

VARIABLES ASSOCIATED WITH PERSISTENCE/WITHDRAWAL  
DECISIONS OF RURAL STUDENTS AT SELECT NEWFOUNDLAND  
POST-SECONDARY INSTITUTES

CENTRE FOR NEWFOUNDLAND STUDIES

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SHAWN HERBERT RUMBOLT









Variables Associated with Persistence/Withdrawal Decisions of  
Rural Students at Select Newfoundland Post-Secondary  
Institutes

By

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### Abstract

Variables associated with attrition of two groups of rural students at select Newfoundland universities/colleges were the focus of this study. Group one consisted of 46 university and 23 college non-persisters and group two consisted of 131 university and 30 college persisters. A questionnaire was developed to: (a) create profiles of university and college persisters and non-persisters, (b) gather their suggestions for interventions needed at the senior high and post-secondary level to help ease the transition for rural Newfoundland students into post-secondary, and (c) ascertain their main reasons for maintaining or not maintaining enrolment. Variables examined included select background and demographic characteristics and factors related to one's high school and post-secondary experiences. Data obtained from university and college students was analyzed separately using descriptive statistics. Results indicated that college/university persisters, as compared to college/university non-persisters: sought assistance more frequently from school counsellors, had more realistic expectations of post-secondary, met more frequently with faculty members, showed more involvement in orientation activities, and were less likely to see themselves obtaining seasonal work and collecting unemployment insurance benefits in the up-coming year. In addition, college persisters, as compared to college non-persisters: were younger, attended church more, were less inclined to think of changing their programs, sought post-secondary counsellor assistance more

frequently and visited them more often, expressed more concern about their ability to finance their education, were less likely to be receiving Canada Student Loans, showed more involvement in campus clubs/organizations, had closer relationships with their roommates, and obtained less support/encouragement from their brother(s). Further, university persisters, as compared to non-persisters: had higher Level Three and post-secondary averages, felt more at home in university and were more satisfied with the environment, more often saw their courses as being relevant to their goals, had less difficulty coping with stress, had parents/guardians who placed more emphasis on their post-secondary graduation, and received more support/encouragement from their families and post-secondary staff. As well, to help ease the transition from high school into post-secondary for rural Newfoundland students, university and college respondents felt that, at the senior high level, there was a need for increased emphasis on preparation of students for the academic component of post-secondary life as well as provision of more information about other facets of post-secondary, whereas at the post-secondary level: instructors need to be more sensitive, counselling services and orientation activities need to be more helpful, and there should be increased means to ensure student social integration. College and university persisters noted returning primarily for reasons related to aspirations and career goals or benefits of such, whereas non-persisters reported choosing not to persist for reasons mostly associated with:

seeing their program or area of study as an inappropriate choice, experiencing financial difficulty, or wanting to enter the work force. Finally, recommendations for practice and research were made towards the transition of rural students to post-secondary.

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## CHAPTER ONE

### Introduction

With declining enrolments, reduction in student attrition, which has always been a concern of colleges and universities, according to Astin (1975) and Iffert (1957), is now assuming greater importance (Nelson, Scott & Bryan, 1984). This increased concern has resulted in quite an extensive body of literature focusing on the portion of college and university students who fail to maintain enrolment until graduation. Numerous causal linkages have been established, correlations between a wide array of individual student characteristics and student dropout behaviour have been reported, institutional types have been scrutinized, and the quality of a student's social interaction and integration within the post-secondary environment has been identified in a number of important studies as a major factor in determining his/her persistence potential (Bynum & Thompson, 1983).

According to Nelson et al. (1984), recent studies, as compared to earlier prediction investigations, have made more progress in identification of potential student dropouts as a result of concentration on those students most likely to dropout. The importance of this progress is substantiated by Bee and Beronja (1984) who indicated that a significant portion of attrition might be prevented through carefully planned institutional interventions which would be most effective if those most at risk of dropping out could

be accurately identified. Investigators have historically identified freshmen as being the largest subgroup of at risk students (Bean, 1980; Dukes & Gaither, 1984). The freshman year, particularly the first semester, was noted to be a transition period for students during which they experienced significant changes in their social lives (Cuyjet & Rode, 1987). In addition, the freshman year has been recognized as the most stressful for college students (Schwitzer & Robbins, 1986).

However, one cannot safely assume that interventions utilized in one institution to help retain freshmen would be successful with potential dropouts at other institutions. Bean (1986) indicated that, as a result of student heterogeneity and institutional type, it is desirable to identify the sets of factors that influence attrition decisions for as many subgroups at institutions as possible.

The present study attempted to obtain the necessary information from rural Newfoundland post-secondary students attending select college and university campuses to identify those most at risk of dropping out, and gather their suggestions for retention interventions at the senior high and post-secondary level. Information regarding the students' background and demographic characteristics, high school and post-secondary experiences, reasons for persisting/withdrawing, and suggestions for interventions were compiled from information gathered on questionnaires.

Subsequently, suggestions for retention interventions and further research were made based on the data obtained.

#### Purpose of the Study

A sample of rural Newfoundland post-secondary students were selected for inclusion in a study with the following purposes in mind:

1. To develop profiles of college/university persisters and dropouts based on information provided by them on questionnaires which surveyed variables associated with their background/demographic characteristics and high school/post-secondary experiences.
2. To obtain from rural post-secondary students, via information provided on questionnaires, their suggestions for interventions needed at the senior high and post-secondary level to ease in their transition from high school to post-secondary.
3. To obtain from rural post-secondary students, via information provided on questionnaires, their main reasons for persisting in or leaving post-secondary programs.
4. To determine, via information provided by college/university students, if their decisions to persist in or drop out of post-secondary programs are associated with intentions to work seasonally and collect unemployment insurance benefits.
5. To identify, based on findings of this study, those college/university students most at risk and make

recommendations for retention interventions at the senior high and post-secondary level.

#### Significance and Rational

Studies of higher education illustrate the positive impact that a post-secondary education may have on those who attain it. According to Stoecker, Pascarella, and Wolfle (1988), economic, social, and personal benefits have long been attributed to the educational process. Further, Stocker, et al. (1988) indicated that post-secondary education, as a means to individual occupational prestige and collective social mobility, had become an extensively used resource for individuals and policy makers to improve existing social inequalities. However, despite the positive ramifications of post-secondary education for those who attain it, and the society in which they live, many students leave post-secondary institutions prior to graduation. According to Tinto (1982), for the past century, student attrition has remained fairly constant at about 45%.

Bynum and Thompson (1983) indicated that an extensive body of literature has focused on the large portion of college and university students who drop out each year or who do not persist to graduate on schedule. Despite the abundance of research conducted regarding the topic of student attrition and the concern it has evoked, development and implementation of retention policies and programs is still an ongoing domain of research, development, and

evaluation at the level of the individual institution (Pascarella, 1986). Further, the drop out phenomenon in post-secondary institutions is yet to be clearly understood (Bean, 1986) and there remains a need for programs to minimize freshman attrition (Dukes & Gaither, 1984).

Bean (1986), offered a synthesis of variables known to, or believed to, impact upon attrition decisions and suggestions as to what institutions could do to reduce attrition. According to Bean (1986), many administrators are misplacing emphasis when they attempt to reduce the dropout rate in many of our post-secondary institutions by not focusing on specific subgroups of students. The issue is not the percentage of the total student population that do not persist, but retention of various types of students.

Thus, Bean (1986) suggested it is of essence, when developing retention programs, to segment the population and identify the dropout rates for various groups within the student body. Similarly, Stage (1988) contended that when analysing college outcomes, more emphasis should be placed on the identification of meaningful student subgroups. As well, Bean (1986) stated that "to believe there is one best way to increase retention is to fail to grasp the complexity of the issue" (p. 49). The quality, degree level, and missions of institutions differ, as well as the personal and social backgrounds of the students they attract. Therefore, as a result of heterogeneity in institutional and student

type, and numerous possible legitimate reasons for dropping out, a single model of student attrition would not suffice when attempting to explain the attrition process for all students at all types of institutions.

Pantages and Creedon (1978), and Bee and Beronja (1983-84), also stressed the importance of identifying high probability dropouts. They noted that identification was of essence so that counselling or other interventions could be implemented before decisions to withdraw were made. In addition, other researchers have demonstrated the positive impact that counselling had on students who were considered to be at a high risk of dropping out. Bishop and Brenneman (1986), and Bishop and Walker (1990), conducted studies which indicated that the vast majority of students who were considered to be retention risks chose to persist after receiving counselling.

The literature indicated that rural students constitute one such subgroup in need of further examination and subsequent retention interventions. According to Aylesworth and Bloom (1976), research on rural and urban students in higher education suggested that rural students were more likely to dropout. As early as 1967, Ackerson, in a speech that was delivered at the National Outlook Conference On Rural Youth, recognized the plight of young rural Americans. Ackerson (1967) indicated that there was a need for many improvements in rural America if young people were to reach

their fullest potential.

However, Aylesworth and Bloom (1976) reported that despite the "educational handicap of rural Americans and the uncertainty about the fate of rural students in college", there was limited research information on the characteristics of rural and urban students or identification of "special problems faced by the rural student" (p. 236). Later, Brown (1985), in a study which reviewed existing literature on rural students who dropout of higher education, indicated that rural youth were still in need of special interventions to ensure they persist at the post-secondary level. Brown (1985) noted that although there existed research which challenged the relationship between post-secondary attrition/retention and rural/urban background, corroborated findings indicated that students from larger schools were more likely to persist than their counterparts from smaller schools.

Such literature, which indicated that rural students tended not to persist at a rate comparable to that of urban post-secondary students, has much significance for those concerned with reduction of attrition in Newfoundland's institutions of higher learning. Newfoundland university and college campuses attract a great percentage of their student population from a large rural geographical area. Most of these students are required to relocate in order to attend the institutions of their choice. With them they



bring a multitude of varying background characteristics. Some adapt to their new environment, whereas others, as indicated by the high percentage of rural students who return home, are simply not prepared for an easy transition into post-secondary.

It was apparent, according to studies conducted with other rural post-secondary students, that rural youth experienced a myriad of problems during the transition from their home communities into university or college. Lee (1983), in a Manitoba study which examined Frontier School Division and Provincial students, indicated that students from Frontier faced a variety of unique problems when they entered post-secondary institutes. These problems resulted in short-term participation for them. As well, Brown (1985), in his review of existing literature on rural students, reported that providing specialized campus services for rural and small-town students might be one answer to the problems faced by these students when they enter post-secondary institutions.

The literature did not contain any study which had segmented and examined rural, Newfoundland, post-secondary students in an attempt to identify specific problems faced by them when leaving home and entering college or university. Nor had such a study been conducted for the purpose of designing interventions to help ease the transition for these students and there by reducing the

probability of post-secondary attrition for them.

This is not to say that Newfoundland's rural youth had not been included in post-secondary studies. Newfoundland's rural students were included in research (Smallwood & Klas, 1973; Sacrey, Klas, & Boak, 1979; Budgell, 1985; Moores, 1984) conducted at Memorial University of Newfoundland, in attempts to obtain greater insight into the composition of the student body, as well as variables associated with student life and performance. However, the rural subgroup was never segmented for data analysis. Thus, there existed a void in information necessary to help Newfoundland's rural post-secondary students.

The institutions chosen for inclusion in this study were: (a) Memorial University of Newfoundland, St. Johns; (b) Sir Wilfred Grenfell College, Corner Brook; (c) Western Community College, Stephenville; and (d) Western Community College, Stephenville Crossing. No attempt was made to generalize the findings of this study beyond the specific subgroup chosen.

Variables examined in this study were mostly those indicated in the literature to have been associated with post-secondary retention/persistence. As well, the author investigated whether or not persistence/withdrawal decisions were influenced by select other variables not found to have been examined in previous post-secondary attrition studies. The author sought, via open-ended questions: suggestions

from rural respondents as to what would benefit rural students at the high school and post-secondary level, in their transition into college/university; and their major reasons for persisting, or not persisting, in post-secondary.

Those factors examined in previous retention studies, and subsequently included in this examination, were associated with students' background/demographic characteristics and high school/post-secondary experiences.

The following investigated variables were not typically examined in previous studies: whether or not a student had a high school counsellor, type of relationship with high school counsellor (whether or not he/she knew a counsellor well), whether or not a student was aware of counselling services while at post-secondary, and whether or not a student had intentions to obtain seasonal work and unemployment insurance benefits in the up-coming year. The authors knowledge of the rural Newfoundland context, as well as personal and or professional discussions, resulted in the inclusion of these variables.

The voluminous amount of literature pertaining to studies of post-secondary attrition/retention indicated that the proposed study was by no means the first of its kind. However, it was unique in that, as previously mentioned, it focused on Newfoundland's rural youth, a subgroup not found in the literature to have been the centre of such a study.

Hopefully, the information obtained helped paint a more vivid picture of the rural Newfoundland post-secondary persister/dropout, identified problems encountered by these rural youth when they left their hometowns, and also provided some answers as to why some of Newfoundland's rural youth persisted in college or university while others did not. Such information would be especially beneficial to those interested in identifying those most at risk of dropping out, as well as those interested in designing interventions to be implemented at the high school or post-secondary level to ease the transition for rural youth.

#### Definition of Terms

Academic integration: The process whereby a student was successful in adjusting to the academic environment at post-secondary, as exemplified by passing courses and sufficient attempts to seek academic advisement.

Attrition: The process whereby a student withdrew from a post-secondary institution prior to meeting all graduation requirements.

Dropout (non-persister): A student who withdrew from the post-secondary institution of first enrolment prior to completion of a program.

Persister: A student who enrolled in a specific post-secondary program during consecutive semesters from the time of first matriculation until graduation or the last wave of data collection.

Retention: The process whereby a student maintained enrolment status in a specific post-secondary program until graduation.

Rural student: A student who's hometown population was less than 2,000 (Moore, 1985).

Social integration: The process whereby a student was successful in adjusting to the social environment at a post-secondary institution, as exemplified by frequent informal contact with peers and faculty members.

### Research Questions

The following research questions were derived from a review of studies which examined the association between identified variables and post-secondary attrition/retention, and information obtained by the author during discussions with rural youth and youth helpers regarding students' decisions to leave, or stay enrolled at post-secondary institutions.

Those questions derived primarily from the literature review include:

1. Do rural college/university persisters and dropouts differ with regard to the following background/demographic characteristics: age, gender, religious affiliation and commitment, hometown size, distance from hometown to post-secondary, and socioeconomic background?

2. Do rural college/university persisters and dropouts differ with regard to factors related to their high school

experience such as: Level Three grade point average; size of high school attended; whether or not they had a high school counsellor; perceptions of high school counsellor effectiveness; number of meetings with high school counsellor; relationship with high school counsellor; and having unrealistic expectations, or not, about post-secondary?

3. Do rural college/university persisters and non-persisters differ with regard to factors related to their freshman experiences such as: extent of academic integration; student/parental motivation and commitment; influence of post-secondary counselling services; satisfaction with their post-secondary experience; values; financial variables; extent of social integration; influence of stress; alcohol use; place of residence; and extent of support/encouragement received from family members, friends, and faculty members while attending college/university?

4. What are some services/resources rural Newfoundland post-secondary students feel should be implemented at the high school level to ease the transition for them from their home communities into post-secondary environments?

5. What changes/additions do rural Newfoundland college/university students feel should be implemented at the post-secondary level to ease the transition for rural students into institutions of higher learning?

6. What are the main reasons identified by rural

Newfoundland college/university students for returning to post-secondary institutions?

7. What are the main reasons identified by rural Newfoundland post-secondary students for not returning to college/university?

The following research question ensued primarily from discussions, by the investigator, with rural Newfoundland post-secondary students regarding their educational aspirations:

8. Are the decisions of rural Newfoundland post-secondary students, to stay enrolled in or dropout of post-secondary programs, associated with motivation to obtain unemployment insurance benefits and seasonal work?

#### Limitations

This study is by no means a panacea for all problems related to post-secondary attrition, for every subgroup of rural students, in all Newfoundland post-secondary institutions. Some limitations of this study include:

1. The sample population utilized in this study did not include rural students from all Newfoundland post-secondary institutions. Therefore, since all institutions are said to attract a different subgroup of individuals (Bean, 1986), one cannot generalize the findings of this study to other subgroups who attend other institutions.

2. The sample population consisted of only rural students at select Newfoundland post-secondary institutions.

Thus, student subgroup heterogeneity necessitates that the results from this study not be generalized to other subgroups, such as urban students, whether they be at the same college/university or not.

3. The sample population included only those students who volunteered to complete questionnaires. Responses from those who chose not to participate may have been different from those who did fill questionnaires.

4. The sample population examined included only those students with a Level Three certificate. Therefore, results cannot be generalized to those rural students who did not obtain a Level Three education but may have attended one of the post-secondary institutions included in the study.



## CHAPTER TWO

### Review of Select Literature and Research

The literature indicated that attrition and retention, at the post-secondary level, have evolved as major issues of concern over the past century. Early federally supported retention studies by such researchers as McNeely (1937), and Iffert (1957), suggested that the problem of student attrition had been a national (American) concern for many years. Further, according to Nelson et al. (1984), the issue was assuming greater importance as enrolments declined. As well, Duea (1981) indicated that, on a list of 20 major issues in higher education, college presidents ranked maintaining student enrolment as being second in importance. More recently, Public Affairs and Youth Affairs, Employment and Immigration, Canada, further indicated the importance of this area for further examination. They suggested that "if the current dropout rate of 30% continues, by the year 2000 as many as one million under-educated, untrained youth will have come onto the labour market" (p. 2).

The voluminous amount of literature which continues to compile as researchers search to further identify and analyze indicators and variables related to post-secondary attrition, substantiates the importance placed on post-secondary attrition/retention. Through the past century researchers have attempted to determine which types of

students are more prone to dropout, and why some students leave post-secondary institutions prior to graduation while others with similar academic, social, and personal characteristics persist. The vast preponderance of this research has produced much information on variables associated with post-secondary attrition, as well as suggestions for intervention programs.

However, it was noted by Brown (1985), in his review of existing literature on rural post-secondary student attrition, that although there was abundant research regarding post-secondary attrition, little was available regarding rural student attrition. Schonert, Elliott, and Bills (1989) reported that, in general, the literature lacked follow-up information on the educational attainment of rural high school graduates; there was a need for research which carefully investigated rural school graduates' matriculation, persistence, and withdrawal rates in post-secondary institutions so that these students could be adequately dealt with by college and university personnel. Similarly, McCaul (1989) noted that "a substantial gap in dropout literature exists relative to rural dropouts and unique circumstances of rural schools which may contribute to such behaviour" (p. 19).

The review of select available literature related to post-secondary attrition, presented here, falls under three major headings: persistence of rural students in post-

secondary institutions, variables associated with rural post-secondary student attrition, and variables associated with all post-secondary student attrition.

#### Persistence of Rural Students in Post-secondary Institutions

Research on rural versus urban post-secondary student persistence is somewhat dated, inconsistent, and according to Brown (1985), Schonert et al. (1989), and McCaul (1989), limited. Thus, this is an area requiring further investigation to validate causes of the high dropout rate of rural students and to develop suggestions for intervention techniques. Aylesworth and Bloom (1976) noted that, according to the results of a study conducted by them in the United States, despite the educational handicap of America's rural youth, and uncertainty about their fate in college, their predicament has not resulted in vast quantities of research on the characteristics of rural students, nor has it led to the identification of special problems that confront them.

Some researchers noted that rural students, as indicated by the size of their hometown or high school, were at a higher risk of dropping out of post-secondary institutions than were urban students. Miller (1970), in a study of Australian rural and urban students, revealed that students from rural areas were more vulnerable to failure. Consistent with Miller's findings, a study by Dale and Miller (1972), of Welsh students, reported that during the

first year of university, students from city schools made the most progress. On the contrary, those from schools in towns of about 16,000 to 60,000 showed the least progress, whereas students from schools in smaller towns and villages were ranked as performing somewhere between the other two groups.

Davis (1964) also conducted a study which examined the association between the size of one's hometown and his/her subsequent post-secondary persistence. Davis (1964) carried out an extensive investigation of university students who were completing their initial degree and preparing for graduate studies entrance. He reported a relationship between the size of one's high school hometown and his/her plans for advanced study. Examination of a detailed distribution of hometowns revealed that as hometown size increased so did the number of students immediately proceeding to graduate programs. Likewise, Astin (1975) indicated that freshmen with small-town backgrounds were more prone to dropout than those who spent most of their lives in larger towns and cities. As well, Aylesworth and Bloom (1976), in a study of post-secondary students, indicated that "rural students have a lower survival rate than do urban students" (p. 240).

More recently, in a study conducted by Kleinfeld (1982), which examined Native student success at the University of Alaska, through the late seventies, the

difficulties experienced by rural post-secondary students were further substantiated. Kleinfeld (1982) reported that the Native student success rate, which had been increasing, levelled off with a large increase in the proportion of freshmen from village high schools. Also, Lee (1983), in a study which will be elaborated on in the following section, noted that many post-secondary students, from the Frontier School Division in Manitoba, experienced short-term participation in higher education.

Similarly, Schwarzweller (1976) examined the influence of demonstrated scholastic ability on educational ambition in societies of Norway, Germany, and the United States. His research findings suggested that a significant determinant of educational mobility was social class origin, such as coming from a rural environment and schooling experience.

However, Moore (1985) produced findings contrary to the above studies which indicated that students from rural areas, as compared to those from urban areas, were more likely to withdrawal from post-secondary programs prior to completion. Moore (1985), in a study of persisting and non-persisting rural minority college students in South Carolina colleges, reported that students from smaller towns showed a higher rate of persistence. More specifically, students from small rural towns and cities with populations of less than 50,000 withdrew in smaller proportions than did students from larger communities.

Likewise, Schonert et al. (1989), in a study designed to gather follow-up information on graduates from small Iowa school districts, in order to identify the "educational pathways" of rural youth during the initial five years after high school graduation, produced findings which suggested that rural students were not more inclined to dropout than were their urban counterparts. Their results indicated that, of the rural students who matriculated into post-secondary institutions, approximately 75% persisted until they had attained their degrees. This was significantly higher than the national (American) average of 50% (Tinto 1987).

As previously mentioned, some researchers investigated the relationship between the size of one's high school and his/her persistence in higher education. Cope (1972), in a study conducted in the United States, found that students from small schools did not persist in college at a rate comparable to that of students from larger high schools. Anderson (1974) later corroborated Cope's findings by reporting that students who attended high schools with less than 20 graduates a year were less likely to persist in college than students who had attended larger high schools.

According to Schonert et al. (1989), research on rural students had evoked concerns about the capability of small rural schools to provide an adequate basic education for their students and prepare them for college. Jess (1988)

noted that there were various disadvantages of rural schools. These included: faculty members teaching beyond their major fields, lack of facilities, lack of cultural assets, shortage of funds, distance from post-secondary institutions, bias against rural areas in the larger society, failure to comprehend the factors which differentiate rural and urban schools, and the lack of a rural education network.

Contrary to findings which implicated rural students to be at a disadvantage when attending post-secondary education, Downey (1980) reported that a relationship between the size of high school graduated from and persistence rate did not exist. Further, few differences existed in performance between metropolitan and rural students included in Downey's (1980) research.

More recently, McClung (1988) produced similar findings to those of Downey (1980). In a study which identified variables associated with Black students who graduated, and those who withdrew from Clemson University, a predominantly White, rural university in South Carolina, high school size was not found to be a differentiating factor.

Moore (1984) produced findings inconsistent with those which indicated rural students to be at a higher risk of dropping out of post-secondary, or there to be no relationship between size of high school attended and post-secondary persistence rate. In a study that investigated

the personal and social variables affecting voluntary attrition during Junior Division, at Memorial University of Newfoundland, Moores found that more voluntary dropouts had attended more urban high schools.

Jess (1988) noted various variables which may be advantageous to the rural high school attender: small classes, individual attention, more leadership opportunities, many opportunities to develop individual talents, and strong community support.

Thus, in the limited literature available on rural versus urban post-secondary attrition there were many inconsistencies. However, many researchers have painted a rather bleak picture of the educational attainment of rural youth (Schonert et al., 1989). There were many studies which indicated that those post-secondary students who brought with them a rural background tended not to persist at a rate comparable to that of their urban counterparts. Thus, they were in need of special interventions to increase their persistence in higher education (Brown, 1985; Lee, 1983).

#### Variables Associated with Rural Post-secondary Student Attrition

As was the case with the available literature which examined rural versus urban post-secondary attrition, research which identified factors associated specifically with rural students' decisions to persist in or withdraw



from higher education, was sparse and mostly dated. The associated factors examined here was confined to 11 major areas: rural perspective of post-secondary education, socioeconomic variables, gender, academic ability/performance, stress and associated variables, commitment, aspirations and related factors, values, financial concerns and unemployment and it's implications.

#### Rural Perspective of Post-secondary Education

The literature indicated that rural student/community perceptions of the relevance of post-secondary education could have a great impact upon rural students' post-secondary experiences and aspirations.

Lee (1983) noted possible negative consequences of the rural perspective of post-secondary education on rural college student persistence. He conducted a study involving Frontier School Division and provincial (Manitoba) school students to identify trends and factors in secondary and post-secondary school participation and to suggest strategies for increasing post-secondary accessibility and participation. It was noted by Lee (1983), that since many rural students experienced short-term participation in post-secondary education, rural communities failed to see positive or useful results arising from post-secondary education.

Similarly, Brown (1985), in his review of existing literature on rural higher education students, noted that

one social factor which affected the rural dropout rate was low family expectations. Earlier, Edington (1971) also noted that rural student expectations had a negative impact on their persistence in higher education. He reported that attainment of education was not seen by rural youth as the answer to their problems. They had low self-esteem and experienced a feeling of helplessness in conquering environmental handicaps. Further, rural youth perceived that they had limited options and those that did exist for them were consistent with their socioeconomic background.

#### Socioeconomic Variables

The literature also indicated socioeconomic factors to have been associated with rural post-secondary student attrition (Brown, 1985). In a not so recent study conducted by Aylesworth and Bloom (1976), it was noted that only one-sixth of small-town Americans 25 years of age and older, continued their education beyond high school, as compared to one-fourth of urban Americans. Low economic status was one factor said to have been contributing to this lack of incentive. Moore (1985) also produced findings which illustrated the association between socioeconomic status and rural post-secondary student persistence. In her study, all of the family background measures which differentiated dropouts from persisters and transfers were indicators of lower socioeconomic status. Dropouts were noted to have more siblings, and their parents, less education and lower

incomes than parents of students in either of the other groups examined.

#### Gender

It was also noted by Moore (1985) that there were no significant differences in the persistence rates of rural males and females included in her study. However, Brown (1985) stated, in his review of rural post-secondary student studies, that rural female students had greater needs than rural male students. Chu (1980) produced findings which supported Brown's contention. Chu noted that the traditional norms concerning the woman's proper place in the home, with the children and supportive of the spouses endeavours, were still conformed to by the majority of rural women. Further, although daughters were probably academically superior, rural families usually provided sons with the first opportunity for higher education.

#### Academic Ability/Performance

The literature indicated that examination of the academic capability of rural students versus urban students had not been the focus of post-secondary retention studies in recent years. However, the following cited studies indicated that some researchers viewed rural students as academically inferior while others saw them as performing at a comparable level to that of urban students.

An early study conducted by Holloway, Beagle, and Bryant (1960) indicated that post-secondary students from

smaller communities achieved a lower educational level than that of their urban counterparts. Feller (1974) later supported these findings. He conducted a study which also indicated such a rural/urban difference with regard to academic performance. His results revealed that urban, non-middle class females were top achievers, while the bottom third in his study were rural, middle class males. As well, Shaw and Brown (1957) reported that students from less populated areas had lower levels of academic performance than students from urban areas. However, Shaw and Brown (1957) also indicated that, for students who come from major metropolitan areas (500,000 or more), the relationship of urbanism to higher academic performance was not maintained. A greater heterogeneity of students coming from these urban areas was one explanation offered for this observation.

Despite the possibility of having lower academic standings than their urban counterparts, other researchers contended that rural students were not at a disadvantage when attending post-secondary institutions. King (1963) found that rural students achieved academic success at a level comparable to that of urban students while attending post-secondary institutes, despite the fact that they entered college with lower potential. Likewise, Sanders, Osborne, and Green (1955) reported that there was no real difference in academic performance between urban and rural students, although urban students were typically higher on

aptitude than rural students. Also, results of a study by Aylesworth and Bloom (1976) indicated that rural freshmen were intellectually comparable to urban freshmen.

Fewer studies were located which utilized academic performance as an indicator of rural student persistence. McCaul (1989), in a study of rural public school dropouts, indicated that rural dropouts had lower grades and lower scores on an achievement test composite than rural persisters.

However, such a significant positive direct relationship between academic performance and school persistence was not found by Schonert et al. (1989), in her study of rural students enrolled in two-year and four-year post-secondary programs. For students enrolled in two-year programs, non-persisters outperformed persisters. However, no significant difference in achievement test results were found between persisters and non-persisters enrolled in four-year programs.

#### Stress and Associated Variables

Aylesworth and Bloom (1976) stated that students from rural areas experienced a special set of stresses as a result of their transition from their home community to the college community. Similarly, McLaughlin (1970) indicated that a disproportionate number of rural college students "exhibited depressive reactions" to their post-secondary experience. According to McLaughlin, this depression may

have been attributed to the conflict, or lack of "fit", experienced between the campus environment and the rigid and highly religious background of many students.

Anderson (1974) linked incongruence with one's environment to lack of rural student persistence in post-secondary. Anderson stated that "the student who faces difficulty in adjusting to college life, and who does not perceive the campus as a desirable setting, may withdraw from college rather than face a situation which to him is emotionally undesirable" (p. 192).

The literature also suggested that post-secondary adjustment difficulties of rural youth were intensified by a lack of appropriate coping skills. Although rural youth seem to have more personal problems than do urban students, both prior to and after college entry, research indicated that they typically did not seek counselling (Aylesworth & Bloom, 1976). One avenue taken by rural students, instead of an option such as counselling, to reduce stress and alienation, was the excessive use of alcohol and drugs. In a study conducted by Aylesworth and Bloom (1976), excessive use of alcohol and drugs was reported with significantly greater frequency by rural students than by urban students. Bishop and Walker (1990) provided rationale for guiding rural students from alcohol and drugs, to counselling services, as a means of reducing stress and alienation. Bishop and Walker reported that research evidence suggested

that counselling services had a positive impact on retention efforts at the post-secondary level.

#### Commitment, Aspirations, and Related Factors

Researchers demonstrated that rural student persistence, in college/university, was associated with level of educational aspirations and commitment.

Lee (1983) noted that short-term participation in post-secondary education was associated with the common expectation of students that their highest level of education would be "some college or university". Moore (1985) corroborated these findings. She noted that, in general, the lower one's expected level of educational attainment, the greater the chance of withdrawal and dropout. Similarly, McCaul (1989) indicated that rural high school dropouts and persisters differed with regard to level of educational aspirations. Approximately three times as many dropouts, as compared to persisters, indicated that they would be satisfied with attaining less than a high school education. As well, 15% more dropouts indicated that they would be satisfied with completion of high school only. Further, while many dropouts indicated aspiring to attend vocational school, only 2.4% of dropouts, as compared to 12.5% of persisters, indicated that they would be dissatisfied if they did not obtain a college degree.

In addition, Tinto (1987) noted that, among those rural students who pursued higher education, it was likely that

persisters exhibited a high degree of commitment to their institution as well as to the goal of graduation. Further, Kleinfeld (1983) reported that rural students who had declared a major, at the University of Alaska, were less likely to dropout than those who had not made such a commitment. Declaring a major, according to Kleinfeld, may have resulted from experiencing more counselling and career direction in high school, having had a better system of support, or having resolved the question of what they were in college for.

Aylesworth and Bloom (1976) also produced results which provided rationale for giving students adequate counselling and career direction. Feedback obtained from rural students who dropped out of college indicated a general dissatisfaction with academic opportunities at the post-secondary institute. Such dissatisfaction may have resulted because "rural students came to the university with sets of academic goals different from those of urban students and found many of the courses in the freshman year unrelated to their goals" (p. 239).

Schonert et al. (1989) linked career direction and student support system with rural post-secondary persistence. In their study, non-persisters overwhelmingly indicated career indecision as one of the main reasons for leaving prior to graduation. As well, among persisters at the two-year colleges surveyed, the majority of parents were



reported to have influenced post-high school plans "a great deal", whereas the majority of parents of non-persisters were noted to have been only "somewhat" influential. However, such a positive direct relationship between parental support and student persistence was not found with rural students enrolled in four-year programs. Parents were identified by the majority of persisters and dropouts as having influenced post-high school plans a "great deal".

Schonert et al. (1989) also indicated that results regarding the association between support received from others outside the family, and student persistence, were inconsistent. Among the students surveyed from two-year programs, neither persisters nor non-persisters perceived military recruiters, counsellors, college recruiters, or male or female best friends as having significantly influenced their post-high school plans. In addition, half of the students in both groups noted that teachers were "somewhat" influential, and the others indicated that their teachers were "not at all influential". However, among the students surveyed from four-year programs, persisters as compared to non-persisters, were more than twice as likely to have identified teachers as having influenced them "a great deal".

#### Values

Literature which examined the relationship between students' values and rate of persistence in higher education

was somewhat discrepant. Schonert et al. (1989) noted that of the rural students enrolled in two- and four-year programs, included in their study, a high percentage of persisters indicated "success in my line of work" as very important. In contrast, only a small percentage of respondents in both groups indicated having lots of money as "very important". However, Moore (1985) indicated more differences in the values expressed by persisters and non-persisters. Rural dropouts placed more emphasis on making a lot of money, assisting their parents financially, working in a prestigious job, and owning a successful business, than did rural persisters. Thus, the highest level of motivation to achieve recognition and material success was expressed by dropouts.

Rosen (1969) hypothesized why such motivation was not enough to ensure post-secondary persistence. According to Rosen:

"motive alone is not sufficient to ensure success ... Achievement motive may provide the internal impetus to excel, but it does not impel the individual to take the necessary supplementary steps to achieve success. Such steps include ... hard work in association with the belief that the external environment can be mastered through rational effort, careful planning and willingness to defer gratification" (p. 49).

### Financial Concerns

Concern about financial matters was shown to have been related to rural post-secondary student attrition. Moore (1985) indicated that in her study, of those students who indicated "no concern" about their ability to finance their college education, only 10.5% dropped out, as compared to 11.3% of those who expressed "some concern" about finance, and 20.9% of those who expressed "major concern" about finance.

In addition, in Moore's (1985) study, dropouts indicated financial problems as one of the major reasons for withdrawal. Similarly, Schonert et al. (1989) indicated that non-persisters, in their study, overwhelmingly indicated financial constraints as a reason for leaving prior to graduation.

### Unemployment and It's Implications

No examinations of the impact of student intentions to obtain seasonal work and collect unemployment insurance benefits, on persistence/withdrawal decisions, were located. However, the literature did identify some negative ramifications of being unemployed. Herr and Cramer (1987) contended that distress about unemployment was associated with a myriad of personal and social problems. Such a contention supported Levine (1979) who noted that some of the emotional and cognitive consequences of unemployment included boredom, identity diffusion, lower self-esteem,

guilt and shame, anxiety and fear, anger, and depression. In addition, Liem and Rayman (1980) indicated prolonged unemployment to be a serious threat to one's health and quality of life. Further, Herr and Cramer (1987) suggested that the impact of unemployment was felt by all segments of the system of which the individual was a part. For those involved it is common to have manifested stresses and strains of the physical, emotional, and social nature.

