EXPLORING THE REASON FOR THE HIGH WITHDRAWAL RATE OF DISTANCE EDUCATION STUDENTS ENROLLED IN FIRST LEVEL ACCOUNTING.

A research report presented in partial fulfilment of the requirements for the degree of the Master of Business Studies at Massey University

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CHAPTER 1: INTRODUCTION AND OVERVIEW

First Level Accounting by Distance Education at Massey University (New Zealand)

Massey University is the only New Zealand university providing first level distance education (extramural education) in accountancy, and is one of the largest university providers of extramural accountancy education in Australasia. The last three years have witnessed a steady growth in the demand for extramural first level accountancy. The number of students enrolling have almost doubled in that period from just over 500 to nearly 1,000 in 1989.

Unlike some of the world's open universities Massey University is a "dual mode" institution. That is extramural and internal courses are taught to the same prescriptions and assessed by the same final examinations. An advantage of this system is that standards achieved by extramural students are comparable to those achieved by internal students in the same course, and there is no distinction between a qualification gained extramurally and one by internal study. The latter is important to the many extramural students wishing to pursue an accountancy career and eventually qualify for membership of the New Zealand Society of Accountants.

However, for extramural students the method of delivery of accountancy education is different to that of the internal students. It is a method of education heavily reliant on printed materials and involves very little face-to-face contact. Coupled with this is the fact that many extramural accounting students are of mature age, working, have young families, and have had no previous experience of university study or distance education.

Problem Statement

This study is concerned with problem of drop-out (the term drop-out will be used to refer to those students who withdraw and those who simply do not complete) from the first level extramural accounting (10.100). The drop-out rate has ranged in the last three years from between 35% to 42% of those originally enrolled, and though these rates of drop-out are about average for first level extramural courses at Massey University, they do represent a waste of scarce teaching and administrative resources. (See Appendix 1.)

The problem is especially pressing because this year (1989) many potential students were turned away once a ceiling figure of 1,000 students had been reached. At the same time the drop-rate from all extramural courses has been steadily increasing and accounting reflects this trend. It is argued that if more were known about drop-out students and their reasons for dropping-out some attempt could be made to, at least, halt the trend referred to. This study makes some recommendations in this respect.

Drop-outs from extramural courses has never been systematically studied within the Department of Accountancy at Massey University, and no information has been collected about the characteristics of drop-out or the reason why they drop-out. Therefore this study will specifically address two questions:

- Are certain types of students more likely to drop-out than others?

- Why do students drop-out?

Literature Review

An extensive search of the Massey University Library yielded some information relevant to this study. In particular, a research study on drop-outs from the UK Open University provided some useful comparisons and insights into this problem.

In addition a dialog search from the ERIC database was conducted using descriptors such as drop-outs (university, and tertiary), withdrawals, distance education, accounting education, open university, professional continuing education, correspondence tuition/courses, professional award courses, mature/adult students and adult education. This search yielded several very useful references which were not available in the Massey University Library but which were requested and used.

No information was located specific to the problem of drop-outs from university first level extramural accounting courses. Most of the studies involved the problems of drop-outs from a university-wide perspective, and referred only generally to specific courses. However, such comparisons are valid as the first level accounting (10.100) course is very representative of the larger extramural first level courses at Massey University (see Appendix 1 for a comparison of Accounting 10.100 drop-out rates with other extramural courses). Moreover, because specific knowledge of drop-outs from accounting extramural courses is lacking from the literature this study will add useful new knowledge to the subject.

Research Method and Analysis

The two questions addressed by this study were approached using different methods.

To research for possible "common characteristics" of drop-outs, data was collected from the Massey University Registry. A print-out of the academic records of the extramural students who had enrolled in the 1987/88 first level accounting (10.100) courses was obtained. These records comprise such personal data as age, sex, school qualifications, tertiary academic history, and university admission criteria. The data collected was quantitatively analysed by using the SPSSX facilities available on the Massey University mainframe computer. Chi-square values were obtained and the data "cross tabulated".

To research why students drop-out a telephone survey was conducted, after an earlier pilot survey had proved successful. This approach necessitated contacting over 350 drop-out students with the aim of achieving, at least, a 70% response rate. A qualitative analysis of the survey results was undertaken, and little quantitative analysis was involved in this second question addressed, apart from some frequency counts and percentages.

Ethical Issues

The questionnaires on file, completed by the researcher via telephone interviews, are strictly confidential and students were assured that their answers would remain so. Therefore this raw data is not available to anyone else. Moreover, in the presentation of the research results care was taken to preserve confidentiality. However, the results of this study will be available to the Massey University Extramural Students Society, who funded some of the research, and any other parties interested in the problem of drop-out among extramural students.

CHAPTER 2: LITERATURE REVIEW

Introduction

This literature review covers the two questions being researched:

- **Are certain types of student more likely to drop-out than others?**
- **Why do students drop-out?**

These questions form the basis of this study. It is the objective of this literature review to examine the answers given to similar questions asked by other researchers working in both domestic and international context. It is argued that distance education students of Accounting at Massey University should not be considered as a aberrant group to be studied as isolated phenomena. Thus this literature review not only discusses drop-outs in other universities but also reviews relevant research from other disciplines, while staying within the confines of distance education.

The drop-out rate (the rate comprises those who withdraw officially and those who do not comlete the course) from first year Accounting at around 42%, is about average for first year courses taken by distance education students at Massey University (see Appendix 1 for 1988 comparisons). Drop-out rates vary widely among courses and no overall pattern is discernible; that is drop-out rates would seem to be random across all faculties, and no conformity exists among related subjects.

However, one common theme which emerges is that Massey University's drop-out rates match those in overseas institutions in terms of the average rates and the random variability of rates between courses. For example, Woodley and Parlett (1983) have quoted average university drop-out rates in 1982 of first level students as being:

Open University (UK) 45%,

Athabasca University (Canada) 71%,

Open Learning Institute (Canada) 32%,

National University Extension Association (USA) 40%,

NKI School (Norway) 35%,

The Fernuniversitat (West Germany) 47% (p.3).

With reference to the Open University (UK) Woodley and Parlett (1983) reported that in 1981 the highest drop-out rate for a course was 71% and the lowest 17%, a range of 54%, and there were considerable variations in all faculties and at each course level (p.13). For comparison in 1988 Massey University recorded from first year distance education courses a highest drop-out rate of 70% and a lowest of 8%, a range of 62%.

Thus with a drop-out rate currently averaging 42%, introductory accounting at Massey University for distance education students might be seen as a fairly typical course to study. Moreover, the drop-out rate in introductory accounting has increased from 35% to 42% in the period 1985-88.

The aim of this literature review is to examine the two questions posed by this study in the light of similar studies undertaken by other researchers. It is an attempt to gather more information on the complex issue of student drop-out. The literature cited in this study was gathered as a result of using the data base facilities available to the library at Massey University. Searches of the data base were conducted using such descriptors as: drop-outs, wastage rates, withdrawals, distance education, accountancy, etc.

Are certain types of student more likely to drop-out than others?

In this study drop-out rates have been investigated by selecting five key demographic characteristics held on the student file: gender, prior failure, previous experience, admission criteria and age. This type of break down is in keeping with most overseas research models.

Gender

Generally, research regarding which sex is the most likely to drop-out has produced contradictory results. Morrison's (1981) analysis of students dropping-out from Auckland University's Centre for Continuing Education shows females as more likely to drop-out (p.58). Tinto (1975) reviewing over ten United States (US) studies reported that males were less likely to drop-out than females (p.98). Whether Tinto's explanations would be valid in the US today is uncertain, given the increased emphasis since 1975 on education of women and their occupational attainment.

By contrast, Hibbett in her study of drop-out students (1986) declared: "There were no significant differences with regard to sex" (p.71). This result was supported by Horton's (1976) study of New Zealand (NZ) adult university extension courses (p.21).

However, Woodley and Parlett's (1983) much larger study of all UK Open University students (1981 only) found men were more likely to drop-out (p.8). This was true for both new and continuing students. Because of the extensive nature of their research, more weight must be attached to their results.

History of prior failure

Tinto (1975) pointed out that past measures of learning performance (grades), were associated with drop-out: the higher the previous grades, the lower the drop-out rate (p.46). In addition, Boshiers's research (1969) of NZ adult extension courses discovered that those who had previously dropped-out were more prone to drop-out again (p.121).

Tremaine (1978), from her research of Massey University distance education students, was uncertain as to whether or not there is a particular type of student who is a continual withdrawer and thought this was a matter for further research (p.38).

However, Woodley and Parlett (1983), in their comprehensive study of Open University students identified "high risk" students as those who had failed previous courses. Indeed, they went on to suggest: "The University could refuse to allow students who have failed an Open University course to proceed with their studies" (p.22). They also found an almost perfect relationship between year of entry and drop-out rates. The longer students had been in the Open University system (i.e. failed students returning to repeat courses) the less likely they were to gain a course credit (p.10).

Previous university experience

The research question is whether distance education students possessing passes in some papers are less likely to drop-out than new students enrolling with no university experience?

In their study of drop-outs and wastage rates Woodley and Parlett (1983) found a very strong relationship between the number of credits (including credit exemptions) held by open university students and their chance of gaining a course credit at the end of the year. In general, they claimed, the more credits held, the greater were the chances of success (p.10).

Tremaine (1978), commenting on students with previous university experience, stated that students without experience tend to withdraw for time related reasons, while students with experience tended to withdraw for reasons of "fate" (p.39). This is an interesting conclusion but she did not go on to confirm whether students without experience were more likely to withdraw. Though, perhaps, this may be inferred from her findings: new students tend to withdraw for time related reasons and by far the most common reason for withdrawing was lack of time (p.31).

Boshier (1969) in his study of drop-out from New Zealand university extension classes declared: "Successful previous participation in adult education was predictive of successful participation among the adult group studies, with only 13% dropping out, compared to 68% of first time participants (p.121). This conclusion endorses the Open University research of Woodley and Parlett (1983). Thus it would appear that students with previous successful university experience are less "at risk" than new students.

Admission criteria

The question posed seeks to find a relationship between university entrance qualifications held and subsequent success.

Mitchell (1988) discovered, in his UK study of student performance in first level university Accounting courses, that students who possessed higher grade Scottish Certificate of Education did significantly better than other students (p.290).

Tinto (1975) stressed the importance of pre-college education in his model which predicted drop-out. The higher the grades, class rank and performance, the less was the probability of drop-out (p.94). Woodley and Parlett (1983) confirmed these probabilities declaring:

> Generally speaking, the lower a person's previous educational qualifications the more likely he or she was to drop-out. This held true for new and continuing students but the differences in wastage rates were more marked among new students (p.9).

Hooper (1987) found from his study of 452 first year internal Accounting students at Massey University, that total bursary marks (bursary being the final New Zealand public examination sat by the more academic school leavers) gained was a significant predictor of success and persistence (p.39). However, Morrison (1981) in his study of mature students at the Centre for Continuing Education, Auckland University concluded that mature students, both qualified for entry and provisionally admitted, do at least as well as their younger internal counterparts who enter with a "B Bursary", and have a lower withdrawal rate than those entering with University Entrance (p.59).

From the literature it would seem reasonable to conclude that New Zealand students possessing "A Bursary" qualifications would be less likely to drop-out, but with regard to other entrance qualifications the situation is less certain.

Age

Hibbett (1986) stated from her United Kingdom based tertiary education research that with few exceptions, increasing age meant an increasing likelihood of completing one's course (p.73). Morrison (1981) in his analysis of students by age, sex, and subject area at Auckland University found more mature students less likely to withdraw from courses (p.58).

On the other hand Smith (1987), in his study of drop-outs from the University of Newcastle's open foundation courses, could discover no age correlation among drop-outs (p.17). Though, it must be noted that his survey was limited because he had only seventy replies from two hundred surveyed. Nevertheless, his results were supported by Horton's research (1976) into New Zealand (NZ) adult university extension courses which found no age differences between drop-outs and persisters (p.23).

