had a GPA mean of 3.05 with a standard deviation of 0.67 while the later's mean and standard deviation were 2.09 and 0.86 respectively. These data revealed a difference between the two groups of  $t=2.72$ .

GPA data obtained from student records and summarized in Table 4 show that the graduates' GPA scores at the end of the first trimester ranged from 1.57 to 4.00 and non-graduates scores ranged from 0.71 to 3.64. The graduate with the GPA of 1.57 had completed grade 6 before entering the course. The two graduates with 4.00 GPA scores had completed grade 12. The non-graduate with a 0.71 GPA entered the course with a grade X1 standing while the one with the 3.64 GPA had completed grade 9. Only one student performed below the minimum GPA level of 1.00, and was terminated.

These results are consistent with Pascarella's (1983:94) study which found that secondary school achievement had a significant negative influence on persistence. In other words, although there is a relationship between grade school achievement and academic performance at college, it does not

guarantee persistence.

These results suggest that there are differences between graduates and non-graduates with respect to GPA performances by the end of the first trimester. In other words, graduates on average appear to integrate more strongly with the academic standards established at RRCC than did non-graduates. These results are also consistent with those of Astin's (1975) and Tinto's (1975) who both found that academic performance prior to college was not a clear predictor of persistence.

Because there are differences in people's adjustment patterns to new situations, those who received low GPA scores in the first trimester might have improved their performance by the end of the third trimester. Thus, an examination of the respondents' GPA at the end of the third trimester is here given.

#### Grade Point Average at the End of Third Trimester

When the constructs of the academic integration index are examined separately, the greatest difference between graduates and non-graduates  $t=3.68$  was revealed when the end of the first year GPA scores were tested. Table 5 show the mean GPA score for graduates as 3.27 with a standard deviation of 0.67 and the mean for non-graduates as 2.19 with a standard deviation of 0.76.

Table 5 shows that by the end of the third trimester the

lowest GPA score for the graduate group was 2.17, and 1.00 for non-graduates. The highest scores for the two groups were 4.00 and 3.55 respectively. Both groups on average showed stronger patterns of integration, but graduates continued to out perform non-graduates. The table also shows that by this time two more students had withdrawn from the course.

In conclusion, seven of the eight constructs used in the academic integration index show differences between graduates and non-graduates. The greatest difference  $t=5.38$  was observed when the transferees and stopouts were entered as non-graduates.

Of the remaining constructs, the greatest difference was found to occur when all survey data relating to perceived academic integration were grouped. When the constructs are analyzed separately, the highest difference was found to exist with academic performance at the end of the third trimester. 'Perceived intellectual growth' and 'satisfaction with grades received' showed the second and third greatest difference between graduates and non-graduates.

The GPA data showed that although both groups increased their level of integration by the end of the third trimester, graduates showed the greatest increase.

No difference was found to exist when highest school grade completed was considered. This result seems to indicate

that factors other than schooling may have had some influence on persistence.

These results were based on a small population, but are consistent with the findings of other studies that used large samples. It seems reasonable to infer that these results are reflective of academic integration patterns among academically disadvantaged adults at the community college level.

Finally, in a discourse on student retention and the role of institutions in dealing with the matter, Tinto (1987) noted that there are no magic formulas to this issue: "a concern for the education of students, and their integration as full members in the social and intellectual life of the institution appear to be the two most important principles of successful retention programs" (Tinto 1987:187).

#### Social Integration Index

The literature relating to social integration has focused on students in postsecondary institutions with residences. In residential institutions, the degree to which students interact is viewed as being essential to social integration. Since the institution which the students in this study attended is non-residential, social integration of the same magnitude might not be expected to be as significant a factor in relation to student persistence as they went to

their respective homes each evening after classes.

Tinto (1975) identified social integration as being multi-dimensional. That is, the students' level of social integration is dependent on their goal (Tinto, 1975:106). Spady (1971) found that persistence is directly associated with the individual's perception of his/her 'social fit'. Spady went on to argue that once the person's perception of social congruence is taken into account, 'social fit' is relatively unimportant in explaining withdrawal behaviour because friendships can most often be established in socially deviant groups on campus, or off campus. In other words, the probability of premature departure due to incongruence with the dominant social group on campus is remote because friendship may be possible within a smaller group.

In an attempt to determine the level of social integration the students in this study perceived existed while they attended RRCC, four measures of social integration were examined (Table 6). An explanation regarding the construction of the index is provided.

A general social integration index was derived from a combination of the questionnaire items (Questions 2.1 to 2.8; 3.1, 3.2, and 3.7) relating to whether or not students worked on academic assignments in groups, discussed academic matters with instructors in semi-formal settings, the level of student

interaction with peers for purely social reasons, and perception of their peer's friendliness. The purpose of this index was to determine if there were differences between graduates and non-graduates regarding these items.

The lowest score possible on this composite index was 11 and the highest 53. The reported scores ranged from a low of 22 to a high of 44.

The first calculation in Table 6, 'general social integration' consists of all the questionnaire data relating to this topic. The other three items are sub-sections of the first.

When the three sub-sections are separately analyzed, two of them -academic social activities and purely social activities- show difference between graduates and non-graduates. However, no difference was found to exist between the groups regarding 'friendliness of peers'.

#### Academic Social Activities

This index was designed to measure differences between graduates and non-graduates regarding the effect of working with their peers and of discussing academic matters with their instructors in informal settings. There were four questions relating to this matter (Questionnaire items 2.1 to 2.4). Two dealt with the students' participation in informal study

groups and the other related to the number of times students discussed academic matters with instructors. There were five possible responses ranging from never to very regularly. The lowest possible score for this index is 4 and the highest is 20. The actual scores for the academic social index ranged from 7 to 20.