#### Variables Associated With All Post-secondary Student Attrition

The author investigated which, if any, of the variables found to have been associated with post-secondary students' withdrawal/persistence decisions in other retention studies, were related to rural, Newfoundland students' persistence/attrition decisions. Thus, a review of post-secondary studies which did not segment rural students, or make a comparison between rural and urban students, was conducted. The research on post-secondary attrition/retention, in general, was more extensive and up-to-date than was the literature on rural post-secondary students. The literature review was confined to four major areas: student background and demographic characteristics, student/parental motivation and commitment and associated variables, integration into the post-secondary environment, and student perceptions of the post-secondary environment and experience.

### Student Background and Demographic Characteristics

The literature indicated various background and demographic characteristics to be associated with post-secondary attrition: gender, age, religious orientation and commitment, hometown proximity, socioeconomic variables, financial difficulty and concerns, source of finance of post-secondary education, and high school performance.

Gender. A lack of consensus existed in research findings pertaining to student gender and persistence in college/university. Moline (1987), in a study of 227 full-time freshmen who had enrolled in Fall Quarter 1982, at a large commuter institution of higher education, indicated that gender had no significant direct effect on persistence. Similarly, Ott (1988) reported that when analysing predictors of post-secondary performance in an eastern state university, gender was not a significant indicator of academic attainment. These studies corroborated an earlier study by Moores (1984) which produced data indicating no association between gender and post-secondary attrition.

However, there were studies which reported significant differences in rate of persistence for males and females at post-secondary institutions. In a study of full-time freshmen at the University of Maryland, College Park, conducted by Galicki and McEwen (1989), it was reported that female students graduated at a significantly higher rate than did male students. These results supported earlier

findings of Voorhees (1987) who developed logit modelling to explore the persistence of community college students. Distributions of observed frequencies showed that females persisted at a higher rate than males.

Contrary to studies which indicated females to have a higher post-secondary persistence rate, Avakian, MacKinney, and Allen (1980-82) reported that males fared better. In a study which examined race and gender differences in student retention, at the University of Missouri-St. Louis, they found small, yet consistently higher retention rates of males, as compared to females, for both full-time freshmen and transfer students. Similarly, Shaver, Furman, and Buhrmester (1985), in a study which examined the impact of transition on 400 members of the University of Denver's entering freshmen class, indicated that the transition was particularly harder for men than for women.

Bynum and Thompson (1983) also indicated that persistence rates of college students varied by gender. They noted that gender majorities experienced disproportionately higher dropout rates. Thus, the gender ratio tended to be self-adjusting over time with the majority gender experiencing the heaviest attrition.

Age. Findings regarding the relationship between student age and persistence in higher education were also inconsistent. Some earlier literature suggested that older students were more apt to dropout (Astin 1976). However,

the majority of research on this topic suggested no significant relationship between the age of a student and the extent of persistence. Most of the studies supported the contention of Pantages and Creedon (1978), "that age is not a factor in causing attrition" (p. 57).

Kooker and Bellamy (1969), in a six year follow-up study of college students, and De Vecchio (1972), in a three semester study of non-returning community college students, reported no significance between student age and whether or not he/she persisted. As well, no significant age differences, among groups, were reported by Gustavus (1972) in a one-semester study of dropouts, readmitted students, and successful students. More recently, Moores (1984), in a study which dealt with the personal and social variables affecting voluntary student attrition in a Newfoundland college, also reported that the age of a student was not significantly related to his/her decision to voluntarily dropout or to persist. Likewise, Budgell (1985), in a study of mature students at Memorial University of Newfoundland, also indicated that mature students, those 21 years or older, were neither more nor less likely to drop out than their younger counterparts. Further, Moore (1985), in a study of persisting and non-persisting rural minority college students, in six South Carolina colleges, reported that although a larger proportion of students 19 and over withdrew, the distribution of persisters, transfers, and

dropouts did not differ significantly. Likewise, McCauley (1988) reported that age was not found to have been associated with Black student's persistence at a predominantly White suburban university. Hutchinson and Johnson (1980), and Pascarella and Chapman (1983), also found the age variable to have been of little use in predicting persistence.

Religious orientation and commitment. The literature indicated a need for further investigation into the relationship between students' religious backgrounds and post-secondary attrition/retention decisions. Findings of studies which examined the association between these variables were inconsistent.

Although, according to Moore (1985), religion had rarely been used as a primary variable in attrition studies, some research indicated one's religious preference to somehow be related to persistence. For example, in a post-secondary study conducted by Rossman and Kirk (1970), it was reported that 50% of non-persisters, as compared to 38% of persisters, were either atheist, agnostic, or had no religious beliefs, or no formal religion. Similarly, it was found by Astin (1975) that freshmen who indicated their religious preference to be "none" or "other" were more likely to drop out than their counterparts who indicated a specific religious orientation such as "Jewish".

Thus, earlier studies indicated that religious



commitment was associated with post-secondary persistence. Further, these investigations supported Menese and Sedlacek (1986), who stated that an understanding of a student's religious values and orientation would be useful in working with students and that an effective counsellor would ensure that such information be examined systematically in his/her counsellor-student relationships.

More recent research did not support the contention that an association existed between student religious background and persistence. Dollar (1983-84), in a four-year longitudinal study designed to identify personality and academic factors that could be useful in reducing student attrition from college, failed to observe any differences on indices of religious orientation among persisters and dropouts. Also, Moores (1984) did not report religious preference or church attendance as significant variables associated with persistence/withdrawal decisions. Similarly, French, Klas, and Boak (1977), indicated that religious affiliation contributed little to the variability of semester grade point averages of Memorial University of Newfoundland students.

Hometown proximity. Discrepancies existed in literature pertaining to the association between proximity of one's hometown to college/university and his/her persistence. An earlier study by Johansson and Rossman (1973) indicated that the distance between one's hometown

and college was not significantly related to persistence in higher education. These findings were later corroborated by Moline (1987), who found no significant effect of home proximity on persistence. Similarly, French, Klas, and Boak (1977) reported that the distance Memorial University of Newfoundland students commuted contributed little to variability of grade point averages.

However, other researchers (Ramist, 1981; Carrol, 1988) stated that there was a significant negative direct relationship between geographic distance from home and persistence in post-secondary institutions. In addition, Lee (1983) noted that attending a post-secondary institution far from one's home community had a negative impact on a student's post-secondary experience. Lee (1983) reported that rural students from the Frontier Division school district in Manitoba faced a variety of unique problems since most were a great distance from their home communities. Moores (1984), on the other hand, reported that students from further away were not at a disadvantage while at a post-secondary. He indicated, in his study, that a significant number of persisters had to relocate to attend university. Thus, some researchers noted that distance from home had no significant effect on persistence, others said that those from further away were at a disadvantage, while others reported that those who came from greater distances showed a higher rate of persistence.

Socioeconomic variables. Studies which examined the relationship between socioeconomic variables and post-secondary attrition have produced inconsistent findings. Moline (1987) reported no significant relationship between family income and persistence rates of students included in his study. One interpretation of these results, according to Moline (1987), could have been that the University of Minnesota's financial aid policies ameliorated any differences in parental income status between students, or the costs of attendance for state residents at a public institution may have been within the financial resources available to most students.

On the contrary, McCauley (1988), in a study of the persistence of Black students at a predominantly White institution, reported that students with lower family status were more likely to drop out. Family status was determined by asking students whether they came from a family of professionals or a family of non-professionals. Similarly, Pascarella, Smart, and Ethington (1986) indicated that in their study of long-term persistence of two-year college students, socioeconomic status was associated with the retention of some students. More specifically, for women, socioeconomic status had a positive direct effect on degree of persistence. Socioeconomic status was determined by the sum of parental combined level of education and combined parental income.

Other research also indicated parental level of education as a variable associated with socioeconomic status and examined its relationship with post-secondary student persistence. It was reported by Astin (1976) that children of more highly educated parents were less likely to drop out.

Contrary to such findings, Seale (1984) found that, in testing Tinto's (1975) student attrition model on a community college population, parents' level of education did not have any impact on any of the variables examined. Likewise, Nora (1987) reported that in her study of determinants of retention among Chicano college students, parents' education had no direct effect on retention rates.

Financial difficulty and concerns. Nora (1990) reported that few studies had incorporated measures of student finances in testing models of student attrition, on varied student populations, even though the research on student persistence was very extensive. As was reported with the association between parents' income level and student persistence rate, findings regarding the association between students' financial status and persistence in post-secondary institutions were discrepant.

An earlier study by Trent and Medsker (1968) indicated that the larger portion of withdrawals could not be accounted for by financial status. On the contrary, more recent studies (Eagle, 1981; Martin, Berkey, & Gribben 1982;

Keim, Van Allen, & Anderson, 1982) reported that students indicated financial difficulty as among the major reasons for leaving college. Nora (1990), in a study of campus based aid programs as determinants of retention among Hispanic community college students, also indicated that students were leaving higher education largely because of financial reasons.

However, despite the reported relationship between financial problems/difficulty, Fields and LeMay (1973), at Oregon State University, concluded that financial concern had a greater effect on a student's initial decision to attend college than on his/her decision to remain in college.

Source of finance of post-secondary education. As with the effect of student finances on post-secondary attrition, Nora (1990) indicated that few studies had incorporated student source of financial aid in testing models of attrition. However, a review of available literature indicated that findings regarding the association between a student's source of finance and persistence rate were inconsistent.

Moline (1987), in research which used path analysis to explore the relationships among a number of variables, including financial aid, which were shown in prior research and theory to be related to persistence, noted that none of the financial aid variables examined had any significant

effect on the persistence criterion of credits completed. Similarly, Kreiger (1980) investigated the impact of combinations of financial aid on student persistence and failed to produce any significant differences between a control group and an experimental group.

On the contrary, other researchers have produced findings which indicated that a student's source of financial aid was associated with his/her persistence at post-secondary. Jensen (1981), in a study which investigated the effect of a student's total aid awards on persistence, reported that financial assistance made a contribution to the persistence of students during their first year. Further, in a 1983 review of the conclusions of research findings on financial aid and post-secondary persistence, it was reported by Jensen that most studies indicated that financial aid had a small positive impact on persistence and that grant aid and scholarships generally enhanced student persistence. More recently, Nora (1990), in a study which examined financial aid programs as determinants of retention among Hispanic community college students, indicated that both campus- and non-campus based (Pell grants) resources were significant in the retention process.

Relative to the issue of the impact of type and amount of financial aid on student persistence, was the influence of student employment while attending college/university.

Astin (1975) reported that students who worked full-time while attending post-secondary institutions were more likely to drop out. Kolstad (1977) corroborated Astin's findings. Kolstad indicated that, for the majority of students who held a full-time job, dropout rate was almost double that of students with a part-time or no job.

However, contrary to such conclusions, Moore (1985) found no significant relationship between the number of hours worked per week and student persistence rate.

High school performance. The majority of studies which examined the influence of high school performance on post-secondary persistence suggested a positive direct relationship between these two variables. However, some research did not demonstrate such an association.

Various researchers produced findings which supported Bean's (1982) contention that high school grades, and rank in high school class, were associated with student attrition. Nora (1987), in a study which tested a modified version of Tinto's student attrition model on a population of Chicano students attending two-year colleges, indicated that high school grades had a direct effect on post-secondary retention. In addition, Nora (1990) later reported that community college students who performed academically better at the high school level were enrolled for more semesters, earned more hours, and were more likely to earn some form of credential. Likewise, Moline (1987),

who used path analysis to explore relationships among a number of variables which were demonstrated to have been related to student persistence, indicated that high school grade point average was directly associated with post-secondary persistence. As well, it was noted by Ott (1988), in a study which employed logistic regression to analyze predictors of academic performance for first-time freshmen in an eastern state university, that students with lower high school academic grade point averages had significantly higher predicted probabilities of academic dismissal than students with higher high school grade point averages. Moores (1984) reported similar findings. He found that significantly more voluntary dropouts, as compared to persisters, had obtained lower high school grade point averages. McClung (1988) substantiated these findings. In McClung's study it was indicated that Scholastic Aptitude Test scores, high school class standing, class rank, and grade point averages could be used as indicators of success at the post-secondary level.

Not all studies which examined the association between high school performance and post-secondary persistence have indicated such a clear relationship. Stoecker, Pascarella, and Wolfle (1988) did not find secondary academic achievement to be directly related to post-secondary persistence. However, they did report that high school achievement was among a substantial number of variables



which had a significant impact upon constructs such as academic and social integration, which in turn affected persistence.

Further, there was research which did not support the contention that post-secondary persistence was associated with high school performance. Blanchfield (1971) maintained that high school average was not a significant factor in differentiating dropouts from successful students. Similarly, Peng and Fetters (1978) indicated that high school grade point averages typically only account for 10% of the total variances observed in student attrition at the post-secondary level. As well, Pantages and Creedon (1978) found that student academic ability and class rank did not have a direct influence on attrition rates. Thus, some controversy existed over the relationship between high school academic performance and persistence in post-secondary.

#### Student/Parental Motivation and Commitment and Associated Variables

Since Summerskill (1962), in a review which examined over 180 studies, indicated a need for further study regarding the impact of student motivation on post-secondary persistence, a number of researchers have further investigated the relationship between these variables. Some studies suggested that persisters and dropouts differed with regard to level of motivation. More specifically,

persisters showed higher levels of motivation than their counterparts who left institutions of higher education before completion of programs (De Vecchio, 1972; Peng and Feters, 1977). Such findings were supported by Ramist (1981) who contended that "Student motivational factors may be considered the sine qua non of persistence, and therefore the most important target of persistence research".

Student support systems. Support from significant others was indicated to have had an impact upon student persistence/withdrawal decisions. In a follow-up study of 10,000 California high school graduates, conducted by Trent and Medsker (1968), a positive correlation between the likelihood of college graduation and intensity of parental interest was reported.

As well, it was found by Hackman and Dysinger (1970) that level of commitment, as expressed by a student and his/her parents prior to college entry, was significantly related to whether or not a student persisted beyond his/her first year. Mallinckrodt (1988) also indicated, in an analysis of fourteen survey items that examined college support systems, that for White student persisters, lots of encouragement from his/her family was a significant factor in their decision to stay in school.

Likewise, according to Bean (1982), level of interest and encouragement expressed by parents, high school teachers/counsellors, and relatives had a direct effect on

attrition. However, it was noted by Nora (1987) that although parent's encouragement had no significant direct effect on retention rates, it did directly affect initial institutional/goal commitments.

Student career goals and aspirations. Research indicated that students who entered college with clear vocational goals and commitments were more likely to persist (Pascarella & Chapman, 1983; DiGiorgio & Dunphy, 1985; Titley, 1985). Titley (1985), demonstrated such a positive correlation between clarity of goals, level of commitment, and persistence in a study which compared the attrition rate of a group of students who decided upon an area of study prior to enrolment, with those who were categorized as undecided, and with those who had made a change at orientation. An attrition rate of 46% was noted for those who had applied for, and matriculated in, a designated but broad area of study, yet did not select a specific major. This rate was not significantly different from that of students who had selected specific majors. However, a significantly higher attrition rate was observed in the two remaining groups of indecisive or undecided students.

These findings supported research of DiGiorgio and Dunphy (1985) which noted higher attrition rates among students uncertain about their majors, as compared with students who had declared majors. Getzlaf, Sedlacek, Kearney, and Blackwell (1984), in an attrition study

conducted at Washington State University, also found that those who dropped out had a lower commitment to the institution they attended.

Similarly, Nora (1987) reported that Chicano students who exemplified higher levels of institutional and goal commitment had more positive perceptions of their colleges or a higher level of academic integration. Breen (1983) also noted that students who clearly viewed graduation as their main priority were more likely to overcome obstacles and persist toward this goal. Likewise, Tinto (1975) reported a positive relationship between students' commitment and post-secondary persistence. He stated that "once the individual's ability is taken into account, it is his commitment to the goal of college completion that is most influential in determining college persistence" (p. 102). Further, he noted that commitment could be measured in terms of the student's educational expectations. Tinto's assertion was supported by Williamson and Creamer (1988). In a study of student attrition in 2- and 4-year colleges, they suggested that goal commitment consistently had the strongest direct effect on persistence of all variables in the models they examined.

As well, research indicated a direct relationship between student aspirations and persistence. Panos and Astin (1968) found that, upon entrance to college, persisters more often indicated aspirations to attend

graduate or professional school. Similarly, Carrol (1988) reported that, in her study of freshmen retention and attrition factors at a predominantly Black urban community college, the majority of students in the three groups observed indicated a desire to obtain a bachelor's degree. However, persisters were more likely to pursue an associate degree, whereas dropouts were most likely to pursue certification programs. Dropouts were said to have the lowest educational goals at the time of admission to college.

#### Student Integration into the Post-secondary Environment

Most research which examined the influence of academic and social integration, on persistence in higher education, found that the extent to which a student persisted was determined by the degree of "fit" between him/her and the post-secondary environment. However, some research data did not support such a relationship between these variables.

According to Stoecker, Pascarella, and Wolfle (1988), the most complex phenomenon of the persistence-withdrawal process in post-secondary education was developed by Tinto (1975). Tinto (1975) suggested a theoretical, longitudinal model of persistence whereby withdrawal behaviour resulted from the process of interaction between the student and the college/university he/she attended. When an individual entered a post-secondary institution, he/she brought a unique set of precollege characteristics: individual

attributes, and family background/secondary school experiences. The individual's level of commitment to the goal of graduation, and commitment to the institution, were influenced by these precollege characteristics as well as experiences within the college environment, which led to various levels of academic and social integration, the core concepts of Tinto's model. Other things being equal, it was noted by Tinto (1975) that this integration into the academic and social systems of the institution most directly influenced persistence/withdrawal decisions.

Stoecker, et al. (1988) conducted a national, 9-year, multi-institutional study which supported Tinto's model of the persistence-withdrawal process. They suggested that the most important determinants of persistence were the student's academic and social integration at post-secondary. Similarly, Pascarella, Smart, and Ethington (1986) reported that successful integration, by students, into the academic and social systems of the last institution they attended was significantly related to attainment of, or persistence in, the pursuit of bachelor's degrees at the college in which they were presently enrolled.

Similarly, other researchers produced findings which supported the contention that there was a relationship between the degree of "fit" between a student and institution, and his/her persistence. Flemming (1985), in a study of Black students at seven post-secondary

institutions, reported that the degree to which a student identified with a campus was a critical factor in the determination of his/her persistence. Lack of affiliation with a college was seen by Fleming as being associated with a decreased desire to remain in school and possibly to a decline in academic performance. Also, Dollar (1983-84), in a study of selected factors for retention counselling with college students, noted that students who dropped out differed from their persisting peers in that they experienced more feeling of alienation.

Contrary to the above findings, Nora (1987) revealed that for Chicano college students, neither academic nor social integration affected retention rates. Likewise, Glenn (1990), in a study of factors related to retention of academically talented students at the University of Central Arkansas, noted that non-returning students indicated having more friends entering the university. Glenn theorized that this greater social affiliation may have been in competition with academic demands.

The literature identified a number of variables as directly or indirectly associated with, or utilized as a measure of, a student's level of academic/social integration at post-secondary institutions. Those discussed here include: involvement in campus organizations/activities, interaction with faculty members, orientation experience, post-secondary accommodations, and post-secondary academic

performance.

Involvement in campus organizations/activities. The belief that involvement in student organizations, and similar out-of-class activities, resulted in an increase in the positive influences of college is gaining precedence in educational thought and research (Abrahamaowicz, 1988). Further, the literature contained many studies which illustrated the positive ramifications, including greater levels of persistence, of student involvement in campus organizations and activities.

Nelson et al. (1984), in a study designed to identify variables to describe at-risk students among first-semester freshmen at the University of North Dakota, reported positive implications of student involvement. Successful students who chose not to stay in college, tended not to participate in activities. Thus, poor social integration probably contributed to their withdrawal decisions. Dukes and Gaither (1984) also provided data which illustrated the positive ramifications of social integration. These researchers examined the effects of a Campus Cluster Program on student persistence and academic performance. The Cluster Program provided recreational, social, and academic activities for participants. Results indicated that cluster students exhibited significantly higher persistence rates in their first two terms than freshmen not involved in the program. The report of the Study Group on Excellence in



American Higher Education (1984) further illustrated the importance of student involvement at the post-secondary level. This report cited student involvement as the most important condition for improving undergraduate education.

Similarly, Abrahamowicz (1988) explored the relationship between student organizational membership and: perceptions of the college, satisfaction with the college environment, and broader involvement within the institution. His results indicated differences, sometimes extraordinary differences, between students who participated in student organizations and those who did not. Members of student organizations showed involvement in activities beyond the traditional domain of such organizations. As well, member's perceptions pertaining to relationships with faculty, administrators, and students were significantly more positive than perceptions of non-members. Further, members showed greater satisfaction with the college environment. The results of his study suggested that those individuals who were members of student organizations seemed to have connected with their college in a unique way.

Astin (1984) maintained that, in order to maximize educational and developmental impact, college students must develop such a special connection with their institutions. Further, Abrahamowicz (1988) suggested that this special connection exemplified by participants in student organizations seemed to lead to involvement in the whole

post-secondary experience. Abrahamowicz also contended that involvement, satisfaction with the college, and positive perceptions had major implications in the realm of post-secondary retention.

Interaction with faculty members. The literature contained inconsistent findings regarding the association between a student's interaction with faculty members and his/her persistence at post-secondary.

A study conducted by Nelson et al. (1984) indicated that faculty members influenced student persistence intentions by what they said to them. These researchers found that in their study, persisters as compared to non-persisters, reported having received more encouragement from their instructors.

Other research indicated that socializing with faculty members increased retention rates. McClung (1988) noted a direct relationship between the amount of social interaction between college students and various faculty members, and level of persistence.

Theophilides and Terenzini (1981) produced findings which indicated the focus of informal interactions with faculty members to be associated with student persistence. Informal interactions which focused on intellectual or course related matters, and students' future career concerns, were reported to make a significant contribution to college persistence, especially for first-year students.

Similarly, other studies indicated academic advising to be influential in post-secondary students' persistence/withdrawal decisions. In fact, Habley (1984), in an article designed to provide and discuss a model for better understanding the critical relationship between student retention and academic advisement, indicated that the Advisement-Retention Model, presented by him, supported the contention that quality academic advisement provided the most significant mechanism which enabled students to clarify educational goals and further relate those goals to the post-secondary experience. Subsequently, since this relationship existed, academic advisement was the critical link in the student retention process.

Glenn (1990) produced data which further augmented the relevance of academic advising at institutions of higher learning. In a study of retention and attrition, of American College Test Scholars, Glenn reported a significant difference in the number of times returnees, as compared to non-returnees, met with academic advisors. He concluded that returnees were either more intrinsically motivated to attain advice or believed that seeking such advice would increase the probability of their persistence.

Beal and Noel (1980) also produced research findings which showed how faculty had a positive impact upon student retention, via discussions held with them. A caring attitude of faculty and high quality advising were reported

by Beal and Noel as among the top positive factors identified in their study as influencing student retention. As well, inadequate academic advising was noted to be in the top negative factors.

Braxton, Duster, and Pascarella (1988) indicated that the effect upon freshman persistence, of interactions with faculty members, through academic advising, was indirect. They contended that when academic advising was given to a student it had a direct and positive influence upon his/her academic integration and subsequent institutional commitment, which in turn directly and positively affected his/her persistence.

Voorhees (1987) examined the influence of various demographic variables, upon persistence rates, among community college students. Academic advising was not a variable included, however the number of informal interactions with faculty was. Neither a direct nor indirect positive effect upon persistence was reported. The students number of informal interactions with faculty members did not meet statistical criteria to be considered as a logit for persistence.

Orientation experience. Research findings pertaining to the relationship between student participation in orientation activities and post-secondary persistence were discrepant.

A recent study conducted by Martin and Dixon (1989),

which examined the effects of freshmen orientation and locus of control on student adjustment to college, did not indicate orientation attendance to have a positive impact on retention or student adjustment. It was noted by Martin and Dixon that orientation attenders were not significantly more well-adjusted to college life, at mid-semester, than were non-attenders, nor did they exhibit a greater return rate for the following semester.

On the contrary, Pascarella, Terenzini, and Wolfe (1986) maintained that student involvement in orientation experiences may not have had a direct impact on freshman year persistence but it did have a significant positive indirect effect by enhancing the initial social integration of first year students.

Similarly, a study conducted by Cuyjet and Rode (1987) indicated that orientation contacts seemed to help first year students feel more a part of the college community. Orientation attenders were less likely to view the student body as apathetic or lacking school spirit, more likely to find other activities to occupy themselves besides going to class and study, and less likely to feel "lost" or like "numbers" in a book.

Further, Titley (1985) indicated that, situated at the start of the college experience, orientation served as the transitional cushion between past and future learning experiences. Also, the orientation program may determine

and perhaps even solidify the relationship between the student and institution because it may be the first real meeting of the two.

Post-secondary accommodations. Researchers indicated campus living to have increased the likelihood of student persistence and satisfaction with the post-secondary experience (Aitken, 1982; Astin, 1985; Levin & Clowes, 1982; Pascarella & Terenzini, 1980; Tinto, 1987).

In a study of the effects of residence hall living on the attainment of the Baccalaureate Degree, Levin and Clowes (1982) indicated that living in college-owned housing significantly increased the likelihood of graduation. Of residential students included in the study, 66% graduated, whereas only 55% of the students living with parents graduated in the same four-year period. Astin (1985) contended that students' probability of persistence was increased by more experiences such as interaction with peers, participation in school activities and programs, and interaction with faculty members, which were all more accessible to students living on campus.

Further, Aitken (1982) reported that one's satisfaction with his/her residence living was one of the top indicators of student persistence, next to academic performance. Such satisfaction was mostly influenced by positive interaction with peers, roommate compatibility, and physical conditions of the dormitory. These findings substantiated the

contention of Upcraft (1985) who reviewed the literature pertaining to the educational impact of residence halls and noted that dormitory living helped to retain students.

Post-secondary academic performance. The literature indicated that findings regarding the association between cumulative grade-point average and persistence at the post-secondary level were discrepant.

According to Voorhees (1987), variables that estimated academic integration were prominent in traditional models of post-secondary student persistence. Further, grade point average was the most common indicator of academic integration.

A study conducted by Dukes and Gaither (1984) failed to produce data which indicated student post-secondary performance to be associated with persistence. In their research, scholastic disqualification did not seemingly make a major contribution in causing attrition among freshmen. Of the non-persisting freshmen included in their Cluster Program, 77% left with grade point averages in excess of 2.0. Similarly, Voorhees (1987) reported that in his study of persistence among community college students, grade point average was independent of persistence. These findings corroborated earlier research of the Educational Testing Service which contended that poor academic performance was not a major contributing factor to students' decisions to leave college prior to graduation (Tibby, Hirabayashi,

Olson, & Peterson, 1978).

On the contrary, other researchers produced data which indicated that academic performance was positively associated with intent to persist in post-secondary. Johnson (1987) attained such findings in his investigation of academic factors associated with transfer student persistence. Grade point average had a positive impact on persistence for juniors and sophomores included in Johnson's study. Similar results were found by Suen (1983) in a study of alienation and attrition of Black college students at a predominantly White, four-year, public university in the rural Midwestern United States. Grade point average was found to have related significantly to attrition among both Black and White students included in the study. Suen stated that these findings suggested that any attempts to reduce attrition among post-secondary students should also try to improve students' academic performance. Such findings were consistent with the suggestion of Pantages and Creedon (1978), that research on college attrition during the 1950s, 1960s, and 1970s indicated that as much as half of the variance in attrition may have been associated with academic factors.

#### Student Perceptions of the Post-secondary Environment/Experience

Post-secondary attrition studies indicated relationships between student perceptions of various



elements in the institutional environment and persistence. Those noted here include: guidance counsellor effectiveness, relationship between the curriculum and one's goals, and satisfaction with the post-secondary environment.

Guidance counsellor effectiveness. In a study conducted by Carrol (1988), at Medgers Evers College in Brooklyn, New York, it was noted that the best single discriminating independent variable in predicting student outcome by program membership was perceived guidance counsellor effectiveness. Those students who saw their counsellor as effective had a greater persistence level than those students who did not perceive such effectiveness.

Relationship between the curriculum and one's goals. Student perceptions, of the extent to which the college curriculum was related to their career goals, was related to post-secondary persistence. Heller (1982), using 2,063 City University of New York students, examined the differing characteristics of persisters and non-persisters. His results indicated that students were more likely to persist if they perceived the curriculum to be related to their career goals.

Similarly, Johnson (1987), in a study which investigated academic factors that affect transfer student persistence at a large, urban commuter university, in the Southwest United States, reported that the actual persistence of transfer students was strongly associated

with perceptions of the value of their education to future employment.

Higgerson (1985) also indicated an association between a student's career objectives and educational goals, and his/her persistence. Among the three main reasons identified by Higgerson for withdrawal from college were having unclear career objectives and educational goals.

Satisfaction with the post-secondary environment and related factors. Perceptions of unsatisfactory conditions within, or related to the college environment, were also identified in the literature to have been associated with post-secondary attrition. In a study of attrition among University of North Dakota students, Nelson and Urff (1982) found that most often cited by students, for leaving prior to attaining a degree, was the desire to attend a different college. Dissatisfaction with the curricular offerings and other aspects of the university were identified as the major underlying reasons for such a desire to move on.

Similarly, studies by Higgerson (1985), and Johnson (1987), indicated that students who were dissatisfied with their academic programs were more inclined to drop out. As well, in a study of first-time entering, University of North Carolina students, conducted by Ironside (1979), it was found that about one third of those who withdrew gave reasons related to dissatisfaction with the college environment. More recently, Glenn (1990) indicated greater

satisfaction with the university, among returnees, as compared to students in his study who chose to drop out.

#### Summary

The literature review indicated that post-secondary attrition was the focus of a great deal of research over the past century (Bean, 1986; Brown, 1985; Moore, 1985; Pantages & Creedon, 1978; Ramist, 1981; Tinto, 1975). Researchers have investigated variables associated with persistence/withdrawal decisions, tried to determine causes of attrition, conducted reviews of retention studies, searched for recommendations for retention programs, and segmented various subgroups of students in post-secondary attrition studies. Results of such investigations have indicated many causes of attrition from college or university, many variables associated with the withdrawal or persistence decisions, and many interventions needed, prior to and during the freshman year, to help retain the various types of students within the student populations. As well, it was evident that the research findings were inconsistent. As a result of individual/institutional heterogeneity, student/post-secondary institute needs, and factors associated with withdrawal, causes of attrition may vary between student subgroups, as well as between institutions. Further, the amount of research attention given to different subgroups of students has varied. Most studies cited in this chapter were conducted at urban American post-secondary

institutions. However, more recently researchers have concentrated investigations on the post-secondary attrition of minority groups such as Blacks, older students, Natives, Chicanos, and rural students, to name a few. Results indicated that such separate investigations were justified. Many of these sub-populations had unique variables which influenced their persistence rates. As a result of these unique factors, and discrepancies noted in the literature, there remains a need for further post-secondary studies which segment student populations before the problem of withdrawal, for all subgroups of students, from higher education is resolved or at least fully understood.

## CHAPTER THREE

### Methodology

This study attempted to: (a) identify factors which differentiated rural college/university persisters and dropouts, (b) ascertain their main reasons for leaving or staying in post-secondary, and (c) obtain some of their suggestions as to what could be done at the high school and college/university to help ease the transition from the rural community into the post-secondary environment.

This chapter will include descriptions of the following:

1. Data collection procedure.
2. Sample and sampling procedure.
3. The instruments.
4. Procedure for preparation of the data for statistical analysis.
5. Treatment of the data.

#### Data Collection Procedure

In June of 1990, representatives at Memorial University of Newfoundland, Sir Wilfred Grenfell College, and the Western Community College campuses in Stephenville and Stephenville Crossing were contacted and informed of the purpose of this study. Approval and pledges of support with the development ensued.

A letter was then sent to representatives of the universities requesting access to student files. After receiving approval, they were provided with a description of

the sample population required. Shortly after, the investigator was issued two computer generated lists containing names and home addresses of all students who had enrolled at the universities for the first time in September of 1989 and had finished the winter term of 1990, or had left prior to the end of the 1990 winter term.

Officials at the colleges to be included provided a list of names, home addresses, and programs of study for all students who had enrolled at their campuses for the first time in September of 1989.

A copy of the most recent Newfoundland census (1986) was then used to identify university and college students on the lists who were from rural communities. A rural community was defined as having a population of 2,000 or less (Moore, 1985).

During the second week of August, 1990, all of the rural youth who had attended the universities selected for inclusion in the study were mailed a package which included a letter requesting their participation in the study (Appendix A), a copy of the survey instrument (Appendix B), and a self-addressed stamped envelope.

Approximately three weeks later, a follow-up letter (Appendix E), requesting completion and return of uncompleted questionnaires, was sent to the same students. Early in September, of 1990, officials at the colleges were again contacted and asked for further information on their

students, as well as their assistance in administration of the survey instrument to selected persisters. Following agreement to participate, a list of names of students selected for possible inclusion in the study was forwarded to them. This list was later returned to the investigator with identification of those who had completed Level Three, were still attending, or had dropped out. Those not having a Level Three certificate were deleted from the sample list.

Modified versions of the survey instrument which was initially sent to the university students (Appendix C) were sent to representatives at the colleges early in December, 1990. Students were then requested to complete the questionnaires. Those filled were returned to the investigator approximately two weeks later.

Further, early in December of 1990, a package was mailed to the home addresses of college non-persisters selected for inclusion in the study. The package included a letter requesting their participation in the study (Appendix D), a copy of the questionnaire administered to college persisters (Appendix C), and a self-addressed stamped envelope.

Approximately three weeks later a follow-up letter (Appendix F) was sent to these students, requesting completion and return of uncompleted questionnaires.

#### Sample and Sampling Procedure

The survey population for this study initially

consisted of all full-time students who had enrolled at Memorial University of Newfoundland in St. John's, Sir Wilfred Grenfell College in Corner Brook, or the Western Community College campuses at Stephenville and Stephenville Crossing, for the first time in September of 1989.

Since this was a descriptive study of rural post-secondary students, those students from urban areas were excluded from the sample population. Newfoundland's most recent census survey (1986) was used to identify those students from rural communities.

As well, measures were taken to ensure that all students included in the final sample had a Level Three high school certificate. For instance, questionnaires obtained from the university students who had not attended Level Three were not included in the final data analysis and only those college students identified by college officials as having attained a Level Three certificate were requested to complete a questionnaire.

Thus, those included in the final sampling population were rural, Level Three graduates, who had enrolled for the first time, at Memorial University of Newfoundland in St. John's, Sir Wilfred Grenfell College in Corner Brook, or the Western Community college campuses at Stephenville or Stephenville Crossing, in September of 1989. Students were placed in one of two groups:



Group One

Group One consisted of those students from the final sampling population who, at the time of data collection, were not enrolled in the programs in which they had been in September of 1989, and had not finished their programs, or had no intentions to do so in September of 1990. There were 104 such students from the universities surveyed and 82 from the college campuses investigated. A total of 74 questionnaires were returned from those students. Of this 74, 5 indicated not having a Level Three high school education and were subsequently not included in the study. Thus, there was a final total of 69 students, 23 college and 46 university, in Group One (see Table 1).

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Insert Table 1 here

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Group Two

Group Two initially included all of those students from the sampling population who, at the time of data collection, either had finished the program in which they enrolled in September of 1989, were still continuing, or had intentions to do so in September of 1990. Using these criteria, 723 students were identified from the university campuses and 84 from the college campuses. From these students, a selection was then made to obtain an appropriate number of students to include in a control group for such a descriptive study. Of

Table 1

Percentage and Number of Students by Group Membership

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Group One	0	0.0	46	100.0	0	0.0	23	100.0
2. Group Two	131	100.0	0	0.0	30	100.0	0	0.0

the university attenders, 260 of 732 were randomly chosen, whereas all (84) college attenders were selected. Completed questionnaires were returned from 133 of the university students and 30 of the college students. Two university students indicated no Level Three certificate and were not included in the study. Thus, Group Two consisted of a total of 161, 131 university and 30 college, rural students (see Table 1).