However, Tremaine (1978) in her study of withdrawals from distance education courses at Massey University stated: "... the withdrawal population showed that a higher proportion of younger students and single students withdrew" (p.33). Perhaps, more importantly for the purposes of this study, Woodley and Parlett (1983) found that among first year Open university students the curve is approximately U-shaped with the very young (up to 25) and very old (65+) being more likely to drop-out (p.9). Their findings are probably the most definitive quoted because of the large population covered: all first year Open University students during 1981 and 1982.

Why do students drop-out?

Studies have shown that there are many factors which cause, or at least contribute to, student drop-out. No list of reasons would be exhaustive; so drop-out factors have been grouped under three appropriate general criteria as follows:

- **lack of time**
- **unforeseen changes in personal circumstance (external reasons)**
- **problems with the course pedagogy and administration.**

Lack of time

In her study of withdrawals from distance education courses at Massey University, Tremaine (1978) identified lack of time as by far the single most important reason (42%) cited by students who formally withdrew (p.24). In a recent survey of drop-outs from the New Zealand Technical Institute's Management (NZTCI) courses Ostman (1988) discovered that, on average, one third of the students dropped-out, and that half of the drop-outs cited "lack of time" as their reason for not completing (p.95).

Bartels (1985) research among distance education students dropping-out from Fernuniversitat found most of the drop-outs had problems with the estimated study-time of the courses (p.44). This led to an inability to meet set deadlines, and outside job pressures frustrated attempts to invest additional time. One student, quoted as typical, said he felt like an 110m hurdle sprinter, always trying to catch up with assignments.

Hibbett (1986) concluded more free time is linked to more success in course completion. Full time workers were less likely to complete their courses, and more likely to drop-out. Hibbett found this particularly true in award bearing courses (such as Accounting) where 86% of all drop-outs worked full-time compared to only 65% of all course completers (p.74). It is interesting that her research revealed qualifications to lack of time such as: course too demanding, difficulty in keeping up, too exhausted after work and work demands.

Smith's respondents (1987) cited as principal reasons for dropping-out, conflicts with work or domestic responsibilities, claiming the course took too much of their free time. Smith concluded that too many mature students begin their studies with a give-it-a-try attitude, and if circumstances militate against their studies they abandon them, not gladly but quite naturally, with much the same kind of regret as someone might abandon a planned picnic. Smith felt the main reason for abandonment, under the "lack of time" classification, was an unwillingness to give study the priority it needs for success (p.19).

Lack of time is the most quoted reason for distance education drop-out, and, as described in this review, tends to be a blanket excuse covering other problems. Although they did not specifically address the question of "when" students drop-out, Woodley and Parlett (1983) claimed, that because most drop-out occurs before the first course assignment many people are "marginal" students at the time of enrolment (p.21). Certainly this review would confirm that the lack of time factor would appear to cover attitudes such as: too optimistic and unrealistic at enrolment, poor motivation for study, and lack of commitment.

Unforeseen changes in personal circumstances (external pressures).

Bartels (1985) suggested that many of the drop-outs who encountered external conflicts with their studies had never given studying first priority from the beginning (p.46). An analysis of Tremaine's (1978) respondents' reasons for withdrawal reveals 110 students out of a total of 182 cited such personal reasons as: illness, career change, personal stress, shifting house, financial problems, going overseas, and pregnancy (p.31). A consideration of some of these reasons (e.g. overseas trips, shifting house, etc.) given by students does give weight to Bartels suggestion of a primary lack in overall motivation.

Smith (1987) also found that about half of all respondents claimed changes in circumstances since commencement of the course as their reason for not completing. Some of his respondents coupled changing circumstances with a lack of time. This Smith thought quite reasonable. It could well be that changes in circumstances could shorten the time available for study. But Smith, like other researchers, considered some of the oft quoted reasons, such as moving house, changing jobs, or holidaying

overseas, rather dubious grounds for abandoning a serious course of university study (p.19). Interestingly, he observed, that none of his respondents made any reference to pressure from spouses or any other kind of family hostility. Smith concluded (1987): "Perhaps the prevalent fear among adult educators that this is a significant cause of drop-out is not justified" (p. 20).

Problems with the course pedagogical and administrative

Surprisingly, most studies found that drop-outs, who cite problems or disappointments with their courses, to be in a minority. Tremaine's analysis (1978) revealed that 84 students or 23% of her respondents blamed or expressed dissatisfaction with their course. Over half of this number finding their course too difficult, or citing administrative problems (p.31).

Smith (1987) was concerned that so few of his respondents blamed their course for their drop-out. Few faults with course were mentioned, a fact which caused Smith to speculate that: "people who are only contingently committed to an enterprise do not blame themselves for their failure, and have, therefore, no need to seek scapegoats." He thought that the major difficulty of drop-out research is getting drop-outs to consider honestly whether their problems do arise from "external pressures" or are really inherent inability to cope with the work (p.24).

Hibbett (1986) also found that drop-outs, especially from award courses, emphasised difficulties encountered regarding other commitments with little critique of their course contents and arrangements (p.280). Ostman (1988) in his analysis of drop-outs from NZTCI courses found that, apart from lack of time and personal problems, remaining reasons such as poor study materials, administrative problems and tuition, averaged between "of little" or "no importance" for a majority of respondents (p.95).

Finally, Woodley and Parlett (1983) concluded from their extensive research on drop-outs from Open University (UK) courses that many drop-outs occur before the first assignment of a course because many people are marginal students with 'push' factors barely outweighing 'pull' factors at the time of enrolment (p.21). Push factors included such items as: wants degree to get promotion, interested in subject, spouse

encouraging, allowed time off for study or vacation courses. Pull factors included such items as: wants to spend more time with family, course is very difficult, fees are high, does not like tutor.

Woodley and Parlett (1983) suggested that although students begin their courses with push factors slightly stronger, they are vulnerable to new pull factors which tip the balance and cause withdrawal. The new and final pull factor might be a temporary crisis at home or work (e.g. moving house) but it is this final factor which students give to researchers as their reason for drop-out. Thus pull factors, such as the course is very difficult or the tutor unpleasant, are seldom referred to as the reason for drop-out. For example, a student may have had constant difficulty coping with the course content, but time devoted to shifting house one weekend may have put such a student irretrievably behind. Such a student when surveyed as to their reason for drop-out, would probably reply "shifting house" (p.22).

Summary and Conclusion

Generally, the literature reviewed provided fairly consistent information on the two research questions posed by this study.

It can be concluded from this review that the type of student likely to drop-out, or most "at risk", would:

- be male or female, with a slight balance in favouring males
- have some history of previous failure
- have no previous university experience
- have minimal or no university entrance qualifications
- probably be younger (up to 25) or possibly older (65+).

This review has uncovered some interesting approaches to the question as to why students drop-out. All those quoted were in agreement that the most common response to this question was "lack of time", an answer often coupled with changes in personal circumstances. Few respondents to the surveys quoted found fault with their courses or tutors. Most researchers expressed dissatisfaction with these responses, concluding that "lack of time" was an answer which concealed more than it revealed. Students who lacked time, may well have lacked commitment, and such reason as "shifting house" or "overseas holiday" seemed particularly trivial.

On the other hand, it may reasonably be concluded that, if, as many researchers suspect, most drop-out students were "marginal" from the start and have had considerable difficulty coping with the contents of their courses, they would not want to expose their personal shortcomings to inquisitive university researchers. Thus "lack of time" may be a euphemism for inability to cope with course content.

CHAPTER 3: RESEARCH METHODS AND RESULTS: THE DROP-OUT PROFILE

Introduction

Are certain types of student more likely to drop-out than others?

The first objective of this study was to establish by methodical investigation an answer to the research question posed above using data from the first level accounting course (10.100). The research approach to this question made use of Massey University registry records to obtain a common profile of the typical extramural first level accounting drop-out. The data obtained was analysed, and the results presented in cross tabular and graphical forms.

Research Method

In 1987 and 1988, there were 1344 distance education (extramural) students enrolled in first level accounting (10.100) at Massey University of which 585 (43%) dropped-out (withdrew or did not complete). Of the 585 that dropped-out, 144 officially withdrew before March 31, and were deemed by the University not to have enrolled. This meant their personal data was officially removed from the course roll, and their academic record unaffected by their short enrolment. For this reason the following analysis was confined to the remaining 441 (37%) students who dropped-out subsequent to March 31 in the two years covered by this study.

In order to establish a profile of those students likely to drop-out from first level accounting at Massey University, the following five questions were put forward and tested in this investigation.

The five questions asked of the data contained within the University record archives were:

- **Sex:** was there any difference in gender performance;
- **Prior failure:** would a history of failing in other disciplines indicate an unsuccessful result in first level accounting;
- **Number of prior papers taken:** does previous university experience benefit an extramural student;
- **Admission criteria:** is there a relationship between the university entrance qualification held, and success in first level accounting;
- **Age:** is this a factor likely to influence results?

These five questions were developed into five null hypotheses, and served as the five independent variables used in the statistical programme obtained from the SPSSX information analysis system. Once set-up, the programme was run on the mainframe computer at Massey University's Department of Computer Science.

Before a computer programme could be developed the raw data had to be gathered from a print-out of the extramural rolls 1987 and 1988, which were obtained from the University's management information system. The extramural rolls in question contained the final grades and personal details of 1200 students who were enrolled in 1987 and 1988 in first level accounting (10.100). These 1200 students represented the total population of the study.

When the necessary data on 1200 students had been extracted from the roll, and entered into the mainframe computer, a "Cross Tabulation" analysis was produced. The resulting tables show the joint distribution of two or more variables that have a number of distinct values. The frequency distribution of one variable is subdivided according to the values of one or more variables. The unique combination of values for two variables defines a cell, the basic element of all the tables.

In addition to the tables, summary chi square statistics were produced. Moreover, the significance of each cell could be assessed independently by using the appropriate chi square formula.

The null hypotheses asked of each variable to be tested was:

- Ho: that the variable concerned would have no significance on the likelihood of course completion.

The five hypotheses were tested by reference to the tables produced, summary statistics obtained, and independent cell chi square analysis calculated. The tables produced by the SPSSX programme were in a matrix format, displaying the independent variable on one axis and the dependent variable on the other.

For the purposes of interpreting the matrix tables produced by the "Cross Tabulation" analysis, student grades were distributed into four categories labelled as follows:

- O = drop-outs;
- F = students who sat the final examination and failed;
- M = students who gained a merit pass ("B" or better);
- P = students gaining a "C" grade pass.

Every "Cross Tabulation" table produced contains cells which display, in order, the following four calculations:

- 1. the number of students in each grade category belonging to a specified sub-group of the independent variable concerned;
- 2. the percentage of a specified sub-group of the independent variable falling within a particular grade category;
- 3. the percentage of a particular grade category belonging to a specified sub-group of the independent variable under consideration;
- 4. the percentage of the total number of students enrolled.

3.1 Results: Are certain types of students more likely to drop-out than others?

The five null hypotheses to be tested will be considered in turn and the results analysed and interpreted.

Sex

Hypothesis (Ho 1): gender has no significance on the likelihood of course completion.

TABLE 1: Cross Tabulation by Sex and Grade.