An analysis of Table 6 shows the greatest difference  $t=3.69$  existed in academic social activities. In other words, graduates appear to work in study groups and/or discussed academic matters with their instructors outside the classroom more often than did non-graduates.

The calculated mean for graduates is 15.3 with a standard deviation of 2.28, and 11.8 and 2.55 respectively for non-graduates. The lowest and highest graduates' responses in this category were 12 and 20 respectively. Non-graduate responses were 7 and 16. Although these scores are high for both groups, the graduates' scores are much higher than those of non-graduates indicating greater participation in these activities.

When the data were analysed further 8 of the 14 graduates scored above the mean while only 3 non-graduates did so. This result suggests that good students participated in these activities more than other students. Tinto (1987) suggested that participation in such extra-curricular academic

TABLE 6

SOCIAL INTEGRATION INDEX

CONSTRUCTS	Graduates N=14		Non- Graduates N=12		Significant Test Critical Value = 1.711 Actual Value
	M	Sd.	M	Sd.	
General Social Integration	35.86	4.45	29.3	4.40	3.77
Academic Social Activities	15.3	2.28	11.8	2.55	3.69
Purely Social Activities	10.0	3.12	8.0	1.68	1.98
Friendliness of Peers	10.14	1.25	9.6	1.26	1.13



activities, besides the obvious academic benefit may help social integration.

This result may be of interest to counselors. In counseling students who are experiencing difficulty with grasping certain concepts, counselors could suggest that students try working on assignments in small groups.

#### Purely Social Activities

This index was designed to provide an indication of the respondents participation in the purely social activities available to IBA students, and to determine any difference that may exist between the two groups. The index was derived from four questionnaire responses (Questions 2.5 to 2.8). Two questions dealt with self/peer initiated activities, one dealt with student's participation in activities organized by the social club, and the other was meant to provide an indication of the students involvement in the social activities organized by the student council.

There was a mild difference  $t=1.98$  between the graduates and the non-graduates in terms of purely social activities. A closer look at the results show that a standard deviation of 3.12 for graduates was found. This suggests that for some of them, purely social activities were not important.

The minimum and maximum possible scores on this index are

4 and 20 respectively. Five possible responses ranging from 'never' to 'very regularly' were provided. The actual scores ranged from 5 to 17. These scores varied widely. For graduates they ranged from 5 to 17 and from 5 to 11 for non-graduates.

A closer analysis of the data showed that 6 of the graduates scored above the mean, indicating strong social congruence. Three had mean scores, suggesting average integration. Five scored below the mean. This seems to be indicative of social incongruence.

This result is consistent with both Spady's (1971) and Tinto's (1975) findings. Both found that social integration is not absolutely necessary for persistence to occur.

When a similar examination was done for non-graduates it showed that only 3 of them had scores above the mean. This indicates that 9 of the 12 non-graduates did not participate in purely social activities often.

These results suggest that most graduates participated in social activities often. On the other hand, many of them did not, neither did the majority of non-graduates. The regular social activities of the graduates appear to support Tinto's (1987) argument that students who worked on assignment in groups tended to integrate socially.

Since most graduates appear to integrate socially (8 of

14), and the other 6 did not, this result is consistent with Spady's contention that 'social fit' is a relatively unimportant factor in persistence/ attrition behaviour.

#### Friendliness of Peers

The last construct of the social integration index was comprised of three questionnaire responses (Questions 3.1, 3.2 and 3.7. The data revealed no difference  $t=1.13$  between graduates and non-graduates.

The lowest and highest possible scores for this measure were 3 and 13. The actual scores for graduates were 9 and 12 respectively, while 8 and 12 were reported by non-graduates.

All the analyzed data -actual scores, means, and standard deviations- showed no difference between the groups.

In summary, three of the four measures used in the social integration index showed differences between graduates and non-graduates. The greatest difference was revealed in the general social index. Of the three sub-elements used in the index, the greatest difference between the two groups was found to exist in academic social activities. Graduates worked on assignments in study groups, and discussed academic concerns with their instructors more often than non-graduates. There was evidence of a moderate difference between the groups in purely social activities. But since slightly less than half

of the graduates did not often participate in purely social activities, there does not appear to be a consistent relationship between social integration and persistence. However, there was no difference between the groups regarding friendliness of peers.

These results seem to indicate that social integration as it relates to persistence depends on the individual. Some graduates indicated a high level of integration while others did not. This may be due to individual traits or to the non-residential nature of the community college.

The results support the findings of Spady (1971), Tinto (1975 & 1987) and Pascarella, et al. (1983). They all argue that social integration although useful when it exist is not necessary for persistence to occur. More specifically, Spady noted that it is the student's perception of social integration that is most directly associated with persistence. Tinto (1987) argued that the student's decision to persist in a college program is also affected by his/her perceived level of integration with the social system of the institution.

Tinto emphasized that social integration as it relates to persistence does not infer total, or even wide ranging, congruence with the dominant college environment as much as it relates to growth through friendship associations, or to

some degree of congruence with another social group at or outside the college.

### Institutional Integration

Persistence in college according to Tinto (1975) must be understood as a series of interactions between the individual and the institution -peers, instructors and administration- in which (s)he is enrolled. The absence of integration, he argued, appears to have two sources: incongruence and isolation. Incongruence occurs when students perceive themselves as being at substantial odds with the institution. Isolation occurs from an inadequate amount of interaction (Tinto, 1987:53).

One of the functions of intervention programs is to help reduce the level of isolation students experience at college by offering a variety of services including counseling and liaison between students, instructors, and administrators. These services are especially useful to students who are native, or are from rural communities.

The Community College ACCESS Program provides important services such as counseling and tutorial services to help students adjust to their new environment. As some native students are unaccustomed to large institutions they appear to benefit from the personal contact they are able to make with

the program's staff. The program also provides assistance with relocation, budgeting, assertiveness training, and tutorials. Where necessary, services are provided on an individual basis or in groups.