### The Instruments

#### The nature of the instruments

The survey instruments utilized in this study were designed to answer the research questions posed earlier (pp. 12-14). Most variables selected for study were those found to have been included in other post-secondary retention studies and discussed in the literature review. These variables were chosen for further investigation because they had not previously been examined with the particular subgroups of students included in this study, the literature indicated that inconsistent findings were obtained from previous studies which included these variables, and the author wished to determine which, if any, of these variables were operational here in Newfoundland and could be used to differentiate college/university persisters and dropouts.

The initial questionnaire (Appendix B) was designed to be presented to university students. This survey instrument was then modified (Appendix C) before being administered to

the college students. The most prominent difference between these questionnaires was that the version sent to the university students referred to their post-secondary institute as a "university", whereas the instrument administered to the college students utilized the term "college". Variables examined with both instruments were the same.

After development of the initial questionnaire, copies were distributed to some students and instructors of the Educational Psychology graduate program at Memorial University of Newfoundland. These individuals offered suggestions as how to modify the questionnaire to improve it's design and clarity. Revisions were made to the instrument prior to printing.

#### Introduction to the Instrument

Several types of questions were utilized on the survey instruments to obtain responses from the final sample population. Most questions were followed by numbers, to be circled, which corresponded to the student's chosen response to the question posed (see question "3. a." in Appendix "B").

Other questions were followed by a blank which required a single word or number to indicate one's response (see question "7." in Appendix "B") .

As well, there were other questions which required more elaboration on behalf of the participant via long answers

(see question "28. a." in Appendix "B").

The final type of question on the survey instrument utilized a Likert Scale to obtain the subjects' responses (see question "13." in Appendix "B").

#### Procedure for Preparation of the Data for Statistical Analysis

Information to be analyzed in the study was initially stored on questionnaires. Thus, the data did not reside on machine readable medium and had to be prepared prior to entry for analysis by a computer program. During preparation, each student, or case, was represented by a line for which values were available for each variable being examined. While entering the data, first of all, numbers corresponding to "Yes" and "No" responses (see question "5. c" in Appendix "B") were entered without modification.

Next, all numbers corresponding to student responses other than "Yes" or "No" (see question "4." in Appendix "B") were entered. Generally, lower numbered responses represented lesser amounts of the variable being examined in the question posed. However, there were some questions in this category which did not gather information indicating varying extents of the variable examined (see question "16. a." in Appendix "B").

Questions which used a Likert type scale (see questions "11. a.", "11. b.", "13.", and "16. e." in Appendix "B") to gather student responses were recoded and entered so that

the higher numbers represented greater extents of the variable being examined.

As well, all answers to questions which required participants to indicate their responses by filling numbers in blanks (see questions "5. b." in Appendix "B"), needed to be regrouped prior to entry in order to reduce the total number of categories of responses from students. This made the data for such questions more manageable for analysis and reporting.

Answers to question "18. d.", on the university questionnaire, were also recoded before entering to enable responses to be compared to those given by college students, if needed. After recoding, all university responses were regrouped to match those possible responses on the college questionnaires. For instance, a response of "1" or "2" on the university questionnaire was matched with all number "1" responses on the college questionnaires. All responses of "3" on the university questionnaires were matched with number "2" responses on the college surveys, and responses of "4", "5", or "6" on the university questionnaires were grouped with responses of "3" on the questionnaires given to college students.

Finally, after interpretation of the data provided on all long answers (see question "28." in Appendix "B"), individual responses were grouped into categories which identified similar suggestions and entered. Such grouping

made this information more manageable to interpret, analyze, and present.

#### Data Processing and Analysis

The SPSS-X Batch system, a comprehensive tool utilized in management, analysis, and display of data, was employed in the study. One discussion of the analysis performed for research questions one, two, three and eight is provided since the statistical procedure employed for all four was the same. Because the author was not testing hypotheses, there was no formal calculation of statistical significance tests. The data were nominal in nature, thus frequencies and percentages were the statistical procedures employed. In the discussion of results, only those differences that were clear and substantive were highlighted.

The remaining four research questions: four, five, six, and seven, were analyzed using the same statistical procedure for each. Frequencies and percentages were found for categories of responses. Since data from the research questions was to be used for descriptive purposes only, descriptive statistics was considered sufficient to quantify the findings.

## CHAPTER FOUR

### Presentation of Results

This chapter provides a report of findings of statistical analysis performed on the data obtained from Groups One and Two. The objective of the study was to examine variables associated with rural student attrition at select Newfoundland post-secondary institutions and compile clear profiles of college/university persisters and dropouts, as well as their reasons for returning or not returning to post-secondary and suggestions for senior high and post-secondary level interventions needed to help rural students, not to investigate cause and effect. Thus, this study was more descriptive than interactive and therefore did not necessitate formal calculation of statistical analysis tests since hypotheses was not being tested.

Results for college and university students will be presented separately. For research questions one, two, three, and eight, frequencies and percentages were obtained on the descriptive data lists for both college students (N=53) and university students (N=177). The list for college students included 23 Group One members and 30 Group Two members, whereas the descriptive data list for university students consisted of 46 Group One and 131 Group Two members (see Table 1). The purpose of research questions four, five, six, and seven necessitated descriptive information pertaining to individual reasons for



persistence/withdrawal decisions and suggestions for interventions needed at the senior high and post-secondary levels. Descriptive statistics were used for analysis of these questions.

Research Question #1. Do rural college/university persisters and dropouts differ with regard to the following background and demographic characteristics: age, gender, religious affiliation and commitment, hometown size, distance from hometown to post-secondary, and socioeconomic background?

#### University Students

##### Age

Persisters and non-persisters did not vary substantially with regard to age. Results indicated that most university persisters and dropouts, 91.0% and 95.7% respectively, were in the 18 to 20 year age group. Very few persisters (6.9%) and non-persisters (4.3%) were 21 years old or more. Similarly, very few persisters (3.1%) and no non-persisters were less than 18 years old (see Table 2).

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Insert Table 2 here

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##### Gender

The gender variable was not found useful in differentiating both groups. More specifically, there were more female persisters (67.9%) and non-persisters (71.7%) in

Table 2

Relationship of Student's Decision by Age

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Less than 18 years	4	3.1	0	0.0	3	10.0	0	0.0
2. 18 - 20 years	118	91.0	44	95.7	14	46.7	9	39.1
3. 21 years and above	9	6.9	2	4.3	13	43.3	14	60.9

each group (see Table 3).

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Insert Table 3 here

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#### Religious Affiliation

Persisters and non-persisters were not substantially differentiated by religious affiliation. Approximately one third of the persisters (34.7%), and non-persisters (34.2%), were Roman Catholic. Slightly more dropouts (47.4%) than persisters (33.1%) reported being Anglican. There was more than twice the percentage of persisters (18.2%), than non-persisters (7.9%), reporting to belong to the United Church. A greater percentage of persisters (9.1%), as compared to non-persisters (5.3%), were Pentecostal. Only 2.5% of persisters, and 5.3% of non-persisters, were belonging to the Salvation Army Church, whereas 2.5% of persisters, as compared to no non-persisters, were of Presbyterian affiliation (see Table 4).

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Insert Table 4 here

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#### Religious Commitment

Persisters and non-persisters varied little with regard to church attendance. Over one half of the dropouts (52.4%), and over one third of the persisters (33.6%), indicated that they attended church less than once a month.

Table 3

Relationship of Student's Decision by Gender

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. Male	42	32.1	13	28.3	17	56.7	15	65.2
2. Female	89	67.9	33	71.7	13	43.3	8	34.8

Table 4

Relationship of Student's Decision by Religious Affiliation

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. Roman Catholic	42	34.7	13	34.2	12	42.9	4	23.5
2. Anglican	40	33.1	18	47.4	7	25.0	8	47.1
3. United Church	22	18.2	3	7.9	5	17.9	4	23.5
4. Pentecostal	11	9.1	2	5.3	3	10.7	1	5.9
5. Salvation Army	3	2.5	2	5.3	1	3.6	0	0.0
6. Presbyterian	3	2.5	0	0.0	0	0.0	0	0.0

Almost one quarter of the persisters (24.1%), and one quarter of the non-persisters (23.8%), attended once a month. Going to church twice a month was reported by 18.1% of persisters and 4.8% of non-persisters. Only 6.0% of persisters, and 7.1% of non-persisters, attended three times per month. Similarly, only 12.9% of persisters, and 4.8% of non-persisters, reported going to church four times per month. In addition, only 5.2% of persisters, and 7.1% of

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Insert Table 5 here

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non-persisters, indicated that they would attend church more than four times per month (see Table 5).

#### Hometown Population

Results indicated that there was not a great deal of variation between persisters and non-persisters when hometown populations were examined. Slightly more dropouts (13.0%) than persisters (4.7%) came from hometowns with a population of 200 or less. Having a hometown population of 201-500 was reported by 29.5% of persisters and 26.1% of non-persisters. Similarly, 21.7% of persisters, and 23.9% of non-persisters, lived in hometowns with 501-1,000 people. As well, 20.2% of persisters, and 15.2% of non-persisters, did reside in hometowns with a population of 1,001-1,500. Approximately one fifth of each group (20.9% of persisters and 21.7% of non-persisters) lived in hometowns with a

Table 5

Relationship of Student's Decision by Number of Times Attending Church Per Month

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. None	39	33.6	22	52.4	11	39.3	16	69.6
2. One	28	24.1	10	23.8	4	14.3	3	13.0
3. Two	21	18.1	2	4.8	6	21.4	4	17.4
4. Three	7	6.0	3	7.1	0	0.0	0	0.0
5. Four	15	12.9	2	4.8	6	21.4	0	0.0
6. More than four	6	5.2	3	7.1	1	3.6	0	0.0

population of 1,501-2,000, and 3.1% of persisters, as compared to no non-persisters, indicated coming from hometowns with more than 2,000 people (see Table 6).

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Insert Table 6 here

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#### Distance from Hometown to University

Persisters and non-persisters varied minimally when they were compared by proximity of hometown to post-secondary institution. Approximately one third in each group (33.6% of persisters and 29.3% of non-persisters) lived 100 miles or less from their hometown while attending university. A distance of 101-200 miles from home was noted by 19.2% of persisters and 24.4% of non-persisters. As well, 15.2% of persisters, and 12.2% of non-persisters, reported a distance of 201-300 miles between their hometown and university. Attending school 301-400 miles from home was indicated by 8.0% of persisters, as compared to 9.8% of non-persisters. In addition, less than 5.0% of each group (4.8% of persisters and 4.9% of non-persisters) were 401-500 miles from home. A distance of 501-600 miles separated 6.4% of persisters, and 9.8% of non-persisters, from their hometowns. Only 4.8% of persisters and 2.4% of non-persisters attended post-secondary institutions 601-700 miles from home. Similarly, only 4.0% of persisters, and 2.4% of non-persisters, were 701-800 miles from home,



Table 6

Relationship of Student's Decision by Population of Hometown

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. 200 or less	6	4.7	6	13.0	4	13.3	4	17.4
2. 201 - 500	38	29.5	12	26.1	10	33.3	3	13.0
3. 501 - 1,000	28	21.7	11	23.9	6	20.0	1	4.3
4. 1,001 - 1,500	26	20.2	7	15.2	4	13.3	7	30.4
5. 1,501 - 2,000	27	20.9	10	21.7	6	20.0	8	34.8
6. More than 2,000	4	3.1	0	0.0	0	0.0	0	0.0

whereas 4.9% of non-persisters, and 4.0% of persisters, reported being more than 800 miles from home while attending university (see Table 7).

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Insert Table 7 here

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#### Socioeconomic Background

##### Mothers'/Female guardians' level of education.

Persisters and non-persisters were not substantially differentiated by mothers'/female guardians' level of education. Results indicated that twice the percentage of dropouts (14.3%), as compared to persisters (7.0%), had mothers/female guardians with an elementary level education or less. Having a mother/female guardian with some junior high was reported by 13.2% of persisters and 19.0% of non-persisters. As well, 27.9% of persisters, and 26.2% of non-persisters, noted that their mothers/female guardians had some high school education, whereas 22.5% of persisters, and 23.8% of non-persisters, noted their mothers/female guardians to have finished high school. In addition, 12.4% of the persisters, and 14.3% of the non-persisters, indicated that their mothers/female guardians had obtained some post-secondary education. Further, more persisters (17.1%), than non-persisters (2.4%), indicated that their mothers had completion of a post-secondary programs. Thus, mothers/female guardians of university persisters and

Table 7

Relationship of Student's Decision by Distance from Post-secondary Institution to Home Community

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. 100 miles or less	42	33.6	12	29.3	14	46.7	10	45.5
2. 101 - 200 miles	24	19.2	10	24.4	1	3.3	5	22.7
3. 201 - 300 miles	19	15.2	5	12.2	6	20.0	1	4.5
4. 301 - 400 miles	10	8.0	4	9.8	3	10.0	1	4.5
5. 401 - 500 miles	6	4.8	2	4.9	3	10.0	0	0.0
6. 501 - 600 miles	8	6.4	4	9.8	0	0.0	2	9.1
7. 601 - 700 miles	6	4.8	1	2.4	1	3.3	1	4.5
8. 701 - 800 miles	5	4.0	1	2.4	0	0.0	2	9.1
9. More than 800 miles	5	4.0	2	4.9	0	0.0	0	0.0

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Insert Table 8 here

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dropouts varied most, with regard to level of education, at the lowest and highest levels included in the survey instrument (see Table 8).

Fathers'/Male guardians' level of education.

Persisters and dropouts differed little with regard to fathers'/male guardians' level of education. Having fathers/male guardians with elementary or less education was noted by 13.8% of persisters and 12.8% of dropouts.

Persisters and dropouts also differed very little (persisters 21.1% and dropouts 23.1%) with regard to having fathers/male guardians with some junior high education. Likewise, these groups differed little with regard to percentage of students having fathers/male guardians with some high school (persisters 20.3% and non-persisters 28.2%). Similarly, 11.4% of persisters, and 10.3% of non-persisters, indicated that their fathers had finished high school. These groups also varied little with regard to percentage of members having fathers/male guardians with some post-secondary education (persisters 4.1% and non-persisters 7.7%). Persisters and dropouts varied most, with regard to father's/male guardian's level of education, at the upper end of the scale utilized. For instance, 29.3% of persisters, and 17.9% of non-persisters, indicated that

Table 8

Relationship of Student's Decision by Mother's/Female Guardian's Level of Education

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Elementary or less	9	7.0	6	14.3	6	20.7	1	4.8
2. Some junior high	17	13.2	8	19.0	6	20.7	7	33.3
3. Some high school	36	27.9	11	26.2	8	27.6	7	33.3
4. High school graduation	29	22.5	10	23.8	6	20.7	2	9.5
5. Some post-secondary	16	12.4	6	14.3	1	3.4	2	9.5
6. Completion of post-secondary	22	17.1	1	2.4	2	6.9	2	9.5

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Insert Table 9 here

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their fathers/male guardians had completion of a post-secondary program (see Table 9).

Mothers'/Female guardians' income. Overall, persisters and dropouts differed little with regard to mothers'/female guardians' level of income. However, these two groups differed most at the lower end of the scale utilized. Having mothers/female guardians with a total income of under \$5,000 was noted by 40.0% of dropouts, as compared to 28.6% of persisters, whereas 28.6% of persisters, and 25.7% of non-persisters, indicated having mothers/female guardians who obtained \$5,000-\$9,999 per year. Similarly, 21.4% of persisters, and 17.1% of non-persisters, noted that their mothers/female guardians had received \$10,000-\$14,999 annually. Also, both groups varied little with regard to having mothers/female guardians with an annual salary of \$15,000-\$19,999 (persisters 3.0% and non-persisters 11.4%). Only 5.4% of persisters, and no dropouts, indicated that their mothers/female guardians had earned \$20,000-\$24,999. Likewise, only 0.9% of persisters, and no non-persisters, indicated having mothers/female guardians who earned \$25,000-\$29,999 per year. Very few persisters (2.7%), and non-persisters (2.9%), reported that their mothers/female guardians had earned a salary of \$30,000-\$34,999. As well,

Table 9

Relationship of Student's Decision by Father's/Male Guardian's Level of Education

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Elementary or less	17	13.8	5	12.8	5	20.0	3	14.3
2. Some junior high	26	21.1	9	23.1	7	28.0	6	28.6
3. Some high school	25	20.3	11	28.2	8	32.0	9	42.9
4. High school graduation	14	11.4	4	10.3	1	4.0	1	4.8
5. Some post-secondary	5	4.1	3	7.7	1	4.0	0	0.0
6. Completion of post-secondary	36	29.3	7	17.9	3	12.0	2	9.5

very few mothers/female guardians of both groups of students (persisters 3.6% and non-persisters 2.9%) were said to earn \$35,000-\$39,999. Finally, even fewer mothers/female guardians were noted to make \$40,000, or more, annually (persisters 0.9% and non-persisters 0.0%) (see Table 10).

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Insert Table 10 here

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Fathers'/Male guardians' income. Generally, persisters and dropouts varied little with regard to fathers'/male guardians' annual incomes attained in 1989. Very few members of either group indicated that their fathers/male guardians earned under \$5,000 (persisters 0.9% and non-persisters 2.9%). Similarly, only 9.1% of persisters, and 5.9% of non-persisters, reported that their fathers/male guardians had earned \$5,000-\$9,999. Slightly more dropouts (29.4%), as compared to persisters (15.5%), noted their fathers/male guardians had earned \$10,000-\$14,999. As well, 20.6% of dropouts, as compared with 11.8% of persisters, reported that their fathers/male guardians had earned \$15,000-\$19,999. More persisters (17.3%), than non-persisters (0.0%), had fathers/male guardians who earned \$20,000-\$24,999. As well, more persisters (11.8%), than non-persisters (5.9%), indicated that they had fathers/male guardians with annual salaries, for 1989, of \$25,000-\$29,999. Having fathers/male guardians who had earned



Table 10

Relationship of Student's Decision by Mother's/Female Guardian's Income

Institute type	University				College			
Enrolment status	Persisters		Dropouts		Persisters		Dropouts	
Groups	n	%	n	%	n	%	n	%
1. Less than \$5,000	32	28.6	14	40.0	6	31.6	3	21.4
2. \$5,000 - \$9,999	32	28.6	9	25.7	7	36.8	9	64.3
3. \$10,000 - \$14,999	24	21.4	6	17.1	2	10.5	2	14.3
4. \$15,000 - \$19,999	9	8.0	4	11.4	3	15.8	0	0.0
5. \$20,000 - \$24,999	6	5.4	0	0.0	1	5.3	0	0.0
6. \$25,000 - \$29,999	1	0.9	0	0.0	0	0.0	0	0.0
7. \$30,000 - \$34,999	3	2.7	1	2.9	0	0.0	0	0.0
8. \$35,000 - \$39,999	4	3.6	1	2.9	0	0.0	0	0.0
9. \$40,000 or more	1	0.9	0	0.0	0	0.0	0	0.0

\$30,000-\$34,999 was noted by 8.2% of persisters, as compared to 20.6% of non-persisters. In addition, 9.1% of persisters, and 0.0% of non-persisters, indicated that their fathers/male guardians had earned \$35,000-\$39,999. At the upper end of the scale utilized, 16.4% of persisters, and 14.7% of non-persisters, reported that their fathers/male guardians had earned \$40,000 or more during 1989 (see Table 11).

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Insert Table 11 here

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Number of siblings. Results indicated that rural persisters and dropouts differed little with regard to number of siblings. Having no siblings was noted by 6.1% of persisters and 4.3% of non-persisters. More members of each group, 30.5% of persisters and 28.3% of non-persisters, reported having just one sibling. Similarly, both groups differed little with regard to percentage of members having two siblings (persisters 19.1% and non-persisters 21.7%). Slightly more dropouts (30.4%), as compared to persisters (19.8%), noted having three siblings. Having four siblings was indicated by 11.5% of persisters, and 2.2% of non-persisters, whereas only 3.1% of persisters, and 4.3% of non-persisters, noted having five siblings. In addition, 9.9% of persisters, as compared to 8.7% of non-persisters, reported having more than five siblings (see Table 12).

Table 11

Relationship of Student's Decision by Father's/Male Guardian's Income

Institute type	University				College			
Enrolment status	Persisters		Dropouts		Persisters		Dropouts	
Groups	n	%	n	%	n	%	n	%
1. Less than \$5,000	1	0.9	1	2.9	0	0.0	0	0.0
2. \$5,000 - \$9,999	10	9.1	2	5.9	2	12.5	8	53.3
3. \$10,000 - \$14,999	17	15.5	10	29.4	3	18.8	3	20.0
4. \$15,000 - \$19,999	13	11.8	7	20.6	5	31.3	1	6.7
5. \$20,000 - \$24,999	19	17.3	0	0.0	2	12.5	0	0.0
6. \$25,000 - \$29,999	13	11.8	2	5.9	0	0.0	0	0.0
7. \$30,000 - \$34,999	9	8.2	7	20.6	1	6.3	1	6.7
8. \$35,000 - \$39,999	10	9.1	0	0.0	2	12.5	2	13.3
9. \$40,000 or more	18	16.4	5	14.7	1	6.3	0	0.0

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Insert Table 12 here

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College Students

Age

Persisters and non-persisters varied substantially with regard to age. Most dropouts (60.9%), as compared to 43.3% of persisters, indicated being 21 years of age or above, whereas most persisters (46.7%), as opposed to dropouts (39.1%), were between the ages of 18 and 20. Very few persisters (10.0%), and no non-persisters, were less than 18 years of age (see Table 2).

Gender

Gender was not a variable which substantially differentiated persisters and non-persisters. Males made up the largest portion of persisters (56.7%) and non-persisters (65.2%) included in the study (see Table 3).

Religious Affiliation

Persisters and non-persisters were not differentiated substantially by religious affiliation. Almost one half (47.1%) of the dropouts, and one quarter (25%) of the persisters, were Anglican. Also, 42.9% of the persisters, and 23.5% of the non-persisters, were Roman Catholic, whereas 17.9% of the persisters, and 23.5 % of the non-persisters reported United Church affiliation. Only 10.7% of persisters, and 5.9% of non-persisters, indicated being

Table 12

Relationship of Student's Decision by Number of Siblings

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. None	8	6.1	2	4.3	1	3.3	1	5.0
2. One	40	30.5	13	28.3	6	20.0	5	25.0
3. Two	25	19.1	10	21.7	5	16.7	2	10.0
4. Three	26	19.8	14	30.4	1	3.3	2	10.0
5. Four	15	11.5	1	2.2	1	3.3	2	10.0
6. Five	4	3.1	2	4.3	5	16.7	1	5.0
7. More than five	13	9.9	4	8.7	11	36.7	7	35.0

Pentecostal and 3.6% of the persisters, as compared to no non-persisters, indicated being of the Salvation Army denomination. No members of either group noted being of the Presbyterian affiliation (see Table 4).

#### Religious Commitment

Frequency of church attendance, while attending college, did not greatly differentiate persisters and non-persisters. Most of the college persisters (69.6%), as compared to 39.3% of non-persisters, reported attending church less than once a month, whereas 14.3% of persisters, and 13.0% of non-persisters, indicated that they attended church once a month. Also, 21.4% of persisters, and 17.4% of non-persisters, attended twice a month, whereas 21.4% of the persisters, as compared to none of the non-persisters, reported attending four times per month. No members of either group reported attending three times per month. Finally, 3.6% of the persisters, as compared to none of the non-persisters, went to church more than four times in one month (see Table 5).

#### Hometown Size

Overall, hometown size was not a factor which greatly differentiated dropouts from persisters. Slightly more dropouts (17.4%), as compared to persisters (13.3%), came from hometowns with 200 or less people. More persisters (33.3%), than non-persisters (13.0%), came from communities with 201-500 people. As well, more persisters (20.0%), as

compared to non-persisters (4.3%), lived in hometowns with 501-1,000 people. However, 30.4% of dropouts, as compared to 13.3% of persisters, did reside in communities of 1,001-1,500. Also, 34.8% of dropouts, and 20.0% of persisters, came from hometowns with populations of 1,501-2,000 (see Table 6).

#### Distance from Hometown to College

Results indicated no clear pattern which differentiated persisters from dropouts when distance from college to hometown was examined for both groups. Almost one half of each group (46.7% of persisters and 45.5% of non-persisters) indicated that they were 100 miles or less from their hometowns. More dropouts (22.7%), as compared to persisters (3.3%), reported being 101-200 miles from their hometowns. On the contrary, less dropouts (4.5%) than persisters (20.0%), indicated being 201-300 miles from home while attending college. Twice as many persisters (10.0%), as compared to dropouts (4.5%), reported college being 301-400 miles from their hometown. Similarly, 10.0% of persisters, and no non-persisters, were reported to be 401-500 miles from home. However, 9.1% of dropouts, and no non-persisters, were 501-600 miles from their home communities. Only 3.3% of persisters, and 4.5% of non-persisters, attended college 601-700 miles from their hometowns. More dropouts (9.1%), as compared to persisters (0.0%), were 701-800 miles from home and no students in either group

indicated being more than 800 miles from their hometowns while attending college (see Table 7).

#### Socioeconomic Background

##### Mothers'/Female guardians' level of education.

Persisters and dropouts differed most, with regard to mothers'/female guardians' levels of education, at the lower end of the scale utilized. Results indicated 20.7% of persisters, and 4.8% of non-persisters, to have mothers/female guardians with elementary or less education. In addition, 20.7% of persisters, and 33.3% of non-persisters, indicated that their mothers/female guardians had obtained some junior high. Likewise, 27.6% of the persisters, and 33.3% of the non-persisters, noted having mothers/female guardians with some high school. Twice the percentage of persisters (20.7%), as compared to non-persisters (9.5%), reported that their mothers/female guardians had obtained high school graduation. Only 3.4% of persisters, and 9.5% of dropouts, reported that their mothers/female guardians had some post-secondary. Similarly, only 6.9% of persisters, and 9.5% of non-persisters, indicated that their mothers/female guardians had completed a post-secondary program (see Table 8).

Fathers'/Male guardians' level of education. Results indicated that persisters and dropouts differed very little with regard to fathers'/male guardians' levels of education. Having fathers/male guardians with elementary or less



education was noted by 20.0% of persisters and 14.3% of non-persisters. In addition, 28.0% of persisters, and 28.6% of non-persisters, noted that their fathers/male guardians had obtained some junior high. Slightly more dropouts (42.9%), as compared to persisters (32.0%), indicated that their fathers/male guardians had some high school. Persisters and dropouts differed minimally with regard to percentages of fathers/male guardians who finished high school (persisters 4.0% and non-persisters 4.8%). Only 4.0% of persisters, and no non-persisters, indicated that their fathers/male guardians had some post-secondary, whereas 12% of persisters, and 9.5% of non-persisters, noted that their fathers/male guardians had completed a post-secondary program (see Table 9).

Mothers'/Female guardians' income. Results indicated that college persisters and non-persisters differed only slightly with regard to mothers'/female guardians' annual incomes. Having mothers/female guardians who obtained an annual income of under \$5,000 was noted by 31.6% of persisters, as compared to 21.4% of non-persisters. More dropouts (64.3%), than persisters (36.8%), reported that their mothers/female guardians earned \$5,000-\$9,999 during 1989. Similarly, slightly more dropouts (14.3%), as compared to persisters (10.5%), noted that their mothers/female guardians earned \$10,000-\$14,999. On the contrary, 15.8% of persisters, as compared to no dropouts,

indicated having mothers/female guardians who earned \$15,000-\$19,999. As well, 5.3% of persisters, as compared to 0.0% of non-persisters, reported having mothers/female guardians earning \$20,000-\$24,999. Further, no members of either group indicated that their mother/female guardian earned \$25,000 or more (see Table 10).

Fathers'/Male guardians' income. Persisters and non-persisters did not vary substantially with regard to fathers'/male guardians' annual incomes. No members of either group indicated having fathers/male guardians who earned less than \$5,000. However, over one half of college dropouts (53.3%), as compared to 12.5% of college persisters, indicated that their fathers/male guardians had an annual salary of \$5,000-\$9,999. Results indicated that 18.8% of persisters, and 20.0% of non-persisters, reported that their fathers/male guardians had a salary of \$10,000-\$14,999 during 1989. Further, more persisters (31.3%), than non-persisters (6.7%), noted that their fathers/male guardians had an annual salary of \$15,000-\$19,999. In addition, 12.5% of persisters, as compared to 0.0% of non-persisters, indicated having fathers/male guardians who earned \$20,000-\$24,999. As well, no members of either group noted having fathers/male guardians who earned \$25,000-\$29,000. Both groups differed very little with regard to percentage of members having fathers/male guardians who earned \$30,000-\$34,999 (persisters 6.3% and non-persisters

6.7%). Similarly, groups differed little with regard to percentage of members with fathers/male guardians who earned \$35,000-\$39,999 (persisters 12.5% and non-persisters 13.3%). Slightly more persisters (6.3%), than non-persisters (0.0%), indicated that their fathers/male guardians had earned \$40,000 or more. Thus, the most notable difference between groups, in percentage of students having fathers/male guardians with a specific income, was observed at the \$5,000-\$9,999 level (see Table 11).

Number of siblings. Both groups differed little with regard to number of siblings reported. Only 3.3% of persisters, and 5.0% of non-persisters, noted not having any siblings, whereas 20.0% of persisters, as compared to 25.0% of non-persisters, indicated having just one sibling. Slightly more persisters (16.7%), than non-persisters (10.0%), noted having two siblings. On the contrary, slightly more dropouts (10.0%), than persisters (3.3%), reported having three siblings. Similarly, 10% of dropouts, and 3.3% of persisters, reported having four siblings. More than three times the percentage of persisters (16.7%), as compared to non-persisters (5.0%), noted having five siblings. In addition, both groups differed little with regard to percentage of members reporting to have more than five siblings (persisters 36.7% and non-persisters 35.0%) (see Table 12).

Research Question #2. Do rural university/college

persisters and non-persisters differ with regard to factors related to their high school experience such as:

Level Three grade point average; size of high school attended; whether or not they had a high school counsellor; perceptions of high school counsellor effectiveness; number of meetings with high school counsellor; relationship with high school counsellor; and having unrealistic expectations, or not, about post-secondary?

### University Students

#### Level Three Grade Point Average

Overall, both groups differed somewhat with regard to Level Three grade point average. Higher percentages of dropouts, as compared to persisters, indicated having averages of 75 or below, whereas higher percentages of persisters, as compared to dropouts, indicated having averages of 76 or above. For instance, only 0.8% of persisters, as compared to 9.1% of non-persisters, indicated that they had an average of less than 55. In addition, 1.6% of persisters, and 4.5% of non-persisters, reported an average of 55-60. Also, 3.1% of persisters, as compared to 4.5% of non-persisters, noted that their average was between 61 and 65. Twice the percentage of dropouts (22.7%), as compared to persisters (10.9%), indicated that they attained an average of 66-70. Similarly, 20.5% of non-persisters, and 13.3% of persisters, noted a Level Three average of 71-75 percent. On the contrary, more persisters (20.3%), than

non-persisters (15.9%), reported having an average of 76-80 percent. Similarly, 30.5% of persisters, and 13.6% of non-persisters, noted 81-85 percent averages and 19.5% of persisters, as compared to 9.1% of non-persisters, indicated that they attained an average of more than 85 while in Level Three (see Table 13).

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Insert Table 13 here

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#### Size of High School Attended

Results indicated that dropouts and persisters differed with regard to size of high school attended. More non-persisters, as compared to persisters, attended smaller high schools, whereas more persisters, as compared to non-persisters, attended larger high schools. Size of high school was indicated by the number of students in one's high school graduating class. More specifically, 19.0% of dropouts, as compared to 7.1% of persisters, indicated having less than 10 people in their graduating class. Similarly, 23.8% of persisters, and 11.8% of non-persisters, reported 10 to 15 students in their graduating class. As well, more dropouts (7.1%), than persisters (3.1%), indicated that they had 16 to 20 people in their graduating class. On the contrary, more persisters (15.0%), than dropouts (9.5%), reported a graduating class of 21 to 25. In addition, 26 to 30 was the reported graduating class size

Table 13

Relationship of Student's Decision by Level Three Average

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Less than 55	1	0.8	4	9.1	0	0.0	0	0.0
2. 55 - 60	2	1.6	2	4.5	2	7.1	1	4.8
3. 61 - 65	4	3.1	2	4.5	7	25.0	1	4.8
4. 66 - 70	14	10.9	10	22.7	7	25.0	12	57.1
5. 71 - 75	17	13.3	9	20.5	6	21.4	6	28.6
6. 76 - 80	26	20.3	7	15.9	3	10.8	0	0.0
7. 81 - 85	39	30.5	6	13.6	2	7.1	1	4.8
8. More than 85	25	19.5	4	9.1	1	3.6	0	0.0

for 2.4% of persisters and 4.8% of non-persisters. Both groups also differed little with regard to percentage of students who indicated a graduating class size of 31 to 35 (persisters 12.6% and non-persisters 11.9%). However, more than twice the percentage of persisters (48.0%), as compared to dropouts (23.8%), indicated that they had more than 35 students in their Level Three graduating class (see Table 14).

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Insert Table 14 here

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#### High School Counsellor or Not

Having a high school counsellor or not was not found to be a variable which differentiated persisters and dropouts. More students in each group, 73.8% of persisters, and 65.2% of non-persisters, indicated having a counsellor while in high school. As well, similar percentages, 26.2% of persisters, and 34.8% of non-persisters, reported not having access to a high school counsellor (see Table 15).

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Insert Table 15 here

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#### Perceptions of High School Counsellor Effectiveness

Persisters and dropouts differed little with regard to perceptions of their high school counsellor's effectiveness, as indicated by thoughts of having attained adequate career

Table 14

Relationship of Student's Decision by Number of Student's in One's Level Three Graduating Class

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Less than 10	9	7.1	8	19.0	2	8.0	1	5.0
2. 10 - 15	15	11.8	10	23.8	3	12.0	6	30.0
3. 16 - 20	4	3.1	3	7.1	5	20.0	3	15.0
4. 21 - 25	19	15.0	5	9.5	2	8.0	5	25.0
5. 26 - 30	3	2.4	2	4.8	1	4.0	3	15.0
6. 31 - 35	16	12.6	5	11.9	1	4.0	2	10.0
7. More than 35	61	48.0	10	23.8	11	44.0	0	0.0



Table 15

Relationship of Student's Decision by Having a High School Counsellor or Not

Institute type	University				College			
	Enrolment status		Dropouts		Dropouts		Dropouts	
Groups	N	%	N	%	N	%	N	%
1. Yes	96	73.8	30	65.2	20	69.0	15	68.2
2. No	34	26.2	16	34.8	9	31.0	7	31.9

direction and counselling or not. More students in each group (persisters 63.8% and non-persisters 55.9%) reported that they had received adequate counselling and career direction. As well, fewer students in each group (persisters 36.2% and non-persisters 44.1%) indicated that their counsellor had not been effective (see Table 16).

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Insert Table 16 here

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#### Number of Meetings with High School Counsellor

Results indicated that persisters and non-persisters varied little with regard to number of meetings with high school counsellors while in Level Three. Most students in each group (persisters 55.3% and non-persisters 77.4%) indicated seeing their counsellor less than three times. More persisters (33.0%), as compared to non-persisters (12.9%), noted that they had three to five meetings with their counsellor. Only 5.3% of persisters, and 6.5% of dropouts, reported six to eight meetings. Similarly, just 6.4% of persisters, and 3.2% of non-persisters, indicated meeting with their counsellor more than eight times (see Table 17).

