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Adjustment problems of Zambian University students

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ADJUSTMENT PROBLEMS OF ZAMBIAN UNIVERSITY STUDENTS

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A THESIS SUBMITTED TO THE UNIVERSITY OF WALES

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

ADJUSTMENT PROBLEMS OF ZAMBIAN UNIVERSITY STUDENTS

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ADJUSTMENT PROBLEMS OF ZAMBIAN UNIVERSITY STUDENTS

SUMMARY OF THE THESIS

A review of the literature indicates that a student's transition from school to university, is frequently accompanied by a variety of adjustment problems. This study investigates the particular problems experienced by a large group of undergraduates in a developing country, namely Zambia. A variety of techniques are used, including paper and pencil questionnaires and individual and "group" interviews. A statistical analysis of the results shows a considerable number of adjustment problems that are generally experienced, keenly felt and persistent. The majority of these problems are academic, rather than social in nature. Some categories of student, are found to experience significantly more adjustment problems and more severe adjustment problems, than others. The causes of the problems are investigated and finally suggestions are made for their elimination, or amelioration.

B.N.WILSON. 1983.

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ADJUSTMENT PROBLEMS OF ZAMBIAN UNIVERSITY STUDENTS

CHAPTER 1

INTRODUCTION AND STATEMENT OF THE PROBLEM

"Undergraduates owe their happiness chiefly to the consciousness that they are no longer at school" - Beerbohm (1899).

Sir Max Beerbohm's statement is a reflection of his own experience on going up to Oxford University from Charterhouse School. He thoroughly enjoyed his new university life of academic freedom and enterprise, which contrasted so greatly with the petty regulations and discipline of his previous schooling. This contrast is something which virtually all undergraduates experience, but it does not necessarily result in the euphoria described by Beerbohm. Sometimes, adapting to the new environment can be quite problematic. Here, for example is the experience of a more recent first-year student attending a university in the midwest of America : "I was very homesick and overwhelmed by the impersonal atmosphere, as well as the diversity of characters, I came in contact with. I also had no idea of how to study and thought that if I was smart enough to have been accepted I could glide by without studying, as I had done at school", (quoted in Cope and Hannah, 1975).

Students at the University of Zambia, where this present piece of research has been carried out, have voiced similar expressions of maladaptation to the one quoted above. These are some of the difficulties mentioned by a first-year education undergraduate, two months after his entry into university:

"there are too many distractions from work I can't settle down to anything, as soon as I start to read a book my mind starts to wander..... at school I used to work very hard, but here there is so much freedom..... I need help." When interviewed again, some three months later, this particular student's problems had considerably diminished and he expressed a much more harmonious relationship with the university environment. Thus the verbatim evidence of modern university students, indicates that the difference between school and university environments is still considerable, but the effect of the change in environment, need not necessarily lead to contentment, but can result in unsettledness, anxiety and even depression.

What other evidence is there, for the existence of student adjustment problems? The American student quoted above, finally decided that the problems were too much for him and at the end of the first year he "dropped-out" of university. This phenomenon of dropping-out is by no means infrequent, although the research evidence is somewhat confused by different definitions of "stopout", "dropout" and "wastage" (cf. Heywood, 1971, p.189 and Cope and Hannah, op. cit., p.2). The "stopout" is best defined as a student who voluntarily leaves an institution, but may return at a later date. A "dropout" is a stopout, who never returns to obtain the university final qualification. "Student wastage" is a wider term, that encompasses stopouts and dropouts and also includes non-voluntary withdrawals from university; for instance, examination failures and disciplinary dismissals.

In the present context, adjustment problems are expected to be involved in both voluntary and non-voluntary cases of withdrawal.

They are here defined, as difficulties brought about by a change in the educational setting, which prevent a student obtaining maximum benefit from his new environment, and which can in extreme circumstances, lead to a student "stopping out", "dropping out" or being excluded from the university. In a typical situation, a student transfers from school to university, encounters difficulty in studying, (perhaps exacerbated by a new and exciting social life), loses confidence after poor mid-year test results and finally fails his end of year examinations. Voluntary or involuntary withdrawal might possibly result and he would join the growing ranks of student "casualties", that cause concern to educationalists in many countries of the world.

Miller (1970, 1973) quotes the following typical statistics of university student wastage: America 20%, Australia 33% and Britain 14%. The figure for Zambia is about 17%, (Shaw, 1979). Thus in Australia, approximately one third of the students who enter university, never obtain a final degree. This is a very high figure and it has led to a considerable number of research studies investigating Australian methods of university selection and reasons for wastage, (e.g. Olsen, 1957; Pentony, 1968; Genn, 1972; Miller op. cit., 1974; Nixon and Taft, 1977). In his comparison of Australian and British universities, Miller concludes that the main reasons for the high Australian wastage figures, are that the Australian student is younger, he is comparatively less educated, he receives less individual tuition, has a larger number of examinations to pass and cannot fall back on the "safety-net" of a "pass degree" (commonly used in many British universities). In addition, the Australian universities are less selective and a higher proportion of the population enter university.

Britain's wastage figures are relatively small in comparison, perhaps because the universities have more stringent admission criteria. As Mc Intosh(1975) put it, the majority of people in Britain never have the chance to drop-out because they never had the opportunity to "drop-in". The introduction of an Open University was seen as a way to amend this situation, although the abandonment of admission criteria inevitably led to higher wastage rates, (McIntosh and Morrison, 1974). Of the 14% of British students who never obtain a final degree, the large majority leave voluntarily and only about 2% fail examinations, become ill or are excluded for disciplinary reasons, (University Grants Committee, 1968). Nevertheless the wastage figures are sufficiently large to have generated a considerable body of research on wastage and related topics such as, campus unrest, student counselling, mental health, study methods and teaching methods, (Heywood, 1971; Mc Intosh, 1975; Newsome et al., 1973; Payne, 1969; Entwistle and Entwistle, 1970).

Zambia's wastage figures are also relatively small. Only about 1 student in 150 of the age group enters the University of Zambia (Ministry of Education, 1980; cf. 1 student in 15 entering British universities, Miller, op. cit.) and once a student has gained entrance to the University, he is highly motivated to obtain a final degree. Most of the wastage is probably the result of illness, pregnancy and family obligation, although no comprehensive study of Zambian student wastage has been conducted and no precise figures are available.

Another phenomenon which suggests the presence of student adjustment problems is that of campus unrest and university closure. Very often such disruptions are the result of a combination of political

influence and the undergraduate's newly experienced freedom. This freedom and its associated feeling of power, are a probable foretaste of greater responsibility, to be assumed later in adult life and subsequently it is an important element in the training of a country's future leaders. It is however, something which students frequently have difficulty in adjusting to and has on occasions been abused. In most cases, "freedom of expression" and "flexing of student muscle", is an accepted part of undergraduate life and is sympathetically received by government and the public at large. Occasionally however, the student movement is seen as a threat to the status quo and student dismissals and university closure may result. The 1960s, in particular, witnessed an epidemic of university unrest, particularly in America and Europe (Lipset, 1972, Ehrenreich, 1969). More recently, African campuses have experienced disruption and closure. To give one example, the University of Zambia since 1971, has had three lengthy closures and innumerable shorter "shutdowns" and "student strikes". On some of these occasions, adjustment problems which will be discussed more fully later on in the research, played a prominent part. For instance, in Jan./Feb. 1982, the students demonstrated and then had a three day boycott of lectures, because of the poor food served up in the student canteens. Similarly, poor staff/student relationships and shortage of books, were influential in causing other periods of unrest early in 1982. It should be possible to resolve some of these confrontations, that individually and collectively result in a considerable loss of teaching time, by surveying the student's difficulties and recommending ways in which they can be overcome. Surprisingly, very few comprehensive surveys of university student adjustment problems, are to be found in African research literature.

In the above situation, where the presence of adjustment problems, in large groups of students, has been directly responsible for the loss of many hours of university teaching, there is little doubt that the existence of such problems is undesirable. Similarly, if a particular adjustment problem or group of adjustment problems, is severely experienced by an individual student and results in his dropping-out of university, then efforts should be made to try and prevent a similar recurrence in the future. However, it is possible to argue, that the existence of problems in certain proportions, is inevitable and even desirable, in that they form an integral part of the educational experience; helping to exercise a student's intelligence and mature his personality in readiness for the vicissitudes of the world at large. The data which is generated in this study, permits the reader to adopt his own criteria in order to decide whether an adjustment problem is worthy or not worthy of consideration. For the purpose of the present thesis however, the following criteria have been adopted with regard to the acceptability or otherwise, of adjustment problems.