In a study of students' use of university facilities, Churchill and Iwai (1981) found that dropouts used campus facilities -counselors, library and other informational services- the least of all student groups. They also noted that academically marginal students who used the instructional and counseling services tended to persist. Rugg (1982) found that when low academic achievers used campus services the dropout rate among them was 10 percent as compared with 30 percent for those who did not seek help.

Since such services appear to be essential, especially for marginal students, some indication of the students' perception regarding the services provided by CCAP seems appropriate.

#### Institutional Integration Index

The purpose of this index was to determine the students' perception regarding the helpfulness of their instructors and the usefulness of the services offered by CCAP. They are three items in this integration index. The general index is a composite of data drawn from questionnaire items (Question 3.3

to 3.6). That data was then divided to form the two sub-elements of the index.

No difference was found to exist between graduates and non-graduates in terms of the helpfulness of their instructors or with the services provided by CCAP.

In this section of the questionnaire respondents were provided with four options ranging from 'very unhelpful to very helpful'. The responses were coded as follows: very unhelpful 1, unhelpful 2, helpful 3 and very helpful 4.

#### General Institutional Integration Index

An analysis of the general institutional integration index (Table 7) shows the mean and standard deviation for graduates as 13.57 and 1.4 respectively. The corresponding data for non-graduates are 12.17 and 1.86 respectively. The scores for both groups are relatively high. When these data were analyzed a moderate difference between the two groups was found.

The lowest possible score for this index was 4 and the highest 16. The lowest score recorded by graduates was 12 and the highest 16. The corresponding scores for non-graduates were 9 and 16 respectively. These data seem to indicate a high degree of institution integration. In other words, most students found their instructors to be helpful.

TABLE 7

INSTITUTIONAL INTEGRATION INDEX

CONSTRUCTS	Graduates N=14		Non- Graduates N=12		Significant Test  Critical Value = 1.711
	M	Sd.	M	Sd.	
General Institution Integration	13.57	1.4	12.17	1.86	2.19
Helpfulness of Instructors	6.71	1.09	6.17	6.17	1.36
Perceived Usefulness of CCAP Services	6.79	0.77	6.00	1.58	1.66



This result is consistent with the findings of both Churchill and Iwai (1981), and Rugg (1982). Those findings were cited in the introduction of this integration index.

#### Helpfulness of Instructors

The construct examines the students' perception of the helpfulness of instructors. The measure was comprised of two questionnaire items (Questions 3.3 and 3.4). The lowest and highest possible scores for these questions were 2 and 8 respectively. The range of scores obtained for these two questions were identical for both graduates and non-graduates, the low was 4 and the high was 8.

The difference in mean scores for graduates and non-graduates is only 0.54. A significant test of the mean scores resulted in a value of  $t=1.36$ . Since the calculated 't' value is less than the critical value (See Table 7), there is no difference between the two groups. In other words, both the graduates and the non-graduates felt their instructors were helpful.

#### Perceived Usefulness of CCAP Services

The last construct in Table 7 measures the students' perception of the services provided by The Community College ACCESS Program. Most students reported that the services

offered by CCAP were helpful to very helpful. Two questions were used to collect this data (Questions 3.5 and 3.6). The lowest score possible for this measure was 2 and the highest was 8. The lowest actual score recorded by graduates was 6 and the highest was 8. This produced a mean of 6.79. On the other hand, the scores for non-graduates varied more widely. The lowest score was 2 and the highest was 8. These figures resulted in a mean of 6.00.

A significant test of the means revealed an actual value of 1.66. Thus, there was no difference between graduates and non-graduates regarding the usefulness of the services provided by CCAP. Since the majority of respondents (24 out of 26) found the counseling and administrative services to be either helpful or very helpful, the students appear to be expressing congruence with the services provided.

This result is important to those concerned with providing similar services to students, especially natives. Many native students have not been very successful in the education system. Many of them have tried to pursue postsecondary training through the normal route, or as mature students but they soon became frustrated and dropped out (Metelski 1982). By providing counseling, administrative, tutorial and other services, a greater number of native students may persist.

In summary, when the constructs of the institutional integration index were tested separately, no difference was found to exist between the graduates and the non-graduates. However, when the data were combined a moderate difference was detected.

The results indicate that both graduates and non-graduates reported that their instructors were helpful. Most students (24 of 26) indicated that the counseling and administrative services provided by CCAP were helpful.

#### SUMMARY

This section of the chapter analyzed the data relating to the perceived academic, social, and institutional integration of a group of academically disadvantaged adult students, to determine if differences exist between graduates and non-graduates in any of these areas while the respondents were enrolled in an Integrated Business Administration pilot project at Red River Community College but administered by The Community College ACCESS Program. The section concludes that there were some measurable differences between graduates and non-graduates in terms of academic and social integration, but not in institutional integration.

The findings indicated that in terms of academic integration:

- The greatest difference between the two groups was found to occur in GPA scores at the end of the third trimester in the course  $t=3.68$ .
- The second highest difference related to perceived intellectual growth  $t=3.59$ .
- The third highest difference was found in satisfaction with grades received  $t=3.44$ .
- The fourth difference was found to exist in the GPA scores at the end of the first trimester  $t=2.72$ .
- No difference was to exist between the groups regarding the highest school grade completed.

Two differences were found for social integration:

- Graduates did their assignments in groups and discussed academic matters with their instructors more often than non-graduates  $t=3.69$
- Graduates showed stronger social integration than non-graduates  $t=1.98$ .
- There was no difference between graduates and non-graduates in terms friendliness of peers  $t=1.13$ .

No difference was found to exist between graduates and non-graduates regarding institutional integration.

- Both graduates and non-graduates indicated that their instructors were helpful  $t=1.36$ .

- Graduates and non-graduates found the services provided by CCAP to be helpful  $t=1.66$ .