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Insert Table 17 here

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Table 16

Relationship of Student's Decision by Perceptions of Having Received Adequate Counselling and Career Direction or Not

Institute type	University				College			
	Enrolment status		Dropouts		Dropouts		Dropouts	
Groups								
	N		%		N		%	
1. Yes	60		63.8		19		55.9	
							76.2	
							13	
2. No	34		36.2		15		44.1	
							23.8	
							3	
							18.8	

Table 17

Relationship of Student's Decision by Number of Times Meeting with a High School Counsellor

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. Less than three	52	55.3	24	77.4	6	30.0	4	26.7
2. Three - five	31	33.0	4	12.9	9	45.0	8	53.3
3. Six - eight	5	5.3	2	6.5	5	25.0	2	13.3
4. More than eight	6	6.4	1	3.2	0	0.0	1	6.7

Relationship with High School Counsellor

Persisters and dropouts differed somewhat with regard to relationships with their high school counsellors, as indicated by perceptions of knowing them well or not. Overall, more persisters (61.2%), as compared to non-persisters (45.7%), noted knowing their counsellor well. In addition, more dropouts (54.3%), than persisters (33.8%), reported not knowing their counsellors well (see Table 18).

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Insert Table 18 here

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Having Unrealistic Expectations About University or Not

Persisters and non-persisters did vary substantially with regard to expectations about university. More persisters (52.8%), as compared to non-persisters (30.4%), indicated that life at university was what was expected. On the contrary, more dropouts (69.6%), as compared to persisters (47.2%), noted that life at university was not what was expected (see Table 19).

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Insert Table 19 here

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College StudentsLevel Three Grade Point Average

Generally, no pattern emerged in the reported Level Three grade point averages of persisters and non-persisters

Table 18

Relationship of Student's Decision by Knowing a High School Counsellor Well or Not

Institute type	University			College		
	Enrolment status		Persisters	Dropouts	Persisters	Dropouts
Groups			n	%	n	%
1. Yes	60	61.2	16	45.7	14	66.7
2. No	38	33.8	19	54.3	7	33.3

Table 19

Relationship of Student's Decision by Whether Life at Post-secondary was Expected or Not

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	67	52.8	14	30.4	19	63.3	10	47.6
2. No	60	47.2	32	69.6	11	36.7	11	52.4

to indicate that these groups differed greatly with regard to this variable. No member of either group reported an average of less than 55. Only 7.1% of persisters, and 4.8% of non-persisters, noted having an average of 55 to 60 while in Level Three. More persisters (25.0%), as compared to non-persisters (4.8%), reported an average of 61 to 65. On the contrary, more than twice the percentage of dropouts (57.1%), as compared to persisters (25.0%), indicated that they had obtained an average of 66 to 70. Persisters (21.4%), and dropouts (28.6%), differed slightly with regard to percentages of members reporting an average of 71 to 75, whereas 10.8% of persisters, and no non-persisters, noted having obtained an average of 76 to 80. As well, both groups differed only slightly with regard to percentages of members indicating an 81 to 85 percent average (persisters 7.1% and non-persisters 4.8%). Only 3.6% of persisters, and no non-persisters, reported having received an average of more than 85 while in Level Three (see Table 13).

#### Size of High School Attended

Results suggested that college persisters and dropouts differed with regard to size of high school attended. This was indicated by number of students in one's Level Three graduating class. More persisters, as compared to non-persisters, attended larger high schools. More specifically, the data showed that both groups differed little with regard to percentages of students who had less



than 10 students in their graduating class (persisters 8.0% and non-persisters 5.0%). Further, more dropouts (30.0%), than persisters (12.0%), noted attending a Level Three class with 10 to 15 members. On the other hand, slightly more persisters (20.0%), than non-persisters (15.0%), indicated that their were 16 to 20 students in their graduating class. More dropouts (25%), than persisters (8.0%), indicated 21 to 25 to be the size of their graduating class. Similarly, more dropouts (15.0%), than persisters (4.0%), noted that they had a graduating class of 26 to 30. As well, 10% of dropouts, as compared to 4.0% of persisters, reported their high school graduating class size to have been 31 to 35. However, 44.0% of persisters, as compared to 0.0% of non-persisters, noted that they had a Level Three graduating class of more than 35 (see Table 14).

#### High School Counsellor or Not

Results indicated that persisters and dropouts differed very little with regard to percentage of members having a high school counsellor or not. More persisters (69%), and dropouts (68.2%), noted having access to a school counsellor, whereas roughly only one third in each group (persisters 31.0% and non-persisters 31.8%) indicated not having access to such a resource (see Table 15).

#### Perceptions of High School Counsellor Effectiveness

Both groups varied very little with regard to perceptions of high school counsellor effectiveness, as

indicated by thoughts of having received adequate counselling and career direction or not. More students in each group, 76.2% of persisters and 81.2% of non-persisters, noted that they had attained adequate counselling and career direction, whereas only 23.8% of persisters, and 18.8% of non-persisters, indicated not having received such adequate services (see Table 16).

#### Number of Meetings with High School Counsellor

College dropouts and persisters varied little with regard to number of reported meetings with their high school counsellors, while in Level Three. For instance, 30.0% of persisters, as compared to 26.7% of non-persisters, indicated seeing their counsellor less than three times. In addition, 53.3% of dropouts, and 45.0% of persisters, noted seeing their counsellor three to five times. Meeting with a counsellor six to eight times, was reported by 25.0% of persisters and 13.3% of non-persisters. Further, only 6.7% of dropouts, as compared to no persisters, indicated seeing their counsellor more than eight times while in Level Three (see Table 17).

#### Relationship with High School Counsellor

Results indicated that knowing a high school counsellor well may have been associated with persistence in college. For instance, 66.7% of persisters, as compared to 46.7% of non-persisters, indicated knowing their high school counsellor well, whereas 53.0% of non-persisters, as

compared to 33.3% of persisters, reported not knowing their counsellor well (see Table 18).

#### Attainment of Unrealistic Expectations About College or Not

Results indicated that more persisters (63.3%), than non-persisters (47.6%), noted having realistic expectations about college life. Further, 52.4% of dropouts, as compared to 36.7% of persisters, noted having unrealistic expectations about life at college (see Table 19).

Research Question #3. Do rural college/university persisters and non-persisters differ with regard to factors related to their first year experiences such as: extent of academic integration; student/parental motivation and commitment; influence of post-secondary counselling services on them; satisfaction with their post-secondary experience; values; financial variables; extent of social integration; influence of stress; alcohol use; place of residence; and extent of support/encouragement received from family members, friends, and faculty members while attending college/university?

#### University Students

##### Academic Integration as Indicated by:

1. Academic performance. Results indicated that university persisters and dropouts differed with regard to post-secondary academic integration, as indicated by university average. For example, 43.6% of dropouts, as compared to only 7.4% of persisters, indicated having an

average of less than 55. Both groups differed only slightly with regard to percentage of students reporting an average of 55 to 60 (persisters 26.4% and non-persisters 30.8%). More persisters (25.6%), than non-persisters (12.8%), reported having an average of 61 to 65. Similarly, more persisters (16.5%), than dropouts (7.7%), indicated that they had an average of 66 to 70 while in university. As well, 14.0% of persisters, and only 5.1% of dropouts, reported 71 to 75 as being their average. Also, 7.4% of persisters, as compared to 0.0% of non-persisters, indicated having an average of 76 to 80. Further, 1.7% of persisters, and 0.0% of non-persisters, noted that they had obtained an average of 81 to 85. Only 0.8% of persisters, as compared to none of the non-persisters, noted that their post-secondary average was more than 85. Thus, more dropouts, as compared to persisters, obtained averages of 60 and below,

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Insert Table 20 here

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whereas more persisters, as compared to non-persisters, received averages of 66 and above (see Table 20).

2. Number of times seeking academic advice. Results indicated that persisters and non-persisters differed somewhat with regard to number of times seeking academic advice from faculty members. More than twice the percentage of non-persisters (26.7%), as compared to persisters

Table 20

Relationship of Student's Decision by Post-secondary Average

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. Less than 55	9	7.4	17	43.6	0	0.0	0	0.0
2. 55 - 60	32	26.4	12	30.8	1	4.3	0	0.0
3. 61 - 65	31	25.6	5	12.8	0	0.0	0	0.0
4. 66 - 70	20	16.5	3	7.7	6	26.1	2	20.0
5. 71 - 75	17	14.0	2	5.1	3	13.0	2	20.0
6. 76 - 80	9	7.4	0	0.0	4	17.4	2	20.0
7. 81 - 85	2	1.7	0	0.0	4	17.4	2	20.0
8. More than 85	1	0.8	0	0.0	5	21.7	2	20.0

(10.9%), indicated never seeking advice. On the contrary, over one half of the persisters (51.9%), and 35.6% of non-persisters, reported looking for advice one to five times. As well, 20.2% of persisters, as compared to 11.1% of non-persisters, noted six to ten times to be the frequency of visits to faculty members for academic advisement. Further, more non-persisters (26.7%), than persisters (17.1%), indicated seeking advice more than ten times (see Table 21).

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Insert Table 21 here

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Students'/Parents' Motivation and Commitment as Indicated by:

1. Decision on a program or area of study. Results indicated that persisters and dropouts varied minimally with regard to having decided, or not, on a program or area of study while at university or prior to attending. For instance, 83.1% of persisters, as compared to 83.7% of non-persisters, indicated such a decision had been made, whereas 16.9% of persisters, and 16.3% of non-persisters,

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Insert Table 22 here

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noted not having made such a commitment (see Table 22).

2. Thoughts of changing one's chosen program or area of study or not. Results indicated that persisters and

Table 21

Relationship of Student's Decision by Number of Times Seeking Advice from Faculty Members Regarding School Work

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. None	14	10.9	12	26.7	0	0.0	4	19.0
2. One - five	67	51.9	16	35.6	9	30.0	6	28.6
3. Six - ten	26	20.2	5	11.1	7	23.3	4	19.0
4. More than ten	22	17.1	12	26.7	14	46.7	7	33.3

Table 22

Relationship of Student's Decision by Whether or Not a Program or Area of Study was Decided Upon

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	108	83.1	36	83.7	27	90.0	16	76.2
2. No	22	16.9	7	16.3	3	10.0	5	23.8



non-persisters varied slightly with regard to thinking of changing their chosen program, or area of study, or not. For example, 55.4% of persisters, as compared to 50.0% of non-persisters, noted that they had thought of making a change, whereas 44.6% of persisters and 50.0% of non-

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Insert Table 23 here

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persisters had indicated more commitment to their programs or areas of study in that they had not thought of changing them (see Table 23).

3. Post-secondary aspirations. Findings indicated that persisters and dropouts differed notably with regard to level of post-secondary aspirations. More than twice the percentage of persisters (29.5%), as compared to non-persisters (14.5%), indicated that they wished to obtain only some post-secondary. As well, 48.9% of persisters, and 59.1% of non-persisters, noted that they wanted completion of a program. Further, three times the percentage of persisters (36.6%), as compared to non-persisters (11.4%), noted that they wished to obtain completion of a program and beyond (see Table 24).

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Insert Table 24 here

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Table 23

Relationship of Student's Decision by Thinking of Changing One's Program or Area of Study  
or Not

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. Yes	62	55.4	18	50.0	9	31.0	15	68.2
2. No	50	44.6	18	50.0	20	69.0	7	31.8

Table 24

Relationship of Student's Decision by Post-secondary Aspirations

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Part of a program	19	14.5	13	29.5	4	13.3	1	4.3
2. Completion of a program	64	48.9	26	59.1	20	66.7	10	43.5
3. More than completion of a program	48	36.6	5	11.4	6	20.0	12	52.2

4. Parental influence on post-secondary attendance decisions.

Mother/Female guardian. No substantial difference was observed between persisters and non-persisters with regard to the amount of influence their mothers/female guardians had on their decisions to attend university. For example, 2.5% of persisters, and 5.6% of non-persisters, indicated that their mothers/female guardians had no influence on their decision. Most members of each group noted that their mothers/female guardians had some influence on their decision (persisters 87.6% and non-persisters 86.1%). In addition, 9.9% of persisters, as compared to 8.3% of non-

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Insert Table 25 here

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persisters, indicated that their mothers/female guardians influenced their decisions very much (see Table 25).

Father/Male guardian. Results indicated no substantial difference between persisters and non-persisters with regard to extent of fathers'/male guardians' influence on university attendance decisions. For instance, 2.4% of persisters, and 7.9% of non-persisters, indicated that their fathers/male guardians had no influence. However, most members of each group (persisters 87.0% and non-persisters 86.8%) reported that their fathers/male guardians had some influence, whereas 10.6% of persisters, as compared to 5.3%

Table 25

Relationship of Student's Decision by Extent of Mother's/Female Guardian's Influence on His/Her  
Post-secondary Attendance Decision

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. No influence	3	2.5	2	5.6	1	4.5	0	0.0
2. Some influence	106	87.6	31	86.1	17	77.3	19	100.0
3. Very much influence	12	9.9	3	8.3	4	18.2	0	0.0

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Insert Table 26 here

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of non-persisters, noted that their fathers/male guardians had very much influence on their post-secondary attendance decision (see Table 26).

5. Importance parents/guardians placed on student's post-secondary graduation. Results indicated substantial differences between persisters and non-persisters with regard to importance their parents/guardians placed on their university graduation. More persisters (77.3%), than non-persisters (27.1%), indicated that their parents/guardians saw their graduating from university as important, whereas more non-persisters (72.9%) than persisters (22.7%) noted

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Insert Table 27 here

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that their parents/guardians did not see their graduation as important (see Table 27).

The Influence of Post-secondary Counselling Services as Indicated by:

1. Awareness of post-secondary counselling services. Persisters and non-persisters did not differ substantially with regard to percentage of members having knowledge of counselling services at university. Most students in each group, 79.2% of persisters and 97.8% of non-persisters,

Table 26

Relationship of Student's Decision by Extent of Father's/Male Guardian's Influence on His/Her Post-secondary Attendance Decision

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. No influence	3	2.4	3	7.9	3	11.1	0	0.0
2. Some influence	107	87.0	33	86.8	20	74.1	19	100.0
3. Very much influence	13	10.6	2	5.3	4	14.8	0	0.0

Table 27

Relationship of Student's Decision by Whether or Not One's Parents/Guardians Saw One's Post-secondary Graduation as Important

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	129	77.3	10	27.1	29	100.0	22	100.0
2. No	38	22.7	27	72.9	0	0.0	0	0.0



indicated being aware of such services, whereas only 20.8% of persisters, and 2.2% of non-persisters, indicated not having such awareness (see Table 28).

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Insert Table 28 here

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2. Willingness to use counselling services. Similar results were obtained with regard to percentages of each group indicating specified frequencies of meetings with university counsellors. For instance, 66.1% of persisters, as compared to 62.2% of non-persisters, indicated not seeing a counsellor at all. Seeing a counsellor once was reported by 12.9% of persisters and 13.3% of non-persisters. Similarly, 12.9% of persisters, and 15.6% of dropouts, noted seeing a counsellor twice. Counsellors were indicated to have received three visits from 5.6% of persisters and 2.2% of non-persisters. Only 0.8% of persisters, and no non-persisters, reported seeing a counsellor four times. In addition, only 1.6% of persisters, as compared to 6.7% of non-persisters, noted receiving counselling services more than four times (see Table 29).

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Insert Table 29 here

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3. Perceptions of post-secondary counsellor effectiveness. Results indicated that persisters and

Table 28

Relationship of Student's Decision by Having Awareness of Post-secondary Counselling Services or Not

Institute type	University				College			
	Enrolment status		Dropouts		Dropouts		Dropouts	
	Persisters	Dropouts	Persisters	Dropouts	Persisters	Dropouts	Persisters	Dropouts
Groups	N	%	N	%	N	%	N	%
1. Yes	103	79.2	45	97.8	30	100.0	20	95.2
2. No	27	20.8	1	2.2	0	0.0	1	4.8

Table 29

Relationship of Student's Decision by Number of Meetings With Post-secondary Counsellor(s)

Institute type	University				College			
	Enrolment status		Enrolment status		Enrolment status		Enrolment status	
Groups	Persisters		Dropouts		Persisters		Dropouts	
	n	%	n	%	n	%	n	%
1. None	82	66.1	28	62.2	7	23.3	15	71.4
2. One	16	12.9	6	13.3	8	26.7	3	14.3
3. Two	16	12.9	7	15.6	5	16.7	3	14.3
4. Three	7	5.6	1	2.2	4	13.3	0	0.0
5. Four	1	0.8	0	0.0	2	6.7	0	0.0
6. More than four	2	1.6	3	6.7	4	13.3	0	0.0

non-persisters were not differentiated substantially by perceptions of university counsellor effectiveness, as indicated by thoughts of having obtained adequate counselling and career direction or not. Most members of each group, 69.7% of persisters and 73.9% of non-persisters, reported thinking that they had not received adequate services, whereas 30.3% of persisters, and 26.1% of non-persisters, felt that they had (see Table 30).

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Insert Table 30 here

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#### 4. Relationship with post-secondary counsellor(s).

Findings suggested that university persisters and non-persisters were not substantially differentiated by relationships with university counsellor(s), as indicated by their perceptions of knowing them well or not. Most members of each group, 93.5% of persisters and 93.5% of non-persisters, reported not knowing a counsellor well, whereas only 6.5% of each group noted knowing a counsellor well (see Table 31).

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Insert Table 31 here

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#### Satisfaction With the Post-secondary Experience as Noted by:

1. Relevance of post-secondary courses to student goals. University persisters and non-persisters differed

Table 30

Relationship of Student's Decision by Perceptions of Having Received Adequate Counselling and Career Direction or Not While at Post-secondary

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. Yes	27	30.3	12	26.1	14	56.0	7	63.6
2. No	62	69.7	34	73.9	11	44.0	4	36.4

Table 31

Relationship of Student's Decision by Perceptions by Having Known a Post-secondary Counsellor Well  
or Not

Institute type	University				College			
	Enrolment status		Dropouts		Dropouts		Dropouts	
	Groups	n	%	n	%	n	%	n
1. Yes		8	6.5	3	6.5	12	40.0	0
2. No		115	93.5	43	93.5	18	60.0	22

substantially with regard to perceptions of the relevance of their courses to their goals. More persisters (73.8%), as compared to non-persisters (40.0%), indicated that their courses were relevant to their goals, whereas 60.0% of dropouts, and 26.2% of persisters, noted that their

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Insert Table 32 here

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university courses were not relevant to their goals (see Table 32).

2. Perceptions of being satisfied with the post-secondary environment or not. A substantial difference was observed between persisters and dropouts with regard to percentages of members indicating being satisfied with their university environment or not. More persisters (77.7%), as compared to non-persisters (44.4%), indicated being satisfied, whereas more non-persisters (55.6%), than persisters (22.3%), reported not being satisfied with their

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Insert Table 33 here

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university environment (see Table 33).

Values as Indicated by:

1. Importance of money. Persisters and non-persisters did not differ substantially with regard to percentage of group members placing value on alot of money. Most

Table 32

Relationship of Student's Decision by Whether or Not Post-secondary Courses Were Relevant to One's Goals

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	93	73.8	18	40.0	23	82.1	16	72.7
2. No	33	26.2	27	60.0	5	17.9	6	27.3



Table 33

Relationship of Student's Decision by Being Satisfied With the Post-secondary Environment or Not

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. Yes	101	77.7	20	44.4	23	76.7	15	68.2
2. No	29	22.3	25	55.6	7	23.3	7	31.8

persisters (85.0%), and non-persisters (74.4%), indicated that making lots of money was important to them, whereas 15.0% of persisters, and 25.6% of non-persisters, did not

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Insert Table 34 here

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place importance on obtaining such monetary success (see Table 34).

2. Importance of a prestigious job. Persisters and dropouts varied minimally with regard to importance placed on a prestigious job. Most members in each group, 86.4% of persisters and 79.1% of non-persisters, noted that having a prestigious job was important to them, whereas 13.6% of persisters, and 20.9% of non-persisters, did not have such a value (see Table 35).

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Insert Table 35 here

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3. Importance of being able to financially help one's parents. Persisters and non-persisters varied minimally with regard to importance they placed on ability to financially help their parents. Although most members of each group placed value on being able to help their parents, slightly more non-persisters (84.1%), as compared to persisters (71.4%), indicated having such a value. As well, 28.6% of persisters, as compared to 15.9% of non-persisters,

Table 34

Relationship of Student's Decision by Perception of Money as Important or Not

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	108	85.0	32	74.4	20	80.0	16	76.2
2. No	19	15.0	11	25.6	5	20.0	5	23.8

Table 35

Relationship of Student's Decision by Perception of a Prestigious Job as Important or Not

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	108	86.4	34	79.1	22	88.0	15	75.0
2. No	17	13.6	9	20.9	3	12.0	5	25.0

reported seeing the ability to financially help their parents as not important (see Table 36).

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Insert Table 36 here

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Financial Variables:

1. Financial concern. Persisters and non-persisters did not vary substantially with regard to amount of concern expressed about their ability to finance their university education. For instance, 13.2% of persisters, as compared to 19.6% of non-persisters, indicated no concern. Over one half of the persisters (65.9%), and almost one half of the non-persisters (47.8%), reported some concern about their ability to finance their education, whereas 20.9% of persisters, as compared to 32.6% of non-persisters, indicated major concern (see Table 37).

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Insert Table 37 here

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2. Main source of finance of post-secondary education. Results indicated that persisters and non-persisters did not differ substantially with regard to indicated main source of finance of university education. For example, 25.2% of persisters, as compared to 26.1% of non-persisters, reported parents/guardians to be their main source. Only 4.3% of non-persisters, and no persisters, noted a scholarship to be

Table 36

Relationship of Student's Decision by Seeing One's Ability to Financially Help One's Parents as Important or Not

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	90	71.4	37	84.1	19	86.4	19	86.4
2. No	36	28.6	7	15.9	3	13.6	3	13.6

Table 37

Relationship of Student's Decision by Extent of Concern About One's Ability to Finance One's Post-secondary Education

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. None	17	13.2	9	19.6	4	13.3	6	26.1
2. Some concern	85	65.9	22	47.8	16	53.3	2	8.7
3. Major concern	27	20.9	15	32.6	10	33.3	15	65.2

their primary source. Over one half of persisters (70.2%), as compared to 63.0% of non-persisters, reported Canada Student Loan to be their main source, whereas no persisters, or non-persisters, noted a loan from another source to be their primary means. Savings was reported by very few persisters (3.1%), and non-persisters (2.2%), to be their main source of finance. No members of either group indicated that earnings from work, while at university, or unemployment insurance benefits, was their primary source. In addition, only 1.5% of persisters, as compared to 4.3% of

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Insert Table 38 here

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non-persisters, reported their main source to be means other than those provided on the survey instrument (see Table 38).

3. Number of hours worked per week. Reported number of hours worked per week, at a job, did not differentiate persisters and non-persisters. Most members of each group, 90.8% of persisters and 80.0% of non-persisters, indicated not working any hours, whereas 6.1% of persisters, as compared to 6.7% of non-persisters, reported working 1 to 10 hours. Only 1.0% of persisters, and 4.4% of non-persisters, worked 11 to 20 hours per week, whereas 21 to 30 hours of work, at a job, was reported by 2.0% of persisters and 8.9% of non-persisters. No members of either group noted working 31 to 40 hours or more (see Table 39).



Table 38

Relationship of Student's Decision by Main Source of Finance of Post-secondary Education

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Parents/Guardians	33	25.2	12	26.1	0	0.0	1	4.3
2. Scholarship	0	0.0	2	4.3	0	0.0	1	4.3
3. Canada Student Loan	92	70.2	29	63.0	19	63.3	6	26.1
4. Other loan	0	0.0	0	0.0	0	0.0	0	0.0
5. Savings	4	3.1	1	2.2	2	6.7	5	21.7
6. Work while at post-secondary	0	0.0	0	0.0	1	3.3	0	0.0
7. Unemployment insurance benefits	0	0.0	0	0.0	8	26.7	10	43.5
8. Other	2	1.5	2	4.3	0	0.0	0	0.0

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Insert Table 39 here

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Social Integration as Indicated by:

1. Involvement in campus organizations/clubs.

Persisters and non-persisters varied little with regard to participation in campus clubs/organizations. Most members of each group (persisters 81.5% and non-persisters 71.7%) indicated not taking part in such activities, whereas 18.5% of persisters, and 28.3% of non-persisters, reported involvement (see Table 40).

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Insert Table 40 here

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2. Informal discussions with faculty members.

According to the data obtained, persisters and non-persisters differed somewhat with regard to frequencies of informal discussions with faculty members. More non-persisters (30.4%), as compared to persisters (18.3%), noted no such meetings. On the contrary, slightly more persisters (40.5%), than non-persisters (34.8%), indicated having such meetings less than five times. Further, 23.8% of persisters, as compared to 26.1% of non-persisters, noted meeting with faculty members, informally, five to ten times. As well, 17.5% of persisters, and 8.7% of non-persisters, indicated talking with faculty members, outside of the

Table 39

Relationship of Student's Decision by Number of Hours Worked Per Week at a Job

Institute type		University				College			
Enrolment status		Persisters		Dropouts		Persisters		Dropouts	
Groups		n	%	n	%	n	%	n	%
1.	None	89	90.8	36	80.0	25	83.3	20	87.0
2.	1 - 10	6	6.1	3	6.7	2	6.7	3	13.0
3.	11 - 20	1	1.0	2	4.4	0	0.0	0	0.0
4.	21 - 30	2	2.0	4	8.9	1	3.3	0	0.0
5.	31 - 40	0	0.0	0	0.0	1	3.3	0	0.0
6.	More than 40	0	0.0	0	0.0	1	3.3	0	0.0

Table 40

Relationship of Student's Decision by Involvement in Campus Organizations/Clubs or Not

Institute type	University				College			
	Enrolment status		Dropouts		Dropouts		Dropouts	
Groups	Persisters		Dropouts		Persisters		Dropouts	
	n	%	n	%	n	%	n	%
1. Yes	24	18.5	13	28.3	17	60.7	5	22.7
2. No	106	81.5	33	71.7	11	39.3	17	77.3

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Insert Table 41 here

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classroom, more than ten times (see Table 41).

3. Having many friends at post-secondary or not.

Persisters and non-persisters differed minimally with regard to having had many friends or not. Most members of each group indicated having had many friends at university (persisters 91.5% and non-persisters 84.4%), whereas only 8.5% of persisters, and 15.6% of non-persisters, reported

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Insert Table 42 here

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not having had many friends at university (see Table 42).

4. Perceptions of feeling at home in the post-secondary environment. Persisters and dropouts differed substantially with regard to percentage of members feeling at home in the post-secondary environment or not. More than twice the percentage of persisters (64.6%), as compared to non-persisters (28.9%), indicated feeling at home, whereas more than twice the percentage of dropouts (71.1%), as compared to persisters (35.4%), reported not feeling at home (see Table 43).

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Insert table 43 here

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Table 41

Relationship of Student's Decision by Frequency of Informal Meetings With Faculty Members

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. None	23	18.3	14	30.4	2	6.7	5	23.8
2. Less than five	51	40.5	16	34.8	7	23.3	6	28.6
3. Five - ten	30	23.8	12	26.1	5	16.7	3	14.3
4. More than ten	22	17.5	4	8.7	16	53.3	7	33.3

Table 42

Relationship of Student's Decision by Having Many Friends at Post-secondary or Not

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	119	91.5	38	84.4	27	90.0	23	100.0
2. No	11	8.5	7	15.6	3	10.0	0	0.0

Table 43

Relationship of Student's Decision by Perceptions of Feeling at Home in the Post-secondary Environment or Not

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	84	64.6	13	28.9	20	66.7	15	65.2
2. No	46	35.4	32	71.1	10	33.3	8	34.8



#### 5. Relationship with roommates.

First roommate. Results indicated that persisters and non-persisters varied minimally with regard to relationships with their first roommates. For instance, 3.7% of persisters, and 4.9% of non-persisters, described their relationship with their first roommate as unfriendly. Further, 1.9% of persisters, as compared to 2.4% of non-persisters, indicated that they would describe their relationship as distant. Both groups varied very little with regard to percentages of members describing their relationship as okay (persisters 10.2% and non-persisters 9.8%). Almost twice the percentage of non-persisters (31.7%), as compared to persisters (16.7%), noted that they would describe their relationship as friendly. Slightly more persisters (67.6%), than non-persisters (51.2%),

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Insert Table 44 here

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indicated that they would describe their relationship with their first roommate as very close (see Table 44).

Second roommate. No direct association between described relationship with second roommate and university persistence was noted. For instance, 5.1% of persisters, as compared to 0.0% of non-persisters, indicated an unfriendly relationship. On the contrary, 8.7% of non-persisters, as opposed to 0.0% of persisters, reported a distant

Table 44

Relationship of Student's Decision by Relationship With First Roommate

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Unfriendly	4	3.7	2	4.9	0	0.0	0	0.0
2. Distant	2	1.9	1	2.4	0	0.0	0	0.0
3. Okay	11	10.2	4	9.8	1	6.7	0	0.0
4. Friendly	18	16.7	13	31.7	1	6.7	10	55.6
5. Very close	73	67.6	21	51.2	13	86.7	8	44.4

relationship. Both groups varied little with regard to percentages describing their relationships as okay (persisters 8.5% and non-persisters 13.0%). Slightly more persisters (44.1%), as compared to non-persisters (30.4%), noted a friendly relationship, whereas more non-persisters (47.8%), than persisters (42.4), indicated a very close relationship with their second roommate (see Table 45).

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Insert Table 45 here

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6. Extent of involvement in orientation. Overall, results indicated that persisters attended more days of orientation than did non-persisters. For example, 82.9% of non-persisters, as compared to 54.5% of persisters, reported not attending any days of orientation. Slightly more persisters (6.3%), than non-persisters (4.9%), noted attending one day. Similarly, 8.0% of persisters, as compared to 2.4% of non-persisters, indicated attending two days of activities. Further, 17.0% of persisters noted attending three days, whereas only 9.8% of non-persisters reported attending this many days. Also, 5.4% of persisters, and no non-persisters, indicated having attended four days. As well, 3.6% of persisters, as compared to no non-persisters, noted five days of involvement, whereas 5.4% of persisters, and no dropouts, reported more than five days of involvement in orientation activities (see Table 46).

Table 45

Relationship of Student's Decision by Relationship With Second Roommate

Institute type	University				College			
Enrolment status	Persisters		Dropouts		Persisters		Dropouts	
Groups	n	%	n	%	n	%	n	%
1. Unfriendly	3	5.1	0	0.0	0	0.0	0	0.0
2. Distant	0	0.0	2	8.7	0	0.0	1	25.0
3. Okay	5	8.5	3	13.0	0	0.0	2	50.0
4. Friendly	26	44.1	7	30.4	1	12.5	0	0.0
5. Very close	25	42.4	11	47.8	7	87.5	1	25.0

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Insert Table 46 here

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Influence of Stress as Indicated by:

1. Experiencing much stress or not. Results indicated that persisters and non-persisters differed little with regard to percentages of group members reporting having experienced much stress or not. Most members of each group (persisters 71.3% and non-persisters 88.9%) indicated experiencing stress, whereas only 28.7% of persisters, and 11.1% of non-persisters, noted not experiencing much stress (see Table 47).

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Insert Table 47 here

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2. Difficulty coping with stress or not. Substantial differences were reported between persisters and non-persisters with regard to percentages of members indicating having experienced difficulty coping with stress or not while at university. More non-persisters (72.5%), than persisters (47.4%), noted having had difficulty, whereas more persisters (52.6%), as compared to dropouts (27.5%),

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Insert Table 48 here

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indicated not having had such difficulty (see Table 48).

Table 46

Relationship of Student's Decision by Number of Orientation Days Attended

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. None	61	54.5	34	82.9	6	24.0	16	72.7
2. One	7	6.3	2	4.9	7	28.0	2	9.1
3. Two	9	8.0	1	2.4	2	8.0	0	0.0
4. Three	19	17.0	4	9.8	5	20.0	0	0.0
5. Four	6	5.4	0	0.0	1	4.0	0	0.0
6. Five	4	3.6	0	0.0	1	4.0	2	9.1
7. More than five	6	5.4	0	0.0	3	12.0	2	9.1

Table 47

Relationship of Student's Decision by Having Experienced Much Stress or Not While at Post-secondary

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. Yes	92	71.3	40	88.9	25	86.2	13	56.5
2. No	37	28.7	5	11.1	4	13.8	10	43.5

Table 48

Relationship of Student's Decision by Having Experienced Difficulty Coping With Stress or Not While at Post-secondary

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Yes	46	47.4	29	72.5	11	42.3	5	31.3
2. No	51	52.6	11	27.5	15	57.7	11	68.6



### Alcohol Use

Frequency of alcohol use did not differentiate persisters and non-persisters at the universities surveyed. For instance, 20.3% of persisters, as compared to 25.6% of non-persisters, indicated that they never used alcohol while at university. Approximately one third of each group (persisters 33.6% and non-persisters 32.6%) reported using alcohol on special occasions. Both groups differed very little with regard to percentages of members indicating using alcohol once per month or once per week (persisters 16.4% and non-persisters 14.0%). In addition, 10.2% of persisters, and 4.7% of non-persisters, reported using alcohol twice per week, whereas more than twice per week was the frequency of use indicated by 3.1% of persisters and 9.3% of non-persisters (see Table 49).

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Insert Table 49 here

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### Place of Residence While at Post-secondary

Findings indicated some differences between persisters and non-persisters with regard to percentages of members in each group reporting various types of university accommodations. More persisters (41.6%), than non-persisters (31.0%), indicated having stayed in a residence, whereas 2.4% of non-persisters, and no persisters, reported having lived at home. In addition, more persisters (10.4%),

Table 49

Relationship of Student's Decision by Frequency of Alcohol Use While at Post-secondary

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Never	26	20.3	11	25.6	0	0.0	2	8.7
2. On special occasions	43	33.6	14	32.6	8	26.7	7	30.4
3. Once a month	21	16.4	6	14.0	6	20.0	4	17.4
4. Once a week	21	16.4	6	14.0	9	30.0	7	30.4
5. Twice a week	13	10.2	2	4.7	3	10.0	0	0.0
6. More than twice a week	4	3.1	4	9.3	4	13.3	3	13.0

than dropouts (0.0%), noted having lived off-campus with relatives. However, more dropouts (66.7%) reported having lived off-campus, renting house, room, or apartment, than did persisters (48.0%) (see Table 50).

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Insert Table 50 here

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Extent of Support/Encouragement Received from Others:

1. Mother/Female guardian. Persisters and dropouts differed with regard to the amount of support/encouragement received from their mothers/female guardians. Slightly more dropouts (2.4%), than persisters (1.7%), indicated no support/encouragement. Similarly, more non-persisters (14.3%), as compared to persisters (2.5%), noted having received very little support/encouragement regarding their university attendance. Further, more non-persisters (16.7%), as compared to persisters (10.1%), indicated some support/encouragement regarding their attendance. However, more persisters (85.7%), as compared to non-persisters (66.7%), noted having received very much

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Insert Table 51 here

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support/encouragement from their mothers/female guardians (see Table 51).