Firstly, adjustment problems will be accepted if they are not so "potent" as to disrupt significantly a student's work or social integration. In the study that follows, the students are asked to report their difficulties as either "a severe problem", "a problem" or "a slight problem". A response of "slight problem" is considered acceptable, although the existence of large numbers of slight problems could hinder the effective intergration of the student. Secondly, particular adjustment problems should be experienced by small numbers of students. When large groups of undergraduates experience the same adjustment problem, intervention is necessary in order to prevent the possibility of a more general campus unrest.

In the present study, an arbitrary cut-off point of one third of the student population, has been adopted. If less than one third of the students experience a particular adjustment problem, the situation is considered acceptable. Finally, adjustment problems will be accepted if they are temporary. Ideally they should begin to diminish in the first three months and certainly last no longer than the first year. If they persist into subsequent years, then this is not simply a question of adjustment, but an indication of more fundamental disharmony that exists between the student and the university.

Consequently, the circumstances in which adjustment problems are a cause for concern, are, (1) when they persist into second, third and subsequent years (2) when individual adjustment problems are of such potency, that they either have a deleterious effect on the students' academic performance, or prevent him from deriving the benefits that result from a full integration with the university society, and (3) when particular adjustment problems are experienced by more than one in three of the student population.

This introductory section has been primarily concerned with two basic questions: (a) Do undergraduates experience adjustment problems? and (b) Is the presence of student adjustment problems desirable?. Students' verbatim accounts, combined with research into student wastage and the incidence of campus unrest, suggest an affirmative answer to the first question. Research reports in the related fields of student mental health (e.g. Baker, 1964; Payne, 1969) and university counselling (e.g. Newsome et al., 1973), add support to this conclusion. The answer to the second question, has been considered to be one of degree. If the adjustment problems are too persistent, severe or general, then they are not desirable and cut-off points have been suggested beyond which they

should be considered a cause for concern. The next chapter moves on to look at the types of adjustment problems that university students frequently experience and then focuses on a particular campus and discusses the likelihood of serious problems being encountered there.

CHAPTER 2

REVIEW OF LITERATURE

It has been indicated that students are likely to experience adjustment problems when transferring from school to university and that in certain circumstances these problems are undesirable and should if possible be eliminated. The next issue to consider, is the type or kind of adjustment problem that students encounter. The experiences of students from all over the world will firstly be considered, before focusing on the difficulties that Zambian students are likely to encounter. As indicated later in this chapter, the Zambian campus is typical of a number of new universities in the Central and East Africa region, but to date there is virtually no research on the adjustment problems experienced by students entering these universities.

Two main categories of adjustment problem are initially identified, academic problems and social problems. The advantage of making such a distinction, is that it enables a more accurate diagnosis of student problems to be made and this will subsequently be of assistance when remedial measures are suggested. Typical examples of academic and social adjustment problems are: the difficulties encountered by students in taking lecture notes, and learning to get on with a room-mate in a hall of residence. Sen (1970), in her study of the adjustment problems experienced by overseas students when entering British Universities, made a similar distinction between "educational" and "social" adjustment. The former was defined as "the extent to which the student is able to satisfy the requirements of the course of study that he pursues and is in turn, satisfied with the educational treatment he receives."

Social adjustment was the ability "to lead a satisfactory social life." In general such research studies (e.g. Sen, *ibid.*; Goldthorpe, 1965) tend to find that the number of academic or educational problems encountered by students, is greater than the number of social problems. This observation, which is supported by the reports of university counsellors, (e.g. Blaine and McArthur, 1971) is hardly surprising, as the university is primarily an academic institution. Occasionally, however, social problems can be uncharacteristically prominent, for instance in times of campus unrest (see P. 11). A few of the adjustment problems encountered by students, might be classified as academic and/or social, depending on the particular circumstances of the student. Thus, financial problems can be mainly academic (e.g. purchasing sufficient books), or social (e.g. buying clothes), or a combination of the two. In general, it is expected that there will be a positive functional relationship between academic and social problems, i.e. students who are reasonably content with their social life will be well adjusted academically; although as Tinto (1975) has pointed out, there may in some cases, be a "reciprocal" functional relationship. This is the situation where a student is well integrated socially but not academically and vice versa. For instance, a students' lack of academic adjustment, might be the result of too much social integration.

Within the broad categories of academic and social adjustment problems, research studies have identified a variety of problem areas, some of which are common to most student populations and others which are more specifically related to a particular campus and student population under scrutiny. For example, Goldthorpe (1965) in his

study of Makerere university students in Uganda, reported the following problems: understanding the English used in lectures, taking lecture notes, making up a study schedule, too little assistance from academic staff, the unfriendliness of other students and bewilderment with the complexity of the campus. Smalls' (1966) findings, with first-year students at the University of Canterbury, New Zealand, revealed some problems which were similar, e.g. "benefitting from lectures" and "the remoteness of staff," etc., but other difficulties, not mentioned by Goldthorpe, were also reported, e.g. too heavy a workload and excessive involvement with the university social life.

One commonly reported problem, which has already been mentioned in chapter I, is the difficulty that students encounter in adjusting to the "academic freedom" of the university environment. The point that the students are making here, is that at school pupils are generally told what to study, when to study and how to study, (typically referred to as "spoon-feeding"), whereas at university, undergraduates are expected to initiate their own learning processes and plan their own study schedules. In technical terms, undergraduates have to adjust to a system which is largely "intrinsic" in nature (they motivate themselves), although as indicated in chapter 1, the desire to obtain a degree can be a powerful external motivational force. Previously, the students had been used to an "extrinsic" system where the motivational forces emanate from the teacher. The motivational problems encountered by students on entering university, have been investigated in a number of university settings. Stellwag (1965), working in Holland, where there is a strong emphasis on independent study, found that the academic freedom of the university presented the students with many motivational problems. Wankowskis' (1968) study of students who had withdrawn from Birmingham University, U.K., similarly reported that 60% of the students had encountered

difficulties associated with motivation and a number of American authors, (e.g. Pervin et al., 1966; Demos, 1968), emphasised the important role played by motivation and goal commitment, in the subsequent academic performance of the student.

Another difference between the school and university which frequently causes academic problems for the students, is the university's traditional use of lectures as a means of instruction. Olsen's (1957) survey of 80 failed Australian students, indicated that inability to cope with lectures, was one of the most common reasons for a student's academic difficulties. Similarly, Goldthorpe (1965) reported that amongst his sample of 115 African students, "the most frequently mentioned difficulty, was the lecture system." For these students, the need to concentrate for 50 minutes on spoken English, while simultaneously making a precis of what was being said, was a considerably strain.

The problem for the Makerere students, was rendered more acute by the language of instruction being different to that of their mother tongue - a situation frequently encountered in the ex-colonies, where different tribal groupings have been amalgamated and there is no common language. Zambia is another example of this situation and Tembo M. (1980), in her study of Zambian female undergraduates, reported that the linguistic ability of some students was insufficient for them to understand the terms used in text-books. These difficulties can also arise when a student goes to study at a foreign university. Sen, in the previously cited work, found that African students in British universities had relatively few language problems compared with their colleagues from Asia, the Middle East and the West Indies. Nevertheless, 23% of the Africans, still reported some difficulty in following the English used in lectures. Similarly, Miller (1970),

indicated that Asian students studying in Australasia encountered language problems and Tijoriwala (1966) wrote one of a number of reports, indicating that linguistic difficulties were prominent in the adjustment of Indian students to American universities.

The examples given above: motivational problems, adjusting to the lecture system and linguistic difficulties, are fairly typical of the kind of adjustment problem experienced by students in the academic field. There is slightly more difficulty in identifying typical social problems, probably because of the greater variation that exists in the social structures of different universities. However, the research literature provides a number of social adjustment problems that are quite widely experienced and three of these, loneliness, male/female interaction and residency, will now be discussed.

For many students, going to university means leaving friends and family behind and the resultant feelings of "loneliness" can be stressful and adversely influence a student's academic performance. Gray and Short (1961) for instance, found that 11% of failed students, experienced feelings of loneliness and Lucas et al. (1966) showed that academically successful students had more friends in other departments, than students who were failing. Bloom (1971), commenting on the situation at the University of Zambia, found evidence of loneliness among the undergraduate population and felt that the students in general, were more isolated than their British and South African counterparts and more "in need of a close confidant". Occasionally, results are obtained which tend to contradict the above findings. Van Parreren and Schutte-poer (1964), in a Dutch study, showed that socially isolated students often obtained very high examination marks. Such students could be likened to the archetype "boffin"; a person

completely involved in his work with little time or regard for social interruption. In keeping with this finding, Lavin (1965) and Spady (1971) reiterated the previous remarks concerning the danger of a student becoming too involved with the social aspects of university life. An excessive preoccupation with social affairs, can lead to a student neglecting his studies and consequently failing his examinations.