In general, these results show that graduates were more able to meet the academic standards at RRCC than did the non-graduates. There was no evidence to indicate that social integration was consistently related to persistence.

## DISCUSSION AND FINDINGS: PART TWO

### BACKGROUND CHARACTERISTICS

#### Introduction

This is the second of a three part chapter devoted to the discussion and findings of the study. This section is concerned with determining what influence, if any, background characteristics appear to have on students' integration and persistence.

The degree to which students integrate into the academic, social and institutional systems of the institution at which they are enrolled appear to be associated with their background characteristics. According to Tinto (1975), students enter an institution with a variety of background characteristics. It is believed that those background characteristics influence the students' desire to graduate. The strength of that desire is believed to have an important role in determining whether or not students will persist or withdraw.

The purpose of examining background characteristics in this section is to ascertain what effects, if any, those background characteristics appear to have on the persistence/withdrawal behaviour of the students in the IBA course. The background characteristics used in this study are age, sex,

marital status, and family size.

Age

To determine if age is a significant indicator of persistence/withdrawal behaviour, the respondents were divided into two categories: younger and older students. A person who was 23 years of age or less was classified as a younger student. Conversely, an one who was 24 years of age or older was considered as any older student. Since the students in this study ranged in age from 18 years to 45 years, and as the typical college students is between the ages of 18 and 23, twenty-three was chosen as the dividing point to contrast age with persistence.

An analysis of Table 8 shows that the respondents were equally divided according to the designated age categories.

TABLE 8  
AGE and PERSISTENCE

Age Academic Success	23 years of age or less		24 years of age or more		Total	
	No.	Percent	No.	Percent	No.	Percent
Graduates	5	38	8	67	13	50
Non-graduates	9	62	4	33	13	50
TOTAL	14	100	12	100	26	100

In other words, 50.0 percent of the students were 23 years of age or younger and 50.0 percent were 24 years of age or older. It is also evident that 62 percent of the graduates were 24 years of age or older, while 31 percent of the non-graduates were older students. The index shows that 69 percent of the non-graduates were under 23 years of age.

This result suggests that there may be a slight relationship between age and persistence. This finding is in keeping with Kidd's (1973) and Mc Clusky's (1981) studies. They both indicated that older people continue to grow intellectually and are more careful in thinking things out, but tend to be slower in finishing an assigned task than younger students.

This result is consistent with Kasworm's (1980) study which found that the academic performance of older students equals, and often surpasses, that of younger adult students.

### Sex

The literature relating to sex and persistence is not surprisingly inconclusive. Earlier studies (Spady 1970, Astin 1975, Tinto 1975) indicated that men tended to persist more than women. A study by Voorhees (1987) found that women tended to persist more than men. It is relatively common in western societies to assign certain tasks to children



according to their sex, as a result, certain attitudes are developed. Those attitudes may influence an individual's perception of him/her self and ultimately, the goal of graduating.

To determine if sex had any effect on persistence, sex was plotted against persistence.

Table 9 shows that 38 percent of the respondents were male and 62 percent female. The table also reveals that 57 percent of the graduates were female and 43 percent were male. The greater number of women respondents could be reflective of the selection criteria. Affirmative action programs give selection priority to female candidates, especially single mothers.

TABLE 9  
PERSISTENCE BY SEX

	Graduates		Non-graduates		Total	
	No.	Percent	No.	Percent	No.	Percent
Male	6	43	4	33	10	38
Female	8	57	8	67	16	62
TOTAL	14	100	12	100	26	100

Although the number of female respondents who graduated

is greater than that of men, 8 to 6, a greater proportion of the men respondents graduated than women. Six of 10 males (60 percent) and 8 of 16 women, or 50 percent graduated. This data show a 10 percent better retention rate by proportion for men. It is unclear whether sex alone is responsible for this difference.

These results seem to support the findings of both the earlier studies, as well as the later one cited above. The data supports the later study by Voorhees who found that females persisted more than males. This result supports that position in terms of actual numbers, but when percentages are applied to the data, a greater proportion of men were found to persist.

Even though it is unclear that a single variable -sex was the cause of the difference in retention it appears prudent to analyse other single variables such as marital status to see if it too may account for a difference.

#### Marital Status

Some research indicate that it is more difficult for an adult woman with family responsibilities to successfully participate in postsecondary full time education than it is for men. When most women enroll in full time studies, they continue to be responsible for a greater proportion of child

care, cooking, laundry and other household tasks (Huston-Hobrug and Strange, 1986). Degen (1985) in a study on non-traditional students who participated in a university program, found that 47 percent of the respondents indicated that participation in full time studies strained their family relations.

In this section, an attempt is made to see if marital status has either a positive or a negative effect on persistence for either married or single students.

An analysis of Table 10 shows that 65 percent of the respondents were not married and 35 percent were married. Sixty-four percent of the graduates were single while 36 percent were married. But among the non-graduates, as many as 67 percent were not married. Although these data suggest a slightly lower success rate for single students, the concerns identified in the literature about females experiencing more

TABLE 10  
MARITAL STATUS AND PERSISTENCE

Marital Status	Graduates		Non-graduates		Total	
	No.	Percent	No.	Percent	No.	Percent
Single	9	64	8	67	17	65
Married	5	36	4	33	9	35
TOTAL	14	100	12	100	26	100

difficulty than males was not fully addressed. Therefore, males will be excluded from the next analysis and the number of females in the study are plotted against persistence.

Table 11 shows that 82 percent of the females who responded to the questionnaire were not married. Seventy-five percent of the female graduates, on entry to the program were

TABLE 11  
FEMALE PERSISTENCE

Marital Status	Graduates		Non-graduates		Total	
	No.	Percent	No.	Percent	No.	Percent
Single	6	75	8	89	14	82
Married	2	25	1	11	3	18
TOTAL	8	100	9	100	17	100

single and 89 percent (14 of 17) of the non-graduates were not married. Only three females were married when they entered the IBA program. Thus, this cell, 3 married females, is too small to draw conclusions.