SEX	COUNT / ROW PCT / COL PCT / TOT PCT	GRADE O	GRADE F	GRADE M	GRADE P	ROW TOTAL
MALE	1	229	46	170	153	598
		38.3	7.7	28.4	25.6	49.8
		51.9	55.4	47.4	48.3	
		19.1	3.8	14.2	12.8	
FEMALE	2	212	37	189	164	602
		35.2	6.1	31.4	27.2	50.2
		48.1	44.6	52.6	51.7	
		17.7	3.1	15.8	13.7	
	COLUMN TOTAL	441	83	359	317	1200
		36.8	6.9	29.9	26.4	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.
3.00520	3	0.3908	41.362

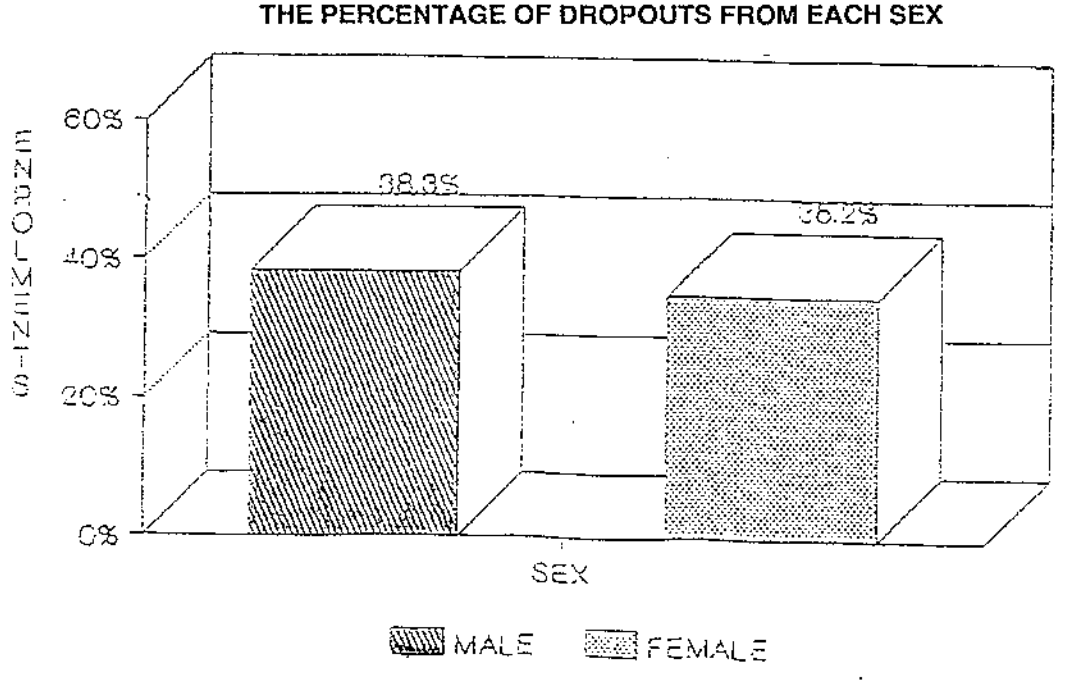


Table 1 shows no significant difference in the drop-out rate between genders, and the hypothesis cannot be rejected. This was in spite of the fact that approximately 38% of males dropped-out compared to 34% of females. The difference is not greater than could be expected to occur by chance. This result is endorsed by some of the literature on gender drop-out, but to date the findings of the literature on this subject is far from conclusive.

Prior Failure

Hypothesis (Ho 2): a history of prior failure (students with a record of previously failing one or more university papers) has no significance on the likelihood of course completion.

TABLE 2: Cross Tabulation by Prior Failure and Grade.

PRIOR	COUNT / ROW PCT / COL PCT / TOT PCT	GRADE O	F	M	P	ROW TOTAL
0		213	28	246	212	699
NO PRIOR FAILURE		30.5	4.0	35.2	30.3	72.7
		65.5	40.6	82.0	79.4	
		22.2	2.9	25.6	22.1	
1		112	41	54	55	262
PRIOR FAILURES		42.7	15.6	20.6	21.0	27.3
		34.5	59.4	18.0	20.6	
		11.7	4.3	5.6	5.7	
COLUMN TOTAL		325	69	300	267	961
		33.8	7.2	31.2	27.8	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.
63.43324	3	0.0000	18.812

DROPOUT PERCENTAGE BY PRIOR FAILURE

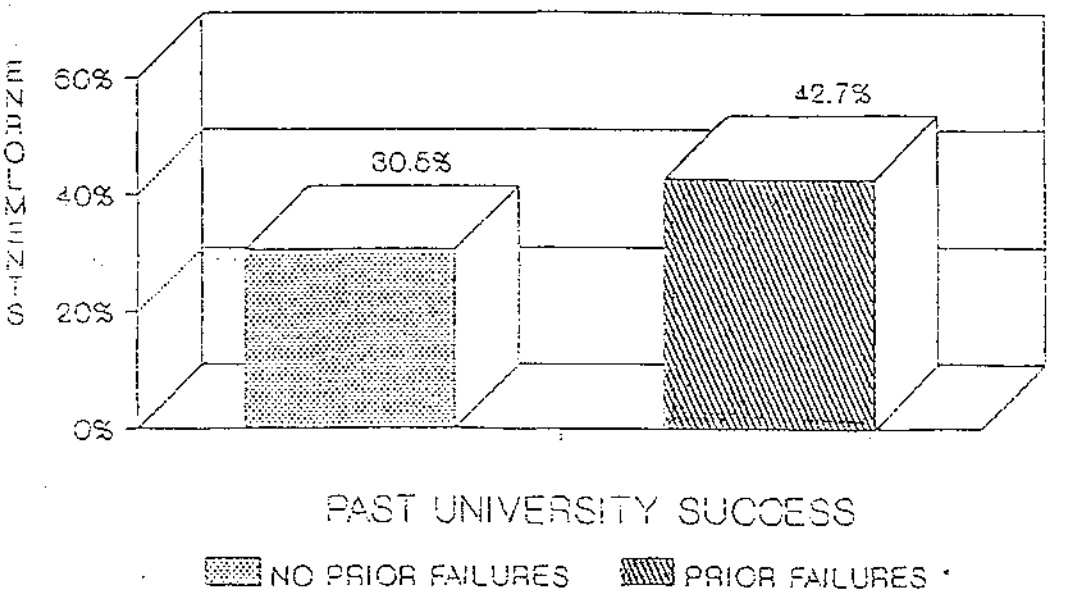


Table 2 shows a significant difference on the likelihood of course completion. That is, 42% of those with a history of failure (one or more university papers) dropped-out compared with 30% of those with a record of no prior failure. The difference between these two groups is greater than could be expected by chance, and therefore the null hypothesis must be rejected. This represents a positive finding which is supported by the literature on the subject of drop-outs with a previous history of failure.

Previous University Experience

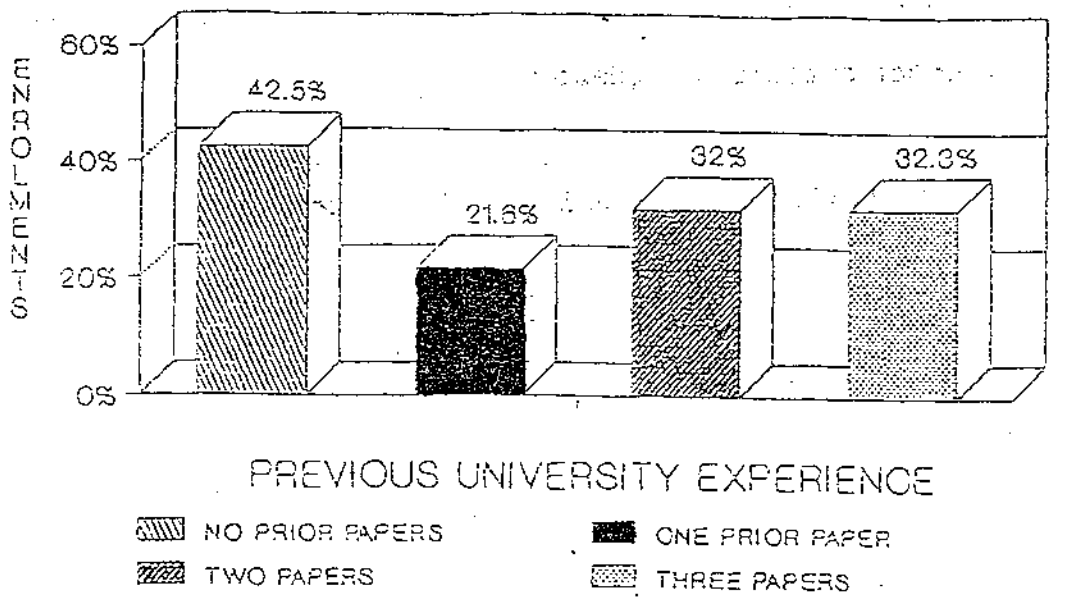
Hypothesis (Ho 3): the amount of previous university experience (based on the number of university papers already taken) has no significance on the likelihood of course completion.

TABLE 3: Cross Tabulation by Prior Experience and Grade.

PAPER	GRADE				ROW TOTAL
	I O	I F	I M	I P	I
0 NO PRIOR PAPERS	246	30	153	150	579
	42.5	5.2	26.4	25.9	48.3
	55.8	36.1	42.6	47.3	
	20.5	2.5	12.8	12.5	
1 ONE PRIOR PAPER	11	5	21	14	51
	21.6	9.8	41.2	27.5	4.3
	2.5	6.0	5.8	4.4	
	.9	.4	1.8	1.2	
2 TWO PAPERS	24	7	24	20	75
	32.0	9.3	32.0	26.7	6.3
	5.4	8.4	6.7	6.3	
	2.0	.6	2.0	1.7	
3 THREE PAPERS	160	41	161	133	495
	32.3	8.3	32.5	26.9	41.3
	36.3	49.4	44.8	42.0	
	13.3	3.4	13.4	11.1	
COLUMN TOTAL	441	83	359	317	1200
	36.8	6.9	29.9	26.4	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.
22.46192	9	0.0075	3.527

PERCENTAGE DROPOUT BY AMOUNT OF PREVIOUS EXPERIENCE



From Table 3 it can be seen that the percentage variation of those that dropped-out, grouped according to the number of papers already taken, is significantly different: 42%, 21%, 32%, and 32%. Those students enrolling for the first time have, at 42% to 32%, a difference in drop-out rate from other students, more accustomed to university study. Such a difference in drop-out rate is greater than could be expected by chance, and so the null hypothesis must be rejected. It can be concluded that extramural students enrolling for the first time on a university course are more likely to drop-out than those with previous experience. This finding is supported by the literature, which was earlier cited in this study.

Admission Criteria

Hypothesis (Ho 4): university admission criteria (defined according to New Zealand academic qualifications, see below) will have no significance on the likelihood of course completion.

TABLE 4: Cross Tabulation by Admission Criteria and Grade.

ADMIS	GRADE: O	F	M	P	ROW TOTAL
AD EUDEM	1	2	5	8	16
	6.3	12.5	31.3	50.0	1.3
	.2	2.4	1.4	2.5	
	.1	.2	.4	.7	
PROV ADMIS	126	36	66	107	335
	37.6	10.7	19.7	31.9	27.9
	28.6	43.4	18.4	33.8	
	10.5	3.0	5.5	8.9	
UE/6FC	274	41	223	171	709
	38.6	5.8	31.5	24.1	59.1
	62.1	49.4	62.1	53.9	
	22.8	3.4	18.6	14.3	
B BURSARY	28	4	31	17	80
	35.0	5.0	38.8	21.3	6.7
	6.3	4.8	8.6	5.4	
	2.3	.3	2.6	1.4	
A BURSARY	12		34	14	60
	20.0		56.7	23.3	5.0
	2.7		9.5	4.4	
	1.0		2.8	1.2	
COLUMN TOTAL	441	83	359	317	1200
	36.8	6.9	29.9	26.4	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.
61.54661	12	0.0000	1.107

Explanation of admission terms used.

Ad Eundem: refers to those students admitted to Massey University on the basis of suitable overseas earned qualifications.

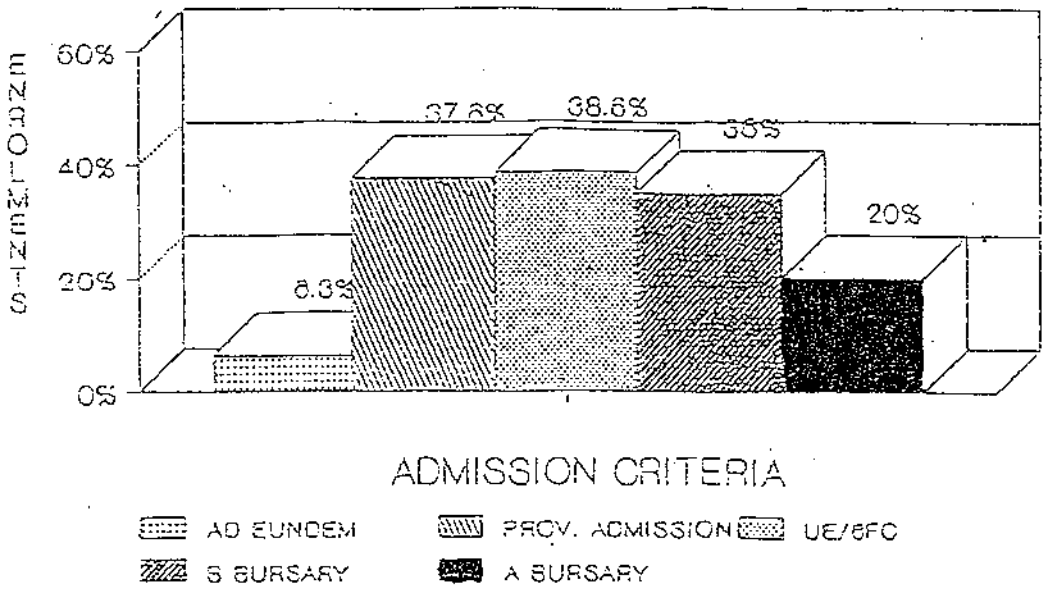
Provisional Admission: applies to mature students (over 21) admitted without other entry qualifications.