An associated area of social adjustment that sometimes causes problems is male/female interaction. Flecker (1959) for instance, reported that worries about girl or boy friends, adversely affected the studies of Australian first-year students and Hopkins et al. (1958) found that failed students were characterised by their inability to form successful relationships with the opposite sex. Male/female interaction is likely to be more distracting for undergraduates, if they have been previously educated in a single-sex school. This is the situation for many Zambian students and Tembo, in the previously cited study of female undergraduates, reported that girls from single-sex secondary schools were very shy and found it difficult to relax in front of their male counterparts. The complex nature of this particular kind of adjustment problem, and the specificity of the research results, is illustrated by the fact that some of these girls would later become over-involved with male students and in exceptional cases, have to leave university because they were pregnant. Whether a relationship with a member of the opposite sex, causes a problem or solves a problem is largely dependent on the unique character of that relationship, the students involved and to a lesser extent, on the approbation or disapproval of the society of which they are a part.

One aspect of social adjustment that is related to both loneliness and male/female interaction, concerns the residential status of the student. The majority of studies agree that it is beneficial for

a student to be on-campus for at least part of his university career. The university provides a social education, by placing the student in close contact with his academic peers. Studies have also shown that there is a correlation between residency and a student's academic performance. Alfert (1966) reported that students who lived at home or in lodgings, were more susceptible to academic problems and subsequent dropout. Similarly, Newfield (1963) showed that British students who lived off-campus, did not perform as well in their first-year exams, as colleagues who lived in halls of residence. Langley (1965), in a significant and comprehensive study of university residency, differentiated between students in the first and subsequent years. Her conclusions were that it was particularly important for a student to be on-campus in the first year. In this initial period, the student forms friendships and establishes study habits that are likely to continue for the remainder of his time at university. However, whereas first-year students in halls of residence did better academically, than those living at home or in lodgings, the position was reversed in later years. Second and third-year students living in halls, did less well than home-based students. Third-year students living in lodgings performed better than both hall and home - based students, suggesting that once a student had adjusted to university, he may find that lodgings provide him with better facilities for study. This argument is reinforced by student references to the various drawbacks of hall life, such as noise and social distractions. In one survey of halls of residence at the University of Sydney (1964), 30% of the students complained of these problems.

A final adjustment problem which can affect both academic and social adjustment, has already been mentioned. It concerns finance and a review of the literature shows it to be a widely experienced difficulty, for many university students.

Tijoriwala (1966) indicated that money was one of the main problems encountered by her Asian students, when attending American colleges. Other American studies (Iffert, 1956; Panos and Astin, 1967) report that it can also be a problem for indigenous Americans, but as Cope and Hannah (1975) point out, the student's difficulty is relative to the affluent nature of American society and there are probably very few American students who genuinely cannot continue at university because they have insufficient money. Certainly the difficulty is likely to be more acute in developing countries, where the economies, especially of late, have been under considerable strain and only limited funds are available for tertiary education. In Zambia, students are fortunate to receive their accommodation and tuition free-of-charge, but as will be later observed, the scale of their personal and book allowances, is quite small and many students complain that they are unable to purchase essential texts.

The problems of adjustment discussed above, serve as examples of the kind of academic and social difficulty typically experienced by students on first entering university. We now move away from this general appraisal of student adjustment problems and focus more specifically on a particular campus and the kinds of problem experienced there. The campus under scrutiny, is the main campus of Zambia's sole university - the University of Zambia. In the early 1960's, when Britain still governed Zambia (then Northern Rhodesia), the need for indigenous skilled man-power was becoming increasingly apparent and consequently the Lockwood Commission (1963) was set up to look into the possibility of founding a new university. The report recommended that a university be established, which would "respond to the real needs of the country" and which "on merit would win the respect and proper recognition of the university world".

The university campus was situated some five miles east of the centre of the capital city, Lusaka and has subsequently been developed into a unit of over 3000 full-time students 500 part-time and about 270 academic members of staff. Schools are now established in Agricultural Science, Education, Engineering, Humanities and Social Sciences, Law, Medicine, Mines and Natural Sciences.

The students, who come from all parts of Zambia, are mainly African, with minority groups of Asians and a very small number of Europeans. The majority have experienced a system of education which is very similar to that of Britain. A relatively low minimum university entrance requirement of five "O" levels, is compensated for by a four or five year degree programme (seven years in the case of medicine). The usual student progression, is to satisfactorily complete four courses per year.

The academic staff come from many different backgrounds. Africans now form the majority, but there are sizeable contingents of expatriates from Europe and Asia, and a smaller number from America and Australasia.

The University of Zambia is an interesting campus to investigate, for a number of reasons. Firstly, although there is considerable disparity between African universities in general, the University of Zambia is typical of a number of English speaking universities that have recently been founded in Central and East Africa, (e.g. Zimbabwe University, founded in 1957; Nairobi, 1963; Botswana, 1964 and Malawi, 1974). All the universities are relatively new and have emanated from the same educational tradition. They draw students from different tribal backgrounds, employ expatriate teaching staff, have problems establishing relevant curricula and maintain a precarious independence from central government. Consequently, research conducted

on one of these campuses will have a wider relevance and interest, than to just that campus alone. In the case of student adjustment problems, it is expected that the kinds of problem experienced, will be very similar for all these students of Central and East African universities. (Comparative studies between Zambia, Nairobi and Botswana have recently been initiated). Secondly, very little research has been conducted on these African campuses and there is a pressing need to review the progress the universities have made in the years since their inception. The Zambian government has recently recognised this need and 17 years after its inauguration, the University of Zambia has become the subject of a government Commission of Enquiry (1982). The reason for the lack of research, is partly because of the newness of the universities, but also because of heavy staff teaching commitments, lack of funds and high staff turnover. The latter factor is becoming less significant, as more indigenous lecturers are trained to take over from expatriate staff. Then thirdly, there is reason to suspect that the typical Zambian undergraduate, experiences relatively large numbers of adjustment problems, particularly when compared with his counterpart in an industrially developed part of the world, e.g. Australasia, Europe and North America.

Some of the reasons for expecting Zambian students to experience large numbers of adjustment problems have already been mentioned. For instance, the language of instruction for students in the above continents, is usually that of their mother tongue. In Zambia, there are some seven main languages and about 30 different dialects. The students all arrive at the university with a working command of English (at least "O" level standard), but frequently find the sophisticated vocabulary and syntax used in books and by lecturers, difficult to understand. Similar difficulties arise regarding the student's expression of English, both in the oral and written mode.

The contrast between university and school teaching methods, is another area of difficulty. Genn (1972, 1973) found quantifiable differences between the Australian university and school learning environments and it is hypothesised that the larger this difference, then the greater the number of academic adjustment problems on entering university. Considerable university/school discrepancies are present in Zambia, particularly along the continua: (a) rote-learning to comprehension to critical analysis, and (b) dependent to independent study. In the first instance, the Zambian schools rely heavily on repetitive exercise and rote-learning; because of factors such as, shortages of books and educational equipment, large classes (50 pupils are common), and inadequately trained teachers. The University lecturers however, usually expect an overall comprehension of the subject matter and an ability to analyse material critically. With regard to dependent/independent study, the Zambian pupil does not have the benefit of a sixth-form type of training, before entering university. As Entwistle (1977) has pointed out, independent study which is encouraged in the sixth-form, is an important precursor of the study-methods expected of a university student. The Zambian student entering the university at the "O" level stage, still has to learn the study-skills of using the library, scanning books, taking notes etc., before he is able to fully benefit from the university academic environment.

The educational level at which the students enter the University of Zambia, brings into question the appropriateness of the university teaching-methods for this particular group of university students. Why not alter the university system and procedures, to more precisely cater for the students needs? Some departures from the more classic forms of university education, have been instituted, to try and assist the student. Continuous assessment is one of these.

Throughout the academic year the student is given a number of tests and assignments, which contribute to his final course grade. Most Zambian students appreciate this kind of structuring of their work schedule, although it can result in very heavy work-loads, especially when all the assignments come at the same time. Another disadvantage is that the continuous assessment system, tends to inhibit the student's independent study; his free-reading and creative research.

Associated with the above argument regarding the appropriateness of the university teaching methods, is the much larger question of the appropriateness of the university itself. A number of authors both African and European, have criticised the African universities for being foreign or "alien" institutions, (e.g. Ashby, 1964; Yesufu, 1973), founded for reasons of prestige rather than necessity. As Ashby put it: "the African wanted a replica of the British university at its best and the expatriate staff had no other model to offer". For the University of Zambia, the Lockwood Report (1963) placed the university in a difficult position. In order to win the "recognition of the university world" (P.22) it had to adopt methods, curriculum, organisation, staff, tradition, etc., which made it difficult to meet "the real needs of the country" and perhaps also, the needs of the student. The fundamental problem, is that the role of the university in developing African countries has either not been identified, or not been accepted by various sections of the society. It is not intended to digress further into this discussion of the concept of an African University, but to note that those students who regard the university as being "foreign" or irrelevant to their needs, will find adjusting to the university's academic and social milieu, much more difficult than students who are in accord with the traditional aims and principles of university education. It should also be noted that disaffected students in developed countries usually have a number

of alternative educational opportunities available to them. In Zambia the choice is much more limited.