Many of the single females are parents. Thus, this result does not appear to support the concern in the literature relating to the difficulty that women with family responsibilities who are engaged in full time studies

encounter.

The difference between this result and the literature may be due to the type of supports CCAP provides for students with children -financial assistance with daycare and counseling are among the supports provided.

To test the influence of this result on female student persistence, it seems appropriate at this stage of the study, to consider family size. For the purpose of this study, family size does not refer to a specific number of children in a family household, but to whether or not there were children in the family when the student enrolled in the program.

#### Family Size

It does not appear that family size alone will seriously influence persistence/withdrawal behaviour. However, if there are many young children in a family, the female student may not be able to participate in study group activities or other extra-curricular activities as readily as the student without child care responsibilities.

Since females are usually responsible for child care and other related tasks, only women, regardless of marital status, will be considered in this analysis. In this examination, female students are divided into two groups: without children and with children, and plotted against academic success. The

results are summarized in Table 12.

An analysis of Table 12 shows that 56 percent of the respondents had no children, and 44 percent had. Seventy-five percent of the non-graduates were childless and 25 percent had children. However, 62 percent of the graduates had children while 38 percent did not have any. According to the questionnaire responses, the average family had between one and three children.

This result appears to suggest that females with children are more committed to graduating and therefore persisted better than those without children.

TABLE 12  
FEMALE WITH AND WITHOUT CHILDREN ACCORDING TO PERSISTENCE

	Graduates		Non-graduates		Total	
	No.	Percent	No.	Percent	No.	Percent
No children	3	38	6	75	9	56
Children	5	62	2	25	7	44
TOTAL	8	100	8	100	16	100

More women with children graduated than those without. Also, there was a smaller number of women with children among the dropouts.

This result does not show a strong association between family size and persistence because 5 females with children graduated while 3 without did. Conversely, 6 females without children dropped out while only 2 with children did. It seems that females with children have a slightly stronger tendency to persist than those without, but a difference of 2 is too small to say that family size alone has a positive influence on persistence.

There are a number of possible explanations for the high number of younger single women without children withdrawing. One explanation could be that since most of them are under 23 years of age, the need for an education may not be as immediate as is the case with single mothers. Making the adjustment to an urban setting while at the same time adjusting to college life may be too distracting for those without immediate family responsibilities. Thus, they may decide to try other things and return to college at a later date.

Most of the background characteristics have thus far been analyzed independently and the results show that young single females are prone to early departure. It seems appropriate now to combine a number of these background characteristics to determine if they have a more definite association to persistence. The first of these measures is age and sex in

relation to academic success.

To construct a table with age, sex, and academic success, the respondents are divided into two groups according to age as used before.

Analysis of Table 13 shows that the students who tended to depart prematurely were younger, especially females. Of the 12 non-graduate respondents, half of them were younger females but only two older females withdrew. The table also shows that an equal number of younger and older females graduated -4 each. A similar pattern is evident for males only the number is different: 3 instead of 4. There were also 4 younger male students who withdrew prematurely.

These data show that younger students tended to dropout more often than older students.

TABLE 13  
AGE, SEX, AND ACADEMIC SUCCESS

Age	23 years or less				24 years or older				Total	
	Grads.		N-Grads		Grads.		N-Grads.		#	%
Success	#	%	#	%	#	%	#	%		
Male	3	30	4	40	3	30	0	0	10	100
Female	4	25	6	38	4	25	2	12	16	100
TOTAL	7	27	10	38	7	27	2	7	26	100



Since half of the non-graduates were younger females (6) and as the majority of graduates are females (8 of 14), the next analysis will consider only females. The purpose of this analysis is to determine if family size and age have any influence on academic success.

In this analysis, females are divided into two groups: those who entered the IBA program with children and those who entered without. The divisions for age and academic success are maintained.

An analysis of the data shows that there was not much difference among the female respondents in terms of having children on entry to the program. Nine of them had children and seven did not. Of the 8 graduates, 5 had children. There 6 females 23 years of age or less that had children, 3 of them graduated and three did not. There were 3 females 24 years of age or older who had children, 2 graduated and 1 did not.

There were 7 females without children, 4 were 23 years of age or less, 1 graduated and 3 did not. Of the 3 older females, 2 graduated and 1 did not.

These cells are too small to offer conclusive results but the data seem to indicate that among the IBA female students there was a mild association with age, motherhood and persistence.

Only females were included in the above analysis because the data indicated that younger female students were departing prematurely. That same data showed that younger male students were the second most likely group to withdraw from the program. Therefore, some attention is now devote to male respondents.

Two analyses were done for male students. The first is a combination of age, marital status and academic success; the other consist of age marital status, family size and academic success. The same analytical procedures that were used for the females are used here.

The data show that there were 10 male respondents. Of these 10, four were single and 6 were married. Six of the 10 males graduated.

With respect to age, 7 males were 23 years of age or less. Three of them graduated, 2 were single and the other was married. Of the 4 who did not graduate, 1 was single and 3 were married. There were 3 older male students, 1 single and 2 married, all of them graduated.

Although the numbers used in this analysis are small, the result is consistent with the findings for the females. They both show that younger students are prone to leave the program prematurely.

In the final examination of background characteristics

and how they relate to persistence of male students, family size is now considered. Hence, age, marital status, academic success and family size are analyzed.

The data show that half the male respondents had children and the other half did not. The majority of the male respondents (7) were younger students. Of that group, 3 graduated, 4 did not. None of the three younger male graduates had children. Of the 4 young male non-graduates, 2 had children and 2 did not. On the other hand, there were 3 older male students all of whom had children and graduated.