2. Father/Male guardian. Results indicated a positive

Table 50

Relationship of Student's Decision by Post-secondary Accommodations

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. Residence	52	41.6	13	31.0	13	52.0	15	78.9
2. Home	0	0.0	1	2.4	2	8.0	0	0.0
3. Off campus with relatives	13	10.4	0	0.0	3	12.0	0	0.0
4. Off campus renting apartment, room, or house	60	48.0	28	66.7	7	28.0	4	21.1

Table 51

Relationship of Student's Decision by Extent of Support/Encouragement Given by One's Mother/Female Guardian Regarding One's Post-secondary Attendance

Institute type	University				College			
Enrolment status	Persisters		Dropouts		Persisters		Dropouts	
Groups	n	%	n	%	n	%	n	%
1. None	2	1.7	1	2.4	0	0.0	0	0.0
2. Very little	3	2.5	6	14.3	3	10.7	1	4.5
3. Some	12	10.1	7	16.7	4	14.3	3	13.6
4. Very much	102	85.7	28	66.7	21	75.0	18	81.8

direct relationship between extent of support/encouragement received from fathers/male guardians and university persistence. Slightly more non-persisters (2.5%), as compared to persisters (1.8%), indicated no support/encouragement. Similarly, more non-persisters (15.0%), than persisters (0.0%), noted very little support/encouragement. On the contrary, more persisters (20.7%), as opposed to non-persisters (15.0%), indicated having obtained some support/encouragement regarding their attendance at university. As well, more persisters (77.5%), than dropouts (67.5), reported having received very much

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Insert Table 52 here

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support/encouragement from their fathers/male guardians (see Table 52).

3. Brother(s). Results suggested somewhat of a direct positive relationship between extent of brother's support/encouragement given, regarding one's attendance at university, and university persistence. More non-persisters (15.0%), than persisters (7.6%), indicated having received no support/encouragement. Similarly, more dropouts (12.5%), as compared to persisters (10.9%), noted obtaining very little support/encouragement. However, more persisters (42.4%), than non-persisters (32.5%), indicated some support/encouragement. Likewise, more persisters (39.1%),

Table 52

Relationship of Student's Decision by Extent of Support/Encouragement Given by One's Father/Male Guardian Regarding One's Post-secondary Attendance

Institute type	University				College			
Enrolment status	Persisters		Dropouts		Persisters		Dropouts	
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. None	2	1.8	1	2.5	1	4.2	0	0.0
2. Very little	0	0.0	6	15.0	4	16.7	1	4.3
3. Some	23	20.7	6	15.0	4	16.7	9	39.1
4. Very much	86	77.5	27	67.5	15	62.5	13	56.5

than non-persisters (35.0%), noted having received very much support/encouragement from their brother(s) regarding their attendance at university (see Table 53).

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Insert Table 53 here

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4. Sister(s). No relationship between amount of support/encouragement received from sister(s), regarding one's university attendance, and persistence was indicated. Both groups varied minimally with regard to percentages of members indicating having received no support/encouragement (persisters 5.7% and non-persisters 6.7%). Similarly, 9.1% of persisters, as compared to 6.7% of non-persisters, noted very little support/encouragement. Slightly more non-persisters (40.0%), than persisters (31.8%), indicated having received some support/encouragement. On the contrary, slightly more persisters (53.4%), than non-persisters (46.7%), reported to have obtained very much

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Insert Table 54 here

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support/encouragement from their sister(s) regarding their university attendance (see Table 54).

5. Relative(s). Findings suggested a positive direct relationship between extent of support/encouragement received from relative(s), regarding one's university



Table 53

Relationship of Student's Decision by Extent of Support/Encouragement Given by One's Brother(s)  
Regarding One's Post-secondary Attendance

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. None	7	7.6	6	15.0	5	17.9	1	5.3
2. Very little	10	10.9	7	12.5	8	28.5	2	10.5
3. Some	39	42.4	13	32.5	4	14.3	2	10.5
4. Very much	36	39.1	14	35.0	11	39.3	14	73.7

Table 54

Relationship of Student's Decision by Extent of Support Encouragement Given by One's Sister(s)  
Regarding One's Post-secondary Attendance

Institute type	University				College			
Enrolment status	Persisters		Dropouts		Persisters		Dropouts	
Groups	n	%	n	%	n	%	n	%
1. None	5	5.7	2	6.7	5	20.0	0	0.0
2. Very little	8	9.1	2	6.7	1	4.0	1	4.8
3. Some	28	31.8	12	40.0	9	36.0	5	23.8
4. Very much	47	53.4	14	46.7	10	40.0	15	71.4

attendance, and persistence. More non-persisters (18.2%), than persisters (5.4%), noted no support/encouragement. Similarly, slightly more non-persisters (15.9%), than persisters (11.7%), indicated having received very little support/encouragement. On the contrary, slightly more persisters (37.8%), as compared to non-persisters (34.1%), indicated getting some support/encouragement regarding their attendance. Likewise, more persisters (45.0%), than non-persisters (31.8%), noted to have received very much support/encouragement (see Table 55).

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Insert Table 55 here

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6. Friend(s). Results indicated no relationship between extent of support/encouragement received from friend(s), regarding their university attendance, and persistence. More non-persisters (11.9%), than persisters (1.8%), noted no support/encouragement. However, more persisters (10.9%), than non-persisters (7.1%), indicated having received very little support/encouragement. More non-persisters (42.9%), as compared to persisters (36.4%), reported receiving some support/encouragement, whereas 50.9% of persisters, as opposed to 38.1% of non-persisters, noted

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Insert Table 56 here

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Table 55

Relationship of Student's Decision by Extent of Support Given by One's Relative(s) Regarding One's Post-secondary Attendance

Institute type	University				College			
Enrolment status	Persisters		Dropouts		Persisters		Dropouts	
Groups	n	%	n	%	n	%	n	%
1. None	6	5.4	8	18.2	5	18.5	0	0.0
2. Very little	13	11.7	7	15.9	3	11.1	5	23.8
3. Some	42	37.8	15	34.1	11	40.7	6	28.6
4. Very much	50	45.0	14	31.8	8	29.6	10	47.6

Table 56

Relationship of Student's Decision by Extent of Support/Encouragement Given by One's Friend(s)  
Regarding One's Post-secondary Attendance

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. None	2	1.8	5	11.9	4	14.3	0	0.0
2. Very little	12	10.9	3	7.1	4	14.3	3	14.3
3. Some	40	36.4	18	42.9	5	17.9	5	23.8
4. Very much	56	50.9	16	38.1	15	53.6	13	61.9

obtaining very much support/encouragement from friend(s) regarding university attendance (see Table 56).

7. Post-secondary counsellor(s). Results indicated somewhat of a positive direct relationship between extent of support/encouragement, received from one's post-secondary counsellor, regarding university attendance, and persistence. Slightly more non-persisters (37.2%), as compared to persisters (28.0%), indicated receiving no support/encouragement. Similarly, slightly more non-persisters (20.9%), than persisters (17.2%), reported very little support/encouragement. On the contrary, 23.2% of persisters, as compared to 18.6% of non-persisters, indicated receiving some support/encouragement. Further, more persisters (31.2%), than non-persisters (23.3%), noted

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Insert Table 57 here

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receiving very much support/encouragement (see Table 57).

8. Post-secondary advisor(s). Findings suggested a direct positive relationship between amount of support/encouragement, regarding university attendance, received from a university advisor and university attendance. More dropouts (20.9%), than persisters (14.9%), reported no support/encouragement. Similarly, 23.3% of non-persisters, as compared to 20.8% of persisters, noted obtaining very little support/encouragement. In addition,

Table 57

Relationship of Student's Decision by Extent of Support/Encouragement Given by One's Post-secondary Counsellor(s) Regarding One's Post-secondary Attendance

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	n	%	n	%	n	%	n	%
1. None	26	28.0	16	37.2	5	20.8	4	19.0
2. Very little	16	17.2	9	20.9	2	8.3	4	19.0
3. Some	22	23.2	8	18.6	4	16.7	4	19.0
4. Very much	29	31.2	10	23.3	13	54.2	9	42.9

slightly more non-persisters (34.9%), as compared to persisters (29.7%), indicated having received some support/encouragement. On the contrary, more persisters (34.7%), than non-persisters (20.9%), indicated having

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Insert Table 58 here

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received very much support/encouragement (see Table 58).

9. Post-secondary instructor(s). Results suggested a direct positive association between extent of support/encouragement, regarding university attendance, received from university instructor(s) and university persistence. More non-persisters (24.4%), as compared to persisters (18.6%), indicated receiving no support/encouragement. Similarly, slightly more non-persisters (20.0%), as opposed to persisters (19.6%), reported obtaining very little support/encouragement. On the contrary, slightly more persisters (34.3%), than non-persisters (31.4%), indicated receiving some support/encouragement. In addition, more persisters (27.5%), as compared to non-persisters (24.4%), noted

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Insert Table 59 here

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obtaining very much support/encouragement (see Table 59).



Table 58

Relationship of Student's Decision by Extent of Support/Encouragement Given by One's Post-secondary Advisor Regarding One's Post-secondary Attendance

Institute type	University				College			
	Enrolment status		Dropouts		Dropouts		Dropouts	
	Groups	$\bar{X}$	$s^2$	$\bar{X}$	$\bar{X}$	$s^2$	$\bar{X}$	$s^2$
1. None	15	14.9	9	20.9	5	21.7	4	23.5
2. Very little	21	20.8	10	23.3	1	4.3	2	11.8
3. Some	30	29.7	15	34.9	5	21.7	2	11.8
4. Very much	35	34.7	9	20.9	12	52.2	9	52.9

Table 59

Relationship of Student's Decision by Extent of Support/Encouragement given by One's Post-secondary Instructor(s) Regarding One's Post-secondary Attendance

Institute type	University				College			
	Enrolment status		Dropouts		Dropouts		Dropouts	
Groups	Persisters		Dropouts		Persisters		Dropouts	
	n	%	n	%	n	%	n	%
1. None	19	18.6	11	24.4	1	4.2	4	17.4
2. Very little	20	19.6	9	20.0	1	4.2	0	0.0
3. Some	35	34.3	14	31.4	8	33.3	6	26.1
4. Very much	28	27.5	11	24.4	14	58.3	13	56.5

### College Students

#### Academic Integration as Indicated by:

1. Academic performance. College students varied minimally with regard to academic performance. Thus, student persistence did not seem to be associated with academic integration as indicated by college average. No members of either group indicated an average of less than 55. Only 4.3% of persisters, and no non-persisters, reported a college average of 55 to 60. In addition, 61 to 65 was not noted by any members of either group as being their college average. Slightly more persisters (26.1%), as compared to non-persisters (20.0%), indicated that they had received an average of 66 to 70. On the contrary, slightly more non-persisters (20.0%), than persisters (13.0%), noted having received an average of 71 to 75. As well, 20.0% of persisters, and 17.4% of non-persisters, reported a college average of 76 to 80. In addition, a similar percentage of each group indicated having obtained a college average of 81 to 85 (persisters 17.4% and non-persisters 20.0%). However, slightly more persisters (21.7%), than non-persisters (20.0%), reported that they had received a college average of more than 85 (see Table 20).

2. Number of times seeking academic advice. College persisters and non-persisters varied with regard to frequency of visits to faculty members for academic advice. More non-persisters (19.0%), than persisters (0.0%),

reported never seeking such advice. Both groups varied little with regard to percentage of members seeking academic advice one to five times (persisters 30.0% and non-persisters 28.6%). Similarly, 23.3% of persisters, as compared to 19.0% of non-persisters, noted looking for advice six to ten times. Almost one half of the persisters (46.7%), as opposed to one third (33.3%) of the non-persisters, indicated seeking academic advisement from instructors more than ten times (see Table 21).

Students'/Parents' Motivation and Commitment as Indicated by:

1. Decision on a program or area of study. This variable did not differentiate college persisters and non-persisters. More students in each group (persisters 90.0% and non-persisters 76.2%) reported having decided upon a program or area of study, whereas only 10.0% of persisters, and 23.8% of non-persisters, indicated not having made such a commitment (see Table 22).

2. Thoughts of changing one's chosen program or not. Results indicated that persisters and non-persisters varied greatly with regard to having thoughts of changing chosen programs or areas of study or not. More than twice the percentage of non-persisters (68.2%), as compared to persisters (31.0%), indicated having thoughts of changing their chosen program or area of study, whereas more than twice the percentage of persisters (69.0%), as opposed to

non-persisters (31.8%), reported not having such thoughts (see Table 23).

3. Post-secondary aspirations. Persisters and non-persisters differed with regard to post-secondary aspirations. Slightly more persisters (13.3%), as compared to non-persisters (4.3%), indicated that they wished to attain some post-secondary. More persisters (66.7%), than non-persisters (43.5%), noted wanting completion of a program. On the contrary, more non-persisters (52.2%), as compared to persisters (20.0%), indicated aspiring to completion of a program and beyond (see Table 24).

Parental influence on post-secondary attendance decision.

Mother/Female guardian. Persisters and non-persisters varied somewhat with regard to amount of influence mothers/female guardians had on their college attendance decisions, however no direct relationship between this variable and persistence was indicated. More persisters (4.5%), than non-persisters (0.0%), indicated that their mothers/female guardians had no influence on their decisions. On the contrary, more non-persisters (100.0%), as compared to persisters (95.5%), reported that their mothers/female guardians had some influence on their decisions to attend. In addition, 18.2% of persisters, as compared to no non-persisters, noted that their mothers/female guardians influenced their decisions very

much (see Table 25).

Father/Male guardian. Persisters and non-persisters varied somewhat with regard to extent of fathers'/male guardians' influence on college attendance decisions. However, there seemed to be no direct relationship between the extent of influence and persistence. For instance, 11.0% of persisters, as compared to no non-persisters, indicated that their fathers/male guardians had no influence on their decisions, whereas most members of each group (persisters 74.1% and non-persisters 100.0%) reported that their fathers/male guardians had some influence. In addition, 14.8% of persisters, as compared to 0.0% of non-persisters, noted that their fathers had very much influence (see Table 26).

5. Importance parents/guardians placed on student's post-secondary graduation. Persisters and non-persisters did not differ with regard to whether or not their parents/guardians saw their post-secondary graduation as being important. All persisters and non-persisters noted that their parents/guardians saw their graduation from college as being important (see Table 27).

The Influence of Post-secondary Counselling Services as Indicated by:

1. Awareness of post-secondary counselling services. Persisters and non-persisters varied minimally with regard to awareness of counselling services at college. Most

students in each group (persisters 100.0% and non-persisters 95.2%) indicated knowing about the services, whereas only 4.8% of non-persisters, and no non-persisters, reported not being aware (see Table 28).

2. Willingness to use counselling services. Results indicated that persisters and non-persisters differed a great deal with regard to willingness to use counselling services, as indicated by reported numbers of meetings with counsellors. Overall, persisters seemed to have more meetings with counsellors than did non-persisters. For instance, 71.4% of non-persisters, as compared to 23.3% of persisters, indicated not seeing a counsellor at all. Seeing a counsellor once was reported by 26.7% of persisters and 14.3% of non-persisters. In addition, 16.7% of persisters, and 14.3% of non-persisters, noted meeting with a counsellor two times. Further, 13.3% of persisters, as compared to no non-persisters, indicated seeing a counsellor three times. Similarly, 6.7% of persisters, and 0.0% of non-persisters, noted obtaining counselling services four times. As well, 13.3% of persisters, as compared to no non-persisters, reported meeting with a college counsellor more than four times (see Table 29).

3. Perceptions of post-secondary counsellor effectiveness. College persisters and non-persisters were not differentiated by perceptions of college counsellor effectiveness, as indicated by thoughts of having received

adequate counselling and career direction or not. More than one half of each group (persisters 56.0% and non-persisters 63.6%) reported thinking that they had received adequate services, whereas 44.0% of persisters, and 36.4% of non-persisters, did not think so (see Table 30).

4. Relationship with post-secondary counsellor.

Results indicated that college persisters and non-persisters varied substantially with regard to relationships with college counsellors, as indicated by perceptions of knowing them well or not. More dropouts (100.0%), as compared to persisters (60.0%), reported not knowing a counsellor well, whereas 40.0% of persisters, and no non-persisters, indicated knowing a counsellor well (see Table 31).

Satisfaction With the Post-secondary Experience as Indicated by:

1. Relevance of post-secondary courses to one's goals.

Results indicated that college persisters and non-persisters were not differentiated by perceptions of whether or not their college courses were relevant to their goals. Most members of each group (persisters 82.1% and non-persisters 72.7%) indicated thinking that their courses were relevant, whereas 17.9% of persisters, and 27.3% of non-persisters, reported not thinking so (see Table 32).

2. Perceptions of being satisfied with the post-secondary environment or not. No substantial differences were observed between persisters and non-persisters with



regard to percentage of members indicating being satisfied with their college environment or not. Most members in each group (persisters 76.7% and non-persisters 68.2%) indicated being satisfied, whereas 23.3% of persisters, and 31.8% of non-persisters, reported not being satisfied with their college environment (see Table 33).

Values as Indicated by:

1. Importance of money. Most persisters (80.0%), and non-persisters (76.2%), indicated that making lots of money was important to them. Further, 20.0% of persisters, and 23.8% of non-persisters, indicated that such monetary success was not important to them (see Table 34). Thus, this variable was not useful in differentiating persisters and non-persisters.

2. Importance of a prestigious job. Persisters and non-persisters varied slightly with regard to importance placed on having a prestigious job. Although most members of each group perceived such a job as important to them, a higher percentage of persisters (88.0%), as compared to non-persisters (75.0%), indicated having such perceptions. Further, one quarter of the non-persisters, as compared to 12.0% of persisters, reported not thinking that having a prestigious job was important (see Table 35).

3. Importance of being able to help parents financially. Persisters and non-persisters were not differentiated by importance placed upon their ability to

financially help their parents. Most members of each group (persisters 86.4% and non-persisters 86.4%) perceived importance in being able to financially help their parents, whereas 13.6% of persisters, and 13.6% of non-persisters, did not see importance in such an ability (see Table 36).

Financial Variables:

1. Financial concerns. Persisters and non-persisters differed with regard to extent of concern regarding their ability to finance their education. Almost twice the percentage of non-persisters (26.1%), as compared to persisters (13.3%), indicated no concern about their ability to finance their education. Over one half of the persisters (53.3%), as compared to 8.7% of the non-persisters, indicated some concern, whereas 65.2% of the non-persisters, and 33.3% of the persisters, reported having had major concern (see Table 37).

2. Main source of finance of post-secondary education. Persisters and non-persisters did vary somewhat with regard to indicated main source of finance of college education. For instance, 4.3% of non-persisters, as compared to no persisters, indicated parent(s)/guardian(s) as being their main source of finance. Likewise, 4.3% of non-persisters, and 0.0% of persisters, indicated scholarships as being their primary source. More than twice the percentage of persisters (63.3%), as compared to non-persisters (26.1%), reported their main source of finance to be Canada Student

Loans, whereas no members of each group indicated a loan from another source to be their primary means. Three times the percentage of non-persisters (21.7%), as compared to persisters (6.7%), noted savings to be their main source of finance. Only 3.3% of persisters, and no non-persisters, indicated earnings from work, while at college, as being their primary means. More non-persisters (43.5%), than persisters (26.7%), reported unemployment insurance benefits to be their main source of finance of college education, whereas no members of either group indicated obtaining most of their funds, for their education, from sources other than those surveyed (see Table 38).

3. Number of hours worked at a job per week. Reported number of hours worked per week, at a job, did not differentiate persisters and non-persisters. Most members of each group (persisters 83.3% and non-persisters 87.0%) indicated not working any hours, whereas 6.7% of persisters, as compared to 13.0% of non-persisters, reported working at a job for 1 to 10 hours per week. No members of either group worked 11 to 20 hours per week, and 3.3% of persisters, as compared to no non-persisters, indicated working 21 to 30, 31 to 40, and more than 40 hours per week (see Table 39).

Social Integration as Indicated by:

1. Involvement in campus organizations/clubs.

Persisters and non-persisters differed substantially with

regard to participation in campus organizations/clubs. More persisters (60.7%), as compared to non-persisters (22.7%), reported involvement, whereas 39.3% of persisters, and 77.3% of the non-persisters, noted no participation in such groups (see Table 40).

2. Informal meetings with faculty members. Persisters and non-persisters varied somewhat with regard to number of reported informal meetings with faculty members. More non-persisters (23.8%), than persisters (6.7%), indicated never having such meetings. Similarly, slightly more non-persisters (28.6%), as compared to persisters (23.6%), reported having such meetings with faculty members less than five times. On the contrary, 16.7% of persisters, and 14.3% of non-persisters, noted meeting with faculty, under such circumstances, five to ten times. Further, over one half of the persisters (53.3%), as compared to 33.3% of the non-persisters, indicated having informal meetings with faculty members more than ten times (see Table 41).

3. Having many friends at post-secondary or not. Having many friends, or not, while at college was not a variable which differentiated persisters and non-persisters. Most students in each group indicated having many friends (persisters 90.0% and non-persisters 100.0%), whereas only 10.0% of persisters and no non-persisters indicated not having many friends at college (see Table 42).

4. Perceptions of feeling at home in the post-secondary environment or not. Persisters and non-persisters varied minimally with regard to having perceptions of feeling at home in the college environment or not. Most members of each group (persisters 66.7% and non-persisters 65.2%) indicated feeling at home in their college environment, whereas approximately one third of each group, 33.3% of persisters, and 34.8% of non-persisters, reported not feeling at home (see Table 43).

5. Relationship with roommates.

First roommate. Persisters and non-persisters differed with regard to their relationships with their first roommates. No members of either group described their relationship as unfriendly or distant. Further, 6.7% of persisters, as compared to no non-persisters, described their relationships as okay. Over one half of the non-persisters (55.6%), as opposed to 6.7% of persisters, noted friendly relationships with their roommates. As well, almost twice the percentage of persisters (86.7%), as compared to non-persisters (44.4%), noted very close relationships with their roommates (see Table 44).

Second roommate. A positive direct association between one's relationship with a second roommate and college persistence was indicated. No members of either group reported unfriendly relationships with their second roommates. One quarter of the non-persisters, as compared

to no non-persisters, indicated distant relationships. Further, one half of the non-persisters, as opposed to no non-persisters, described their relationships with their second roommates as okay. On the contrary, more persisters (12.5%), than non-persisters (0.0%), reported friendly relationships. In addition, most of the persisters (87.5%), as compared to one quarter of the non-persisters, indicated having very close relationships with their second roommates (see Table 45).

6. Extent of involvement in orientation. Persisters attended more days of orientation activities than did non-persisters. For example, 72.7% of non-persisters, as compared to 24.0% of persisters, reported not being involved in any days of orientation. Almost three times as many persisters (28.0%), as compared to non-persisters (9.1%), noted attending one day. Also, 8.0% of persisters, as compared to no non-persisters, reported two days of involvement. Similarly, 20.0% of persisters, and no non-persisters, indicated being involved in three days of activities. As well, 4.0% of persisters, and no non-persisters, reported four days of participation. On the contrary, slightly more non-persisters (9.1%), than persisters (4.0%), noted attending activities for five days. However, 12.0% of persisters, as compared to 9.1% of non-persisters, reported attending more than five days of orientation activities (see Table 46).

Influence of Stress as Indicated by:

1. Experiencing much stress or not. Persisters and non-persisters did not differ substantially with regard to percentages of students who indicated experiencing much stress or not while at college. Most members of each group (persisters 86.2% and non-persisters 56.5%) reported experiencing much stress, whereas 13.8% of persisters, and 43.5% of non-persisters, indicated not having experienced much stress while at college (see Table 47).

2. Difficulty coping with stress or not. No substantial differences were observed between percentages of college persisters and non-persisters indicating having experienced difficulty coping with stress or not. Most persisters (57.7%), and non-persisters (68.6%), indicated no difficulty coping, whereas 42.3% of persisters, and 31.3% of non-persisters, reported having experienced difficulty coping with stress (see Table 48).

Alcohol Use

Frequency of alcohol use did not substantially differentiate college persisters and non-persisters. For instance, 8.7% of non-persisters, as compared to no persisters, indicated never using alcohol while at college. Both groups differed very little with regard to percentages who used alcohol on special occasions (persisters 26.7% and non-persisters 30.4%). Similarly, 20.0% of persisters, as compared to 17.4% of non-persisters, reported using alcohol

once a month. Again both groups differed minimally with regard to percentages who used alcohol once a week (persisters 30.0% and non-persisters 30.4%). More persisters (10.0%), as compared to non-persisters (0.0%), indicated using alcohol twice a week. Similarly, 13.3% of persisters, and 13.0% of non-persisters, reported using alcohol more than twice a week (see Table 49).

#### Place of Residence While at Post-secondary

Persisters and non-persisters varied somewhat with regard to percentages of group members who indicated various types of college accommodations. More non-persisters (78.9%), than persisters (52.0%), noted having lived in residence. In addition, 8.0% of persisters, as compared to no non-persisters, reported living at home while attending college. Similarly, 12.0% of persisters, as compared to 0.0% of non-persisters, indicated having lived off-campus with relatives. Also, both groups varied minimally with regard to percentages indicating having lived off-campus, renting house, room, or apartment (persisters 28.0% and non-persisters 21.1%) (see Table 50).

#### Extent of Support/Encouragement Received from Others:

1. Mother/Female guardian. Persisters and non-persisters varied little with regard to amount of support/encouragement received from their mothers/female guardians. No members of either group indicated receiving no support/encouragement, whereas 10.7% of persisters, as



compared to 4.5% of non-persisters, indicated getting very little support/encouragement. Both groups varied minimally with regard to percentages reporting some support/encouragement (persisters 14.3% and non-persisters 13.6%). Most members of each group (persisters 75.0%, non-persisters 81.8%) reported having received very much support/encouragement regarding their college attendance (see Table 51).

2. Father/Male guardian. Results indicated no relationship between extent of support/encouragement received from fathers/male guardians, regarding college attendance, and college persistence. More persisters (4.2%), than non-persisters (0.0%), indicated no support/encouragement. Similarly, more persisters (16.7%), as compared to non-persisters (4.3%), reported having obtained very little support/encouragement. However, more non-persisters (39.1%), than persisters (16.7%), noted some support/encouragement, whereas more persisters (62.5%), than non-persisters (56.5%), indicated very much support/encouragement (see Table 52).

3. Brother(s). Results indicated a negative direct relationship between extent of support/encouragement received from brother(s), and college persistence. More persisters (17.9%), than non-persisters (5.3%), indicated having received no support/encouragement. Similarly, more persisters (28.5%), as compared to non-persisters (10.5%),

noted very little support/encouragement. Further, more persisters (14.3%), than non-persisters (10.5%), indicated some support/encouragement. However, more non-persisters (73.7%), as compared to persisters (39.3%), noted having received very much support/encouragement from their brother(s) regarding their college attendance (see Table 53).

4. Sister(s). Results indicated no relationship between extent of support/encouragement received from sister(s), regarding their post-secondary attendance, and post-secondary persistence. More persisters (20.0%), as compared to non-persisters (0.0%), reported receiving no support/encouragement. Both groups varied minimally with regard to percentage of members noting very little support/encouragement (persisters 4.0% and non-persisters 4.8%). More persisters (36.0%), than non-persisters (23.8%), indicated receiving some support/encouragement, whereas more non-persisters (71.4%), than persisters (40.0%), reported receiving very much support/encouragement from their sister(s) regarding their college attendance (see Table 54).

5. Relative(s). No association between amount of support/encouragement received from relative(s), regarding one's post-secondary attendance, and post-secondary persistence was indicated. More persisters (18.5%), than non-persisters (0.0%), indicated having received no

support/encouragement. On the contrary, more non-persisters (23.8%), than persisters (11.1%), noted very little support/encouragement. However, more persisters (40.7%), as compared to non-persisters (28.6%), indicated having received some support/encouragement. On the other hand, almost one half of the non-persisters (47.6%), as opposed to 29.6% of persisters, reported receiving very much support/encouragement from their relative(s) regarding their college attendance (see Table 55).

6. Friend(s). Findings suggested no substantial relationship between extent of support/encouragement from friend(s), regarding their post-secondary attendance, and post-secondary persistence. More persisters (14.3%), than non-persisters (0.0%), indicated no support. Both groups did not vary with regard to percentages of members reporting very little support encouragement (persisters 14.3% and non-persisters 14.3%). However, more non-persisters (23.8%), as compared to persisters (17.9%), noted obtaining some support/encouragement. Likewise, more non-persisters (61.9%), than persisters (53.6%), indicated having received very much support/encouragement from their friend(s), regarding their post-secondary attendance (see Table 56).

7. Post-secondary counsellor(s). No association was indicated between enrolment status and extent of support/encouragement, regarding one's post-secondary attendance, received from one's post-secondary

counsellor(s). Slightly more persisters (20.8%), as compared to non-persisters (19.0%), indicated having received no support/encouragement, whereas 19.0% of non-persisters, and 8.3% of persisters, noted obtaining very little support/encouragement. Both groups varied minimally with regard to percentage of members reporting some support/encouragement (persisters 16.7% and non-persisters 19.0%). Slightly more persisters (54.2%), as compared to non-persisters (42.9%), indicated having received very much support/encouragement from a post-secondary counsellor regarding their attendance at college (see Table 57).

8. Post-secondary advisor(s). Results revealed no association between enrolment status and extent of support/encouragement, regarding one's post-secondary attendance, received from one's college advisor. Both groups varied minimally with regard to percentages of members reporting no support/encouragement (persisters 21.7% and non-persisters 23.5%). Slightly more non-persisters (11.8%), as compared to persisters (4.3%), noted receiving very little support/encouragement. On the contrary, 21.7% of persisters, as opposed to 11.8% of non-persisters, indicated attaining some support/encouragement. Over one half of the members in each group, 52.2% of persisters and 52.9% of non-persisters, reported having received very much support/encouragement from a college advisor (see Table 58).

9. Post-secondary instructor(s). Results indicated no

substantial association between extent of support/encouragement received from one's college instructor(s), regarding one's college attendance, and persistence. More non-persisters (17.4%), than persisters (4.2%), reported receiving no support/encouragement. On the contrary, 4.2% of persisters, as compared to no non-persisters, noted very little support/encouragement. Similarly, 33.3% of persisters, as compared to 26.1% of non-persisters, reported some support/encouragement. In addition, 58.3% of persisters, as compared to 56.5% of non-persisters, indicated receiving very much support/encouragement from their instructor(s) regarding their attendance at college (see Table 59).

Research Question #4. What are some services/resources rural Newfoundland post-secondary students feel should be implemented at the high school level to ease the transition for them from their home communities into post-secondary environments?

Data for this research question was obtained through long answers provided by respondents. Individual responses were grouped under headings representing similar suggestions. Responses from university students are presented in section A, and those from college students in section B, of Table 60. A total of 174 student responses were obtained from the university students. From these responses 14 response categories were formulated with a

frequency of 2 or more. College students provided a total of 36 responses which were placed in 6 categories having a frequency of 2 or more. Frequencies and percentages of the total university and college responses, for each category, are also presented in Table 60.

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Insert Table 60 here

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University Students

Categories of Similar Suggestions

Student independence. The need for greater student independence was identified by 26 students (15.9%). These students felt there was too much "spoon feeding" by teachers.

Information about post-secondary. Twenty-three students (14.1%) indicated a need for more information about post-secondary and life there. Films, seminars, more frequent visits from university personnel, pamphlets, and classroom discussions were suggested as means to provide students with more information.

Visits to post-secondary. First-hand experience, through post-secondary institution tours, was suggested by 19 students (11.6%) as a means to help rural students in their transition.

More and better counselling. As well, 19 respondents (11.6%) felt that rural students would benefit from more

Table 60

Services/Resources Needed at Senior High to Help Ease the  
Transition for Rural Students into Post-secondary

A. Institute type		University	
Group		n	%
- More emphasis placed upon creating greater student independence		26	15.9
- Provision of students with more information about post-secondary and life there		23	14.1
- Visits to post-secondary institutions		19	11.6
- More and better counselling services		19	11.6
- Provision of courses similar to those offered at post-secondary		14	8.5
- A more extensive course selection		13	7.9
- A more demanding Level Three program		10	6.1
- More teaching of study skills		9	5.5
- More emphasis placed on preparing students for university mathematics courses		9	5.5
- Information sessions about university, conducted by post-secondary students		8	4.9
- Opportunities to take notes		6	3.6
- More information about post-secondary registration		3	1.8

(table continues)

Group	n	%
- More opportunities to conduct research	2	1.2
- More opportunities for involvement in public speaking	2	1.2

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B. Institute type                      College

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Group	n	%
- Provision of more information about post-secondary and life there	10	32.2
- More emphasis placed on creation of student independence	6	19.3
- Visits to post-secondary institutions	6	19.3
- More and better counselling services	4	12.9
- More extensive course selection	3	9.3
- More emphasis on teaching of study skills	2	6.4

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extensive counselling, especially career counselling.

Courses similar to those at post-secondary. Having courses which are similar to those offered at university, and taught in a similar manner, was noted by 14 students (8.5%) as suggestions for high school.

Greater course selection. Further, 13 students (7.9%) felt that a greater selection of courses, especially in mathematics, science, chemistry, biology, and french would better prepare rural students for post-secondary.

More demanding Level Three. More challenging courses and a heavier workload were recommended by 10 students (6.1%) as means to help rural students.

Study skills. In addition, 9 university students (5.5%) indicated that rural students, while in Level Three, should be taught how to study.

Preparation for post-secondary mathematics. Adequate preparation for university mathematics was indicated to be lacking, according to 9 students (5.5%). These students felt that efforts should be made to alleviate this problem.

Information sessions conducted by post-secondary students. Also, 8 students (4.9%) felt that post-secondary students would be a good source of information about post-secondary life and what to expect there.

Note taking. Teaching of note taking skills, as well as opportunities to use these skills via lecture type classes, were indicated by 6 students (3.6%) to be needed in

rural high schools.

Information about post-secondary registration. Three students (1.8%) felt that, during their Level Three year, students should be given more information about the post-secondary registration process.

Conducting research. More experience conducting research, according to 2 students (1.2%), was indicated to be needed.

Public speaking. Likewise, 2 students (1.2%) felt that rural students should be given more experience speaking in front of groups, prior to entering post-secondary.

#### College Students

##### Categories of Similar Suggestions

Information about post-secondary. Ten college students (32.2%) indicated that rural high school students should be given more information about post-secondary and life there. This could be done through courses, presentations, and discussions. Further, such information, according to the respondents, should describe dorm life as well as courses and classroom settings.

Student independence. Creating more student independence, and less "spoon feeding", was indicated by 6 students (19.3%), to be needed in rural high schools.

Visits to post-secondary. As well, 6 students (19.3%) noted that first-hand experience, gained via tours of college campuses, would be beneficial to rural students.

More and better counselling. More extensive counselling services, especially career counselling, was suggested by 4 students (12.9%) to be needed at the senior high level.

Greater course selection. Three students (9.3%) indicated that a more extensive selection of courses was needed at the senior high level in rural schools.

Note-taking. More emphasis on teaching students how to take notes was suggested by 2 students (6.4%).

Research Question #5. What changes/additions do rural Newfoundland college/university students feel should be implemented at the post-secondary level to ease the transition for rural students into institutions of higher learning?

Respondents provided data for this research question in long answers. Similar suggestions provided were categorized. Responses from university students are presented in section A, of Table 61, and responses from college respondents are in section B, of Table 61. University students provided 152 responses which were grouped into 17 categories having a frequency of two or more. College respondents provided 31 responses which were subsequently grouped into 7 categories with frequencies of two or more. Frequencies and percentages of the total university and college responses obtained, for each category, are also presented in Table 61.

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Insert Table 61 here

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University Students

Groups of Suggestions for Changes/Additions Needed at Post-secondary

Better relationships with professors. Forty-five students (31.0%) indicated that improved relationships with instructors would help. More concern, better communication, improved understanding, more patience, increased interaction, easier access, more encouragement, and a friendlier approach, were all elements which instructors should work on, according to the university respondents, to help rural freshmen.

Reduction in class size. Reducing class size was one means suggested, by 18 students (12.4%), to help rural post-secondary attenders in the transition into university. Some students indicated that smaller classes would help them "feel more at home" and not "ignored".

More efficient orientation. Further, 16 students (11.0%) noted that more efficient orientation was needed. Students indicated that: one had to be 19 years of age to attend many of the orientation activities, there should be more orientation activities, orientation activities were not familiarizing students with the campus, and orientation should be compulsory.