Another problem which exacerbates a Zambian student's adjustment, is the financial constraint under which his university operates. Wegner and Sewell (1970) found that a student's persistence at university, is related to the amount of financial expenditure per student. Wealthy countries can afford to pay to help their students adjust to university, for instance by providing a comprehensive counselling and guidance service. Zambia's wealth and subsequently the amount of money available for educational purposes, has largely depended on the success of the copper industry. Recently this has gone into decline and the University, which is mainly funded by government grants, has had difficulty in purchasing sufficient materials, especially books, food, recreational equipment and stationery. The shortage of books and stationery, adversely affects the student's academic adjustment. In particular, it restricts his capacity to study independently. Fortunately, the university library is well stocked and maintained and overseas aid-donors occasionally help to up-date some of the subject areas. Key course-work texts are usually placed in a "reserved section" of the library, where they can be consulted but not borrowed. Most students would prefer to possess their own key-books for ease of reference, but the government book allowance is so small, that a typical student can only buy five or six books per year; presuming the copies are available in the university bookshop. Similarly, the student has to be very conservative in his purchase of stationery. The considerable demand for redundant computer paper, is an example of the pecuniary difficulties that students face in this respect. Food problems and insufficient recreational facilities, can also be expected to adversely affect the students social adjustment. As mentioned in Chapter I, the quality and

and variety of food purchased by the university has already resulted in student demonstrations and boycotting of lectures. Recreational facilities are of great assistance in helping a new student to feel at home and they provide the social contacts from which friendships subsequently emerge. However, financial constraint has meant that the university still has no dance-hall or swimming pool and inadequate sums of money are available for sports equipment and common-room facilities.

What other reasons are there for expecting Zambian students to have large numbers of adjustment problems? The research literature indicates that certain categories of student, are particularly prone to adjustment problems and two categories, which are expected to be well represented in the Zambian student population, will now be discussed. The first concerns the socio-economic background of the student; as indicated by parental education, income and occupation. Sewell and Shah (1967) and Astin (1970) in America, found that students with a high socio-economic background were less susceptible to academic problems and more likely to obtain a degree, than students with a low background. Similar findings were reported by Lucas et al. (1966) in Britain and Schonell (1963) in Australia. Occasionally, contrary reports are obtained, indicating that low socio-economic students obtain better academic results than high socio-economic students (e.g. Hopkins et al., 1958). The rationale for the latter results, is that the "lower class" students are more highly motivated toward academic success. The more usual finding however, is that students who have the benefit of highly educated, affluent parents, are likely to do well at university. Chase (1970) and Spady (1971) looked specifically at the educational level achieved by the parents, a factor which Astin (op.cit.) reported to be the best predictor of university

success. They found that college dropouts usually come from less educated parents, whereas college "persisters" have better educated parents. Astin (1975) also explored the relationship between parental income and dropout and found that the less affluent the family, then the more difficulties the student had and the greater the possibility of dropout. In Zambia, the socio-economic background of the majority of the students' parents, is expected to be quite low, particularly with regard to the parents' educational level and income. The majority of Zambian parents have received very little formal education, because prior to independence in 1964, there were very few schools available for African education. The number of Zambians possessing degrees at the end of 1964, was estimated to be a mere 100, (Mwanakatwe, 1968). Similarly, parental income is generally quite small. A minority of "apamwamba" Zambians are very affluent, but the large majority of people have just sufficient for their basic family needs and there is little to spare for their children's educational requirements.

Another type of student who is susceptible to adjustment problems, is the one who comes from a rural background (Summerskill, 1962); although once again it is possible to find contrary results, (e.g. Saunders, 1956). About 55% of the six million Zambian population, is estimated to live in a rural environment, (Census of population and Housing, 1980). One factor which is likely to exacerbate the student's adjustment, is the size of the disparity that exists between Zambia's rural and urban settings. This is much greater than in most industrially developed countries. The typical rural community consists of a number of relatively isolated villages, involved in subsistence agriculture. Their life-style has probably changed very little over the last two to three hundred years.

In contrast, the new urban centres of Lusaka and the Copperbelt, possess facilities and amenities which compare very favourably with the most modern cities in Europe and America. In addition the Zambian urban schools are usually better equipped and staffed than their rural counterparts. This is due to transport problems to the rural areas and teacher preference for the urban areas. The University of Zambia campus is part of the new urban life-style and consequently it is expected that students from a rural environment will encounter more problems of adjustment, than their urban counterparts.

The previously discussed factors of: language difficulty, teaching methods, the "foreign" nature of the university, lack of finance, socio-economic background and rural/urban disparity, suggest that Zambian students will experience considerable numbers of adjustment problems and relatively more adjustment problems than their counterparts in developed areas of the world. There are however, a smaller number of factors, sometimes not found on other campuses, which could be expected to assist a Zambian student's adjustment. These are (a) the high proportion of students in halls of residence (b) the small size of the university (c) students do a period of National Service before entering university and (d) the university's Counselling and Guidance Service.

The majority of students at the University of Zambia live in Halls of Residence and as indicated earlier in this chapter, this is expected to be of considerable help to the students when they first enter university, (Alfert, Newfield, Langley, op.cit.). Of further assistance to the students, is the relatively small size of the University. Adjusting to a campus of 3000 students is presumably easier than adjusting to larger institutions, some of which contain as many as 30,000 students (e.g. the University of California, Berkeley).

Nelson (1966) supports this view by reporting that smaller American colleges have lower dropout rates than larger ones, but surprisingly Kamens (1971) found the opposite to be true. Presumably, the social infrastructure and facilities of the university in question, are more influential on student adjustment, than simple "size of institution."

A factor which is likely to influence both social and academic adjustment, is the maturity of the student on entering university. The majority of Zambians have done a period of National Service just before entering university and this might be of benefit to them in their subsequent adjustment. Certainly a gap between school and university has frequently been found beneficial for other students. Thomas et al. (1938), the Commonwealth Office of Education (1959) and Zweig (1963), all report that an interval between school and university, resulted in improved academic performance.

One final facility which could assist the student's adjustment, is the University Counselling and Guidance Service. At the inception of the University, the Lockwood report emphasised the need for good counselling facilities, particularly as the students enter the University with "O" levels rather than "A" levels. A rudimentary service was in existence until 1978, when it was upgraded following a Dean of Students recommendation, (Kasoma, 1978). Three full-time workers are now available for consultation at the Student Centre and the University Chaplaincy provides another two part-time counsellors, one for catholics and one for protestants.

This chapter began by looking at the kind of adjustment problem typically experienced by students on entering university. It then focused on a relatively unknown campus in a developing country and discussed the likelihood of the students experiencing difficulties. A variety of reasons were subsequently given for expecting those students to experience considerable adjustment problems, particularly

when compared with students from developed parts of the world. The next chapter goes on to formulate a number of hypotheses that have been suggested by the previous discussion and to adopt a research design which will enable these hypotheses to be tested on an appropriate undergraduate population sample.

CHAPTER 3

HYPOTHESES

The preceding chapter has suggested a number of research hypotheses concerning Zambian students and their adjustment problems. These will now be presented in a general form and will then be operationalized using the criteria suggested by Travers (1969), i.e. the hypotheses will be made testable.

Firstly and most importantly, it is expected that Zambian students will experience academic and social adjustment problems when they transfer from school to university. If no adjustment problems are experienced, then the research study is at an end. However, it is unlikely that Zambian students are any different from other university undergraduates who report a wide variety of difficulties. Furthermore, a number of reasons have been given for expecting Zambian students to experience relatively large numbers of adjustment problems, e.g. they are taught in a second language, there are considerable differences between school and university teaching methods etc., etc. (P. 24f.).

Presuming that the Zambian students do indicate that they have adjustment problems, it is expected that the problems reported will be primarily academic in nature i.e. the number of academic problems indicated will exceed the number of social problems. This is in accordance with other research findings (Sen, Goldthorpe, op.cit.) and the experience of those involved in student counselling (Blaine and McArthur, op.cit.).