Although the cells are quite small, it is very noticeable that all the male non-graduates were younger students. This result is similar to that for females. In other words, younger students in the IBA program tend to discontinue their postsecondary training more so than older ones. These results seem to point to an association between age, family size and persistence.

#### SUMMARY

The purpose of this section was to analyze background characteristics to determine what influence, if any, they had on persistence. The results show that there is some association between individual background characteristics and persistence. There was also evidence that when background

characteristics are analyzed collectively, they appear to influence persistence/withdrawal behaviour. More specifically, age, and family size is associated with persistence among IBA students.

The results of this section are as follows:

- Age is related to persistence. Older students showed moderately better persistence than younger ones.
- Younger students, especially females without children have the highest pattern of discontinuance, followed by young married males.
- There is evidence that a greater number of females than males persisted, 57 percent for females to 43 percent for males. However, when sex is analyzed in terms of total respondents persistence, 60 percent of males as against 50 percent for females.
- Females with children tended to persist more than those without.

In general, among the IBA students, age was related to persistence. Nine of the 14 graduates were older students. Also, the majority of non-graduate females were younger students. It is difficult to categorically attribute this to age alone. There is some evidence to suggest that family size

positively influenced persistence. Of the 8 female graduates,  
5 had children.

DISCUSSION AND FINDINGS: PART THREE  
TRANSFEREES AND STOPOUTS

This is the third section of a three part chapter devoted to the discussion and findings of the study. This section is devoted to a discussion of Transferees and Stopouts.

Six of the respondents were found to have withdrawn from the IBA program prematurely but continued their postsecondary training. They represent a unique type of dropout. As a consequence, they were excluded from the analyses covered in parts one and two of this chapter. Because this group is too small to do a detailed statistical analysis, a general description of them and a comparison of their total mean scores are used to indicate their level of academic, social, and institutional integration while they were participants in the IBA program.

Transferees

A total of three respondents transferred to other study programs, two females and one male. They all indicated on the comment section of the questionnaire that when they enrolled in the IBA course they had no vision of what Business Administration was about. Once exposed to the discipline they

soon realized that it was not the type of training they wanted to pursue. Two were younger students, one female the other male; the third person was an older female. Both the older female and the male transferred to social work programs and the other female to a secretarial program.

### Stopouts

A total of three respondents were classified as stopouts. Two were younger females, the other an older male. One of the females chose to enter the work force but after fifteen months she became unemployed. It is at this juncture that she re-applied to the IBA course. The other female had a baby and took a year off. The male suffered a medical problem but returned to the program after sixteen months.

### Transferees and Stopouts: Integration Patterns

In this section a comparison of integration patterns for this special type of premature departures were done. This comparison was obtained by examining their responses to questionnaire items about academic, social and institution integration. The responses were categorized exactly as those used in parts one of this chapter.

The examination of the data revealed that on average, stopouts showed slightly stronger integration trends than did

transferees.

The examination was done by finding the total mean for each response category for each group. An analysis of Table 14 reveals that the mean scores in each category were less than those of the graduates but higher than those of the non-graduates discussed in part one. In terms of transferees and stopouts, stopouts showed a moderately greater tendency toward academic and social integration than did transferees. Transferees on the other hand, showed a very minutely stronger trend towards institutional integration.

TABLE 14  
MEAN INTEGRATION SCORES OF TRANSFEREES AND DROPOUTS

Item	Transferees M	Stopouts M
Academic	9.9	11.0
Social	32.0	36.0
Institution	12.6	11.6

No major conclusion can be drawn from these data, except to note that the slightly higher mean academic and social scores for stopouts may be attributed to the dissatisfaction of the transferees with Business Administration as a possible field of training.



CHAPTER 5  
SUMMARY AND CONCLUSIONS

Summary

The broad purpose of the study was to identify any differences that may exist between graduates and non-graduates in terms of academic, social, and institutional integration. Also, to determine if selective background characteristics appear to influence the persistence/ attrition behaviour of a group of academically disadvantaged adult students who were enrolled in an Integrated Business Administration course at the Community College level.

Question 1a. Academic Integration

- Do graduates and non-graduates differ in terms of academic integration with regards to the grade point average (GPA) received at the end of the first trimester, or at the completion of the first year?

The study indicates that there are observable differences between graduates and non-graduates in GPA scores at the end of the first trimester  $t=2.72$ , as well as at the end of the third trimester  $t=3.68$ .

Graduates general GPA performance indicated stronger academic integration than non-graduates.

- Are there differences between graduates and non-graduates regarding their perception of their own intellectual growth?

The study indicates that there are differences between graduates and non-graduates regarding how they perceived their intellectual growth  $t=3.59$ .

- Would academic accomplishment prior to enrolment in the IBA course contribute to a difference in persistence between graduates and non-graduates?

The study found no evidence to indicate that the highest grade level achieved prior to enrolment in the IBA program is a reliable indicator of persistence  $t=0.49$ .

Some students who entered the course with less than a grade X level of education persisted, but there were others who entered with a grade 12 standing and did not persist.

#### Question 1b. Social Integration

- Is there a difference between graduates and non-graduates in terms of academic social activities such as; working on, or discussing, academic assignments in study groups?

The study indicates that there were differences between graduates and non-graduates in terms of working on, or discussing assignments in study groups  $t=3.69$ .

The data indicate that graduates worked on assignments in

study groups more often than non-graduates.

- Are there differences between these two groups of students regarding the amount of time they participated in purely social extra-curricular activities?

The study indicates that there is a moderate difference between the two groups with regard to purely social activities  $t=1.98$ .

Although a number of graduates indicated that they did not often participate in purely social activities, they persisted. Social integration did not appear to have a consistent effect on persistence among the IBA students.

- Is there a difference between graduates and non-graduates in terms of friendliness with their peers?