UE/6FC: refers to those students admitted with the basic New Zealand university entrance qualification.

B Bursary: refers to those students admitted with a bursary entrance qualification gained by public examinations.

A Bursary: refers to those students admitted with a bursary entrance qualification gained by passing with merit public examinations.

PERCENTAGE DROPOUT BY ADMISSION CRITERIA



The null hypothesis cannot be totally rejected. The three largest categories in terms of student numbers (Provisional Admission, UE/6FC, B Bursary) have similar drop-out rates at 38%, 38%, and 35% respectively. Such slight differences in percentage rates have no significance. Moreover, the small number of ad eundem students involved does not allow any firm conclusions to be drawn in respect of that small sub-group.

However, those students in the A Bursary sub-group are significantly less likely to drop-out. Thus the hypothesis should be amended to exclude those students admitted with an A Bursary qualification.

Because New Zealand university admission qualifications differ from those prevailing overseas it is hard to make valid comparisons with the literature on admission criteria and drop-out rates. However, there is some measure of agreement that those students with the highest level of admission qualifications are less likely to drop-out.

Age

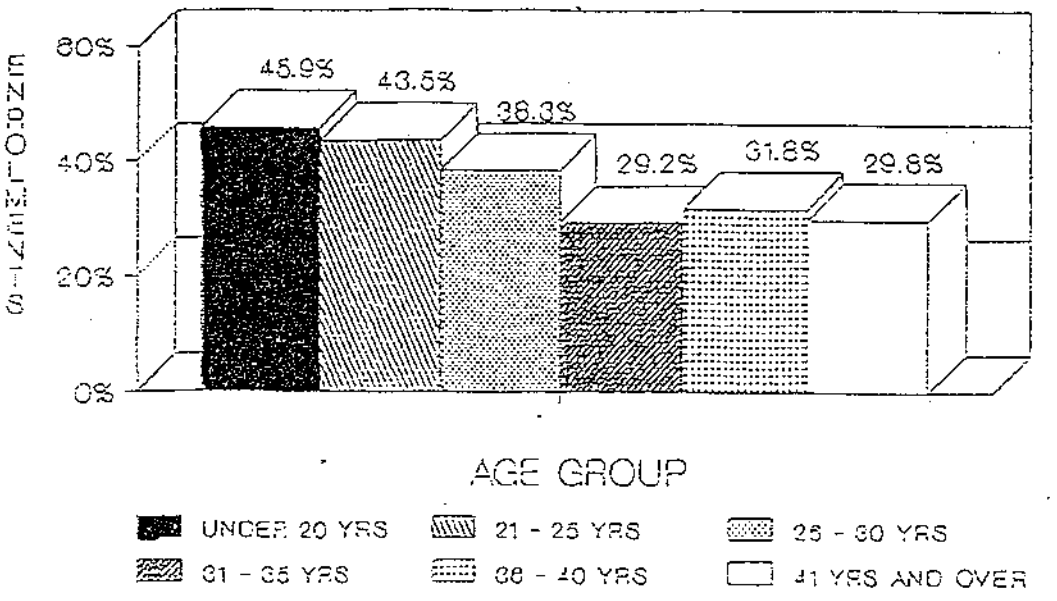
Hypothesis (Ho 5): age will have no significance on the likelihood of course completion.

TABLE 5: Cross Tabulation by Age Group and Grade.

AGECLASS	GRADE O	GRADE F	GRADE M	GRADE P	ROW TOTAL
20	62	9	28	36	135
20 YRS AND UNDER	45.9	6.7	20.7	26.7	11.3
	14.1	10.8	7.8	11.4	
	5.2	.8	2.3	3.0	
25	113	12	74	61	260
BETWEEN 21-25 YR	43.5	4.6	28.5	23.5	21.7
	25.6	14.5	20.6	19.2	
	9.4	1.0	6.2	5.1	
30	113	15	96	71	295
BETWEEN 26-30 YR	38.3	5.1	32.5	24.1	24.6
	25.6	18.1	26.7	22.4	
	9.4	1.3	8.0	5.9	
35	69	20	74	73	236
BETWEEN 31-35 YR	29.2	8.5	31.4	30.9	19.7
	15.6	24.1	20.6	23.0	
	5.8	1.7	6.2	6.1	
40	49	13	55	35	151
BETWEEN 36-40 YR	31.8	8.6	36.4	23.2	12.6
	10.9	15.7	15.3	11.0	
	4.0	1.1	4.6	2.9	
41	36	14	31	40	121
41 YRS AND OVER	29.8	11.6	25.6	33.1	10.1
	8.2	16.9	8.6	12.6	
	3.0	1.2	2.6	3.3	
COLUMN TOTAL	441	83	359	317	1200
	36.8	6.9	29.9	26.4	100.0

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.
36.59336	18	0.0059	0.138

PERCENTAGE DROPOUT BY AGE GROUP



From the above graph it can be seen that the drop-out rate declines as age increases; although the decline levels-off after 31 years. These differences are significant, and greater than could be expected to occur by chance. That is extramural students aged 31 years and over are less likely to drop-out. Therefore, the null hypothesis can be rejected.

These research findings are generally confirmed by other researchers into this question of age and drop-out, as can be seen by reference to the literature cited in this study.

Conclusion

The investigation and analysis of data revealed some common features shared by extramural accounting drop-outs. The "at risk" students involved were those:

- with a record of previous failure in university courses;
- new extramural students with no previous experience of university study;
- aged less than 31 years.

Characteristics rejected by this investigation involved:

- gender differences;
- differences with regard to admission criteria based on school qualifications (excepting the minority of extramural students with an A Bursary pass).

The purpose of identifying the "at risk" students is to enable these students to be identified at enrolment so that counselling can be given, or, at the very least these students will be cautioned against enrolling in too many unfamiliar and difficult papers. In this way it should be possible to reduce the large early drop-out occurring in all extramural first level papers at Massey University.

CHAPTER 4. RESEARCH METHODS AND RESULTS: WHY DO STUDENTS DROP-OUT?

Introduction

The second objective of this study was to find out what reasons extramural students gave for dropping-out. To achieve this objective drop-outs were surveyed in four groups according to the stage in the course they reached. Therefore 199 drop-outs were surveyed after the due date of the first assignment, 92 after the due date of the second assignment, 91 after the due date of the third assignment, 42 after the due date of the fourth assignment, and 14 after the last assignment. Results were then presented in graphical form for analysis and interpretation.

Research Method

In 1989, a record 976 extramural students enrolled in first level accounting (10.100) at Massey University. On the evidence of data derived from earlier years an average of around 40% would drop-out. Expecting this average to be maintained, and having established some likely characteristics of drop-outs, it is appropriate to consider the reasons students give for dropping out.

The method chosen for gathering data from drop-outs was by telephone survey. The main recommendation for this approach was that it was prompt, in other words telephone contact was made close to the drop-out occurring as opposed to several months later. Telephone communication allowed for some feedback, and it was hoped that by using this method a high response rate would be achieved. This latter aim was considered vital to the whole research project for according to Woodley and Parlett (1983) response rates from drop-out questionnaires are generally low. They cite two studies with response rates of 33% and 51% respectively, and comment that such results leave great scope for bias (p.8). Therefore every effort would be made to reach drop-outs, and a target response rate of, at least, 70% was considered desirable to validate the research conclusions.

The virtue of promptness in this research exercise was also regarded as important because the literature indicated that students approached months after dropping-out tended to forget the immediate frustrations and imperatives of the moment. Moreover, distant recollections of disappointing events often become rationalisations softened and blurred by time (Woodley and Parlett, 1983, p.8).

The first stage of this research project was to design a short questionnaire suitable for use over the telephone, bearing in mind the over-riding objective was to find out the main reason why a particular student dropped-out. In this way all the drop-outs interviewed were asked the same set of questions by the same interviewer.

The basic design for a suitable questionnaire for extramural students was developed from the questionnaire used by CUES in 1988. The questionnaire, so developed, was presented for critical review by other staff members at a Department of Accountancy seminar. This exposure resulted in further modifications to the original, and suggestions for further questions were adopted (e.g. the closing question - "Would you enrol again for this course?" - was one of the useful suggestions adopted). A pilot survey was then conducted and fifteen local 1988 extramural accounting (10.100) drop-outs were contacted. The pilot survey showed that the questionnaire, as developed, was unambiguous, could be clearly understood and that information could be elicited in a non-threatening way.

The first level accounting (10.100) course required extramural students to complete five assignments through the year by a due date. Failure to meet the course deadlines, without arranging special time extensions, meant course failure in that "terms" were not granted. Thus, unless a student had a specific exemption, it could be assumed that students who did not submit an assignment by the due date had dropped-out. In this way the course structure conferred an advantage on this research study by making it possible to follow-up students within a few weeks of their dropping-out. Moreover, it also became possible to produce data relating to each assignment stage. For example, it was anticipated that the largest drop-out would occur before the first assignment was due, and this proved to be the case as some 199 (20% of those enrolled) students dropped out at this stage.

Telephoning students who had dropped out proved more difficult and time consuming than was, at first, anticipated. Many students proved to be amazingly mobile and some students were impossible to trace. Each student contacted was initially asked:

- is this your first year of extramural study;
- have you withdrawn from other courses or just accounting;
- was the reason for your withdrawal due to lack of time, personal circumstances or problems with the course?

Students were then invited to expand on their last reply and specifically identify their reason for dropping-out. During the interviews the phrase "withdrawal" was preferred to "drop-out", because it has less pejorative connotations. Most students were approached either at work or around 6.30 pm at night. After some initial surprise at being contacted on this subject, students were very friendly and most anxious to help. Only one contact was hostile. All interviews were closed with the question:

- would you re-enrol again?

The purpose of this last question was to validate the answers already received as a negative response could indicate course problems which had not surfaced.

Each interview was documented and each document carried the name and responses of the interviewee. Documents were collated, numbered and filed. The responses, collected from those students who did not complete the course assignment by the due date, were then analysed and assessed. Finally, a summary of all responses was produced comprising reasons for drop-out throughout the course. The results are presented in four groups according to the stage of drop-out: before the first assignment, before the second assignment, before the third assignment and before the examination.

Results

1. Drop-outs before the first course assignment (April 25)

Nearly two months from the beginning of this course passed before the first assignment fell due, and of the 976 extramural students enrolled, 199 (20%) students failed to complete the assignment. This drop-out rate was similar to previous years, that is half the expected total drop-out rate (40%) were expected to drop-out before the first assignment. Eventually, 170 of the 199 drop-out students were contacted. Their reasons for dropping out so early are displayed below.

Brief Description Of Classification Categories

NEW JOB: refers to all students who dropped out because of a change in employment. For a many students the new job also entailed moving house.

ENROL: refers to those students who dropped out because of a variety of enrolment problems and late delivery of course materials. Many felt they had been enrolled in the wrong course or in too many courses. Others found the experience of extramural education different from what they expected.

TOO MUCH: refers to those students who found the volume of work they were expected to do much more than they had anticipated from the information available in the course description.