Table 61

Changes/Additions Needed at Post-secondary to Help Ease the  
Transition for Rural Students into Post-secondary

A. Institute type		University	
Group		n	%
- Better (more supportive, compassionate, and understanding) relationships with instructors		45	31.0
- Reduction in class size		18	12.4
- More efficient orientation		16	11.0
- More opportunities for socializing (clubs, organizations, and activities)		13	8.9
- More counselling		9	6.2
- Provision of more information about post- secondary institutions and life there		8	5.5
- More peer helpers		6	4.1
- A less complicated means of registration		6	4.1
- Means to increase awareness of counselling services		4	2.7
- Reduced demand on new students		4	2.7
- Reduction in froshing		3	2.0
- Better time schedules		3	2.0
- Stress management programs		2	1.3

(table continues)

Groups	n	%
- Reduction in the number of students on campus	2	1.3
- More helpful advisors	2	1.3
- Support groups	2	1.3
- Clearer identification of buildings	2	1.3

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B. Institute type                      College

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Groups	n	%
- More efficient orientation	8	28.5
- More peer helpers	6	21.4
- More opportunities for socializing (clubs, organizations, and activities)	4	14.2
- Reduction in student workload	3	10.7
- Increased emphasis on the practical component of programs	3	10.7
- More faculty members	2	7.1
- Placement of residence students with roommates they know	2	7.1

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More opportunities for socializing. Also, 13 students (8.9%) indicated that rural freshmen should be provided with more opportunities for socializing.

More counselling. More counselling services, especially for those who need career guidance, or are shy, was suggested by 9 students (6.2%).

More information about post-secondary. In addition, 8 students (5.5%) noted that post-secondary institutions should be doing more to provide rural high school students with information about post-secondary courses, life at university/college, the communities in which post-secondary institutions are located, and procedures for declaring majors and minors.

Peer helpers. Assigning peers or "buddies" was suggested by 6 students (4.1%) as a means of helping some rural students cope with problems and concerns.

Improved registration. As well, 6 students (4.1%) indicated that making the registration process less complicated, by providing students with more information and help, would be beneficial to rural freshmen.

Increased awareness of counselling services. Making students more aware of available counselling services was noted by 4 students (2.7%) to be a possible means of helping new rural students.

Placing less demand on students. Further, 4 students (2.7%) suggested that instructors should ease students into

programs instead of making them "jump head first" and possibly discouraging them.

Reduction in froshing. A reduction in the froshing practice was suggested, by 3 students (2.0%), to be needed.

Better time schedules. Likewise, 3 students (2.0%) indicated that rural attenders should have better time schedules.

Stress management. Help with stress management was indicated, by 2 students (1.3%), to be needed.

Reduction in number of students on campus. Also, 2 students (1.3%) noted thinking that the campus was overcrowded.

Helpful advisors. Advisors were indicated, by 2 students (1.3%), to be of little assistance. These students noted that advisors should be more accessible and caring.

Support groups. Further, 2 students (1.3%) indicated that support groups would be helpful to rural students, especially those having difficulty adjusting to their new environments.

Clearer identification of buildings. More signs on buildings, or other means of identifying facilities, was suggested by 2 students (1.3%) as means of helping rural freshmen.



### College Students

#### Groups of Suggestions for Changes/Additions Needed at Post-secondary

More efficient orientation. Eight students (28.5%) felt that new students would benefit from more efficient orientation activities.

More peer helpers. Providing college freshmen with "buddies", to show them around the campus and introduce them to other students, was suggested by 6 respondents (21.4%) as a means of helping new rural students.

More opportunities for socializing. Further, 4 students (14.2%) noted that more social events would benefit freshmen in their transition.

Decrease in workload. A reduction in the workload was suggested by 3 students (10.7%), as a means to help new students. One student indicated that this may decrease the likelihood of students encountering stress.

Increased emphasis on the practical component of programs. As well, 3 students (10.7%) felt that there should be more emphasis placed on the practical component of college courses.

More faculty. Increasing the number of faculty members was seen as one way, by 2 students (7.1%), to help college freshmen in their transition.

Placing residence students with someone they know. In addition, 2 students (7.1%) felt that placing new students

with a familiar roommate would be helpful.

Research Question #6. What are the main reasons identified by rural Newfoundland college/university students for returning to post-secondary institutions?

Data for this research question was obtained from long answers provided by respondents. Similar reasons were grouped into categories. University student responses were placed in section A, of Table 62, and college student responses in section B, of Table 62. In total, 231 responses were gathered from the university students. From these, 11 categories were formed with a frequency of two or more. From the total of 58 responses provided by the college respondents, five categories with a frequency of two or more were formed. Frequencies and percentages, of the total responses obtained, for the categories are also provided in Table 62.

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Insert Table 62 here

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#### University Students

#### Categories of Identified Similar Reasons for Returning to Post-secondary

Wanting to further one's education. Ninety-nine students (44.3%) indicated that their main reason for returning was to further their education. More specifically, they noted wanting to: finish programs they

Table 62

Main Reasons Identified for Returning to Post-secondary  
Institutions

A. Institute type		University	
Group		n	%
- Wanting to further one's education		99	44.3
- Perceiving university education as a means to a job/career		42	18.8
- Aspiring to more than a Level Three education		24	10.7
- Seeing university education as leading to financial gains		18	8.0
- Wanting to be with friends		17	7.6
- Perceiving there to be a lack of opportunities in one's hometown		8	3.5
- Wanting independence		5	2.2
- Finding university life to be an enjoyable experience		3	1.3
- Receiving encouragement from others		3	1.3
- Wanting to make others proud of them		2	0.8
- Wanting to make one feel good about oneself		2	0.8

(table continues)

## B. Institute type

## College

Group	n	%
- Wanting to further one's education	21	38.8
- Perceiving college education as a means to a job/career	20	37.0
- Aspiring to things which could only be attained through a college education	6	11.1
- Seeing college education as a means to financial gains	4	7.4
- Perceiving there to be a lack of opportunities in one's hometown	3	5.5

had started, obtain degrees, become more educated, and reach goals they had set for themselves.

Perceiving university education as a means to a job/career. Seeing education as a means to future employment was noted by 42 students (18.8%). These students felt that their chances for a good, steady job would be increased if they had a university education.

Aspirations. In addition, 24 students (10.7%) reported returning to university because they aspired to things which could be attained through education. These students noted they: had set goals for themselves to reach, wanted to become successful, wanted to be "someone", wished to fulfil dreams, and wished to expand their knowledge.

Seeing education as leading to financial gains. Attaining financial success was reported by 18 students (8.0%) to be their main reason for returning to university. These students indicated wanting to get a good job, have a steady income, and be able to financially support themselves.

Wanting to be with friends. As well, 17 students (7.6%) noted that their main reason for returning was to be with, and possibly meet, new friends.

Lack of opportunities in hometowns. Perceiving there to be no career opportunities in one's hometown was indicated by eight students (3.5%) as their main reason for returning.

Wanting independence. In addition, 5 students (2.2%) reported returning to university because they wanted to be independent.

Enjoyable experience. Finding university to be an enjoyable experience was reported by 3 students (1.3%) to be their main reason for returning.

Receiving encouragement from others. Also, 3 students (1.3%) indicated returning because of encouragement from others to do so.

Wanting to make others proud of them. Wanting to make family, friends, and community members proud of them was noted by 2 students (0.8%) as their main reason for returning to university.

Wanting to make one feel good about himself/herself. Likewise, 2 students (0.8%) reported that their main reason for returning to university was to enhance their self-image.

#### College Students

#### Categories of Similar Reasons for Returning to Post-secondary

Wanting to further one's education. Twenty-one students (38.8%) indicated that they were returning to college because they wanted to further their education. They wanted to increase their knowledge, finish programs they had started, and better their educational level.

Perceiving college education as a means to a job/career. Seeing college education as a means to a good

job was reported by 20 students (37.0%) as their main reason for returning to college.

Aspirations. In addition, 6 students (11.1%) indicated having aspirations which could only be attained with a college education. These students wanted to: get somewhere in life, have a good future, and reach goals they had set for themselves.

Seeing college as leading to financial gains.

Attainment of financial success, via a college education, was indicated by 4 students (7.4%) as their main reason for returning. These students indicated a need for money and financial independence.

Lack of opportunities in one's hometown. Also, 3 students (5.5%) indicated returning to college because there was no future for them in their hometown.

Research Question #7. What are the main reasons identified by rural Newfoundland post-secondary students for not returning to college/university?

Data for this research question was provided by respondents via long answers. Similar reasons were grouped into categories. University student responses were placed in section A of Table 63 and college student responses in section B of the same table. From the university students, 62 responses were gathered. From these, 10 categories having a frequency of two or more, were formed. As well, 4 categories, with frequencies of two or more, were formed

from the total of 17 responses provided by the college respondents. Frequencies and percentages of the total responses provided, for each category, are also presented in Table 63.

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Insert Table 63 here

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University Students

Categories of Similar Reasons for Not Returning to Post -  
secondary

Wrong choice. A wrong decision was said to have been made, in attending university, by 14 students (25.0%). Most of these indicated that they wanted to pursue a different program from that which they had initially contemplated.

Financial reasons. Financial difficulty was indicated, by 14 students (25.0%), as their main reason for not returning.

Did not like university. In addition, 6 students (10.7%) reported not returning to university because they did not like, or hated, attending.

Difficulty with course work. Difficulty with course material was indicated, by 4 students (7.1%), to be their main reason for not returning.

Professors were uncaring. As well, 4 students (7.1%) reported that they were not returning because of the uncaring attitude of instructors.



Table 63

Main Reasons Identified for Not Returning to Post-secondary

A. Institute type		University	
Group		n	%
- It was the wrong choice for them		14	25.0
- Financial reasons		14	25.0
- Did not like university		6	10.7
- Experienced difficulty with university work		4	7.1
- Found professors to be uncaring		4	7.1
- Was unsatisfied with general studies		3	5.3
- Wanted to enter the work force		3	5.3
- Failed		3	5.3
- Was undecided about a program to pursue		3	5.3
- Felt that university was overcrowded		2	3.5

B. Institute type		College	
Group		n	%
- Financial reasons		7	46.6
- Wanted to enter the work force		4	26.6
- Because of treatment from instructors		2	13.3
- Experienced difficulty with one's chosen program		2	13.3

Unsatisfied with general studies. Dissatisfaction with general studies was reported, by 3 students (5.3%), as their main reason for not returning.

Wanted to work. Likewise, 3 students (5.3%) reported not returning because they wanted to enter the work force.

Failed. Having failed courses was indicated, by 3 students (5.3%), to be their reason for not returning to university.

Undecided about a program to pursue. Further, 3 students (5.3%) reported not returning because they did not know which program to pursue.

University being overcrowded. Too many students on campus was reported by 2 students (3.5%) as their main reason for not returning.

#### College Students

#### Categories of Similar Reasons for Not Returning to Post-secondary

Financial difficulty. Financial difficulty was indicated, by 7 students (46.6%), to be the main reason for choosing not to return to college.

Wanting to work. In addition, 4 students (26.6%) reported not returning because they wanted to enter the work force.

Treatment from instructors. Also, 13.3% of respondents, 2 students, indicated not returning because they were not helped enough by instructors or because of the

way instructors treated them.

Difficulty with chosen program. Further, 2 students (13.3%) indicated not returning because of difficulty experienced in their programs of study.

Research Question #8. Are the decisions of rural Newfoundland post-secondary students, to stay enrolled in or drop out of post-secondary programs, associated with intentions to obtain unemployment insurance benefits and seasonal work?

#### University Students

#### Influence of Intentions to Obtain Unemployment Insurance Benefits and Seasonal Work

Results indicated a positive association between intentions to get seasonal work and collect unemployment insurance benefits, and university persistence. Over one quarter of the non-persisters (26.7%), as compared to 3.1% of the persisters, indicated intentions to take this route, whereas 96.9% of persisters, and 73.3% of non-persisters,

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Insert Table 64 here

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reported that they would not be pursuing seasonal work and unemployment insurance benefits (see Table 64).

Table 64

Relationship of Student's Decision by Having Intentions of Obtaining Seasonal Work and Collecting Unemployment Insurance Benefits or Not

Institute type	University				College			
	Persisters		Dropouts		Persisters		Dropouts	
Enrolment status								
Groups	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
1. Yes	3	3.1	12	26.7	14	46.7	17	73.9
2. No	127	96.9	34	73.3	16	53.3	6	26.1

College StudentsInfluence of Intentions to Attain Unemployment Insurance  
Benefits and Seasonal Work

Results indicated a positive direct relationship between intentions to get seasonal work and collect unemployment insurance benefits, and college attrition. More non-persisters (73.9%), as compared to persisters (46.7%), indicated intentions to take this route, whereas more persisters (53.3%), than non-persisters (26.1%), reported no such intentions (see Table 64).

## CHAPTER FIVE

### Discussion of Results, Conclusions, and Recommendations for Practice and Further Research

This chapter contains a discussion of results obtained in this study, conclusions derived from data obtained, and the author's suggested recommendations for action and further research. Although university and college student-related information is presented under the same headings in major sections of this chapter, both groups were only compared when similar results were obtained.

#### Discussion of Results

##### Background and Demographic Characteristics

Age. For university students included in this study, findings were consistent with earlier studies which found no significant relationship between the age of a student and his/her persistence (Pantages & Creedon, 1978; Kooker & Bellamy, 1969; De Vecchio, 1972; Gustavus, 1972; Moores, 1984; Budgell, 1985; Moore, 1985; McCauley, 1988; Hutchinson & Johnson, 1980; Pascarella & Chapman, 1983). Both groups varied little with regard to the percentage of members in each age category. Thus, the age variable was of no use in prediction of rural university students' persistence. This was contrary to Astin's (1976) findings which suggested that older students were in need of services since they were more prone to drop out.

However, for the college students surveyed, results

suggested that although both groups had a large percentage of its members in the oldest category utilized, age seemed to have a negative direct impact on student persistence. These findings were consistent with Astin's (1976) research which indicated older students to be more prone to withdrawal. However, these findings were not consistent with the majority of research which supported the contention that the age variable was of little use in predicting post-secondary attrition (Budgell, 1985; De Vecchio, 1972; Gustavus, 1972; Hutchinson & Johnson, 1980; Kooker & Bellamy, 1969; McCauley, 1988; Moore, 1985; Moores, 1984; Pascarella & Chapman, 1983). It may be that the older college students in this study had more commitments, such as marriage and their own families, which necessitated their working or being at home. Such constraints would have made post-secondary attendance more difficult for them.

Gender. Findings indicated that, for university and college students alike, the gender variable was of little use in prediction of post-secondary persistence. These results were consistent with research (Moline, 1987; Moore, 1985; Moores, 1984; Ott, 1988) which indicated no significant differences in rate of persistence for males and females. Further, these findings did not support studies which indicated female students to graduate at a higher rate (Galicki & McEwen, 1989; Voorhees, 1987), or studies which indicated males to demonstrate a higher rate of persistence

(Avakian et al., 1980-82; Shaver et al., 1985). As well, Bynum and Thomson's (1983) findings, that gender ratio tended to be self-adjusting over time with the surplus gender experiencing the heaviest rate of attrition, were not supported by this study. However, results of this study did indicate that the universities surveyed attracted more rural females than males, whereas the opposite was true for the colleges surveyed.

Religious Affiliation. The religious affiliation variable did not prove useful in differentiating persisters and dropouts in either of the groups of college or university students examined. These findings corroborated earlier research by Dollar (1983-84), and Moores (1985), which failed to indicate any differences on indices of religious orientation among persisters and dropouts.

Religious Commitment. For university students, findings of this study failed to indicate a clear, positive direct relationship between religious commitment, as indicated by number of times attending church per month, and post-secondary persistence. However, for college students, this variable did prove useful in predicting post-secondary persistence in that persisters indicated greater commitment. These results, for university students examined in this research, corroborated Moore's (1985) study which did not identify church attendance as being a significant variable associated with persistence. Further, findings of this



study, for both groups, failed to corroborate findings of Schonert et al. (1989), who indicated that the majority of persisters and non-persisters, in two-year college programs, considered themselves somewhat or very religious.

Hometown Population. One could interpret findings of this study to mean that, for university and college students alike, the hometown size variable was of little use in prediction of post-secondary persistence. These findings were not consistent with earlier research which indicated student persistence to increase with size of hometown (Davis, 1964). Further, they did not support studies which suggested a positive direct relationship between size of one's hometown and post-secondary persistence, as indicated when rural students' persistence rates were compared to those of urban students (Astin, 1976; Aylesworth & Bloom, 1976; Kleinfeld, 1982; Lee, 1983). Also, results did not correlate with those of Moore (1984) which indicated students from smaller towns to show higher persistence rates. This is not to say that an association between size of one's hometown and persistence rate would not have been observed if rural students had been compared with urban students. All students surveyed were from rural communities. The investigator concluded from the findings that university/college students' persistence was not associated with hometown size, specifically for students coming from communities with 2,000 people or less.

Distance from hometown to post-secondary. Findings of the present study indicated the proximity variable to have been of no use in prediction of university/college student persistence. This supported earlier research (Johansson & Rossman, 1973; Moline, 1987) which indicated distance from hometown to college not to be significantly associated with persistence in higher education. In addition, results of this study were inconsistent with those of Carrol (1988), and Ramist (1981), who reported a significant relationship between geographic distance from home and persistence. Likewise, results were contrary to those of Moores (1984) which indicated a greater number of persisters having had to relocate in order to attend post-secondary since their hometowns were so far away. In Newfoundland today, geographic distance between hometown and post-secondary may not be having such an impact on post-secondary attrition as it may have years ago. Today rural students have a selection of possible colleges or universities to attend and can choose those closest to home. In addition, means of transportation and communication have improved dramatically in Newfoundland over the years making it possible for students to travel home more often, and easier to communicate with those at home, while attending post-secondary.

Socioeconomic background.

## 1. Mothers'/Female guardians' level of education.

Results indicated that, for university students, more mothers of dropouts had the lowest level of education examined, whereas more mothers of persisters had the highest level of education included on the survey. Further, for university respondents, findings corroborated those of Astin (1976), which indicated children of more highly educated parents to be less prone to dropout. In addition, results for university students were supportive of Moore's (1985) investigation which noted parents of dropouts to have less education. However, findings of this study, overall, did not indicate a positive direct relationship between a mothers' level of education and post-secondary persistence, for either of the groups (university/college students) included, and were therefore consistent with those of Nora (1987) which also suggested no association between these variables.

## 2. Fathers'/Male guardians' level of education. For

both groups surveyed, results indicated no direct positive relationship between fathers' level of education and student persistence. Thus, findings were inconsistent with those of Astin (1976) which indicated children of more highly educated parents to be less prone to drop out, as well as those of Moore (1985) which similarly noted parents of dropouts to have less education. However, results of this

study were consistent with those of Nora (1987), which suggested no relationship between parents' level of education and student persistence. Findings of this study indicated that rural university/college students, who noted having fathers with post-secondary education may not be aspiring to similar levels of education, or these fathers may not be influencing their children's persistence any more than fathers with less education.

3. Parents'/ guardians' income. Results indicated mothers'/female guardians' and fathers'/male guardians' income, not to predict university or college student attrition since no positive direct relationship between these variables was observed. Such findings were contrary to those of researchers (Aylesworth & Bloom, 1976; Brown, 1985; McCauley, 1988; Moore, 1985) which noted low economic status to be associated with student attrition. However, results of this study supported Moline's (1987) study which failed to identify any relationship between family income and rate of student persistence. These findings may mean that cost of attendance, at Newfoundland's universities/ colleges, was within the financial resources available to respondents, or funds attained through other means such as summer employment or student loans ameliorated any differences in parental income status.

4. Number of siblings. Findings indicated number of siblings not to predict university or college student

attrition since there was no observed relationship between these variables. Such results were contrary to findings of Moore (1985) which indicated dropouts to have more siblings than persisters. These findings may indicate socioeconomic status, as indicated by number of siblings, not to have been associated with post-secondary attrition, or it may be that for rural Newfoundland students, number of siblings was not a good indicator of socioeconomic status.

#### Factors Related to One's High School Experience

Level Three average. Findings indicated Level Three average to be a good predictor of university, but not college, persistence. Thus, for university, and not college students, results were consistent with those of researchers (Bean, 1982; McCaul, 1989; McClung, 1988; Moline, 1987; Moores, 1984; Nora, 1987; Nora, 1990; Ott, 1988; Schonert et al., 1989) which suggested high school academic performance to have been associated, directly and positively, with post-secondary persistence. Such findings may indicate that university group members, who performed academically poorer in high school, found university programs more difficult and had a greater tendency to leave, prior to graduation, as a result of this difficulty. In addition, some of the university students who attained lower Level Three averages may not have been attaining marks necessary for readmittance. However, for college students, the level of difficulty of programs in which the surveyed students were

enrolled may have been such that the poorer students, as indicated by lower high school grade point averages, did not experience enough more difficulty to impact upon their persistence decisions. As well, the programs may not have been difficult enough for the weaker students to have had difficulty attaining marks sufficient for academic readmission.

Size of high school attended. Results indicated, for university and college students, a direct positive relationship between size of high school attended, as indicated by number of students in one's high school graduating class, and post-secondary persistence. These findings were supportive of research conducted by Cope (1972) which indicated size of one's high school to be useful in prediction of student attrition. One could interpret these results to mean that students from smaller high schools were at a disadvantage, while in university/college, as a result of lack of resources, facilities, course offerings, etc., at their schools. As a result of doing with less, while in high school, they may have shown a higher rate of persistence while in post-secondary, as compared to their counterparts who attended larger high schools.

High school counsellor or not. Findings obtained from both groups, university and college students, suggested no relationship between having a high school counsellor, or

not, and university/college persistence. Thus, the high school counsellor variable proved of no use in prediction of post-secondary persistence. One cannot say if these findings supported, or did not support those of other researchers since this particular variable was not found in literature pertaining to post-secondary persistence. However, one could conclude from this study that rural students who had access to high school counsellors were not given an advantage over their counterparts who did not have such access. This could mean that, because those who did not have counsellors probably attended smaller high schools, the more individual help/attention they may have received, may have ameliorated any differences to persistence that counselling could have made. Further, because counsellors who serve rural Newfoundland schools are often responsible for providing services in a number of schools, the services they provided may not have been sufficient to make a difference to student persistence.

#### Perceptions of high school counsellor effectiveness.

For university and college students, findings indicated that the high school counsellor effectiveness variable was not a good predictor of post-secondary attrition since no relationship between these factors was observed. Such results were not supportive of those of Schonert et al. (1989) which suggested persisters, as compared to non-persisters, were more likely to indicate having received

adequate counselling. These findings may indicate that, for most of the university/college dropouts, having received adequate high school counselling and career direction was still not sufficient to ensure post-secondary persistence.

Number of times meeting with high school counsellor.

Results indicated one's number of times meeting with a counsellor to be of no use in prediction of university or college persistence since no positive direct relationship was observed between these variables. Thus, these findings were not supportive of those of Aylesworth and Bloom (1976) which indicated amount of counselling and career direction to have a positive indirect impact upon student persistence by helping students to declare a major.

Relationship with high school counsellor. Findings suggested that knowing a counsellor well was associated with university/college student persistence. Thus, the quality of the relationship with one's counsellor seemed to be related to persistence. The literature did not indicate this variable to have been examined in attrition research, however, results of this study were somewhat supportive of those of Schonert et al. (1989) which suggested persisters, as compared to non-persisters, to be more likely to have received adequate counselling. Further, since students who felt that they knew their high school counsellor well exemplified a higher rate of persistence, maybe this variable should be examined more closely. Such



investigation could possibly provide greater insight into to explanation of the relationship between counselling and retention efforts, which according to Bishop and Walker (1990), was well established, yet open to debate, conjecture, or both.

Having unrealistic expectations about post-secondary or not. The data suggested that having realistic expectations about university/college was associated with post-secondary persistence. One could interpret these findings to mean that students who were more informed about university/college, and life there, had a greater tendency to persist than their counterparts who entered without such a fund of knowledge. Such results were somewhat supportive of research produced by Schonert et al. (1989), as previously mentioned, which noted an association between persistence, and adequate counselling/career direction. Further, findings of this study, as well as research conducted by Heller (1982), which linked perceiving one's post-secondary curriculum to be related to one's career goals, with persistence, augment the importance of providing students with accurate information about post-secondary, prior to their attendance.

#### Variables Associated With One's Freshman Year Experiences

##### Academic integration.

1. Academic performance. Results suggested university persistence to have been associated with post-secondary

academic performance since there was a direct positive relationship between these variables. On the contrary, no such association was noted between these variables for college students. Thus, the university average variable, and not college average variable, should prove useful in prediction of persistence. These findings, for the university students, corroborated earlier studies by Johnson (1987), Pantages and Creedon (1978), and Suen (1983) which indicated grade point average to have a positive effect on student persistence. However, college student results were consistent with those of researchers such as Dukes and Gaither (1984), Tibby, et al. (1978), and Voorhees (1987), who contended that academic performance was not a major contributing factor to students' decisions to leave post-secondary. Thus, based on findings of this study, one would have to agree that for university students, as opposed to college students, as Suen (1983) indicated, attempts to reduce attrition among post-secondary students should also try to improve academic performance.

2. Frequency of visits to obtain academic advising. Findings indicated frequency of visits to receive academic advising to be of little use in prediction of university persistence. However, this variable did prove useful in prediction of college persistence since an association between these factors was noted. These results, for college, and not university students, were consistent with

those of Glenn (1990) who concluded that returnees were more intrinsically motivated to attain advice or believed that seeking advice would increase the probability of their persistence. Thus they met with academic advisors more times than did non-returnees.

Students'/Parents' motivation and commitment.

1. Decision on a program or area of study or not.

Results indicated having made a decision on a program or area of study to be of no use in prediction of university or college persistence since no substantial relationship between these factors was observed. Such findings were contrary to all other studies which examined these variables. Researchers such as Digorgio and Dunphy (1985), Kleinfeld (1983), Pascarella and Chapman (1983), Schonert et al. (1989), and Titley (1985), suggested that students who had decided upon an area of study or program were more likely to persist than those who had not made such a commitment. Results of this study could be interpreted to mean that declaring a major, or deciding on an area of study, which could be facilitated through: more counselling and career direction in high school; a better system of support; or resolving the question of what one is in college for; according to Kleinfeld (1983), did not facilitate retention of rural Newfoundland post-secondary students.

2. Thoughts of changing one's area/program of study or not.

Results indicated that commitment to a program/area of

study, as indicated by not having thoughts of changing, was associated with college, and not university, persistence and therefore useful in prediction of which college students will persist or not. If in fact students who indicated not having thoughts of changing their programs or areas of study were more committed, results obtained for college, as opposed to university students, were supportive of those of researchers such as Getzalaf et al. (1984), and Nora (1987), which suggested that students who exemplified higher levels of commitment were more likely to persist in higher education.

3. Post-secondary aspirations. Results of this study suggested a positive relationship between university persistence and post-secondary aspiration level. However, results also seemed to indicate college persistence to be negatively associated with aspirations. Such findings, for university, as opposed to college students, were consistent with those of researchers such as Carroll (1988), Lee (1983), Moore (1985), and Panos and Astin (1968), which indicated post-secondary persisters to have had higher aspirations than non-persisters. One could conclude from these findings that university persisters maintained enrolment status because they aspired to more than partial completion of a program whereas many of the non-persisters withdrew because they wished only to finish part of a program. Further, one could interpret results of this study

to mean that many of the college non-persisters, since over one half aspired to more than completion of a program, had unrealistic expectations for themselves. On the contrary, university persisters, since more than one half aspired to completion of a program, seemed to have had more realistic expectations.

4. Extent of parents'/guardians' influence on students' post-secondary attendance decisions. Findings of this study suggested the extent of mothers'/female guardians' and father's/male guardians' influence on post-secondary attendance decisions not to be a good predictor of persistence in university or college students since no relationship between these factors was observed. Such results were non-supportive of those obtained by Schonert et al. (1989) which indicated parents of persisters to influence post-high school plans more than parents of non-persisters. One could interpret findings of this study to mean that most parents/guardians of rural Newfoundland university/college students were having some influence on their children's post-high school plans.

5. Importance parents/guardians place on students' post-secondary graduation. Results indicated the importance of post-secondary graduation variable to be useful in prediction of university persistence since a positive direct relationship between these factors was observed. However, this variable did not prove useful in predication of which

college students would or would not persist. Such findings, for university students, as compared to college students, were somewhat supportive of the contention of Hackman and Dysinger (1970) that students of parents who show a greater commitment to their child's education, prior to college entry, were more inclined to persist than those of parents who do not exemplify such commitment. Further, results of the study were somewhat consistent, for university students and not college students, with those of Trent and Medsker (1968) which indicated that parents of persisters showed a greater intensity of interest in their child's education, as compared to parents of dropouts.

The influence of post-secondary counselling services on student retention.

1. Awareness of post-secondary counselling services. Results indicated the awareness variable to be of no use in prediction of university or college student persistence since most members of each group noted being aware of the counselling services available. One could interpret these findings to mean that the university/college counselling centres did a great job of promoting awareness of their services since so many students indicated knowing about their offerings. In addition, awareness may not have been sufficient to ensure persistence in those students who had decided to dropout.

2. Frequency of meetings with post-secondary counsellor(s). Results indicated the number of times using counselling services variable to be of no use in prediction of university student persistence since no association between these factors was observed. However, this variable did prove useful in prediction of college student persistence since there was a positive direct relationship between these factors. Findings of this study, for university respondents, and not college students, were somewhat supportive of those of Aylesworth and Bloom (1976), which indicated rural youth to typically not seek counselling, in that over one half of each group noted not using counselling services at all. However, this contention of Aylesworth and Bloom (1976), was not supported by the college students, of which almost 80.0% of persisters indicated seeing a counsellor at least once.

3. Perceptions of post-secondary counsellor effectiveness. Findings suggested that for both the university and college students, perceptions of the effectiveness of one's university counsellor was not a useful predictor of persistence since there was no relationship observed between these factors. Such results were inconsistent with those of Carrol (1988), which indicated the best single discriminating independent variable in predicting student outcome to be perceived guidance counsellor effectiveness. One could further

conclude, from results of this study, that most rural students in the universities surveyed, felt that they were not receiving adequate counselling and career direction. On the contrary, most persisters and non-persisters at the college campuses surveyed, felt that they were receiving adequate counselling and career direction.

#### 4. Relationship with post-secondary counsellor.

Results suggested the relationship with university counsellor variable to be of no use in prediction of university student persistence since no association between these factors was observed. Further, one could conclude from findings of this study, that most rural university persisters and non-persisters felt they did not know a counsellor well. On the contrary, this variable did prove useful in prediction of college persistence since a positive direct relationship between these factors was noted. More specifically, all college non-persisters indicated not knowing a counsellor well. The significance of such findings regarding this variable and its association with college student persistence was augmented by the research of Bishop and Walker (1990) which noted that students identified as retention risks tended to persist after receiving counselling.

#### Satisfaction with the post-secondary experience.

##### 1. Relevance of post-secondary courses to one's goals.

Findings of the study indicated perception of the relevance



of one's courses, to one's goals, useful in prediction of university and not college student persistence since a positive relationship between these factors was noted for university students only. Such results obtained from the university students, as opposed to college attenders, were consistent with those of Heller (1982) which suggested that students were more likely to persist if they perceived the curriculum to be related to their career goals, as well as those of Johnson (1987), which suggested student persistence to have been associated with perceptions of the value of education to future employment. One could interpret findings of this study to mean that the university student who saw their courses as leading to something they valued, such as a certain job, were more inclined to persist than the student who failed to see such a connection. In addition, most rural Newfoundland college students, attending the campuses surveyed, thought that their courses were relevant to their goals.

2. Satisfaction with the post-secondary environment. Results indicated satisfaction with post-secondary environment to be useful in prediction of university, but not college, persistence since a relationship between these factors was noted for university students only. Such findings, for university respondents, as opposed to college attenders, supported research conducted by Glenn (1990), Ironside (1979), and Nelson and Urff (1982) which noted a

greater satisfaction with the post-secondary environment among returnees, as compared to dropouts. One could interpret findings of the present study to mean that those university students who were more content in their post-secondary environment were also more inclined to persist than those who were not as satisfied. Further, most college students at the colleges surveyed seemed to be content in their post-secondary environments.

#### Values.

1. Importance of money. Findings indicated that the importance of money variable was not a good predictor of university and college student persistence since no association between these factors was noted. Further, findings for both groups of respondents, university and college students, were inconsistent with those of Schonert et al. (1989) which indicated only a small percentage of persisters and non-persisters to have seen having lots of money as important, as well as those of Moore (1985), which reported rural dropouts, as compared to persisters, to have placed more emphasis on making a lot of money. One could interpret findings of this study to mean that most rural university and college students did value making a lot of money. However, persisters and non-persisters differed in that persisters were more willing to defer gratification and finish their education prior to seeking work, whereas non-persisters wanted to start earning money immediately or they

simply did not see the connection between college education and monetary success.

2. Importance of a prestigious job. The thoughts of having a prestigious job variable was of no use in prediction of university or college student persistence since no relationship between these factors was observed. These findings were inconsistent with those of Moore (1985) which noted rural persisters, as compared to non-persisters, to have placed more emphasis on working in a prestigious job. One could interpret findings of this study to mean that persisters and non-persisters alike, aspired to having a prestigious job. However, the groups may have differed in that post-secondary persisters saw the link between education and such a job, whereas non-persisters did not, or for some reason were not willing to remain in school to obtain such a job.

3. Importance of being able to financially help one's parents. Findings indicated perceptions of being able to financially help one's parents to be of no use in the prediction of university or college persistence since no relationship was observed between these factors. Such results were contrary to those of Moore (1985) which noted rural non-persisters, as compared to persisters, to have placed more emphasis on being able to financially help their parents. One could interpret findings of the present study to mean that although most members of each group wanted to

help their parents, university and college persisters were willing to get their education first whereas non-persisters may have wanted to help immediately.

Financial Variables.

1. Financial concern. Results indicated the financial concern variable to be of no use in prediction of university student persistence since no relationship between these factors was observed. However, this variable did prove useful in identifying those college students most likely to persist or drop out. Findings obtained for university students, and not college students, were inconsistent with those of Moore (1985) which noted that those who expressed more concern were more inclined to drop out. One could interpret results of this study to mean that most of the university students surveyed were experiencing at least some concern about their ability to finance their education, however retention efforts should not necessarily be focused on those students experiencing major concern. In addition, one interpretation of the college data could be that those students who expressed major concern about finance were more prone to dropout than those who expressed no concern or some concern. Thus, retention efforts within the colleges surveyed should focus on those students expressing major concern about their ability to finance their education.

2. Main source of finance of post-secondary education. Findings indicated source of finance to be of no use in

prediction of university persistence since no relationship between these factors was observed. However, results did indicate this variable to have been useful in prediction of college persistence since persisters and non-persisters varied substantially on three of the sources examined. Such results, for university students, were consistent with those of Moline (1987), and Kreiger (1980), which indicated no relationship between financial aid variables and persistence. On the contrary, findings for college students were consistent with those of Jensen (1983), and Nora (1990), which suggested certain types of financial aid to enhance student persistence. One could interpret such findings to mean that retention efforts, for university students, should not necessarily utilize student indicated main source of finance to identify those most at risk of leaving prior to graduation. In addition, one could interpret data from this study to mean that those college students who depended on their own source of finance (savings or unemployment insurance benefits), were more prone to dropout than those students who received a student loan.