The study indicates that there is no noticeable difference between graduates and non-graduates in their perception of friendliness of their peers  $t=1.13$ .

Both groups scored high on this item. The data indicate that there was a high degree of friendliness within the groups.

#### Question 1c. Institutional Integration

- Is there a difference between the two groups of learners regarding their perception of the helpfulness of their instructors, or the usefulness of the services provided by CCAP?

The study found no difference between the two groups with regards to those items. Both groups indicated that their instructors were helpful. They also indicated that the services provided by CCAP were useful.

### Question 2. Background Characteristics

- How do selected background characteristics such as age, sex, marital status, and family size encourage or inhibit students' integration at the community college level.

The study indicates that there is an association between age, sex and family and the persistence/attrition behaviour of IBA students. The results indicate that older students tended to persist more than younger ones. Most of those who departed prematurely were single females who had no children, followed by young married males.

A greater number of females graduated than males. It should be noted that more females were selected to the project than males. When sex is analyzed in terms of total participants, a greater percentage of males persisted, 60 percent males to 50 percent females.

Family size appear to have a positive association with female persistence. More females with children graduated than those without 5 to 3. Family size did not appear to influence male persistence. Of the six men that graduate three had

children and three did not.

Finally, although Tinto's model was useful in identifying some aspects of academic and social integration, a number of limitations became evident when the model was applied in this study. For example, the model emphasized a relationship between the students' commitment to the institution and their persistence. Since the supports provided to IBA students by CCAP are directly tied to their participation in the IBA program at RRCC, the students' commitment to graduating from another institution with CCAP's supports was not applicable. Thus, instead of analysing institutional commitment, institutional integration -the students' perception of the usefulness of the services provided by CCAP- was analyzed.

Another limitation of Tinto's model that was evident in this study is the model's focus on traditional university students. The students in the IBA program were, in terms of age, a mix of traditional postsecondary students as well as others who had entered college for the first time in their adult years.

### Conclusion

This study indicates that the overall graduation rate for the first two intakes combined is 40. Since the stopout and transferees are still pursuing their post secondary training the persistence rate is 48 percent. This is a good graduation/

retention rate considering that approximately half of the group would not have been able to meet the normal academic entrance requirements of the college.

There are observable differences between graduates and non-graduates regarding academic and social integration but not institutional integration. The academic integration index clearly showed that graduates perceived themselves as integrated. They were able to satisfy the minimum standard to maintain registration.

Highest school grade completed is clearly not a reliable indicator of persistence in the IBA program. There were seven graduates who entered the IBA course with a grade 10 standing or less. On the other hand, an equal number of non-graduates entered with a grade 11 or better. This appears to be of significance to those involved in the selection of candidates for integration programs.

Although there were differences between the two groups regarding perceived intellectual growth, many non-graduates indicated that they were satisfied with their intellectual growth but did not persist. This response seems to support the reviewed literature which showed that many of these students have not been socialized to set high educational or employment goals. Perhaps obtaining a diploma is not as important as acquiring certain marketable skills.

The design of the IBA program in concert with the other

services provided by CCAP appear to have a positive effect in bridging the gap between the students' native background and the education system which was identified in the literature. This is evident in the graduation rate of 40 percent.

#### Recommendations About the Study

The recommendations made in this study, although based on the findings of the research reported here are also influenced by the experience of the writer.

- That efforts be made to determine the specific cause(s) of premature departure among younger students, especially single females without children and married males.
- That futur students be made aware of the benefits of working on academic assignment in small study groups. This could be done during orientation.
- That ACCESS continue its effort to provide quality services.
- That in selecting academically disadvantaged adults for postsecondary training, selection committee members should investigate the applicants' history of completed activities in concert with their academic preparedness in determing who should be admitted, rather than on highest grade completed only.
- That efforts be made at the community level to provide

prospective students with more details about courses offered by CCAP as a means of reducing the difficulty experienced by the transferees.

#### Recommendations for Future Study

The following suggestion for future study should help to provide a better understanding of the persistence/attrition behaviour of academically disadvantaged adult students.

- A future study on the issue of students' persistence/attrition behaviour should consider interviews with the students. A case study approach may offer more information on the integration of academically disadvantaged students into the postsecondary system.



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APPENDIX A

Room F 210 RRCC  
2055 Notre Dame Ave  
Winnipeg Manitoba  
R3H 0J9  
September 30, 1988

Dear

It has been a while since we were in contact. How are you? I hope things are going well for you and your family.

I am conducting a survey of all Integrated Business Administration students who registered for the course in 1984 and 1985. The purpose of this survey is to try to better understand some of the different reasons that either help students to complete the program or cause them to withdraw. As you registered during that period, I would be most obliged if you would complete the enclosed questionnaire. It should take about 15 minutes of your time to complete.

Please return the completed questionnaire in the stamped, self-addressed envelope by October 14, 1988. You do not have to sign the questionnaire.

I am conducting this study as part of the requirements for a Master of Education degree. Even though this survey is not officially connected with the Community College ACCESS Program the results may be used by ACCESS to help provide better service to students in the future.

Although your completion of the questionnaire would be greatly appreciated you are under no obligation to do so.

For the second phase of my study I am hoping to interview some former students regarding how they felt about different aspects of the program. I would greatly appreciate your input in this matter. If you would be willing to be interviewed, please complete the enclosed stamped, self-addressed post card and return it separately from the questionnaire.

If you would like a copy of the results of the survey kindly check the appropriate box on the enclosed post card.

Finally, if you have any questions regarding this survey please do not hesitate to call me at 633-5930. Thank you for your kind co-operation in this endeavor.

Yours truly,

.....  
Archie Prescod.