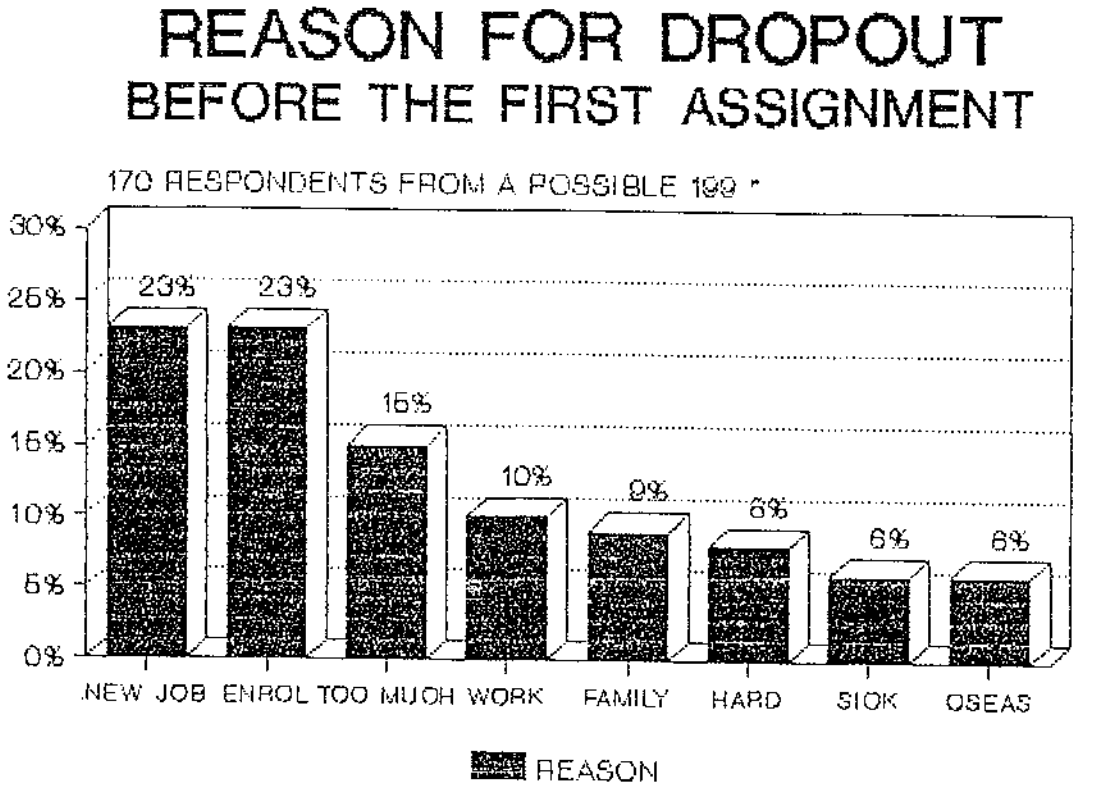
WORK: refers to those students who found their employment demands too great, and were too tired or exhausted to continue with their studies.

FAMILY: refers to those students who could not continue their studies for family or personal reasons.

SICK: refers to those students who dropped out because of sickness, pregnancy, or the illness of a close relatives.

HARD: refers to those students who dropped out because they considered the course to be too difficult.

OSEAS: refers to those students who gave as their reason for dropping out a move overseas, or trip overseas.



* A RESPONSE RATE OF 85%

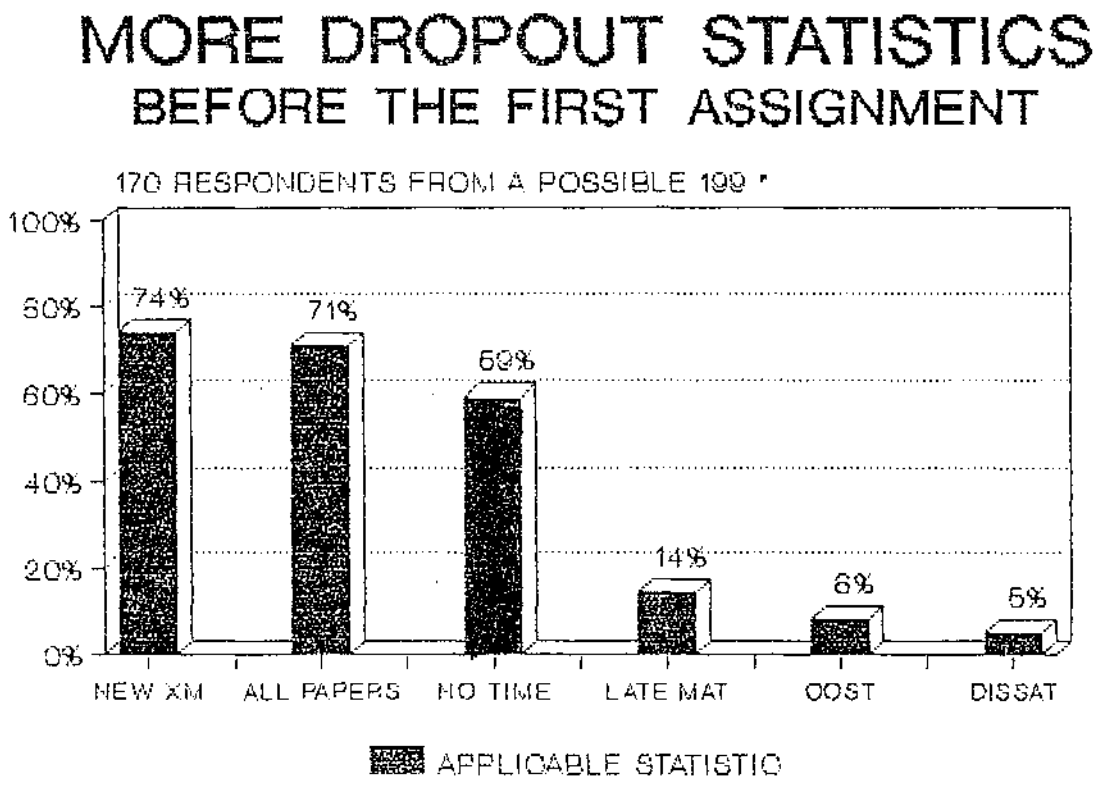
An answer to the general question posed by this research study, "Why do students drop-out?", can be developed in terms of two broad factors: university, and environmental. The former being factors causing drop-out which, in theory, Massey University could remedy, while the latter comprises factors which cause drop-out, of an external or unforeseen nature such as: sickness, new job, additional work or family pressure.

University factors

From the above analysis it can be seen that university factors (ENROL,TOO MUCH, and TOO HARD) account for 46% of the early drop-outs. This can be compared with the Open University's 23% (Woodley and Parlett, 1983, p.8). It is, theoretically, within the power of the university to remedy these adverse factors, though it may not be desirable or financially feasible to do so.

Environmental factors

These factors (NEW JOB, WORK, FAMILY, SICK,and OSEAS) account for 54% of the early drop-outs which can be compared with 77% at the UK Open University, (Woodley and Parlett, 1983, p.8), and may indicate some element of bad planning or weak motivation among the students concerned. A surprising factor was the general friendliness to the course from people for whom it has not worked out as planned. With one exception all the students contacted were friendly and helpful. This is reassuring, but as Smith (1987) pointed out, this is the other side of the drop-out proneness coin: people who are only contingently committed to an enterprise do not need to blame themselves for their failure to achieve an end result, and have, therefore, no need to seek scapegoats (p.24).



* A RESPONSE RATE OF 86%

The 74% NEW XM (new extramural students) shown above who dropped-out can be compared with the 51% NEW XM enrolled in the course. Using the chi square formula:

$$X2 = \frac{(A - E)2}{E}$$

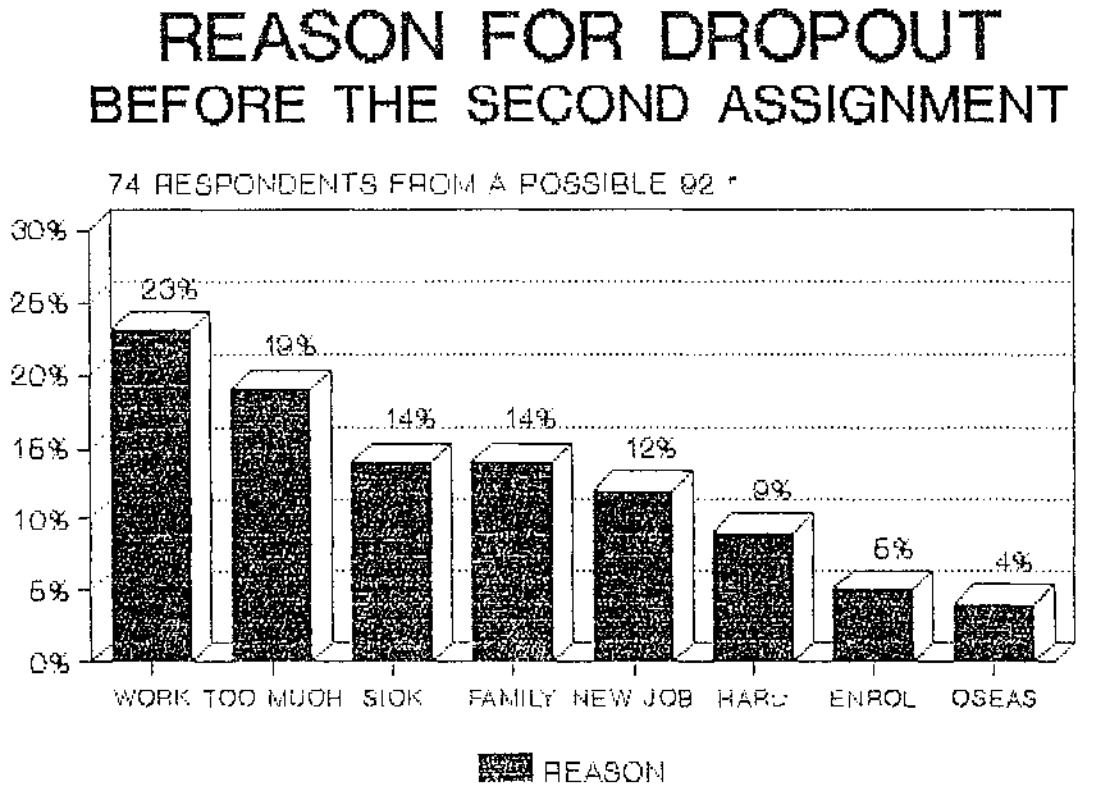
it can be seen that the result is highly significant. That is the fact that 74% of new students withdrew is more than could be expected to occur by chance, given that new students made up 51% of the number enrolled.

That 71% of the early drop-outs dropped-out from all papers is reassuring in that accounting does not appear to have specific problems which cause people to drop-out. The 29% who dropped accounting only can be explained by the number who found the course too hard, too much, or were dissatisfied. The 59% who found that they lacked time to continue with the course could be a product of many causes: new job, too much, work pressure, and family/personal reasons.

Lastly, although course costs had risen steeply, only a small minority of students complained of costs (8%). Even more reassuring was that few drop-outs (5%) actually expressed dissatisfaction with the course.

2. Drop-outs before the second course assignment (June 9)

Between April 25 and June 9, a further 92 (9%) students dropped out, bringing the total number of drop-outs to 291 (29%). Eventually, 74 of the 92 drop-out students were contacted. Their reasons for dropping out are displayed below.



* A RESPONSE RATE OF 80%

The results displayed are discussed in terms of two broad factors: university, and environmental.

University factors

From the above analysis it can be seen that university factors (ENROL,TOO MUCH, and TOO HARD) account for 33% of the early drop-outs. As expected the proportion of drop-outs claiming enrolment related problems has declined, while the number finding the workload "too much" has risen as students get further into the course.

Environmental factors

These factors (NEW JOB, WORK, FAMILY, SICK,and OSEAS) account for 67% of the drop-out, and, once again, may reflect some element of bad planning or weak motivation among the students concerned. Moreover, it is worth reiterating the friendly attitudes retained by drop-outs towards the course in spite of the fact that their studies had not worked out as planned. This is reassuring, but as Smith (1987) pointed out, this may indicate that the drop-outs were only marginally committed and have therefore no cause for regret only feelings of relief (p.24).