The next issue concerns the type or kind of adjustment problem that the students are likely to experience. Because of the similarities that exist between the practices procedures and personnel of the

University of Zambia and other universities, the Zambian students are expected to experience some of the typical student difficulties reported in Chapter 2, e.g. the lecture system, loneliness etc.. Conversely, the unique characteristics of the university of Zambia (the staff, students etc.) will result in some adjustment problems that are peculiar to the Zambian campus.

The following three issues are concerned with whether or not the adjustment problems experienced by the Zambian students are likely to be a cause for concern, i.e. will they exceed the criteria of acceptability with regard to potency, generality and persistency, outlined in chapter I.

The potency of an adjustment problem was considered acceptable if it was indicated by the students to be a "slight problem", but not if it was "a problem" or "a severe problem". The incidence of campus unrest and student dropout from the University of Zambia, suggest that some of the adjustment problems are "potent", i.e. the students will label them a problem or a severe problem.

The generality of an adjustment problem has been deemed acceptable (for the purpose of this thesis) if it is experienced by less than one third of the student population (chapter I). It is difficult to know whether certain adjustment problems will exceed this criterion of acceptability, but some difficulties are commonly referred to by Zambian students and this, coupled with the incidence of campus unrest, suggest that certain problems will be generally experienced.

The persistency of most student adjustment problems is expected to be quite short. However, the involvement of second, third and fourth-year students in disturbances on the campus and their inclusion in student dropout, indicates that some of the problems will be unacceptably persistent, i.e. they will continue into the second and subsequent years at the university. The particular concern of this

research study will be persistent "potent" problems and persistent "generally reported" problems. Persistent problems which are "slight" or experienced by less than one third of the population, are acceptable.

In the next section, the focus of attention moves away from the adjustment problems experienced by the students and on to the Zambian students themselves. Observations of the student's behaviour on campus will be combined with research results obtained from other studies, to produce a number of expectations with regard to various categories of Zambian student. For instance, some students on the Zambian campus are observed to use their mother tongue to communicate outside the lecture room, others use the English medium. African students are known to experience linguistic problems when they come to university (Sen, Goldthorpe, op.cit.) and it is expected that those students who do not speak English all the time, will have more problems. The presumption being that these students are less competent in their use of English.

The socio-economic background of university students was also discussed in chapter 2 (Sewell and Shah, Lucas et al., Schonell, op. cit.) and it is subsequently expected that Zambian students who emanate from a low socio-economic background, as indicated by parental education, income and occupation, will have more adjustment problems. The reason being, that these students will have received less academic and financial assistance and will not have had the opportunity to emulate an educated "model".

Associated with the above postulate, is a further prediction regarding Zambian students who come from big families. In many sections of Zambian society it is still considered prestigious to have a large number of children. Small (1966) in his study of New Zealand

students, found that academic success was associated with smaller rather than larger families and it is expected that Zambian students from large families will have more adjustment problems. The reasons are similar to those stated above, i.e. the students receive less financial and academic assistance.

Another category of student which is well represented on the campus, is the student from a rural background. He is expected to have more adjustment problems (Summerskill, op.cit.) because he has to adapt to the urban environment of which the University is a part and because he is more likely to have been educated in an inferior school.

The maturity of students was discussed in chapter 2, in connection with the period of National Service that most Zambians have to undergo before entering the university. It was suggested that Zambia National Service would help to make the students more mature and provide a "breathing space" before the commencement of university studies, (Thomas et al., Zweig, op.cit.). Thus, it is expected that students who have not done Zambia National Service will experience more adjustment problems.

A corollary to this maturity prediction is that younger students will experience more adjustment problems than older students. The research literature gives some support for this viewpoint (Bledsoe, 1953; Sen, 1970) although it should be noted that a significant number of reports have found the opposite to be true, e.g. Posthumus, 1965; Small, 1966. The length and nature of any interval between school and university, could be responsible for the differences in the findings.

The social maturity of a student and his vulnerability to feelings of loneliness, are also expected to be influenced by whether or not

a student has attended boarding school. In Zambia, students frequently attend boarding school, particularly at the secondary level, because there is no educational facility close to their home. These pupils experience an early separation from their families and thus will be relatively autonomous by the time they reach university. Conversely, day pupils are leaving home for the first time and the associated feelings of loneliness are expected to result in more adjustment problems (Gray and Short, Lucas et al., op.cit.).

One apparent contradiction to the maturity issue is anticipated with regard to married students. Although these students tend to be older, it is expected that they will experience more adjustment problems, because they have to attend to their family's needs at the same time as pursuing their university career. Sen's (1970) results are relevant, as she found that African students particularly missed the companionship of their wives and children. The Asian and Middle Eastern students were comparatively unaffected by being separated from their families.

An important issue that has not been specifically discussed in relation to adjustment problems, is sex difference. Do male or female students experience more adjustment problems? There is an abundance of research evidence, but it is often contradictory - some results indicating that men have more problems (e.g. Hill, 1966) and others that women are more susceptible (Holmes, 1959). Doubtless the cultural setting of the particular university is an important factor, but in Zambia where women occupy a traditionally subservient role, it is expected that female students will experience more adjustment problems than males. Academically they are likely to feel inferior to their male colleagues and socially, where they are in a considerable minority, they can expect difficulties in integration.

Another well documented area, is the scholastic record of a student and its relationship to subsequent university success. The obvious expectation, is that students with a relatively poor scholastic record will experience more adjustment problems than students with a good record. Many research workers have supported this conclusion. For instance, Anderson's (1964) work with Australian students, together with a review of the relevant literature, concluded that school grades were usually the best predictor of university success. In New Zealand, Parkyn (1959) reported a positive correlation of .36, between school results and first-year university performance. This was replicated by Irvine (1966) in the United States, with a correlation of .34. The latter study also indicated that scholastic performance was a good predictor of subsequent university persistence, i.e. pupils who did well at school, were less susceptible to university dropout.

The two final expectations are "local" issues. There is no documentary evidence to which they relate, but they are included because they are of interest to the University community.

The first involves the "quota system" that the University of Zambia is obliged to operate in order to help fulfil the country's manpower requirements. When a student applies to enter the university, he indicates which of the four entry schools, Agriculture, Education, Humanities and Social Sciences or Natural Sciences, he would prefer to study in. If the quota for that school has already been filled, the student is redirected to the school of his second or subsequent choice. Certain schools, such as Natural Sciences are very popular and tend to be filled by "first-choice" students. Education however, is looked upon less favourably. This is because the status and income of teachers in Zambia, is at present quite low. Consequently the School of Education contains many students who would prefer to be

studying elsewhere and presumably this has an adverse affect on their academic motivation. Thus, it is expected that School of Education students will experience more adjustment problems than students from other Schools.

The second, concerns the different tribal groupings that make up the Zambian student population. It is of interest to ascertain whether students from certain tribes experience more adjustment problems than others. Some tribal groups might find it difficult to relate to the remainder of the university population, or might experience relatively more academic problems, as a result of inferior educational facilities in their home area, cultural predisposition, rural background, etc..

In order to test the preceding general hypotheses, it is now necessary for them to be made operational. They need to be defined in terms of observations that can be made, or put in more scientific language, they need to be expressed in terms of variables that can be measured, (a variable is any characteristic, attribute or phenomenon that can take on different values). In the case of the Zambian students, there were no existing scales or questionnaires that could be used to make the appropriate measurements. These had to be constructed and the procedure adopted, together with a general outline of the research design, is given below. More specific details regarding the subjects, questionnaires, variables, procedures and data analyses, are given in the subsequent chapters.

The first fact to establish, is whether or not Zambian first-year students actually experience adjustment problems. To do this a "Preliminary Survey" was conducted in which students and staff were asked, "what adjustment problems do Zambian university undergraduates

experience?" Forty five adjustment problems were reported in total - the details are given in chapter 4. The survey also helped to establish the type of adjustment problem experienced, e.g. the number and variety of academic problems, the number and variety of social problems and whether the problems were similar or different to those reported by other university students. The results of this survey - the existence of adjustment problems and the nature of the problems - were validated in two subsequent Trial Surveys (chapter 5) and in the Main Survey itself (chapter 6).

The main survey questionnaire was based on the results of the Preliminary and Trial Surveys and consisted of 30 bio-data variables (e.g. age, sex, etc.) and 40 adjustment problem variables (e.g. "obtaining the necessary motivation to study hard is a severe problem/problem/slight problem"; "working alongside women is a severe problem/problem/slight problem," etc., etc.). The adjustment problem variables were derived from the preceding surveys in the manner described in detail in chapters 4 and 5. The data obtained from the main survey was used to ascertain the potency and generality of the 40 adjustment problems and to determine which categories of Zambian student experienced more adjustment problems. Some categories were subsequently identified as "high-adjustment problem" groups and new hypotheses were constructed with regard to the kind of adjustment problems that these students were experiencing (i.e. academic, social or study-skill problems - chapter 6).