APPENDIX B

A STUDENT SURVEY OF ATTITUDES TOWARDS  
THE COMMUNITY COLLEGE ACCESS INTEGRATED BUSINESS  
ADMINISTRATION COURSE

-1988-

Introduction: This questionnaire attempts to survey your attitude towards your participation in the Integrated Business Administration (IBA) course at Red River Community College. It is concern not only with your academic experiences but also the extent to which you find life at the college supportive and worthwhile. To do this I have arranged the questionnaire into five sections that I have called ACADEMIC, SOCIAL, INSTITUTIONAL SETTING AND SERVICES, and a short section on PERSONAL BACKGROUND.

For each statement please a check ( ) under the response that BEST indicates your answer to each question.

\*\*\*\*\*

ACADEMIC SATISFACTION: Here are some questions about your grades in the course.

- 1.1 Did you Graduate? ( ) Yes ( ) No
- |  | Strongly Agree | Agree | Disagree | Strongly Disagree |
|--|----------------|-------|----------|-------------------|
| 1.2 Generally, I was satisfied with my performance in the course               | ( )            | ( )   | ( )      | ( )               |
| 1.3 Generally, the grades I received encouraged me to work towards graduation  | ( )            | ( )   | ( )      | ( )               |
| 1.4 Generally, I was satisfied with my intellectual growth while in the course | ( )            | ( )   | ( )      | ( )               |
| 1.5 For me the courses were worthwhile   | ( )            | ( )   | ( )      | ( )               |



2.

**SOCIAL SATISFACTION:** Here are some questions about your social activities during the time you were enrolled in the IBA course. Please put a check mark ( ) under the response that BEST indicates your answer.

	Very Regularly	Often	Some- times	Occasion- ally	Never
2.1 How often did you work on assignments in a study group?	( )	( )	( )	( )	( )
2.2 How often did you work informally on assignments with another IBA student?	( )	( )	( )	( )	( )
2.3 How often did you talk about course content with other IBA students?	( )	( )	( )	( )	( )
2.4 How often did you discuss course matters with your instructors?	( )	( )	( )	( )	( )
2.5 How often did you attend the functions of the FUTURES GRAD CLUB?	( )	( )	( )	( )	( )
2.6 While attending RRCC how often did you attend Student Council Socials?	( )	( )	( )	( )	( )
2.7 How often did you socialized with other IBA students?	( )	( )	( )	( )	( )
2.8 How often did you meet informally with ACCESS staff members?	( )	( )	( )	( )	( )

3.

**INSTITUTIONAL SETTING:** Here are some questions about the institutional setting and the services available to students.

3.1 Looking back at your RRCC experience, how would you describe the general student body? Check ONE only.

- 1.  Most unfriendly
- 2.  Very unfriendly
- 3.  Indifferent
- 4.  Friendly
- 5.  Very friendly

3.2 Looking back at your RRCC experience, how would you describe the ACCESS student body?

- 1.  Most unfriendly
- 2.  Very unfriendly
- 3.  Indifferent
- 4.  Friendly
- 5.  Very friendly

- |  | Not<br>relevant | Very Un-<br>helpful | Helpful | Very<br>helpful |
|--|-----------------|---------------------|---------|-----------------|
| 3.3 How helpful did you find most of your RRCC instructors to be?  | ( )             | ( )                 | ( )     | ( )             |
| 3.4 How helpful did you find most of your ACCESS instructors to be?  | ( )             | ( )                 | ( )     | ( )             |
| 3.5 How helpful were the counselling services of ACCESS to you?  | ( )             | ( )                 | ( )     | ( )             |
| 3.6 How helpful were the ACCESS administrative staff to you?   | ( )             | ( )                 | ( )     | ( )             |
| 3.7 Looking back at your days at RRCC would you say that:  |                 |                     |         |                 |
| a. <input checked="" type="checkbox"/> you felt comfortable with the general social environment at the college |                 |                     |         |                 |
| b. <input type="checkbox"/> the general social environment at the college did not concern me                   |                 |                     |         |                 |
| c. <input type="checkbox"/> you felt isolated from the general social environment at the college.              |                 |                     |         |                 |

4.

BACKGROUND INFORMATION: Here are some questions that might affect your ability to complete the course. Please check the appropriate box to indicate your answer.

- 4.1 Sex: Male ( ) Female ( )
- 4.2 Age at time of enrollment in IBA course \_\_\_\_\_
- 4.3 Marital Status: Single ( ) Married ( )
- 4.4 No of children at time of enrollment in IBA course \_\_\_\_\_
- 4.5 To what extent was your decision to enroll in the IBA course a result of any of the following:

	Not at all	Some extent	Great extent
4.6 To graduate and find a job	( )	( )	( )
4.7 I could not get into university	( )	( )	( )
4.8 Most of my friends were attending RRCC	( )	( )	( )
4.9 To please my parents or spouse	( )	( )	( )
4.10 To obtain a specific skill	( )	( )	( )
4.11 To obtain career insights	( )	( )	( )

\*\*\*\*\*

NOTE 1. If you would like a copy of the results of this survey please check the appropriate box on the enclosed post-card.

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE!!

Please feel free to use the remainder of the page for any comments you may wish to express about your experience in the IBA course.

THANKS AGAIN!

Archie Prescod

COMMENTS:

APPENDIX C

F210 RRCC  
2055 Notre Dame Ave  
Winnipeg MB R3R 3A9  
November 1, 1988

Dear

I sent you a questionnaire package on September 30, 1988 and suggested a return date of October 14, 1988 I wonder if you received it.

If you did receive my package, it would be greatly appreciated if you complete and return the questionnaire by November 16, 1988. On the other hand, if you did not receive it please phone me at 633-5930 collect between 8 am and 4 pm any week day.

Your participation in this survey is vital and would be of great value to future students as well as to the ACCESS program in general.

I look forward to hearing from you soon. If on the other hand you have already responded, kindly accept my apologies for bothering you and ignore this letter. Thank you!

Sincerely

.....

Archie Prescod