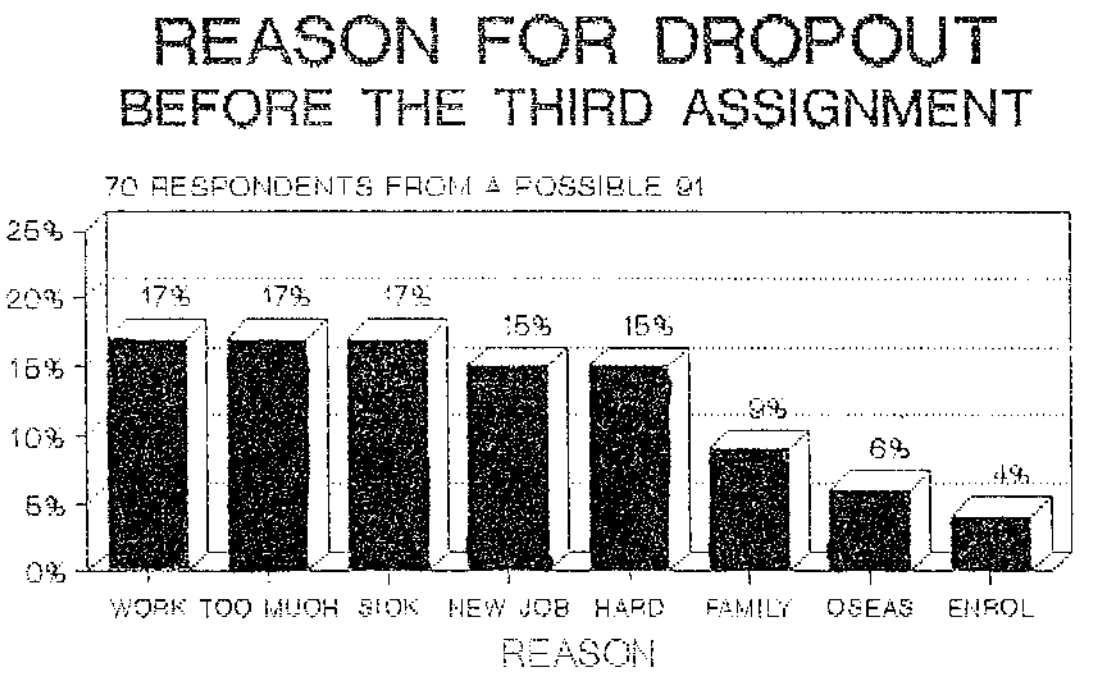
The graph below shows that 71% of the drop-outs were new students to extramural study. This represents a proportion greater than could be expected to occur by chance, given that new students made up 51% of the number enrolled. Thus it would appear that new extramural students have the most difficulty coping with the extra demands of extramural education.

In addition, 77% of drop-out students dropped-out from all papers and this is reassuring in that accounting does not appear to have specific problems which cause people to drop-out. The 69% who found that they lacked time to continue with the course would contain a high proportion of new extramural students.

Lastly, it is important to note that as the course proceeded to this stage a growing number of students were prepared to express dissatisfaction with the course.

3. Drop-outs before the third course assignment (August 11)

Between June 9 and August 11, a further 91 (9%) students dropped out, bringing the total number of drop-outs to 382 (38%). Eventually, 70 of the 91 drop-out students were contacted. Their reasons for dropping out are displayed below.



* A RESPONSE RATE OF 77%

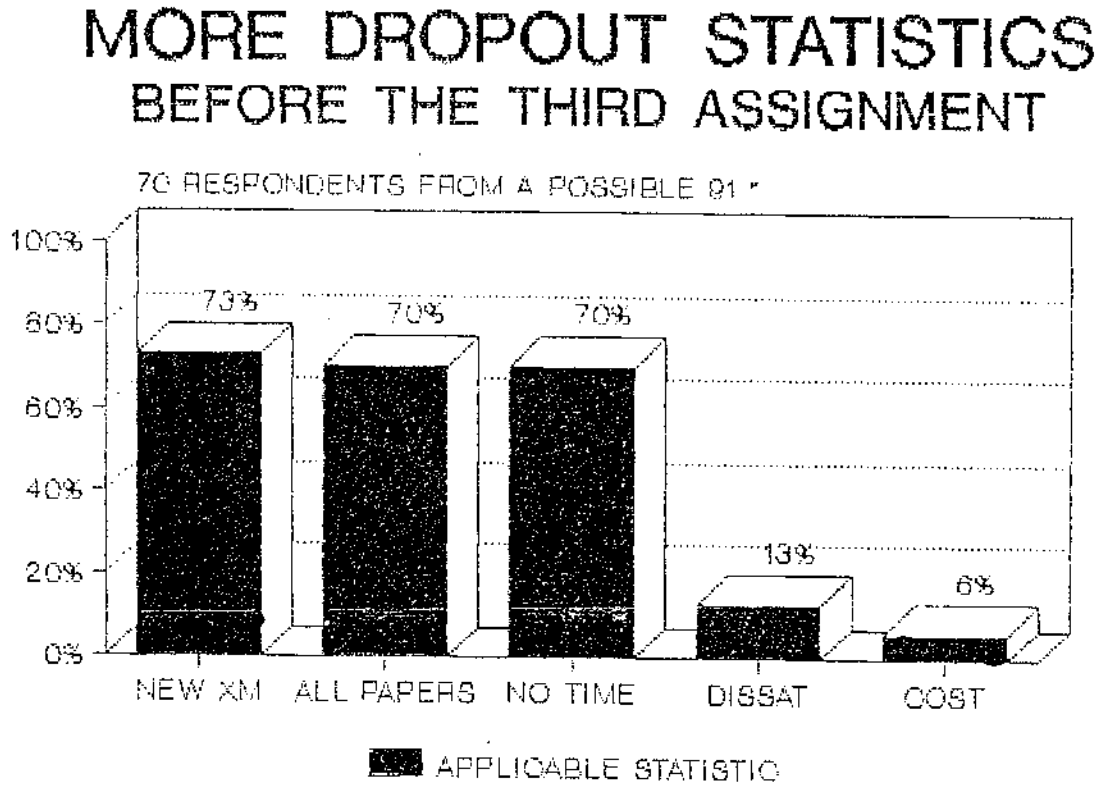
The results displayed are discussed in terms of two broad factors: university, and environmental.

University factors

From the above analysis it can be seen that university factors (ENROL,TOO MUCH, and TOO HARD) account for 36% of the early drop-outs. Though the proportion of drop-outs claiming enrolment related problems has considerably declined, while the number finding the workload "too much" has increased.

Environmental factors

These factors (NEW JOB, WORK, FAMILY, SICK,and OSEAS) account for 64% of the drop-out, and, once again, may reflect some element of bad planning or weak motivation among the students concerned. On the other hand, six months have passed since enrolment and many students may have experienced changes in their lives which could not be anticipated.



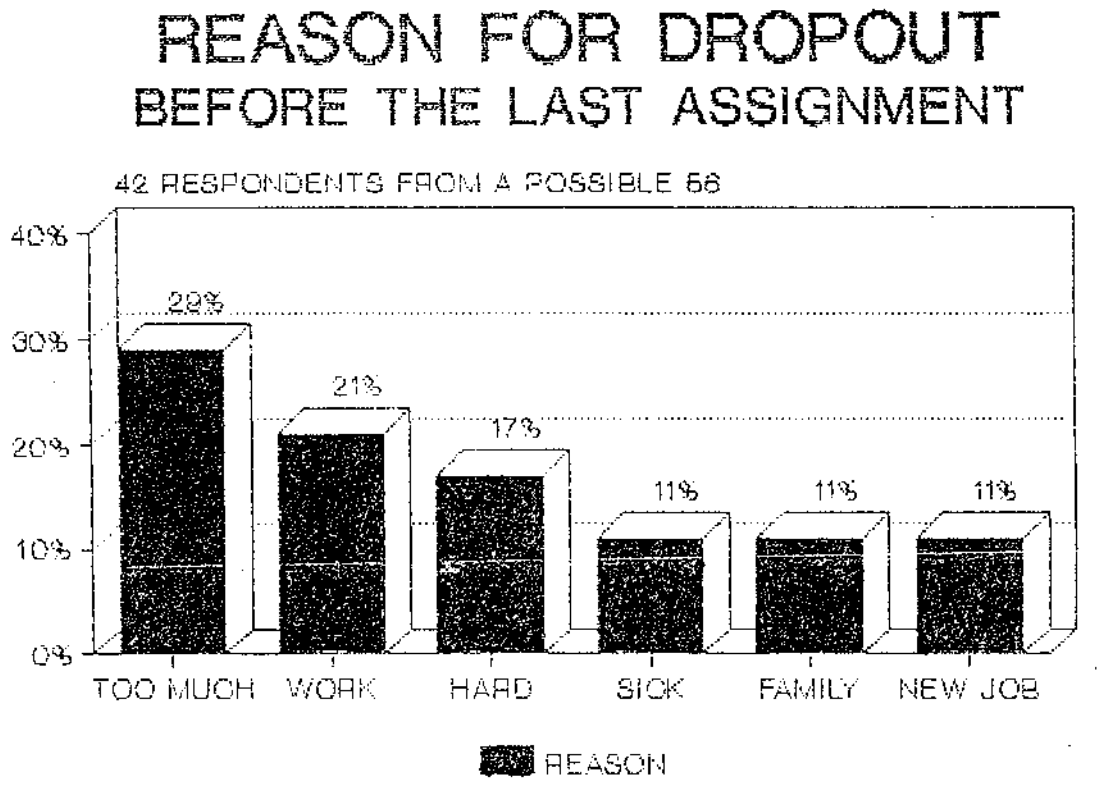
* A RESPONSE RATE OF 78%

The graph above shows that the drop-outs at this stage consisted of some 73% new students. Thus students new to extramural university study were more than proportionately likely to drop-out, given that new students made up 51% of the number enrolled.

The graph also shows that 70% of students dropping-out at this stage dropped-out from all papers, and many students (70%) felt that, without being specific, their problems were broadly due to a lack of time.

4. Drop-outs from the last course assignments (Assignments 4 and 5)

In the last phase of the course, a further 56 (6%) students dropped out, bringing the total number of drop-outs to 438 (45%). The 56 drop-outs comprised 42 from the fourth course assignment and 14 from the fifth and last course assignment. Eventually, 42 of the 56 drop-out students were contacted. Their reasons for dropping out are displayed below.



* A RESPONSE RATE OF 75%

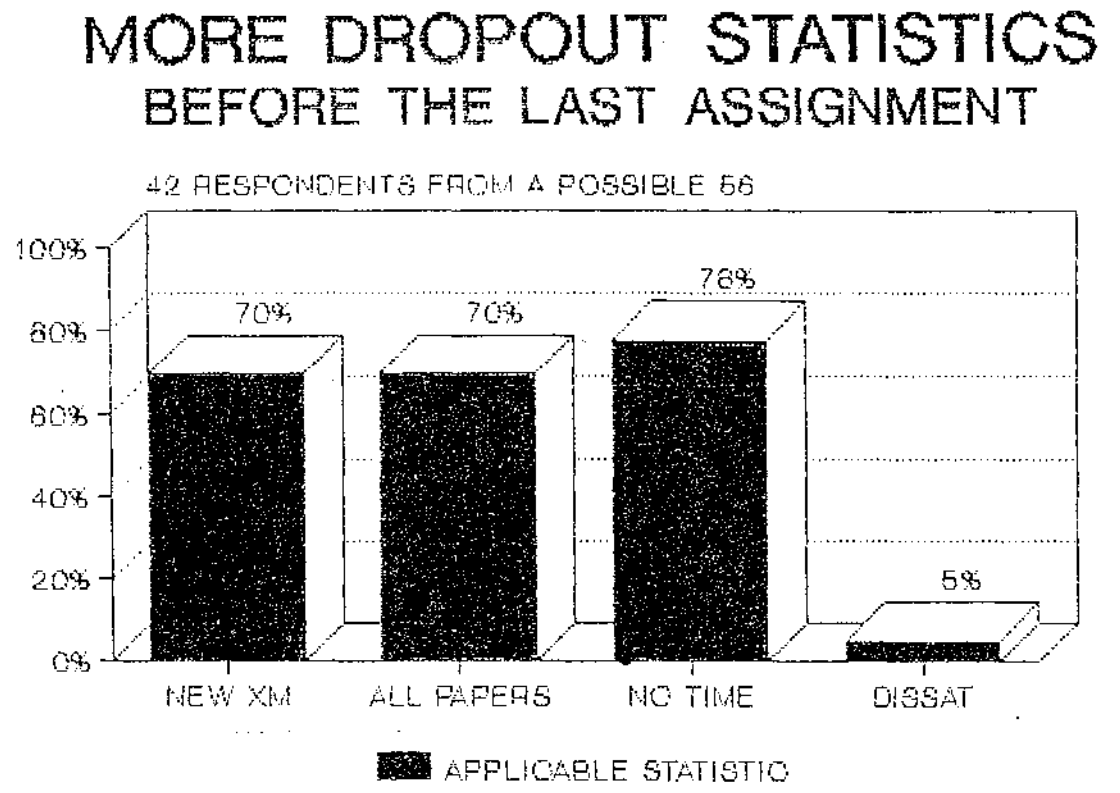
The results displayed are discussed in terms of two broad factors: university, and environmental.