3. Number of hours worked per week at a job. Results indicated number of hours worked per week to be of no use in prediction of university or college student persistence since no relationship between these factors was observed. These findings were consistent with those of Moore (1985)

which noted no significant relationship between the number of hours worked per week and rate of persistence. Findings of this study indicated that most rural students at the universities and colleges surveyed did not have a job during their first year of post-secondary. Further, those that did probably did not work enough hours to impact upon their attrition rate since, according to Kolstad (1977), and Astin (1975), the dropout rate was higher for those students who worked full-time.

#### Extent of social integration.

1. Involvement in campus clubs/organizations. Results indicated involvement in campus organizations/clubs to be of no use in the prediction of university persistence since no association between these factors was observed. However, this variable did prove useful in addressing college retention since a positive association was noted between these factors, for college students. Such findings, for college students, as opposed to university students, were consistent with those of researchers such as Dukes and Gaither (1984), and Nelson et al. (1984), which indicated involvement in campus organizations and activities to have been associated with increased persistence. One could interpret findings of the present study to mean that most university non-persisters and persisters were not involved, whereas college persisters, as opposed to non-persisters, showed more involvement in campus activities.

2. Informal discussions with faculty members. Results suggested frequency of informal meetings with faculty members to be useful in prediction of university and college student persistence since an association between these factors was observed. More specifically, university persisters and non-persisters differed most, with regard to the frequency of informal meetings variable, at the lower and upper ends of the scale utilized, with more non-persisters having indicated no meetings and more persisters having reported the most meetings. Similarly, college persisters, as compared to non-persisters, indicated more frequent informal meetings. One could interpret such findings to indicate that those post-secondary students who rarely met with faculty members, on an informal basis, were at a higher risk of dropping out, whereas those who met more frequently were more inclined to persist. Such findings were consistent with those of McClung (1988) which noted a positive direct relationship between amount of social interaction among college students and faculty members, and level of persistence. However, results of this study were contrary to those of Voorhees (1987), which reported neither a direct nor indirect positive effect of number of informal interactions with faculty, upon persistence rate.

3. Having many friends or not at post-secondary. One could conclude, from this study, that having many friends or not did not substantially differentiate university/college

persisters and dropouts. Such results were inconsistent with those of Glenn (1990) which indicated non-returning students to have had more friends entering the university. Further, results of this study suggested that most rural Newfoundland university/college persisters and non-persisters had many friends at post-secondary.

4. Perceptions of feeling at home in the post-secondary environment or not. Results indicated perceptions of feeling at home in one's post-secondary environment to be positively associated with university, but not college, persistence. Such university student findings were consistent with those of researchers such as Anderson (1974), Dollar (1983-84), and Fleming (1985), which suggested that those students who more readily adjusted to their new environment, and demonstrated a better "fit" with their post-secondary institution, were more inclined to persist than their counterparts who did not. On the contrary, such research was not supported by data obtained from the college attenders. One could interpret findings of this study to mean that university persisters tended to blend into their post-secondary setting more readily, whereas non-persisters were more alienated. In addition, for some reason, whether it be the physical size of the college campus, the overall campus population, or the teacher pupil ratio, most rural Newfoundland college students, at the campuses surveyed, felt at home in their



post-secondary environments.

5. Relationship with roommates. Results indicated the relationship with roommate(s) variable to be of no use in prediction of university persistence since no relationship between these factors was observed. However, this variable did prove useful in identifying those college students most at risk of dropping out. Overall, findings of this study, as indicated by university students' reported relationships with first and second roommates, did not support the conclusions of Aitken (1982), that students who were more compatible with their roommates were more inclined to persist. On the contrary, data obtained from college respondents was consistent with Aitken's (1982) findings. One could interpret results of this study to mean that most rural university persisters and non-persisters were compatible with their roommates, as indicated by the percentages of students reporting friendly or very close as descriptors of their relationships, whereas college persisters, as compared to non-persisters, were more compatible with their roommates.

Involvement in orientation. Extent of orientation involvement proved useful in prediction of university and college persistence since students in the study who indicated more involvement were also more inclined to persist than those who lacked participation. Such results supported the contention of Pascarella et al. (1986), that

student orientation involvement had a positive impact on student persistence via enhancement of social integration. However, results of this study were contrary to those of Martin and Dixon (1989), which reported orientation attendance not to have a positive influence on retention or student adjustment.

#### Influence of stress.

1. Having experienced much stress or not. Most university/college persisters and non-persisters reported experiencing much stress while in post-secondary. Thus, this variable did not prove useful in prediction of post-secondary persistence. However, findings of this study did support the contention of Aylesworth and Bloom (1976), that students from rural areas experienced a special set of stresses as a result of their transition from their home community to the post-secondary environment.

2. Difficulty coping with stress. Findings suggested the extent of difficulty coping with stress variable to have been useful in prediction of university, but not college, persistence since a relationship between these factors was observed for university respondents only. More specifically, university non-persisters, as compared to persisters, noted having had more difficulty coping with stress, whereas most college students indicated having had no difficulty coping with stress. One cannot conclude if these findings were consistent, or not, with the literature

since this variable was not found to have been examined in other post-secondary attrition studies. However, one could interpret results of this study to mean that university persisters, and college students in general, had some adequate coping skills. Such a conclusion would be non-supportive of research conducted by Aylesworth and Bloom (1976) which indicated rural students to have lacked appropriate coping strategies in that one avenue taken by them to reduce stress and alienation was the excessive use of alcohol and drugs.

Alcohol use. Results of this study indicated the frequency of alcohol use variable to have been of no use in prediction of university or college student persistence since no association between these factors was observed. More specifically, university/college persisters and non-persisters did not vary substantially with regard to this variable. Further, most rural students surveyed did not indicate excessive use of alcohol while attending post-secondary. Thus, findings of this study were non-supportive of research conducted by Aylesworth and Bloom (1976), which as previously mentioned, noted that rural students, as compared to urban students, were more inclined to turn to excessive use of alcohol to reduce stress and alienation.

Place of residence while at post-secondary. Results indicated the place of residence variable to have been of some use in prediction of university and college student

persistence. More specifically, findings indicated that a university student's likelihood of persistence was greater if he/she had lived in a residence, or off campus with relatives, whereas his/her likelihood of dropout was increased if he/she had lived off campus renting a house, apartment, or room. One could interpret findings of this study to mean that students who stayed in residence, or off campus with relatives, tended to show greater persistence because of the increased support from those around them. With regard to college respondents, results suggested that students who lived at home, or with relatives, were more likely to persist, whereas those who lived in residence were more likely to dropout prior to graduation. One could conclude, from these findings, that the social life at residence may have interfered with college student persistence. Further, those students who lived away from residence put more effort into their studies and may have received more support from family members. Thus, findings of this study, for university students as opposed to college students, supported those of researchers such as Levin and Clowes (1982), and Upcraft (1985), which indicated dormitory living to have helped retain students.

Extent of support/encouragement obtained while attending post-secondary. Results indicated extent of support/encouragement received from others while attending post-secondary to have been associated with university, but

not college student persistence. More specifically, results of this study indicated that university persisters, as compared to non-persisters, obtained more support/encouragement from others, whereas college persisters and non-persisters generally did not vary substantially with regard to this variable. Such findings for university students, as opposed to college students, were consistent with those of Mallinckrodt (1988) which indicated that, for persisters, lots of encouragement from their family members was a significant factor affecting decisions to stay in school. Similarly, university respondent findings were somewhat supportive of those of Bean (1982) which noted amount of interest and encouragement, expressed by parents, counsellors, and relatives, to have had a positive impact on student persistence.

#### Services/Resources Needed at Senior High

Results obtained indicated that university and college students noted two major areas need to be addressed at the senior high level in order to help rural students ease into post-secondary environments. Both areas involved ensuring that students were more adequately prepared for post-secondary.

First of all, many respondents suggested that rural students needed better preparation for the academic component of post-secondary (offered: courses which are

similar to those at post-secondary; means to help students become more independent; a greater selection of courses; a more demanding Level Three; study skills programs; better preparation for university mathematics; and more experience taking notes, conducting research, and speaking to groups). Such suggestions supported findings of Higgerson (1985), and Johnson (1987), which indicated students who were not satisfied with their academic programs to have been more inclined to drop out.

As well, many of the university and college students surveyed offered suggestions which indicated that rural high school students should be given more means to ensure adequate preparation for facets of post-secondary life outside the academic realm (provision of: information about post-secondary, more and better career counselling, and more information about registration). One could interpret these findings to mean that respondents felt that rural students were entering post-secondary without an adequate fund of information about it. The adverse implications of such findings were evident in many studies. For instance, Nelson & Urff (1982) indicated that many students withdrew prior to graduation because they were unsatisfied with curricular offerings and other facets of university. Similarly, Ironside (1979) noted that many non-persisters chose to drop out because of reasons related to dissatisfaction with the college environment. As well, Abramowicz (1988) contended

that satisfaction with college had major implications in the realm of post-secondary student retention.

Changes/Additions Needed at the Post-secondary Level

Changes/Additions indicated to be needed at the post-secondary level to help ease the transition for rural students were placed in four categories.

First of all, many students provided suggestions which indicated that instructors could make modifications to help rural freshmen (better student/professor relationships, more emphasis on the practical component of programs, more helpful advisors, and less demand on freshmen). Such results were supported by the literature. Nelson et al. (1984) indicated encouragement from instructors to have been positively associated with persistence. In addition, Habley (1984), and Glenn (1990), noted that help, via academic advising, had a positive impact upon student persistence. Further, Beal and Noel (1980) reported a caring attitude and high quality of advising to have been associated with student persistence.

As well, many of the respondents suggested changes/additions that could be addressed through post-secondary counselling services (more counselling, more peer helpers, more awareness of counselling services, formation of support groups, stress management programs, and better time schedules). Such findings supported Bishop's (1990) conclusions that counselling services had a positive impact

on retention at the post-secondary level.

In addition, many of the rural students indicated that their needed to be changes/additions made to post-secondary orientation procedures (more efficient orientation, clearer identification of buildings, less complicated registration, and reduced froshing). Research by Titley (1985), which indicated the orientation experience to have helped in the post-secondary transition, was substantiated by these findings.

Also, many of the survey participants indicated that, in order to help rural students, means to enhance social integration are need at post-secondary institutions (reduction in class size, placement of residence students with someone they know, more opportunities for socializing, and reduction in the campus population). Findings by such researchers as: Anderson (1974), which indicated adjustment to post-secondary to have been associated with persistence; and Abrahamowicz (1988), Dukes and Gaither (1984), and Nelson, et al. (1984), which noted a positive correlation between social integration and persistence, were supported by these results. Further, results of this research question were consistent with findings of Fleming (1985), and Dollar (1983-84), which indicated persisters, as compared to non-persisters, to have shown greater affiliation with their post-secondary institute.



### Reasons for Returning

University and college students noted returning to post-secondary mostly for reasons which were placed in two categories.

First of all, many of the students indicated main reasons which were somehow related to their aspirations (wanting to further their education, and aspiring to more than a Level Three education). Such suggestions were supportive of research produced Lee (1983), McCaul (1989), and Moore (1985), which noted students with higher aspirations to have shown increased rates of persistence. As well, these suggestions were consistent with research conducted by Tinto (1987) which indicated persistence to have been associated with a high degree of commitment to one's institution, as well as to the goal of graduation.

In addition, many of the respondents noted returning for reasons associated with perceiving education as a means to a job/career, or because of the benefits of such ends. Such reasons supported the conclusion drawn by Heller (1982), and Johnson (1987), that students who saw their curriculum or education as related to future careers/employment were more inclined to persist than their counterparts who failed to see such an association.

### Reasons for Not Returning

Most rural post-secondary students identified reasons for not returning to post-secondary which were placed in one

of three possible larger categories: post-secondary attendance was a wrong choice for them, they didn't like it or they were unsatisfied with general studies; financial constraints made attendance difficult; or they wanted to enter the work force.

Student reported reasons for withdrawal, which indicated that they had made a wrong decision by attending their selected institute, supported studies which suggested that students who entered post-secondary without an adequate fund of information were at a higher risk of dropping out than were their peers who were more prepared. For instance, researchers such as Glenn (1990), Higgerson (1985), Ironside (1979), Johnson (1987), and Nelson and Urff (1982) noted that students who perceived unsatisfactory conditions within, or related to their post-secondary environment, were more inclined to drop out than were their counterparts who had no such perceptions. Further, DiGiorgio and Dunphy (1985), Pascarella and Chapman (1983), and Titley (1985) produced findings which indicated that students who were more prepared for post-secondary, in that they had clear vocational goals, were more likely to persist than their peers who had not established such goals.

Student reported reasons for withdrawal, of wanting to work, were somewhat supportive of findings by Moore (1985) which indicated that non-persisters, as compared to persisters, were more motivated to obtain material success

(making alot of money and assisting parents financially). Many of the college students surveyed may have felt that by entering the work force immediately, they would obtain material success faster than if they persisted in college.

University and college student identified reasons for not returning to post-secondary, which were associated with financial difficulty, indicated findings of the present study to have been consistent with studies by Eagle (1981), Keim et al. (1974), Martin et al. (1982), Nora (1990), and Schonert et al. (1989), which indicated financial constraints to be highly correlated with post-secondary attrition. However, findings of this study were inconsistent with those of Fields and LeMay (1973) which noted financial concern to have had a greater impact upon students' initial decisions to attend post-secondary than on their decisions to persist or not. Further, results of this study were not supportive of earlier research by Trent and Medsker (1968) which indicated that a large portion of non-persisters cannot be accounted for by financial status.

The Influence of Unemployment Insurance Benefits on Post-secondary Attendance/Withdrawal Decisions

Findings of the present study indicated intentions to obtain seasonal work and collect unemployment insurance benefits to have been useful in prediction of university and college student persistence. More specifically, more persisters, as compared to non-persisters, in each group

(university and college) considered obtaining seasonal work and collecting unemployment insurance benefits in the upcoming year. These results indicated that many rural post-secondary students, especially non-persisters, should be informed of the possible negative consequences of such a lifestyle, as indicated by Herr and Cramer (1984), Liem and Rayman (1982), and Levine (1979).

### Conclusions

1. University persisters and non-persisters did not differ substantially with regard to any of the background and demographic characteristics investigated. However, college persisters and non-persisters did vary on two of these variables: older college students; and those students showing less commitment to church, as indicated by frequency of church attendance, tended to be more inclined to drop out.

2. With regard to the examined factors related to high school experiences, results indicated that university/college persisters, as compared to non-persisters: knew their counsellors better, had more realistic expectations about post-secondary, and attended larger high schools. In addition, university persisters tended to have had higher Level Three averages than their counterparts who did not maintain enrolment status.

3. An investigation of specific variables associated with freshman year experiences indicated that both

university and college persisters, as compared to non-persisters: had more frequent informal meetings with faculty members, and showed more involvement in orientation activities.

In addition, university persisters, as compared to university non-persisters: attained better marks; aspired to higher levels of education; felt more at home in their university setting; more often viewed their courses to be relevant to their goals; had less difficulty coping with stress; expressed greater satisfaction with their university environment; had parents/guardians who placed more emphasis on their graduation from post-secondary; were more likely to have lived off campus with relatives or in residence; and received more support/encouragement from their mother/female guardian, father/male guardian, brother(s), relative(s), and post-secondary counsellor(s), advisor(s), and instructor(s).

Further, findings of this study suggested that most university students felt that money, a prestigious job, and ability to financially help their parents was important. In addition, most university students: were not participating in campus clubs/organizations, did not know a counsellor well, and were experiencing much stress.

As well, college persisters, as compared to college non-persisters: were less inclined to think about changing their program, visited with counsellors more often, looked for academic advising more often, expressed less concern

about their ability to finance their education, relied on Canada Student Loans as a means of financing their education more, knew their counsellor(s) better, were more likely to have lived at home or with relatives, showed more involvement in campus clubs/organizations, had closer relationships with their roommates, and obtained less support/encouragement from their brother(s).

4. Rural Newfoundland university/college students felt that two major subgroups of interventions were needed, at the senior high level, to help ease the transition for rural students into higher education. Both involved more adequately preparing students for post-secondary.

First of all, respondents indicated that rural students need more efficient preparation for the academic component of post-secondary life. Specifically, they felt that students should be given greater preparation for certain courses and taught how to conduct themselves when taking post-secondary courses. Secondly, participants noted that rural students need better post-secondary preparation via information about facets of higher education other than the academic component.

5. Changes/additions identified by university/college students, to be needed at the post-secondary level to ease the transition for rural students into their new setting, were placed in four categories: (a) instructors need to be more sensitive to the rural freshman, (b) post-secondary

counselling services need to place greater emphasis on identifying and addressing the needs of incoming rural students, (c) more efficient orientation programs should be provided, and (d) means to enhance social integration into the post-secondary environment should be developed.

6. University/college persisters identified two major categories of main reasons for returning to post-secondary: (a) having educational aspirations above and beyond one year of post-secondary, and (b) viewing further education as a means to future career goals or the benefits of such.

7. Three major categories of main reasons were identified by university/college non-persisters for not returning to complete programs: (a) their initial choice of an institution or program had been a wrong one, (b) financial constraints had made post-secondary attendance difficult, and (c) they wanted to enter the workforce.

8. University/college persisters and non-persisters differed substantially with regard to percentage of members entertaining thoughts of obtaining seasonal work and collecting unemployment insurance benefits. Non-persisters, as compared to persisters, were more inclined to view such a path as an option for them.

#### Recommendations for Practice

The author has made the following action recommendations toward easing the transition for rural students into higher education, based on senior high/post-

secondary interventions suggested by college and university respondents, as well as identification of variables, in the present study, as being associated with post-secondary attrition/retention. Some interventions are specifically for university or college students. Others are appropriate for both groups of rural students. In addition, some of the suggested interventions are geared specifically for the senior high or post-secondary level, whereas others could possibly be implemented at both levels.

1. It is recommended that at the senior high level, retention efforts focus on more adequately preparing possible university and college attenders for the academic component of post-secondary programs by: ensuring adequate course selection, encouraging independence, and teaching note taking skills. In addition, potential university students should be offered a high school program which: has a similar workload to that of university, includes courses similar to those at university, requires research and class presentations, includes a study skills component, and adequately prepares students for university mathematics.

2. It is recommended that at the senior high level, potential university and college attenders are given sufficient information about post-secondary so they chose the right program, or area of study, and enter post-secondary with realistic expectations. This may be achieved by ensuring that students know their high school counsellor



well and are given adequate career counselling and tours of post-secondary campuses. Also, those contemplating university attendance should be given sufficient information about the university registration procedure.

3. It is recommended that in the university and colleges surveyed, retention efforts focus on: (a) improving student-faculty relationships by ensuring that new students are given; a workload that is manageable; help, support, and understanding when it is needed; and encouragement to meet faculty members often, (b) improving efficiency of counselling services by; increasing student awareness; providing means to address rural freshman needs such as stress management programs, support services, and career guidance and encouraging students to avail of these services; and ensuring that rural students get to know a counsellor well, (c) ensuring more efficient orientation by; encouraging students to participate in orientation activities; and specifically at the universities, making registration less complicated and ensuring that campus buildings are clearly identified, (d) improving the likelihood of adequate student "fit" into the post-secondary environment by; increasing opportunities for socializing with faculty/students; encouraging student participation in social activities; and assigning "buddies", who are familiar with the institute, to students.

4. It is recommended that at the universities

surveyed: (a) those students with averages of 60 and below, as well as those not living with relatives or in residence, are closely monitored and their needs met to ensure persistence; (b) students are helped to choose courses that are relevant to their goals, (c) efforts are made to increase student satisfaction by determining why some students do not like university, especially general studies, and making necessary modifications to eliminate such dissatisfaction; and (d) efforts are made to reduce class size and overcrowding.

5. It is recommended that at the colleges surveyed: (a) those students who show less commitment, are thinking of changing their programs, come from small schools, live in residence, or are 21 years of age or older, are monitored so their needs can be identified and possibly met to ensure their persistence; (b) all students are encouraged to meet with their academic advisors frequently; and (c) efforts are made to ensure roommate compatibility.

6. It is recommended that at the senior high and post-secondary level, retention efforts for university and college students focus on: (a) increasing student aspirations by helping them to see the importance and benefits of post-secondary education such as good careers and financial gains; (b) providing students with opportunities to discuss, as well as information on, the pros and cons of working seasonally and collecting

unemployment insurance benefits; and (c) increasing student awareness of available student aid.

7. It is recommended that at the senior high and post-secondary level, retention efforts for university students ensure that: (a) students with high school averages of 75 and below are closely monitored and their needs met to ensure their persistence; (b) parents express interest in their child's graduation from university; (c) significant others in the students' lives provide adequate support and encouragement; and (d) students are informed of how post-secondary education can increase one's self-esteem, independence, and opportunities to be with friends.

#### Recommendations for Further Research

1. It is recommended to statistically analyze the interactive effects of the variables examined in this study to determine cause and effect, instead of merely to describe.

2. It is recommended to replicate the present study with different subgroups, such as urban students, at the institutions surveyed.

3. It is recommended to replicate the present study at other Newfoundland post-secondary institutions including those colleges which offer first year university courses.

4. It would be useful to conduct a similar study to the present one which compares students attending first year at the larger university campuses, with those at colleges

which offer first year university courses.

5. It would be useful to design interventions based on findings of the present study, implement them at the senior high level and/or post-secondary level, and examine the ramifications.

## REFERENCES

- Abrahamowicz, D. (1988). College involvement, perceptions, and satisfaction: A study of membership in student organizations. Journal of College Student Development, 29, 233-238.
- Ackerson, N. J. (1967). Rural youth in a changing world. Speech presented at the National Outlook Conference on Rural Youth, Washington, D.C. (ERIC Document Reproduction Service No. ED 016 549)
- Aitken, N. D. (1982). College student performance, satisfaction and retention: Specification and estimation of a structural mode. Journal of Higher Education, 53, 32-50.
- Anderson, L. O. (1974). Small rural high schools and college completion. Journal of College Student Personnel, 15(3), 191-193.
- Astin, A. W. (1972). College dropouts: A national profile (ACE Research Reports, Vol. 7, No. 1). Washington, D.C.: American Council on Education.
- Astin, A. W. (1975). Preventing Students from Dropping Out. San Francisco: Jossey-Bass.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. Journal of College Student Personnel, 25, 297-309.
- Astin, A. W. (1985). Minorities in American higher education. San Francisco: Jossey-Bass.
- Avakian, A. N., Mackinney, A. C., & Allen, G. R. (1980-82). Race and sex differences in student retention at an urban university. College and University, 56-57, 160-165.
- Aylesworth, L. S., & Bloom, D. B. (1976). College experiences and problems of rural and small town students. Journal of College Personnel, 17(3), 236-242.
- Baker, R., & Nidorf, L. (1964). Pattern of occurrence of psychological disturbance in college students as a function of year level. Journal of Clinical Psychology, 20, 530- 531.
- Bayer, A. E. (1968). The college dropout: Factors affecting senior college completion. Sociology of Education, 41, 305-315.

- Beal, P. E., & Noel, L. (1980). What Works in Student Retention. Iowa City, IA: American Council on Testing and National Centre for Educational Management Systems.
- Bean, J. P. (1980). Dropouts and turnover: The synthesis and test of a casual model of student attrition. Research in Higher Education, 12, 155-187.
- Bean, J. P. (1982). Conceptual models of student attrition: How theory can help the institutional researcher. In E. T. Pascarella (Ed.), Studying Student Attrition: New Directions for Institutional Research, 2(4), 17-33.
- Bean, J. P. (1986). Assessing and Reducing Attrition. New-Directions-for-Higher-Education, 51, 47-61.
- Bee, R. H., & Beronja, T. A. (1983-84). Predicting student attrition through the utilization of discriminant analysis. College Student Journal, 17-18, 315-326.
- Bemis, J. F. (1962). A study of undergraduate students who voluntarily withdrew from the University of Washington. Unpublished doctoral dissertation, University of Washington.
- Bers, T. H. (1988). Student major choices and community college persistence. Research in Higher Education, 29(2), 161-173.
- Bishop, J. B., & Brenneman, K. A. (1986). An initial assessment of a counselling centre's role in retention. Journal of College Student Personnel, 27, 461-462.
- Bishop, J. B., & Walker, S. K. (1990). What role does counselling play in decisions relating to retention? Journal of College Student Development, 31, 88-89.
- Blanchfield, W. C. (1971). College dropout identification: A case study. The Journal of Experimental Education, 40(2), 1-4.
- Bolyard, C. S., & Martin, C. J. (1973). High risk freshmen. Measurement and Evaluation in Guidance, 6, 57-58.
- Braxton, J. M., Duster, M., & Pascarella, E. T. (1988). Casual modeling and path analysis: An introduction and an illustration in student attrition research. Journal of College Student Development, 29, 263-271.
- Breen, P. (1983). Focus groups on retention. Unpublished manuscript, De Vry Inc., Evanston, IL.

- Brown, D. E. (1985). Higher Education Students from Rural Communities: A Report on Dropping Out. New Mexico State University, Centre for Rural Education. (ERIC Document Reproduction Service No. ED 258 771)
- Budgell, J. W. (1985). A study of mature students at Memorial University of Newfoundland. Unpublished master's thesis, Memorial University of Newfoundland, St. John's, NF.
- Bynum, J. E., & Thompson, W. E. (1983). Dropouts, stopouts and persisters: The effects of race and sex composition of college classes. Colleges and University, 59, 39-48.
- Callis, R., & DePauw, M. E. (1985, August). Effects of counselling on academic performance. ACPA Developments, 1-2.
- Carroll, J. (1988). Freshman retention and attrition factors at a predominantly Black urban community college. Journal of College Student Development, 29(1), 52-59.
- Chase, C. I. (1970). The college dropout: His high school prologue. Bulletin of the National Association of Secondary School Principals, 54, 66-71.
- Chu, L. (1980). Education for Rural Women: A Global Perspective. Las Cruces, MN: New Mexico State University, Bureau of Educational Research. (ERIC Document Reproduction Service No. ED 168 768)
- Clarenback, K. F. (1977). Educational Needs of Rural Women and Girls. (Report of the National Advisory Council on Women's Education Programs). Washington, D.C.: National Advisory Council on Women's Educational Programs. (ERIC Document Reproduction Service No. Ed 168 768)
- Cope, R. G. (1972). Are students more likely to dropout of large colleges? College Student Journal, 6, 92-97.
- Cosby, A. G., & Stevens, P. J. (1979). Some Inequality and Educational Achievement in Rural America. College Station, TX: Texas A and M University. (ERIC Document Reproduction Service No. Ed 168 768)
- Cuyjet, M. J., & Rode, D. L. (1987). Follow-up of orientation contacts: Effects on freshman environmental satisfaction. Journal of College Student Personnel, 28, 21-28.
- Dale, R. R., & Miller, P. M. (1972). The urban and rural background of first-year university students in relation to their academic performance. The British Journal of

- Educational Psychology, 42(2), 152-158.
- Davis, J. A. (1964). Great Aspirations. Chicago: Aldine.
- Demos, G. D. (1968). Analysis of college dropouts-some manifest and overt reasons. Personnel and Guidance Journal, 46, 681-684.
- De Vecchio, R. C. (1972). Characteristics of non-returning community college freshmen. The Journal of College Student Personnel, 13, 429-432.
- DiGiorgio, A. J., Dunphy, L. (1985). A strategy for retaining undeclared students. Journal of College Student Personnel, 26, 466-467.
- Dollar, R. J. (1983-84). Selected factors for retention counselling with college of education students. College Student Journal, 17-18, 410-416.
- Dollar, R. J. (1985-86). Attrition of college education students: A discriminant analysis. College Student Journal, 19-20, 152-156.
- Downey, R. G. (1980). Higher Education and Rural Youth. Paper presented at the annual Kansas State University Rural and Small School Conference, Manhattan, KS. (ERIC Document Reproduction Service No. Ed 201 459)
- Duea, J. (1981). President's views on current and future issues in higher education. Phi Delta Kappan, 62, 586-588.
- Dukes, F., & Gaither, G. (1984). A campus cluster program: Effects on persistence and academic performance. College and University, 59, 150-156.
- Dunne, F. (1978). Options: A Career Development Project for Rural High School Students - Final Report. Dartmouth College, Department of Education. (ERIC Document Reproduction Service No. ED 160 321)
- Eagle, N. (1981). Survey of nonreturning students. Bronx, New York: Bronx Community College. (ERIC Document Reproduction Service No. ED 225 422)
- Eckland, B. K. (1965). Social class and college graduation: some misconceptions corrected. The American Journal of Sociology, 70, 36-50.
- Edington, E. D. (1971). A Summary of Research in Rural Education: Testimony to the United States Senate Select



- Committee on Equal Educational Opportunity. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education. (ERIC Document Reproduction Service No. ED 053 842)
- Fagg, J., Brown, R., Farris, N., & Rhodes, A. (1980). A Study of the Educational and Career Goals of Freshman Students from the Arkansas Ozarks. Paper presented to the Annual Conference of the Southern Association for Institutional Research, Birmingham, AL. (ERIC Document Reproduction Service No. ED 225 489)
- Feller, B. A. (1974). Rural-urban differences in scholastic performance in college. Paper presented at the annual meeting of the Southern Association of Agricultural Scientists, Memphis, TN. (ERIC Document Reproduction Service No. ED 096 026)
- Fields, C. R., & LeMay, M. L. (1973). Student financial aid: Effects on educational decisions and academic achievement. Journal of College Student Development, 14, 425-429.
- Flacks, R. (1963). Adaptations of deviants in a college community. Unpublished doctoral dissertation, University of Michigan.
- Fleming, J. (1985). Blacks in college. San Francisco: Jossey-Bass.
- Flora, C. B., & Johnson, S. (1978). Discarding the Distaff: New Roles for Rural Women. In T. R. Ford (Ed.), Rural U.S.A., Persistence and Change. Ames, IA: Iowa State University Press.
- Forrest, A. (1982). Increasing student competence and persistence: The best case for general education. Iowa City, IA: American College Testing Program National Centre for Advancement of Educational Practices.
- Fox, J. (1980). Effect analysis in structural equation models. Sociological Methods and Research, 2(1), 3-28.
- Fox, J. (1985). Application of a conceptual model of college withdrawal to disadvantaged students. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- French, F. F., Klas, L. D., & Boak, R. T. (1979). Relative importance of personal and academic factors to satisfactory progress in university. College Student Journal, 13(3), 256-262.

- Galicki, S. J., & McEwen, M. K. (1969). The relationship of residence to retention of Black and White undergraduate students at a predominantly White university. Journal of College Student Development, 30, 300-303.
- Getzlaf, S. B., Sedlacek, G. M., Kearney, K. A., & Blackwell, J. M. (1984). Two types of voluntary undergraduate attrition: An application of Tinto's model. Research in Higher Education, 20(3), 257-268.
- Glenn, L. (1990). The retention and attrition of American college test scholars. Journal of College Student Development, 31, 280-281.
- Goble, R. (1957). A study of the student dropout problem at Miami University. Unpublished doctoral dissertation, Indiana University.
- Gustavus, W. T. (1972). Successful students, readmitted students, and dropouts: A comparative study of student attrition. Social Science Quarterly, 53, 136-144.
- Habley, W. R. (1981). Academic Advisement: The critical link in student retention. National Association of Student Personnel Administrators Journal, 18, 45-50.
- Hackman, J. R., & Dysinger, W. S. (1970). Commitment to college as a factor in student attrition. Sociology of Education, 43, 311-324.
- Heller, B. R. (1982). Persisters and non-persisters: Critical characteristics affecting retention among CUNY/City University of New York/community college career program students. Albany: New York State Education Department, Bureau of Grants Administration. (ERIC Document Reproduction Services No. ED 217 949)
- Herr, E. L., & Cramer, S. H. (1984). Career Guidance and Counselling Through the Life Span. Toronto: Little, Brown, and Company.
- Hill, A. H. (1966). A longitudinal study of attrition among high aptitude college students. The Journal of Educational Research, 60, 166-173.
- Higgerson, M. L. (1985). Understanding why students voluntarily withdrawal from college. NASPA Journal, 22(3), 15-21.
- Holloway, D. E., Beagle, J. A., & Bryant, W. K. (1960). People of rural America (1960 Census Monograph). Washington, DC: U.S. Department of Commerce.

- Hoyt, D. P. (1959). Size of high school and college grades. Personnel and Guidance Journal, 37, 569-573.
- Hutchinson, J. E., & Johnson, A. E. (1980). Identifying persisters, voluntary withdrawals and academic dropouts at a liberal arts college: One institutions predictive model to reduce attrition. National Association of Student Personnel Administrators Journal, 12, 41-45.
- Iffert, R. E. (1957). Retention and withdrawal of college students. (Bulletin, 1958, No. 1). Washington, D.C.: U.S. Government Printing Office.
- Ironside, E. M. (1979). Voluntary withdrawal: Why don't they return? Chapel Hill: University of North Carolina. (ERIC Document Reproduction Service No. ED 180 371)
- Jensen, E. L. (1981). Student financial aid and persistence in college. Journal of Higher Education, 52, 280-294.
- Jensen, E. L. (1983). Financial aid and educational outcomes: A review. College and University, 58, 287-302.
- Jess, J. D. (1988). Rural education: A different kind of politics. A local school perspective. Paper presented at Pioneer Hi-Bred International, Inc., Des Moines, IA.
- Johansson, C. B., & Rossmann, J. E. (1973). Persistence at a liberal arts college: A replicated five-year longitudinal study. Journal of Counselling Psychology, 20, 1-9.
- Johnson, N. T. (1987). Academic factors that affect transfer student persistence. Journal of College Student Personnel, 28, 323-340.
- Jones, J. (1962). Some personal social factors contributing to academic failure at Texas Southern University. Personality Factors on College Campus. Austin: Hagg Foundation for Mental Health.
- Kamens, D. (1971). The college "charter" and college size: Effects on occupational choice and college attrition. Sociology of Education, 44, 270-296.
- Kowalski, C., (1977). The impact of college on persisting and non-persisting students. New York: Philosophical Library Inc.
- Keim, H. D., Van Allen, G., & Anderson, G. J. (1982). A model for determining student attrition. Occupational Education Research Project Final Report, June 1982. (ERIC Document Reproduction Service, No. ED 222-210).

- Kenny, M. E. (1987). Family ties and leaving home for college: Recent findings and implications. Journal of College Student Personnel, 28, 438-441.
- King, D. T. (1963). A comparison of a college generation of rural and non-rural students in selected colleges of Arkansas with respect to academic success and number of semesters of undergraduate study completed. Dissertation Abstracts International, 24, 626-627.
- Kleinfeld, J. (1982). Native college success in the seventies: Trends at the University of Alaska at Fairbanks. (ISER Occasional Paper No. 15). (ERIC Document Reproduction Service No. ED 239 814)
- Kolstad, A. (1977). Attrition from college: The class of 1972 two and one-half years after high school graduation. National longitudinal study of the high school class of 1972. Washington, D.C.: National Centre for Education Statistics (DHEW).
- Kooker, E. W., & Bellamy, R. Q. (1969). Some background differences between college graduates and dropouts. Psychology, 6, 1-6.
- Kreiger, T. B. (1980). A Longitudinal Study of the Relationship Between Federal Financial Aid Packaging and Retention for the Members of the Freshman Class of 1974-1975 at Troy State University. (Ph.D dissertation, Florida State University, 1980). Dissertation Abstracts International, 41, 960-A. (University Microfilms No. 80-19,600)
- Kysar, J. E. (1966). Preventative psychiatry on the college students: A review and prospectus. Mental Hygiene, 50, 398-405.
- Lane, W. C. (1960). The lower class girl in college. Unpublished doctoral dissertation, Stanford University.
- Lathrop, I. T. (1960). Scholastic achievement at Iowa State College associated with high school size and course pattern. Journal of Experimental Education, 35, 37-48.
- Lee, L. (1983). Post-secondary accessibility for Frontier students. Research: A Report of the Planning and Research Branch #83-06. (ERIC Document Reproduction Service No. ED 250 133)
- Levin, S. V. (1979). The psychological and social effects of youth unemployment. Children Today, 8(6), 40.