The remaining hypothesis concerned the persistence of the adjustment problems. This was investigated by administering the main questionnaire to a "matched" group of fourth-year students (chapter 7) and comparing first and fourth-year results. The empirical work concluded with a number of follow-up interviews (chapter 8), which helped to suggest ways in which the problems might be overcome (chapter 9),

while at the same time checking the reliability of the main survey data and indicating why the high-adjustment problem groups experienced more problems.

Having given an indication of the measures to be used in the study of Zambian student adjustment problems, it is now possible to restate in operational terms, the hypotheses outlined earlier in this chapter. The operationalized hypotheses are shown in table I below. It should be noted that the first six items might be more accurately referred to as "predictions" (Tuckman, 1978), as one of the criteria of a hypothesis is that it should refer to relationships between two or more variables, (Travers, op. cit.). Both predictions and hypotheses are included in the table however, as together they provide a sequential picture of the work undertaken in the subsequent chapters.

The phrase "greater adjustment problems" which is used in items 7 to 18, refers to both the quantity and quality of adjustment problems, i.e. the category of student concerned, experiences significantly more adjustment problems and/or a significantly greater severity of adjustment problem (the .05 level is taken to indicate significance). Bio-data details and averages, referred to in the hypotheses, are derived from the information given in the main questionnaire. The word "students" is used to denote "first-year students".

Table I: Eighteen hypotheses and predictions regarding Zambian student adjustment problems (APs)

Hypothesis or prediction		Brief rationale
1.	The majority of the adjustment problems reported by Zambian first-year students in the Preliminary Survey will be academic rather than social in nature.	The university is an academic institution. The evidence of previous research and reports.
		(contd).

Table I: (contd) Eighteen hypotheses and predictions regarding
Zambian student adjustment problems (APs)

Hypothesis or prediction	Brief rationale
2. Some of the adjustment problems referred to by the students in the Preliminary Survey will be similar to the adjustment problems referred to by other students in the Review of Literature.	The similarities that exist between the University of Zambia and other universities.
3. Some of the adjustment problems referred to by students in the Preliminary Survey will be peculiar to the University of Zambia campus.	The University of Zambia has its own unique characteristics.
4. Some of the adjustment problems contained in the main questionnaire will be a cause for concern because they are potent, i.e. the average response given to them by the population sample will be nearer to "a problem" than "a slight problem."	Campus unrest, student dropout, staff and counsellor evidence.
5. Some of the adjustment problems contained in the main questionnaire will be a cause for concern because they are generally experienced, i.e. they will be reported by $\frac{1}{3}$ or more of the student population.	Campus unrest, staff and counsellor evidence.
6. Some of the adjustment problems contained in the main questionnaire will be a cause for concern because they are persistent, i.e. the fourth-years will experience similar adjustment problems to the first-years.	Fourth-year involvement in campus unrest and dropout. Staff and counsellor evidence.
7. Students who indicate that they do not use English as their main language on campus will have greater adjustment problems than students who indicate that English is their main language.	Lack of competence and practice in the English language.
8. Students with a low socio-economic background, as indicated by parental education, income and occupation, will have greater adjustment problems than students from a high socio-economic background (see chapter 6 for a further breakdown of this hypothesis)	Less academic assistance, emulation and encouragement. Less financial support.

(contd.)

Table I: (contd)

Hypothesis or prediction	Brief rationale
9. Students with a higher than average number of siblings will have greater adjustment problems than students with a lower than average number of siblings.	Less academic assistance and encouragement. Less financial support.
10. Students from a rural background will have greater adjustment problems than students from an urban background.	The University is part of the urban environment. Inferior educational facilities in rural areas.
11. Students who have not done Zambia National Service(ZNS) will have greater adjustment problems than students who have completed Zambia National Service.	Non Zambia National Service students are less mature. ZNS provides a "breathing space" between school and University.
12. Students who are younger than average will have greater adjustment problems than students who are older than average.	Younger students are less mature.
13. Students who have not been to boarding school will have greater adjustment problems than students who have been to boarding school, (see Chapter 6 for a further breakdown of this hypothesis).	Non-boarding students are unused to being separated from their families. Less social maturity.
14. Married students will have greater adjustment problems than single students.	Divided allegiance between family responsibilities and University career.
15. Female students will have greater adjustment problems than male students.	The woman's traditionally subservient role in Zambia.
16. Students with division 2 in their Grade 7, Form 3 and CSC school exam results, will have greater adjustment problems than students with division I in these exams.	Less academic competence.
17. School of Education students will have greater adjustment problems than students in the other entry Schools.	Lack of interest in subjects being studied.
18. Students from tribal group X, as indicated by mother tongue, will have greater adjustment problems than students from tribal group Y. (X and Y will be substituted by the various tribal groups indicated in the main questionnaire).	Inferior educational facilities. Cultural predisposition. Rural background.

The statistical techniques used to test the 18 hypotheses will now be briefly outlined. Fuller details are given in the subsequent chapters.

The distribution of variables e.g. the number of students, adjustment problems or reasons for adjustment problems, falling into certain categories was ascertained by a simple frequency count. The Preliminary Survey was sufficiently small for this to be done by hand, but with the Main and Fourth-Year Surveys, a computer was used. Means, standard deviations etc., of the numerical bio-data and the severity of adjustment problems, were calculated using traditional formulae. Two new variables NOAPS and SEVAPS were created by counting the number of adjustment problems experienced by each student and by obtaining an index of the total severity of adjustment problems experienced by each student (see chapter 5).

Relationships between variables, e.g. between various bio-data and NOAPS and SEVAPS, were initially explored using Pearson product-moment correlation, chi-square and Kendall's Tau C statistics, (the measure of association chosen, depending on the level of measurement of the independent and dependent variables). Factor analyses were employed to identify redundant adjustment problem variables and to identify associated groups of adjustment-problem variables. The comparison of student categories for NOAPS and SEVAPS (hypotheses 7 - 18) and for academic, social and study-skill problems was carried out using t - tests. Because the student groups were not mutually exclusive, (e.g. "older" students include "married" students, etc.), a multiple regression analysis was conducted to ascertain which bio-data variables were most influential in determining the number and severity of adjustment problems.

CHAPTER 4

The Preliminary Survey

The primary objective of the preliminary survey was to establish that Zambian students do experience adjustment problems when they transfer from school to University and then to obtain some indication of the type of problem experienced. In order to accomplish this, a simple open-ended question, "What adjustment problems do Zambian university undergraduates experience?", was cyclostyled and distributed to 30 male and female first-year students, 10 members of the academic staff and 10 members of the administrative staff. The university staff were included in the survey, in order to establish the widest range of possible problem areas, experienced by the students. For instance, the staff might be aware of problems that students are too embarrassed to include. Representatives of all four entry schools, (Agriculture, Education, Humanities and Social Sciences, Natural Sciences) were present in the student and academic staff populations.

The responses obtained from the 50 subjects indicated that Zambian students do experience a large number and wide range of adjustment problems, when they transfer from school to university. None of the student sub-sample had experienced a completely problem-free transfer. 45 different kinds of adjustment problems were mentioned in all, 26 of which were identified as being academic in nature and 19 as social, (see hypothesis 1, chapter 3). A description of the student's difficulties is given in table 2 below, together with the number of students and staff referring to the problem. With regard to hypotheses 2 and 3, it will be noted that some of the problems are similar to those reported by foreign university students, (e.g. motivational difficulties, finance and loneliness), while others (e.g. the quota

system, ethnic difficulties and catering facilities) are more particularly related to circumstances prevailing on the Zambian campus. The responses given by the academic and administrative staff, have not been analysed separately, owing to the considerable functional overlap that exists between the two groups, (e.g. Heads of Department and Deans of School, although mainly involved with administrative matters, are also involved in teaching).

Table 2: The Academic and Social Adjustment Problems referred to in the Preliminary Survey.

<u>Academic Adjustment Problems</u>		Students referring to problem (Max.= 30)	Staff referring to problem (Max.= 20)
1.	Insufficient money to buy books.	20	4
2.	Difficulty in adjusting to intrinsic rather than extrinsic motivation.	7	10
3.	Lack of advice concerning which courses to take.	8	8
4.	Lack of study skills.	5	7
5.	Required texts not available in library or bookshop.	9	2
6.	Problems associated with studying in a second language.	2	7
7.	Difficulties associated with helping the family at the same time as attending university.	4	3
8.	Adopting a critical attitude to the material being studied.	0	6
9.	Quality of teaching given by staff is poor.	4	2
10.	Students forced by a quota system into a particular programme.	4	1
11.	Course programmes involve a work-load which is too heavy.	3	2
12.	Students do not know how to use the library properly.	1	5
13.	Understanding and not rote-learning of material, is required.	0	4

(Contd.)