University factors

From the above analysis it can be seen that university factors (TOO MUCH, and TOO HARD) account for 46% of the late drop-outs. Drop-outs claiming enrolment related problems have ceased, while the number finding the workload "too much" has again increased.

Environmental factors

These factors (NEW JOB, WORK, FAMILY, SICK,and OSEAS) account for 54% of the drop-out, a proportion which has remained relatively steady throughout the course.



The above graph shows that 70% of the students that dropped-out were new students, a proportion which is greater than could be expected to occur by chance, given that new students made up 51% of the number enrolled.

In addition, 70% of the drop-out students dropped-out from all papers, and a majority of students (78%) at this stage felt that the over-riding reason for their drop-out was a lack of time. Rather less than before, this stage, expressed dissatisfaction with the course.

Summary and Conclusion

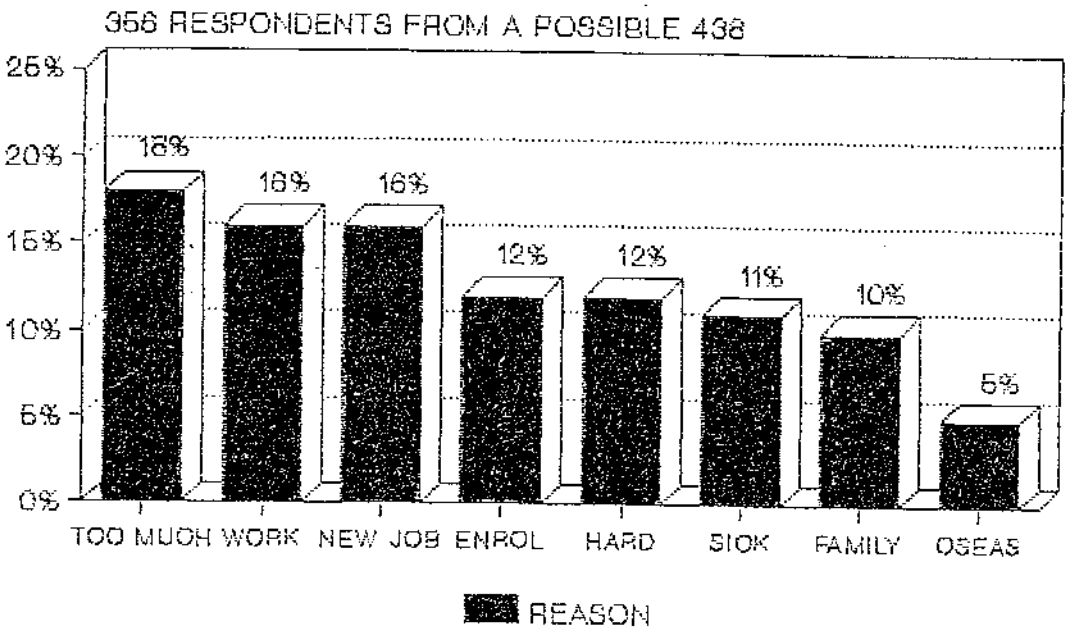
In 1989, 438 (45%) extramural students failed to complete the first level accounting course (10.100) at Massey University. Drop-out decreased sharply in the latter stages of the course, when only 14 failed to complete the last assignment (based on last year, a drop-out of six or seven, at most, is expected before the final examination, and this number will not materially effect the results shown). The 1989 drop-out rate of 45% can be compared unfavourably with the 40% average from previous years. The increasing drop-out rate is a phenomenon shared by other first level extramural papers, and adds weight to the need to study this problem. Thus the objective of this chapter was to explain why students drop-out from first level accounting at Massey University.

To achieve this objective a telephone survey was planned, and after a suitable questionnaire was designed and subjected to critical peer review, a pilot survey involving fifteen 1988 drop-outs was conducted. Once the pilot survey had endorsed the method planned the main survey was commenced, and within five months some 356 students were contacted via telephone from a total drop-out of 438. That is an 81% response rate. Such a high response rate from the total population involved lent validity to research conclusions. Moreover, drop-outs were approached as they occurred throughout the year. This was achieved by immediately contacting all students who had not submitted assignments by the due dates. For research purposes drops-outs were separated into four groups, according to the stage in the course reached, i.e. those that dropped-out before the first assignment (1), before the second assignment (2), before the third assignment (3), and before the last assignment, three weeks before the final examination (4). It was observed that:

- 199 students dropped-out before submitting the first assignment,
- 92 dropped-out before submitting the second assignment,
- 91 dropped-out before submitting the third assignment,
- and 56 dropped out before the last assignment.

The overall results from the survey are displayed in graphical form below, and this graph is a summary of the four "stage" graphs shown in the body of the chapter.

REASON FOR DROPOUT
FROM FIRST LEVEL ACCOUNTANCY



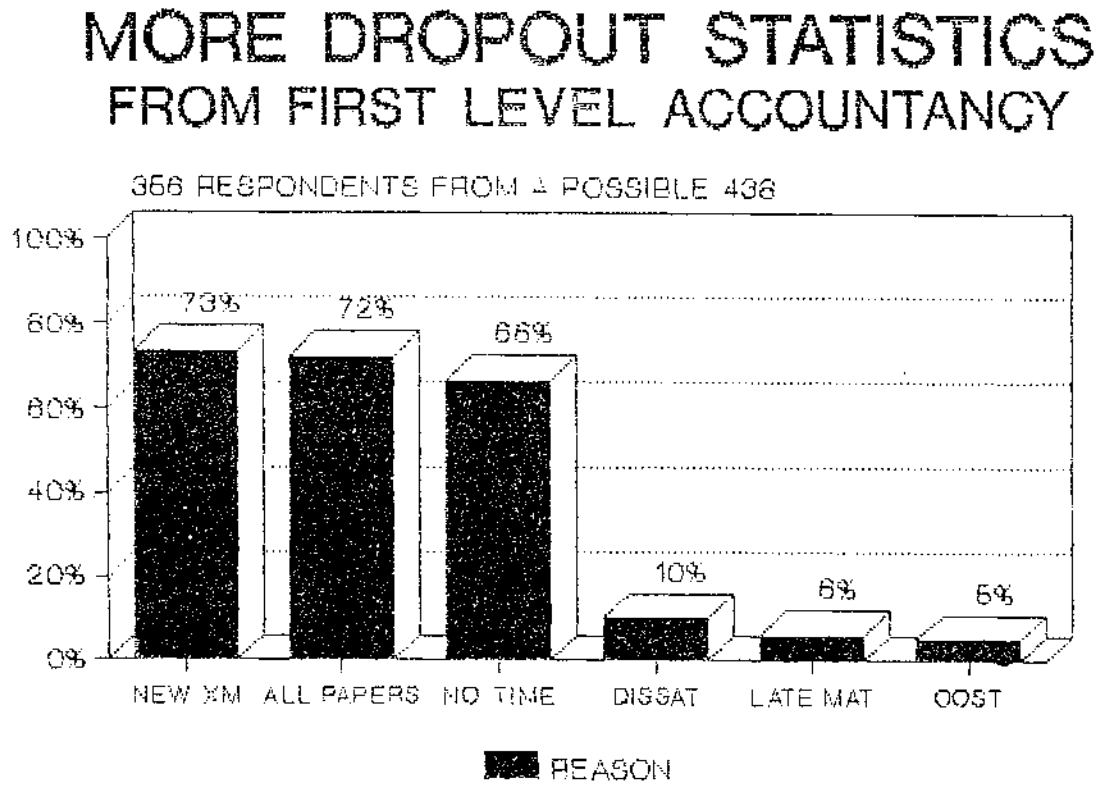
* A RESPONSE RATE OF 81%

The graph shown above reveals that 42% of drop-out respondents cited "university factors" (too much, too hard, enrol) as their reason for dropping-out. While 58% of respondents gave "environmental factors" (new job, work, sick, family, overseas) to explain their drop-out.

Woodley and Parlett (1983) found that "university factors" accounted for 23% of the drop-outs at the UK Open University (p.8). Thus the 42% dropping-out for "university factors" would appear to be comparatively high. These factors are useful to identify as they are the only ones which are subject to university control. Therefore, to reduce extramural drop-outs Massey University would need to concentrate on reducing the "university factors" which give rise to drop-outs. However, in the case of such reasons as "too much" and "too hard" it is not suggested that standards be lowered to achieve a reduction in drop-out. But that more attention be paid to better course design and more information be made available to prospective students on the study demands involved. This latter suggestion would be

particularly appropriate for the many new extramural students that enrol for this course. The students that drop-out because of enrolment problems (12%), such as being enrolled in the wrong course, or taking on too many papers, or receiving their study materials too late are problems which could be corrected by some counselling of students upon enrolment. Too many students claimed that they were misled as to the nature of the course and that the extramural handbook did not contain enough information. On the other hand, many students admitted that they had at enrolment not sought any more information and had later regretted this inaction.

At first sight "environmental factors" appear unavoidable, the products of random chance which students could not have predicted at the time they enrolled, and in the case of sickness, family tragedy, and pregnancy this may be true. However, reasons such as work pressure (16%) and overseas trips (5%) may be the product of a lack of motivation or bad planning. Better counselling upon enrolment could have helped these students (73% of drop-outs were new to extramural and university study), especially those students who enrolled in two or more papers.



* A RESPONSE RATE OF 61%

The above graph clearly reveals the large proportion of new extramural students dropping-out in their first year. New extramural students make up 51% of the total number enrolled, but 73% of those dropping out, and such a difference is statistically significant.

It is reassuring that 72% of those students dropping first level accounting dropped other papers as well, as it indicates the drop-out problem is not peculiar to first level accounting. Moreover, that 66% of drop-outs cited "a lack of time" as their major over-riding problem, reinforces the need to emphasise the demands of extramural study on students at enrolment.

Lastly, some 10% of drop-outs expressed dissatisfaction with the course. Most of these students when questioned further had seemed to misunderstand the nature of extramural education and expected more face-to-face contact with staff or tutors. A finding which strengthens the case for better counselling of new and inexperienced students.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

This study investigated the problem of drop-outs from first level extramural accounting (10.100) at Massey University. It cannot be emphasised strongly enough that this problem is common to all the large first level extramural courses at Massey University. Rates among these courses may vary but a drop-out rate of around 45% from first level extramural accounting is close to the average for large extramural courses(see Appendix 1). The fact that more than two out of five students (most of them new to university education) fail their courses in this way, and that these figures cause so little stir serves to indicate the extent to which extramural drop-out has become institutionalised. There are a number of reasons why this has occurred:

- extramural drop-out has no visible impact (lecturers are not confronted by empty halls and rooms);
- drop-out is considered inevitable;
- some level of drop-out is considered necessary to demonstrate academic rigour;
- course controllers are never confronted by dissatisfied students (new extramural students are scattered and cannot share experiences);
- drop-out rates maybe rising but Massey University has no comparison group in terms of other extramural universities.