- Levin, B., & Clowes, D. (1982). The effect of residence hall living at college on attainment of the baccalaureate degree. Journal of College Student Personnel, 23, 99-104.
- Liem, R., & Rayman, P. (1980). Health and social costs of unemployment. American Psychologist, 37(10), 1116-1123.
- Lins, L. J., Abeil, A. P., & Hutchings, H. C. (1966). Relative usefulness in predicting academic success of the ACT, the SAT, and other variables. Journal of Experimental Education, 35, 1-29.
- Mallinckrodt, B. (1988). Student retention, social support, and dropout intention: Comparison of Black and White students. Journal of College Student Development, 29(1), 60-64.
- Manese, J. E., & Sedlacek, W. E. (1985). Changes in religious behaviours and attitudes of college students from 1973 to 1983. Counselling and Values, 30, 74-77.
- Manese, J. E., & Sedlacek, W. E. (1986). Religious dimensions of college students: A model for counselling and student programming. Journal of College Student Personnel, 27, 82-83.
- Martin, C. J., Berkey, L., & Gribbin, K. (1982). Small college retention. A study and proposal for survival. Paper presented at the annual meeting of the American Personnel and Guidance Association, Detroit. (ERIC Document Reproduction Service No. ED 222 113)
- Martin, N. K., & Dixon, P. N. (1989). The effects of freshmen orientation and locus of control on adjustment to college. Journal of College Student Development, 30, 362-367.
- McCaul, E. (1989). Rural public school dropouts: Findings from high school and beyond. Research in Rural Education, 6(1), 19-24.
- McCauley, D. P., (1988). Effects of specific factors on Blacks' persistence at a predominately White university. Journal of College Student Development, 29(1), 48-51.
- McClung, J. J. (1988). A study to identify factors that contribute to Black student withdrawal at Clemson University. Clemson, South Carolina: Clemson University. (ERIC Document Reproduction Service No. ED 300 483)

- McLaughlin, B. E. (1970). Recognition and treatment of youthful depression in a rural area. Psychosomatics, 2, 420-421.
- McNeely, J. H. (1937). College student mortality. (U.S. Department of the Interior Bulletin No. 11). Washington, D.C.: U.S. Government Printing Office.
- Miller, G. W. (1970). Success, Failure and Wastage in Higher Education. London: Harrap.
- Minister of State for Youth (1991). Stay in School. Government of Canada: Public Affairs and Youth Affairs, Employment and Immigration, Canada
- Moline, A. E. (1987). Financial aid and student persistence: An application of casual modelling. Research in Higher Education, 26, 130-147.
- Moore, B. (1985). A longitudinal/panel study of persisting and nonpersisting rural minority college students. Part 1: Freshman uninterrupted enrollees, transfers and dropouts. (Research Bulletin No. 47). (ERIC Document Reproduction Service No. ED 282 493)
- Moore, K. (1984). A study of personal and social variables affecting voluntary student attrition during junior division at Memorial University of Newfoundland. Unpublished master's thesis, Memorial University of Newfoundland, St. John's, NF.
- Nelson, A. G. (1966). College characteristics associated with freshman attrition. Personnel and Guidance Journal, 44, 1046-1050.
- Nelson, R. B., Scott, T. B., & Bryan, W. A. (1984). Precollege characteristics and early college experiences as predictors of freshmen year persistence. Journal of College Student Personnel, 25, 50-54.
- Nelson, R. B., & Urff, D. M. (1982). Withdrawing/nonreturning students at the University of North Dakota. Grand Fork: University of North Dakota, Division of Student Affairs. (ERIC Document Reproduction Service No. ED 221 098)
- Newton, L. L., & Gaither, G. H. (1980). Factors contributing to attrition: An analysis of program impact on persistence patterns. College and University, 32(3), 237-251.
- Nora, A. (1987). Determinants of retention among Chicano

- college students: A structural model. Research in Higher Education, 26(1), 33-59.
- Nora, A. (1990). Campus-based aid programs as determinants of retention among Hispanic community college students. Journal of Higher Education, 61(3), 312-331.
- Ott, M. D. (1988). An analysis of predictors of early academic dismissal. Research in Higher Education, 28, 34-173.
- Pace, C. R. (1984). Measuring the quality of college student experiences. Los Angeles: University of California at Los Angeles.
- Panos, R. J., & Astin, A. W. (1968). Attrition among college students. American Educational Research Journal, 5, 57-72.
- Pantages, T. J., & Creedon, C. F. (1978). Studies of College Attrition: 1950-1975. Review of Educational Research, 48, 49-101.
- Pascarella, E. T. (1986). A program for research and policy development on student persistence at the institutional level. Journal of College Students Personnel, 27, 100-107.
- Pascarella, E. T., & Chapman, D. W. (1983). A multi-institutional, path analytic validation of Tinto's model of college withdrawal. American Education Research Journal, 20(1), 87-102.
- Pascarella, E., Duby, P., Miller, V., & Rasher, S. (1981). Preenrollment variables and academic performance as predictors of freshmen year persistence, early withdrawal, and dropout behaviour in an urban, non-residential university. Research in Higher Education, 15(4), 329-349.
- Pascarella, E. T., Smart, J. C., & Ethington, C. A. (1986). Long-term persistence of two-year college students. Research in Higher Education, 24(1), 47-71.
- Pascarella, E. T., & Terenzini, P. (1977). Patterns of student-faculty informal interaction beyond the classroom and voluntary freshman attrition. Journal of Higher Education, 48(5), 540-552.
- Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. Journal of Higher Education, 51,

60-75.

- Pascarella, E. T., Terenzini, P., & Wolfle, L. (1986). Orientation to college and freshman year persistence/withdrawal decisions. Journal of Higher Education, 57, 155-175.
- Peng, S. S., & Fetters, W. B. (1977). College student withdrawal: A motivational problem. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Peng, S. S., & Fetters, W. B. (1978). Variables involved in withdrawal during the first two years of college: Preliminary findings from the National Longitudinal Study of the High School Class of 1972. American Educational Research Journal, 15, 361-372.
- Ramist, L. (1981). College student attrition and retention (Report No. 81-1). New York: College Entrance Examination Board.
- Rosen, B. C., Crockett, H. J., & Nunn, C. Z. (1969). Part II: Origins of achievement: Personality and structural factors, Introduction. In B. C. Rosen, H. J. Crockett, & C. Z. Nunn (Eds.), Achievement in American Society. Schenkman Publishing Company.
- Rossman, J. E. (1967). An experimental study of faculty advising. Personnel and Guidance Journal, 46, 160-164.
- Rossman, J. E. (1968). Released Time for faculty advising: The impact upon freshman. Personnel and Guidance Journal, 47, 358-363.
- Rossman, J. E., & Kirk, B. A. (1970). Factors related to persistence and withdrawal among university students. Journal of Counseling Psychology, 17, 56-62.
- Sacrey, P. D., Klas, L. D., & Boak, R. T. (1977). Ideal and actual roles of the university undergraduate prefect - a comparison of the perceptions of students and prefects. Journal of College and University Student Housing, 7(1), 16-21.
- Sanders, W. B., Osbourne, R. T., & Greene, D. H. (1955). Intelligence and academic performance of college students in urban, rural, and mixed backgrounds. Journal of Educational Research, 49, 185-193.
- Schonert, K. A., Elliott, J. P., & Bills, D. B. (1989). College attendance patterns of rural youth: Results from



- Iowa's class of 1983. North Central Regional Educational Lab., Elmhurst, IL. (ERIC Document Reproduction Service No. ED 319 557)
- Schotzinger, K. A., Buchanan, J., & Fahrenback, W. F. (1976). Non-residence advisors: A peer counselling program for commuter students. National Association of Student Personnel Administrators Journal, 11, 42-46.
- Schwarzweiler, H. K. (1976). Scholastic performance, sex differentials and the structuring of educational ambition among rural youth in three societies. Rural Sociology, 41(2), 194-216.
- Schwitzer, A. M., & Robbins, S. B. (1986). Personality constructs as predictors of adjustment to college. Paper presented at the meeting of the American College Personnel Association, New Orleans, L.A.
- Seale, R. E. (1984). A Structural Model for Explaining Retention and Attrition in a Community College. Unpublished doctoral dissertation, University of Houston, Texas.
- Sewell, W. H., & Shah, V. P. (1967). Socioeconomic status, intelligence, and the attainment of higher education. Sociology of Education, 40, 1-23.
- Sexton, V. S. (1965). Factors contributing to attrition in college populations. Twenty-five years of research. The Journal of General Psychology, 72, 301-326.
- Shaw, M. C., & Brown, D. J. (1957). Scholastic underachievement of bright college students. Personnel and Guidance Journal, 36, 195-199.
- Shaver, P., Furman, W., & Buhrmester, D. (1985). Transition to college: Network changes, social skills, and loneliness. In S. Duck & D. Perlman (Eds.), Understanding personal relationships: An interdisciplinary approach (193-219). London: Sage.
- Slocum, W. L. (1956) Social factors involved in academic mortality. College and University, 32(1), 53-64.
- Smallwood, F. D., & Klas, L. D. (1973). A comparison of the academic, personal, and social effects of four different types of university residential environments. Journal of College and University Student Housing, 3(2), 13-19.
- Smith, A. D. (1983-84). Sex differences among community and

- technical college persisters and non-persisters. College Student Journal, 17-18, 60-65.
- Spady, W. G. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. Interchange, 1, 8-9.
- Spady, W. (1971). Dropouts from higher education: Toward an empirical model. Interchange, 2, 38-62.
- Stage, Frances (1988). Student typologies and the study of college outcomes. Review of Higher Education, 11, 247-257.
- Study Group On Excellence in American Education (1984). Involvement in learning: Realizing the potential of American higher education. Chronical of Higher Education, 35-49.
- Stoecker, J., Pascarella, E. T., & Wolfe, L. M. (1988). Persistence in higher education: A 9-year test of a theoretical model. Journal of College Student Development, 29, 196-209.
- Stone, D. (1965). Predicting student retention and withdrawal in a selected state university college of New York. Unpublished doctoral dissertation, Cornell University.
- Suen, H. K. (1983). Alienation and attrition of Black college students on a predominantly White campus. Journal of College Student Personnel, 19, 117-121.
- Summerskill, J. (1962). In The American College (Sanford, R.N., Ed.), New York: Wiley.
- Theophilides, C., & Terenzini, P. (1981). The relationship between non-classroom contact with faculty and students' perceptions of instructional quality. Research in Higher Education, 15(3), 255-269.
- Tibby, E., Hirabayashi, J., Olson, J., & Peterson, R. (1978). What Really Happened to the Class of '75? Berkeley, California: Education Testing Service.
- Tinto, V. (1975). Dropout from Higher Education: A Theoretical Synthesis of Recent Research. Review of Educational Research, 45, 89-125.
- Tinto, V. (1982). Defining Dropout: A Matter of Perspective. In Pascarella, E.T. (Ed.), Studying student attrition. New Directions for Educational Research, No. 36. San Francisco: Jossey-Bass.

- Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago: University of Chicago Press.
- Titely, B. S. (1985). Orientation programs. In U. Delworth & G. R. Hanson (Eds.), Increasing student retention (221-243). San Francisco: Jossey-Bass.
- Titely, R. W. (1985). Initial choice of college major and attrition: The "decided" and "undecided" after 6 years. Journal of College Student Personnel, 26, 465-466.
- Trent, J. W., & Medsker, L. L. (1968). Beyond high school: A psychological study of 10,000 high school graduates. San Francisco: Jossey-Bass Publishers.
- Troy, T. J. (1987). Increasing faculty involvement in retention efforts. In L. Noel, R. Levitz, & D. Saluri (Eds.), Increasing student retention (383-401). San Francisco, CA: Jossey-Bass.
- Upcraft, M. L. (1985). Residence halls and student activities. In L. Noel, R. Levitz, D. Saluri, and Associates (Eds.), Increasing Student Retention, (319-344). San Francisco: Jossey-Bass.
- Voorhees, R. A. (1985). Student finances and campus-based financial aid: A structural model analysis of the persistence of high need freshman. Research in Higher Education, 22, 65-92.
- Voorhees, R. A. (1987). Toward building models of community college persistence: A logit analysis. Research in Higher Education, 26, 115-129.
- Williamson, D. R., & Creamer, D. G. (1988). Student attrition in 2 and 4 year colleges: Application of a theoretical model. Journal of College Student Development, 29, 210-217.
- Wolford, M. (1964). A comparison of dropouts and persisters in a private liberal arts college. Unpublished doctoral dissertation, University of Oregon.
- Young, R. B., Backer, R., & Rogers, G. (1989). The impact of early advising and scheduling on freshman success. Journal of College Student Development, 30, 309-312.

## APPENDIX A

University Student Letter of Request for Participation in the  
Study

Apartment 7  
80 Bowater Drive  
Wabush  
Newfoundland & Labrador  
AOR 1B0

August 18, 1990

Dear Student:

You are being asked to participate in a study of rural Newfoundland university students. The factors examined will be those which distinguish students who complete programs at university from those who do not. The information you provide may be used to help design programs that could ease the transition for students from their high schools to university.

The study is being conducted by myself, Shawn Rumbolt, under the supervision of Mrs. Mildred Cahill, a professor in the Educational Psychology Department at Memorial University, and with the cooperation of the university at which you enrolled in September of 1989.

The questionnaire will take approximately fifteen minutes to complete. You do not have to answer any questions unless you want to. The information you provide will be held in strict confidence. It will be used only by the persons engaged in this study, and all participants will remain anonymous.

When finished your questionnaire, please place it in the self-addressed, stamped envelope, seal, and mail. It would be greatly appreciated if the questionnaire could be completed within one week of being received.

I thank you in advance for your cooperation.

Sincerely,

Shawn Rumbolt  
Graduate Student  
Educational Psychology

## APPENDIX B

University Student Questionnaire



7. What was your Level III average? \_\_\_\_\_
8. Did you have a: (a) Mother or female guardian living with you most of the time prior to university? Yes.....1 No.....2
- (b) Father or male guardian living with you most of the time prior to university? Yes.....1 No.....2

If "Yes" to "8 (a)" or "8 (b)" answer "9" - "12". If "No" to "8 (a)" and "8 (b)" go to "13".

9. How much education does:
- | (a) Your mother or female guardian have?<br>(circle one) | (b) Your father or male guardian have?<br>(circle one) |
|--|--|
| Elementary or less.....1                                 | ... 1  |
| Some Junior High.....2                                   | ... 2  |
| Some High School.....3                                   | ... 3  |
| High School Graduation.....4                             | ... 4  |
| Some Post-secondary.....5                                | ... 5  |
| Completion of a post-secondary program.....6             | ... 6  |
10. What was each of your parents/guardians total income, before deductions, for 1989?
- | (a) Mother/female guardian<br>(circle one) | (b) Father/male guardian<br>(circle one) |
|--|--|
| Under \$5,000.....1                        | ... 1                                    |
| \$5,000 - \$9,999...2                      | ... 2                                    |
| \$10,000 - \$14,999...3                    | ... 3                                    |
| \$15,000 - \$19,999...4                    | ... 4                                    |
| \$20,000 - \$24,999...5                    | ... 5                                    |
| \$25,000 - \$29,999...6                    | ... 6                                    |
| \$30,000 - \$34,999...7                    | ... 7                                    |
| \$35,000 - \$39,999...8                    | ... 8                                    |
| \$40,000 or more.....9                     | ... 9                                    |
11. How much did your parents/guardians influence your decision to attend university?
- | (a) Mother/female guardian<br>(circle one)   | (b) Father/male guardian<br>(circle one) |
|--|--|
| Very Much.....1<br>(If he/she hadn't insisted that I enrol I would have chosen not to attend college.) | ...1                                     |
| Some.....2<br>(He/she supported my decision to attend.)  | ... 2                                    |
| None.....3<br>(Attending college is seen as a waste of time and money by him/her.)                     | ... 3                                    |



12. Do your parents/guardians see your graduating from university as being important?

Yes.....1

No.....2

13. How much support/encouragement did you receive from the following regarding your attendance at university?

Please answer using the following scale

	<u>Very Much</u>	<u>Some What</u>	<u>Very Little</u>	<u>None</u>
Mother/female guardian.....1		2	3	....4
Father/male guardian.....1		2	3	....4
Brother(s).....1		2	3	....4
Sister(s).....1		2	3	....4
Other relative(s).....1		2	3	....4
Friend(s).....1		2	3	....4
University Counsellor(s).....1		2	3	....4
University Advisor.....1		2	3	....4
University Instructor(s).....1		2	3	....4

14. While in university, did you live with your parents/guardians?

Yes.....1

No.....2

If "No" to "14", do "15" and "16". If "Yes" to "14" go to "17".

15. While in university, how many times per semester would:

- a) Your parents/guardians write you? \_\_\_\_\_ times
- b) You write them? \_\_\_\_\_ times
- c) Your parents/guardians visit you? \_\_\_\_\_ times
- d) You visit them? \_\_\_\_\_ times

16. a) Where did you live while at university?

Residence.....1

Home.....2

Off-campus with relatives.....3

Off-campus, renting house, room or apartment.....4

- b) How many other people shared the room in which you slept?

None.....1

One.....2

Two.....3

Three or more.....4

- c) Did you have a roommate or roommates?

Yes.....1

No.....2

If "Yes":

- d) How many? \_\_\_\_\_

- e) How would you describe your relationship with your roommates(s)?  
(Indicate separately for each one using the following descriptions.)

	1st Roommate	2nd Roommate	3rd Roommate	4th Roommate
	<u>(circle one for each roommate)</u>			
Very close.....1 (we communicate well and discuss many of our personal problems.)	.... 1	.... 1	.... 1	.... 1
Friendly.....2 (We don't discuss our personal lives but we do get along well.)	.... 2	.... 2	.... 2	.... 2
Okay.....3 (We get along okay but we don't talk much and we aren't especially friendly.)	.... 3	.... 3	.... 3	.... 3
Distant.....4 (My roommate and I don't have much in common. We don't talk.)	.... 4	.... 4	.... 4	.... 4
Unfriendly.....5 (My roommate doesn't like me.)	.... 5	.... 5	.... 5	.... 5

17. a) Were you involved in any orientation activities at university?  
 Yes.....1  
 No.....2

If "Yes":

- b) How long did they last? No. of days \_\_\_\_\_
- c) Were you satisfied with your orientation experience?  
 Yes.....1  
 No.....2
18. a) Was life at university what you expected it to be?  
 Yes.....1  
 No.....2
- b) Do you feel that your university courses were relevant to your goals?  
 Yes.....1  
 No.....2
- c) What was your university average? \_\_\_\_\_

- d) At the time of your first enrolment at university what was the highest level of education you wished to attain?
- One year of university or less.....1
  - 2 - 4 years of university.....2
  - Completion of a program.....3
  - Professional degree (ie. law or medicine).....4
  - Master's degree.....5
  - Doctorate.....6
- e) Did you decide on a program or area of study while at university or prior to attending? Yes.....1  
No.....2

If "Yes":

- f) Did you think of changing your program or area of study?
- Yes.....1
  - No.....2

If "Yes":

- g) How many times? \_\_\_\_\_
19. Which of the following are important to you:
- a) Making lots of money. Yes.....1  
No.....2
  - b) Having a prestigious job. Yes.....1  
No.....2
  - c) Being able to help your parents financially. Yes.....1  
No.....2
20. a) While at university did you experience much stress?
- Yes.....1
  - No.....2

If "Yes":

- b) Did you have difficulty coping with this? Yes.....1  
No.....2
21. a) How often did you use alcohol while you were in university?
- Never.....1
  - On special occasions...2
  - Once a month.....3
  - Once a week.....4
  - Twice a week.....5
  - More than twice a week..6
- b) How often did you use non-prescription drugs?
- Never.....1
  - On special occasions...2
  - Once a month.....3
  - Once a week.....4
  - Twice a week.....5
  - More than twice a week..6

22. a) Were you satisfied with your university environment?  
 Yes.....1  
 No.....2
- b) Did you feel at home in your university environment?  
 Yes.....1  
 No.....2
- c) Did you have many friends at university?  
 Yes.....1  
 No.....2
- d) Did you feel lost most of the time while at university?  
 Yes.....1  
 No.....2
- e) Did you find the psychological climate at university to be warm?  
 Yes.....1  
 No.....2
- f) Were you involved in any campus clubs, organizations, etc.?  
 Yes.....1  
 No.....2

If "Yes":

- g) How many? \_\_\_\_\_
23. a) Were you aware of counselling services at your university?  
 Yes.....1  
 No.....2
- b) How many times did you meet with a university counsellor?  
 No. of times \_\_\_\_\_
- c) Did you know a university counsellor well?  
 Yes.....1  
 No.....2
- d) Did your university counsellor give you adequate counselling and career direction?  
 Yes.....1  
 No.....2
- e) How often did you talk with faculty members outside of the classroom?  
 Never.....1  
 Less than 5 times.....2  
 5 - 10 times.....3  
 More than 10 times.....4
- f) How often did you seek advice from your instructors regarding your school work?  
 Never.....1  
 1 - 5 times.....2  
 6 - 10 times.....3  
 More than 10 times.....4

24. a) What was the main source of finance of your university education?
- |  |   |
|--|---|
| Parent(s)/Guardian(s)...                 | 1 |
| Scholarship.....                         | 2 |
| Canada Student Loan.....                 | 3 |
| Loan from other source....               | 4 |
| Savings.....                             | 5 |
| Bursary.....                             | 6 |
| Earnings from work while at college..... | 7 |
| UIC.....                                 | 8 |
| Other.....                               | 9 |
- b) How much concern did you have about your ability to finance your university education?
- |   |   |
|---|---|
| None (I had no worry about funds).....                                | 1 |
| Some concern (I thought I probably would have sufficient funds).....  | 2 |
| Major concern (I wasn't certain of being able to finish college)..... | 3 |
- c) Did you have a job while attending university?
- |          |   |
|----------|---|
| Yes..... | 1 |
| No.....  | 2 |

If "Yes":

- d) How many hours per week did you work while you were in university?
- |                   |   |
|-------------------|---|
| None.....         | 1 |
| 1 - 10.....       | 2 |
| 11 - 20.....      | 3 |
| 21 - 30.....      | 4 |
| 31 - 40.....      | 5 |
| More than 40..... | 6 |
25. Do you think you will get seasonal work and collect Unemployment Insurance Benefits during the up-coming year?
- |          |   |
|----------|---|
| Yes..... | 1 |
| No.....  | 2 |
26. a) What is your religious affiliation? \_\_\_\_\_
- b) How many times per month do you usually attend church? \_\_\_\_\_
27. In September of 1990 do you plan to attend a university?
- |          |   |
|----------|---|
| Yes..... | 1 |
| No.....  | 2 |

If "Yes" to "27":

28. a) What are your main reason(s) for returning to university?
1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_

If "No" to "27":

29. What are your main reason(s) for not returning to university?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

30. What do you think are some changes/additions that could be made at the university you attended to help first-year rural students adjust to their new environment more readily?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

31. What do you think are some services/resources that should be offered at the senior high school level to ease the transition from high school to university, for rural students?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

32. Any additional comments would be greatly appreciated.

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## APPENDIX C

College Student Questionnaire





7. What was your Level III average? \_\_\_\_\_
8. Did you have a: (a) Mother or female guardian living with you most of the time prior to college? Yes.....1  
No.....2  
(b) Father or male guardian living with you most of the time prior to college? Yes.....1  
No.....2

If "Yes" to "8 a." or "8 b." answer "9" - "12". If "No" to "8 a." and "8 b." go to "13".

9. How much education does:  
(a) Your mother or female guardian have? (circle one)  
(b) Your father or male guardian have? (circle one)
- |  |       |
|--|-------|
| Elementary or less.....1                     | ... 1 |
| Some Junior High.....2                       | ... 2 |
| Some High School.....3                       | ... 3 |
| High School Graduation.....4                 | ... 4 |
| Some post-secondary.....5                    | ... 5 |
| Completion of a post-secondary program.....6 | ... 6 |
10. What was each of your parent's/guardian's total income, before deductions, for 1989?  
(a) Mother/female guardian (circle one)  
(b) Father/male guardian (circle one)
- |                         |        |
|-------------------------|--------|
| Under \$5,000....1      | .....1 |
| \$5,000 - \$49,999...2  | .....2 |
| \$10,000 - \$14,999...3 | .....3 |
| \$15,000 - \$19,999...4 | .....4 |
| \$20,000 - \$24,999...5 | .....5 |
| \$25,000 - \$29,999...6 | .....6 |
| \$30,000 - \$34,999...7 | .....7 |
| \$35,000 - \$39,999...8 | .....8 |
| \$40,000 or more....9   | .....9 |
11. How much did your parents/guardians influence your decision to attend college?  
(a) Mother/female guardian (circle one)  
(b) Father/male guardian (circle one)
- |  |        |
|--|--------|
| <u>Very Much</u> .....1<br>(If he/she hadn't insisted that I enrol I would have chosen not to attend college.) | .....1 |
| <u>Some</u> .....2<br>(He/she supported my decision to attend.)  | .....2 |
| <u>None</u> .....3<br>(Attending college is seen as a waste of time and money by him/her.)                     | .....3 |

12. Do your parents/guardians see your graduating from college as being important?  
 Yes.....1  
 No.....2

13. How much support/encouragement did you receive from the following regarding your attendance at college?  
Please answer using the following scale

	<u>Very Much</u>	<u>Some</u>	<u>Very Little</u>	<u>None</u>
Mother/female guardian.....1	2	3	....4	
Father/male guardian.....1	2	3	....4	
Brother(s).....1	2	3	....4	
Sister(s).....1	2	3	....4	
Other relative(s).....1	2	3	....4	
Friend(s).....1	2	3	....4	
College counsellor(s).....1	2	3	....4	
College advisor.....1	2	3	....4	
College instructor(s).....1	2	3	....4	

14. While in college did you live with your parents/guardians?  
 Yes.....1  
 No.....2

If "No" to "14" do "15" and "16". If "Yes" to "14" go to "17".

15. While in college, how many times per semester would:

- a) Your parents/guardians write you? \_\_\_\_\_ times  
 b) You write them? \_\_\_\_\_ times  
 c) Your parents/guardians visit you? \_\_\_\_\_ times  
 d) You visit them? \_\_\_\_\_ times

16. a) Where did you live while at college?

Residence.....1  
 Home.....2  
 Off-campus with relatives...3  
 Off-campus, renting house, room or apartment.....4

- b) How many other people shared the room in which you slept?

None.....1  
 One.....2  
 Two.....3  
 Three or more.....4

- c) Did you have a roommate or roommates? Yes.....1  
 No.....2

If "Yes":

- d) How many? \_\_\_\_\_

- e) How would you describe your relationship with your roommates(s)?

(Indicate separately for each one using the following descriptions)

1st Roommate	2nd Roommate	3rd Roommate	4th Roommate

(circle one for each roommate)

Very close.....1      .... 1      .... 1      .... 1  
(We communicate well and  
discuss many of our  
personal problems.)

Friend.....2      .... 2      .... 2      .... 2  
(We don't discuss our  
personal lives but we  
do get along well.)

Okay.....3 .... 3 .... 3 .... 3  
(We get along okay but  
we don't talk much and  
we aren't especially  
friendly.)

Distant.....4      .... 4      .... 4      .... 4  
(My roommate and I  
don't have much in  
common. We don't talk.)

Unfriendly.....5	.... 5	.... 5	.... 5
(My roommate doesn't like me.)			

17. a) Were you involved in any orientation activities at college?
- |          |   |
|----------|---|
| Yes..... | 1 |
| No.....  | 2 |

If "Yes":

- b) How long did they last? No. of days\_\_\_\_\_
- c) Were you satisfied with your orientation experience?
- Yes.....1
- No.....2
18. a) Was life at college what you expected it to be?
- Yes.....1
- No.....2
- b) Do you feel that your college courses were relevant to your goals?
- Yes.....1
- No.....2
- c) What was your college average?\_\_\_\_\_

- d) At the time of your first enrolment at college what was the highest level of education you wished to attain?
- |   |   |
|---|---|
| Some post-secondary .....               | 1 |
| Completion of a program.....            | 2 |
| Completion of a program and beyond..... | 3 |
- e) Did you decide on a program or area of study while at college or prior to attending?
- |          |   |
|----------|---|
| Yes..... | 1 |
| No.....  | 2 |

If "Yes":

- f) Did you think of changing your program or area of study?
- |          |   |
|----------|---|
| Yes..... | 1 |
| No.....  | 2 |

If "Yes":

- g) How many times? \_\_\_\_\_

19. Which of the following are important to you:
- |   |          |   |
|---|----------|---|
| a) Making lots of money.                        | Yes..... | 1 |
|   | No.....  | 2 |
| b) Having a prestigious job.                    | Yes..... | 1 |
|   | No.....  | 2 |
| c) Being able to help your parents financially. | Yes..... | 1 |
|   | No.....  | 2 |
20. a) While at college did you experience much stress?
- |          |   |
|----------|---|
| Yes..... | 1 |
| No.....  | 2 |

If "Yes":

- b) Did you have difficulty coping with this?
- |          |   |
|----------|---|
| Yes..... | 1 |
| No.....  | 2 |

21. a) How often did you use alcohol while you were in college?
- |                           |   |
|---------------------------|---|
| Never.....                | 1 |
| On special occasions..... | 2 |
| Once a month.....         | 3 |
| Once a week.....          | 4 |
| Twice a week.....         | 5 |
| More than twice a week... | 6 |
- b) How often did you use non-prescription drugs?
- |                           |   |
|---------------------------|---|
| Never.....                | 1 |
| On special occasions..... | 2 |
| Once a month.....         | 3 |
| Once a week.....          | 4 |
| Twice a week.....         | 5 |
| More than twice a week... | 6 |

22. a) Were you satisfied with your college environment?  
 Yes.....1  
 No.....2
- b) Did you feel at home in your college environment?  
 Yes.....1  
 No.....2
- c) Did you have many friends at college?  
 Yes.....1  
 No.....2
- d) Did you feel lost most of the time while at college?  
 Yes.....1  
 No.....2
- e) Did you find the psychological climate at college to be warm?  
 Yes.....1  
 No.....2
- f) Were you involved in any campus clubs, organizations, etc?  
 Yes.....1  
 No.....2

If "Yes":

- g) How many? \_\_\_\_\_
23. a) Were you aware of counselling services at your college?  
 Yes.....1  
 No.....2
- b) How many times did you meet with a college counsellor?  
 No. of times \_\_\_\_\_
- c) Did you know a college counsellor well?  
 Yes.....1  
 No.....2
- d) Did your college counsellor give you adequate counselling and career direction?  
 Yes.....1  
 No.....2
- e) How often did you talk with faculty members outside of the classroom?  
 Never.....1  
 Less than 5 times.....2  
 5 - 10 times.....3  
 More than 10 times.....4
- f) How often did you seek advice from your instructors regarding your school work?  
 Never.....1  
 1 - 5 times.....2  
 6 - 10 times.....3  
 More than 10 times.....4

24. a) What was the main source of finance of your college education?

Parent(s)/Guardian(s)....1  
 Scholarship.....2  
 Canada student loan.....3  
 Loan from other source...4  
 Savings.....5  
 Bursary.....6  
 Earnings from work  
 while at college.....7  
 UIC.....8  
 Other.....9

- b) How much concern did you have about your ability to finance your college education?

None (I had no worry about funds).....1  
 Some concern (I thought I probably would have sufficient funds).....2  
 Major concern (I wasn't certain of being able to finish).....3

- c) Did you have a job while attending college?

Yes.....1  
 No.....2

If "Yes":

- d) How many hours per week did you work while you were in college?

None.....1  
 1 - 10.....2  
 11 - 20.....3  
 21 - 30.....4  
 31 - 40.....5  
 More than 30.....6

25. Do you think you will get seasonal work and collect Unemployment Insurance Benefits during the up-coming year?

Yes.....1  
 No.....2

26. a) What is your religious affiliation? \_\_\_\_\_

- b) How many times per month do you usually attend church? \_\_\_\_\_

27. Are you presently attending college? \_\_\_\_\_

Yes.....1  
 No.....2

If "Yes" to "27":

28. a) What are your main reason(s) for returning to college?

1. \_\_\_\_\_  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_

If "No" to "27":

29. What are your main reason(s) for not returning to college?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

30. What do you think are some changes/additions that could be made at the college you attended to help first-year rural students adjust to their new environment more readily?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

31. What do you think are some services/resources that should be offered at the senior high school level to ease the transition from high school to college, for rural students?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

32. Any additional comments would be greatly appreciated.

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## APPENDIX D

College Student Letter of Request for Participation in the Study



Apartment 7  
80 Bowater Drive  
Wabush  
Newfoundland & Labrador  
AOR 1B0

Dear Student:

You are being asked to participate in a study of rural Newfoundland college students. The factors examined will be those which distinguish students who complete programs at college from those who do not. The information you provide may be used to help design programs that could ease the transition for students from their high schools to college.

The study is being conducted by myself, Shawn Rumbolt, under the supervision of Mrs. Mildred Cahill, a professor in the Educational Psychology Department at Memorial University, and with the cooperation of the college at which you enrolled in September of 1989.

The questionnaire will take approximately fifteen minutes to complete. You do not have to answer any questions unless you want to. The information you provide will be held in strict confidence. It will be used only by the persons engaged in this study, and all participants will remain anonymous.

When finished your questionnaire, please place it in the self-addressed, stamped envelope, seal, and mail. It would be greatly appreciated if the questionnaire could be completed within one week of being received.

I thank you in advance for your cooperation.

Sincerely yours,

Shawn Rumbolt  
Graduate Student  
Educational Psychology

## APPENDIX E

University Students Follow-up Letter

Apartment 7  
80 Bowater Drive  
Wabush  
Newfoundland & Labrador  
AOR 1B0

Dear Student:

You were recently selected to participate in a study of rural Newfoundland university students, being conducted by myself, with the co-operation of the university you attended. An anonymous questionnaire surveying pre-university characteristics, first-year university experiences, as well as student values, suggestions and reasons for leaving or staying at university, was then forwarded to you.

The majority of these questionnaires have now been returned and are ready for processing and analysis. Responses from all students would provide a more accurate survey of the above mentioned variables and enable one to make more suggestions to high school and university officials regarding means to help the rural student attending university for the first time.

I would like to thank those of you who have returned completed questionnaires and encourage those who have not to please do so at their earliest convenience. Completed questionnaires returned within one week of receiving this letter will be processed with those returned earlier. Thus, a prompt return of your questionnaire would be most appreciated.

I thank you in advance for your cooperation.

Sincerely yours,

Shawn Rumbolt  
Graduate Student  
Educational Psychology

## APPENDIX F

College Student Follow-up Letter

Apartment 7  
80 Bowater Drive  
Wabush  
Newfoundland & Labrador  
AOR 1B0

Dear Student:

You were recently selected to participate in a study of rural Newfoundland college students, being conducted by myself, with the co-operation of the college you attended. An anonymous questionnaire surveying pre-college characteristics, first-year college experiences, as well as student values, suggestions and reasons for leaving or staying at college, was then forwarded to you.

The majority of these questionnaires have now been returned and are ready for processing and analysis. Responses from all students would provide a more accurate survey of the above mentioned variables and enable one to make more suggestions to high school and college officials regarding means to help the rural student attending college for the first time.

I would like to thank those of you who have returned completed questionnaires and encourage those who have not to please do so at their earliest convenience. Completed questionnaires returned within one week of receiving this letter will be processed with those returned earlier. Thus, a prompt return of your questionnaire would be most appreciated.

I thank you in advance for your cooperation.

Sincerely yours,

Shawn Rumbolt  
Graduate Student  
Educational Psychology