Table 2 (contd)

<u>Academic Adjustment Problems</u>		Students referring to problem (Max.= 30)	Staff referring to problem (Max.= 20)
14.	Staff perceived by students as being remote/authoritarian.	4	0
15.	Students dissatisfied with marking system.	4	0
16.	Female students are lazy and passive.	0	3
17.	Inadequate feedback of results concerning student progress.	1	2
18.	Students have to adapt to staff from many different cultural backgrounds.	0	3
19.	Students reading and comprehension-speed is too slow.	0	3
20.	Answering questions in a vague and verbose manner.	0	2
21.	Previous education inadequate for university work.	0	2
22.	Course timetables conflict.	1	0
23.	Student politics interfere with academic work.	0	1
24.	Female staff resented by male students.	0	1
25.	The library has too short a loan-period.	1	0
26.	Not enough books can be borrowed from the library at any one time.	1	0
<u>Social Adjustment Problems</u>			
27.	Insufficient money for personal requirements.	9	8
28.	Difficulties with regard to relationships with the opposite sex.	9	5
29.	Ethnic differences limit social integration.	4	7
30.	Poor quality food in canteens.	9	2
31.	Difficulties in making friends.	6	4
32.	Lack of general entertainment facilities.	7	2
33.	Too few sporting amenities.	5	3
34.	An absence of cultural societies (singing, dancing etc.).	4	2
35.	Lack of privacy in Halls of Residence.	5	1
36.	Insufficient food from canteens.	4	1
37.	Students find it difficult to budget their financial resources.	0	4

(Contd.)

Table 2 (Contd)

<u>Social Adjustment Problems</u>		Students referring to problem (Max.= 30)	Staff referring to problem (Max.= 20)
38.	Size and complexity of university campus found intimidating.	1	1
39.	Poor maintenance of Halls of Residence.	2	0
40.	Excessive drinking by male students.	0	2
41.	Religious students isolated from rest of student body.	0	1
42.	Academically competent female students, isolated from peers.	0	1
43.	Favouritism shown in allocation of accommodation.	1	0
44.	Difficulties in adjusting to room-mate.	0	1
45.	Students living off-campus find social integration more difficult.	0	1

As will be seen from table 2, there are considerable differences between the proportions of students and staff referring to a particular problem. For example, two thirds of the students refer to the lack of finance for buying books, whereas only one fifth of the staff were aware of the problem. Conversely, one half of the staff refer to student motivational problems, while less than a quarter of the students consider motivation to be a problem. Obviously the students are more aware of certain problems than the staff and vice versa, although in these particular cases there is agreement between students and staff that the problems do exist. Unlike item 8 - "Adopting a critical attitude to the material being studied" - which is only referred to by staff and item 39 - the "poor maintenance of Halls of Residence" - which is only referred to by students. A total of seven adjustment problems are referred to by students alone and 15 by staff alone. Presumably the students are well aware of their own difficulties and thus the former seven adjustment problems can be accepted.

The reason for the 15 problems not being reported by the

students, is unknown. It could be that they only exist in the staff's imagination, or that a larger sample of students would have referred to the adjustment problems, or, as mentioned earlier, the students are reluctant to acknowledge their existence. The validity of the problems mentioned by staff alone, and indeed the validity of all of the adjustment problems referred to in this introductory study, will be tackled in the subsequent research.

A simplified view of the problems indicated by this population sample is obtained by categorizing the 45 adjustment problems under a number of generic headings, e.g. items 5, 12, 19, 25 and 26 in table 2, can be categorized as problems associated with "books". The picture that subsequently emerges is shown in tables 3 and 4. The "constellation" of academic problems, contains four major problem areas: "study problems", "the course programme", "staff-student relationships" and "books". Each problem area or "planet", comprises the sum of the individual adjustment problems or "moons". The social constellation is slightly simpler than the academic, but still contains four significant problem areas: "social integration," "leisure activities," "catering" and "accommodation". Financial problems have a place in both constellations. The size of each planet is indicative of the "importance" of the problem, i.e. the number of students and staff who refer to it. The largest problem areas referred to by this preliminary population sample, were: studying (56 references), finance (45 references) and social integration (41 references).

The conclusions that may be drawn from this preliminary survey, are restricted by the small size of the population sample. However the survey has suggested that: (a) Zambian students do experience a large number and wide variety of adjustment problems, (b) the majority of the adjustment problems are academic in nature (hypothesis 1), (c) some

TABLE 3: THE CONSTELLATION OF ACADEMIC PROBLEMS

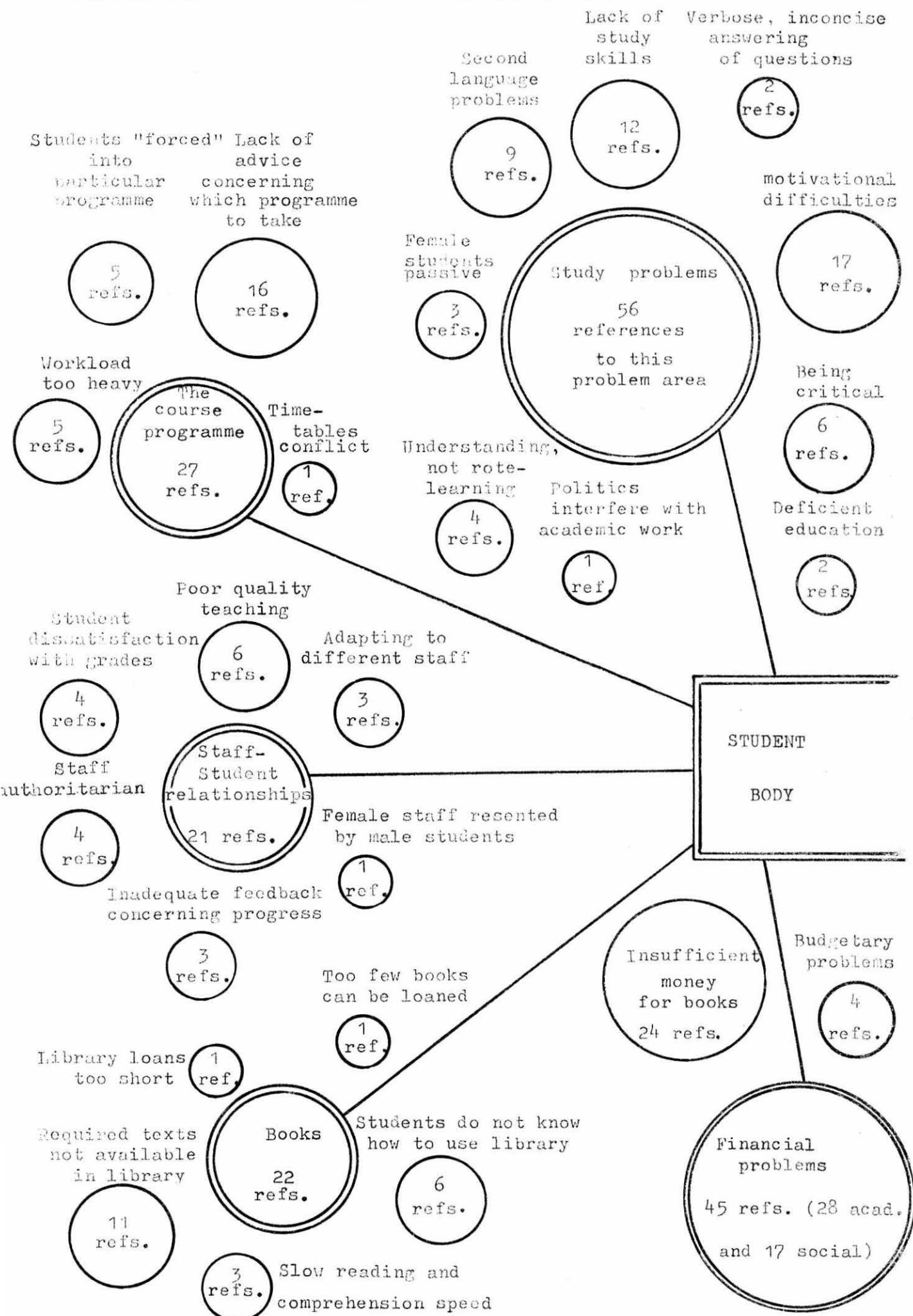
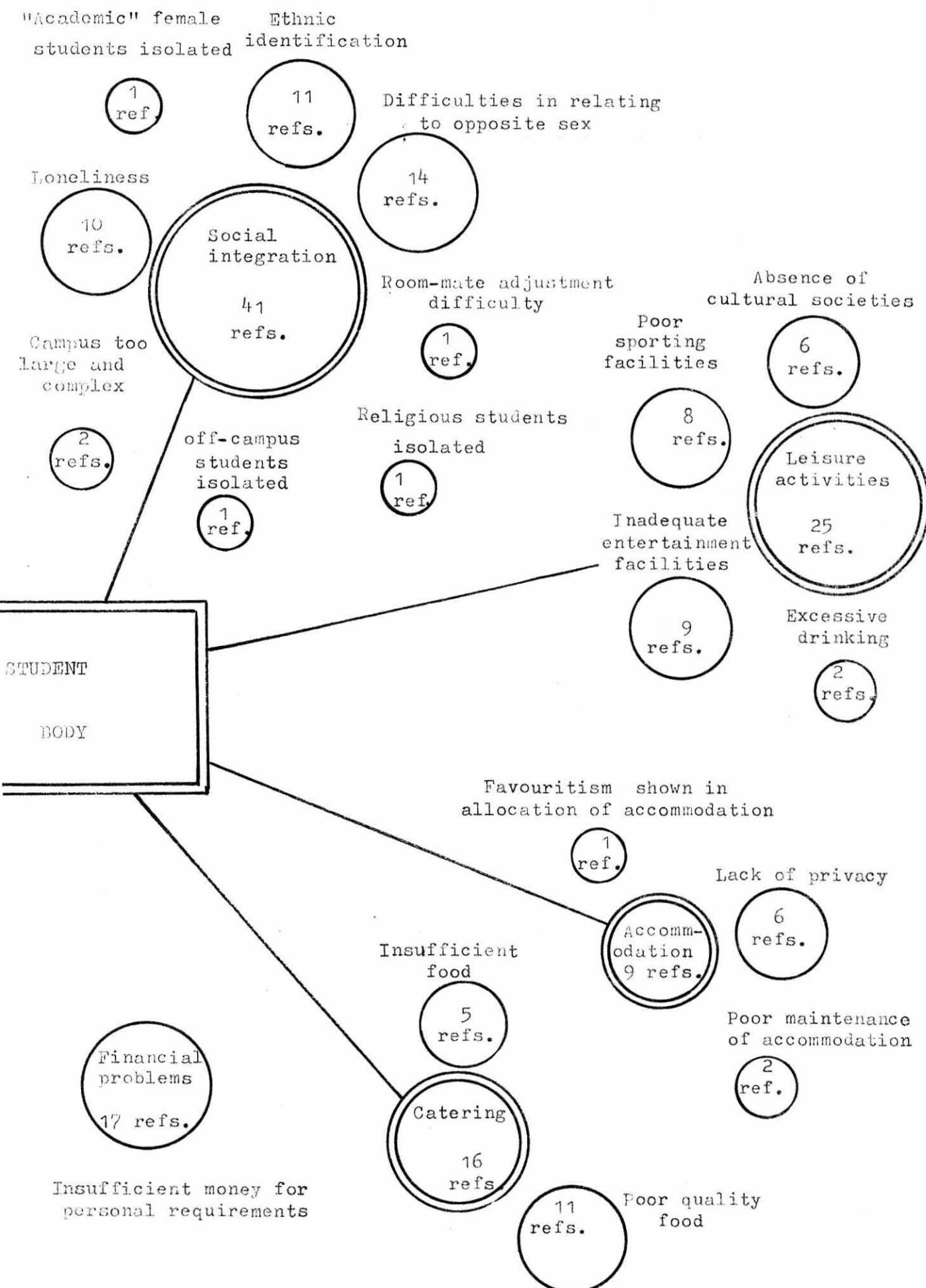