Massey University should decide what drop-out rates are acceptable or inevitable and what rates require some kind of preventative action. It has been argued in this study (see Chapter 4, Conclusion) that those factors which can be identified as "university causes" rather than "environmental" causes, require further investigation and control. By comparison with the UK Open University "university" reasons for drop-out are already too high and should be contained.

Research can help with the drop-out problem by informing discussion, assisting policy making, and suggesting possible preventative measures. At present, considerable staff and extramural resources are invested in students who prematurely discontinue their studies (see Appendix 1). In times, of extreme financial restraint such areas of potential waste require investigation and remedy.

By identifying the "high risk" students the University could introduce a selective screening policy. Such students (as identified in Chapter 3) could be encouraged to consider fully their situation before enrolment. Better course descriptions and sample course materials would ensure students know exactly what they are enrolling for. As has been demonstrated, many drop-outs blame their problems on lack of help during enrolment (see Chapter 4, Conclusion). Interviews with drop-out students revealed how unaware many of the "new" students were about the essential nature of extramural education at enrolment. They had expected much more face-to-face contact and regular tutorial support, when in fact the latter is non-existent in first level extramural accounting.

To decrease drop-out rates Massey University would be best advised to introduce the following changes, which it is argued, are relatively cheap, practical and humanitarian.

- More and better admission counselling for new and "high risk" students. New students have been found especially likely to drop-out, and yet they enrol without any counselling, other than written material contained in the extramural handbook.
- More face-to-face tuition and counselling during the course (e.g. telephone contact should be encouraged not discouraged). The introduction of Regional Day Schools has been well received and on a voluntary basis 45% of the student number attended. Clearly, a good start has been made in improving face-to-face contact. The Regional Day Schools have been welcomed by staff and students, and it is suggested this initiative be maintained.
- New students should be actively discouraged from doing more than one paper unless they can demonstrate a clear understanding of what time demands are involved. Over 65% of drop-outs contacted gave as one of their reasons for dropping-out a lack of time, and new students were especially prone to drop-out.
- the extramural handbook should be redesigned to emphasise course content and study demands, or separate leaflets published for the larger courses informing students of the subject content, hours of weekly study needed, approximate materials costs, and methods of tuition. The UK Open University provides a good model in this respect. Many of the earlier drop-outs blamed their failure on enrolment problems (23%), and a lack of easily accessible information.

- upon registration students should acknowledge, in writing, that they understand what they have enrolled for, and that they are able to devote the necessary time involved for satisfactory course completion. This would make students think again before optimistically committing themselves to courses they cannot sustain.
- new students should be made aware of the essential nature of accounting extramural education, and that tutorial support is not available. Perhaps, one of the most surprising revelations to emerge from this study was that many of the drop-out students had thoroughly misunderstood the self-learning nature of extramural education.
- new business studies students should be discouraged from commencing their university studies with first level accounting. Such students should be encouraged to take subjects like marketing which utilise some skills which they may already possess. Because accountancy uses a special "language" many students were confused from the beginning and lost confidence, as a consequence, in extramural education.

These recommendations would help to contain the drop-out problem from first level extramural accounting. It is a problem which, if ignored, will involve more and more people in a wasteful and frustrating exercise. There will always be some drop-out for "environmental" reasons but the "university" reasons can be contained by the changes suggested. Otherwise we will simply carry on enrolling first level extramural accounting students who are badly informed about the level of skills involved and the time commitment required, while hundreds of other students are unable to register because the course is full.

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APPENDIX 1

Massey University Extramural First level Business Courses (Group A)

Drop-out Analysis 1988

Course	Withdrew	Did Not Complete	Total Drop-out	
			No.	%
Accounting (10.100)	105	209	314	41
Business Organisation (26.120)	90	251	341	47
Business Law (26.150)	99	132	231	46
Marketing (56.111)	124	212	336	36
Business Computing (58.102)	40	34	74	32
Statistics (60.111)	146	167	313	54
Economics (77.101)	49	317	366	51

First Level Extramural Business Courses Average Drop-out 1988 = 44%

APPENDIX 2

SYNOPSIS OF LITERATURE REVIEWED

Bartels, J. (1985). Study experience of graduates and drop-outs at the Fernuniversitat. ICDE Bulletin Vol 1, 39-48.

This study used a rather unconventional research approach in that 14 graduates and 15 drop-outs were invited to write long essays on their experiences for which they were paid a fee. Guidelines of areas to be considered were provided. Many of the students involved had difficulties finding the time to maintain their studies particularly those with outside job demands. Many others cited changes in personal circumstance which led Bartels to doubt their commitment to study in the first place.

Boshier, R.W. (1969) Participation and drop-out in adult university extension classes. New Zealand Journal of Educational Studies, 4, 117-132.

This New Zealand study surveyed 57 drop-outs from Victoria University's extension classes. Chi squared values were obtained and it was found that marital status, education, previous failure, were significant characteristics of drop-outs, while sex and age were not.

Fifty drop-outs were surveyed as to why they dropped out, but only twenty one responded. The most frequent reason given was commitment to other activities, and the next most frequent reason was lack of time causing respondents to get behind in their course work.

Boshier concluded that such reasons as "lack of time" and "vocational demands" more easily accommodated the respondent's self concept than a suggestion that the material was too difficult. This study is limited by the small sample involved and the number of respondents.

Hibbett, A.U. (1986). Dropping out or staying on. Studies in the education of Adults,18, 71-81.

This study involved students enrolled in adult education classes at the Luton College of Higher Education (UK). Hibbett's research aim was to ascertain a comprehensive range of background data, expectations, and experiences over time, to shed some light on which factors are linked to course drop-out. Three questionnaires were completed by 211 respondents. Hibbett found increasing age meant an increasing likelihood of completing one's course. There were no significant differences with regard to sex. Study programmes took a heavy toll of students in full time employment, who were more likely to drop-out because of work demands or because they were too exhausted after work. She also noted that drop-outs from "award" type (such as accounting) courses rarely criticised the course contents or arrangements.

Hooper, K.C. (1987). School qualifications and student performance in first year university accounting. Discussion Paper 61, Department of Accountancy, Massey University, New Zealand.

This study presented a statistically based evaluation of the relationship between school qualifications and students' results in first level accounting at Massey University in 1986. A significant relationship was established between educational attainment and subsequent performance in first level accounting. Educational attainment was measured in terms of New Zealand scholastic criteria: school certificate, sixth form certificate, "B" bursary, and "A" bursary qualifications. The bursary examination requires seventh form students to sit a national examination in five subjects, and most first level accounting students at Massey University had sat this examination. It was found that the higher the total bursary score the greater the likelihood of success in first level accountancy.

Horton, C.W. (1976). University extension participants: their characteristics and attitudes. Hamilton: University of Waikato Extension.

Horton mailed a course evaluation to all persons in University of Waikato Term II courses. He received 411 responses, a 76% return rate, and reported that 16% of participants in 20 university extension courses dropped out in 1975. Significantly, there were no differences in the dropout rate between courses. No sex differences were found between drop-outs and persisters. Unlike other researchers (Tinto, Mitchell, and Boshier) Horton did not find a relationship between education and drop-out, but found that separated and divorced persons were far more likely to drop-out. A quarter of the dropouts said they had dropped out because they were "too busy at work". Other reasons cited were family commitments (25%), and "course failed to meet needs" (16%).

Mitchell, F. (1988) High school accounting and student performance in the first level university accounting course: a UK study.
Journal of Accounting Education,6, 279-291.

This article contains the results of a UK study on the effect of high school accounting on student performance at Edinburgh University in a first level university accounting course. The results of this study, which involved 142 students indicated that previous accounting education was of some value in university accounting but only in the computational assessments. This rather guarded conclusion really leaves the question of the usefulness of prior accounting education open for further research to resolve.

Morrison, A.A. (1981). Success and failure of mature aged students at the University of Auckland. Continuing Education in New Zealand, 53-59.

This research study obtained data from the Centre for Continuing Education at Auckland University concerning part-time students, and the results were analysed by age, qualification, subject area, and sex.

He found mature aged part-time students were less likely to withdraw than younger students, and generally females more likely to drop-out than males. Also Morrison found that previous educational qualifications were not a significant factor in persistence and success.

Ostman, R.E., Wagner, G.A., & Barrowclough, H.M. (1988).
Educational technology and drop-out, Wellington: New Zealand Technical Correspondence Institute.

This study involved 724 respondents of which 75% were males, and 90% aged between 18 and 44 years. More than one third of respondents had dropped out of the NZTCI management courses. Among the reasons cited, by at least half the drop-outs, was "lack of time". The next strongest reason for drop-out was that they took up their studies for interest only. Various forms of course dissatisfaction rated next in order of significance.

The large majority of drop-outs (79 in 100) had discontinued their studies in the year preceding the survey. Three in five drop-outs said they would resume their studies in the future. Gender was not a factor in drop-out. Unskilled workers had higher drop-out rates than administrative or skilled workers. The gap since the last formal educative experience was a factor, with those with large gaps being more prone to leave their studies.

They recommended that students be given a clear idea of expectations prior to beginning their studies, and they stressed the importance of tutor/student contact.

Smith, B. (1987). Investigating drop-out from the open foundation course.
Australian Journal of Adult Education, 27 17-24.

Every year, consistently, close to half the people who commence the Open Foundation Course at the University of Newcastle (Australia) complete it; the rest drop-out. To investigate this phenomena Smith mailed over 200 questionnaires in reply paid envelopes, but only 70 responded. Of these only 11 of the

respondents abandoned their course because it was too difficult. The vast majority of respondents indicated they had dropped out because of a lack of time, changed circumstances, or conflicts of interest with other activities. Few expressed disappointment with their course. Smith concluded that a high proportion of students enrol with a give-it-a-try attitude, and if circumstances go against them they give up, not gladly, but quite naturally.

Smith considered that it was clear from his research that a "perceived" inability to cope intellectually is not the main reason for drop-out. Rather it is an unwillingness to give the study task the priority it needs. Students should be encouraged to consider honestly whether their problems do arise from "external pressures" or are really an inherent inability to cope.

Tinto, V. (1975). Dropout from higher education. Review of Educational Research, 45, 89-125.

This paper summarises earlier American research findings based on studies of college students. From the results obtained a model is formulated that explains the processes of interaction between the individual and the institution that lead differing individuals to drop out from institutions of higher education. Individuals who were not sufficiently integrated into the institutions social system would have a low level of commitment. His review of other studies concluded that past measures of learning performance were associated with drop-out, the higher the previous grades, the lower the drop-out. Generally, it appeared the greater the number of years of schooling, the lower the dropout rate. Moreover, sex appeared related to college persistence because a higher proportion of men finished college degree programmes. Lastly, Tinto found that as the affluence of US families increased, dropout rate decreased, and that as parents' education increased student dropout rate decreased.

Tremaine, M. (1978). Why students withdraw. Palmerston North: Massey University Centre for Extramural Studies.

Some 430 students were surveyed in order to ascertain reasons for withdrawal. The most common reason for withdrawal was "lack of time"(42%). Changes in personal circumstances was the second most common explanation, a set of reasons for which Tremaine used the umbrella description "fate" (30%). Difficulties with course content or arrangements were expressed by only a minority of students (17%).

Woodley, A., and Parlett, M. (1983). Student drop-out.
Teaching at a distance 24, 2-23.

After ten years of study a great deal of basic information is presented and discussed. Because of the sheer size of their research sample their findings must be regarded as definitive. They begin by comparing Open University (UK) drop-out rates with other comparable institutions and found overall drop-out rates to be much the same. Drop-out rates had also steadily increased over the period studied. Also there was a big variation in drop-out rates in all faculties and between all courses. But courses with summer vacation schools had lower drop-out rates.

They discovered "at risk" students by examining such variables as: sex, age, previous educational qualifications, credits held, and year of entry (previous failure). A course with many "at risk" students would have high drop-out rates.

To explain why students drop-out various push and pull factors were advanced. Each factor having a different strength and drop-outs occur when the pull factors outweigh the push factors. Some students beginning with push factors barely outweighing pull factors, which is why most drop-out occurs before the first assignment (though this latter statement was unsupported by any research as to "when" drop-out occurs). Students, they concluded, respond to the question of why they dropped out by citing the final pull factor.