TABLE 4: THE CONSTELLATION OF SOCIAL PROBLEMS



Zambian adjustment problems are typical of the adjustment problems experienced by students in other parts of the world (hypothesis 2) and (d) others are peculiar to the Zambian campus (hypothesis 3).

A larger study is now necessary, in order to validate these results and to test the remaining hypotheses; for example, which (if any) of the adjustment problems indicated by this sample, reach the criteria of potency or generality outlined in the first chapter? The development of the questionnaire to be used on this large sample of students, is the subject of the next chapter. Two prototype questionnaires were used with a further 53 students and 11 members of staff, before the instrument was ready for administration to the main population sample.

CHAPTER 5

Constructing the Main Survey Instrument

The process of constructing the main survey questionnaire, commenced with a scrutiny of the 45 adjustment problems listed in table 2. The wording of some of these adjustment problems was subsequently changed in order to suit the familiar English usage of the Zambian first-year students, e.g. "insufficient money to buy books" (table 2, item 1) was changed to, "the money I have available to buy books" and "difficulty in adjusting to intrinsic rather than extrinsic motivation" (item 2), was simplified to, "studying hard". In some cases two or more statements were used to describe one adjustment problem. Thus, item 6 ("problems associated with studying in a second language"), was subdivided into expression and comprehension difficulties in written and spoken English. In other cases, one statement was used to describe two or more adjustment problems, e.g. "the accommodation provided in Halls of Residence" embodied items 35, 39 and 43. The comments of students and staff were used in order to compose these derived statements of the adjustment problems. Forty-three statements were eventually formulated to replace those listed in table 2. Twenty-nine of the statements were in the academic section and 14 in the social section.

In order to establish the potency of each adjustment problem, a rating scale was devised in which the student had to indicate whether a statement was "a severe problem", "a problem", "a slight problem" or "not a problem". For instance, item 1 on the questionnaire was given as follows:

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
1. Studying hard				

(The student is requested to place a tick in the appropriate column).

The causes of the adjustment problems, were then investigated by formulating some of the more likely causes and appending them to the statement of the problem. Thus, in the above example, the student who had indicated that "studying hard is a problem," was next required to place a tick against one or more of the following alternatives:

- (1) because my teachers fail to encourage me.
- (2) because there are too many other things to be done on campus.
- (3) because the work is too difficult.
- (4) because my residence is too noisy.

At the end of this section the respondents were asked to state if they had any other reasons for the adjustment problems, or if there were any comments they wished to make concerning the nature or wording of the problem statements.

The personal details of the students completing the questionnaire were obtained in a section of 28 items, which preceded the adjustment problem statements. The items ranged from "name ", "computer number", "age" and "sex" to, "what language do you mainly speak with your friends on campus?" and "have you ever made use of the Student Counselling Service?"

The questionnaire was completed with a sentence requesting students to indicate whether there were any other adjustment problems of any nature that they had experienced, but which had not been mentioned. (The original questionnaire also contained a further 11 ancillary questions - appendix A, items 16, 18, 23, 29, 34, 36, 45, 46, 48, 49 and 51 - which were subsequently removed and more appropriately placed in the follow-up interviews).

The final draft of this "first-trial questionnaire" (see appendix

A), was given to 20 students and 11 members of staff. The main purpose of the trial-run was to establish the appropriateness of the content, phraseology, instructions and layout of the survey instrument. The students (12 from Education, 8 from Natural Sciences, 15 males and 5 females), were asked to complete the questionnaire according to the instructions, while staff were asked to comment on the content etc., indicated above. The students were also told to note down the time required to complete the questionnaire.

The results of the survey were as follows. Firstly, the inclusion of the 15 adjustment problems, originally referred to by staff alone, (see chapter 4), was endorsed, because the majority of students acknowledged the existence of these difficulties. "Having women lecturers" was the least acknowledged adjustment problem with four references. Secondly, no further adjustment problems were suggested by the population sample. Only seven students responded to the request for "other adjustment problems" and the problems they gave were all covered by the existing statements, e.g. one student stated that "the government does not give the students enough money". This problem is already included in the questionnaire by items 33 and 35, (see appendix A). Thus, the content of the questionnaire seems to cover the majority of adjustment problems experienced by Zambian students. This assertion is given further confirmation in the main survey (P. 70).

The comments given by staff, students and project supervisor on the content, phraseology, instructions and layout of the questionnaire, resulted in some other amendments being made. For example, the problem statement "studying hard", was again changed to "obtaining the necessary motivation to studying hard". The introduction to the questionnaire was revised to allow students to be anonymous and another instruction for completing the questionnaire was added (and the layout altered) to prevent students responding to reasons for an adjustment

problem , after they had indicated that there was not a problem.

More fundamental changes were required in the bio-data section of the questionnaire. This was completely re-written in order to make the generated information more suitable for computer processing. The result of these amendments, was the questionnaire shown in appendix B - the "second-trial questionnaire".

Before submitting the questionnaire to the main population sample, a final trial-run was conducted, this time using 38 first-year students. The purpose of the trial, was to evaluate the statistical procedures that would be used and to see if the questionnaire could be reduced in length, by removing redundant items. The time taken to complete the first-trial questionnaire (approximately 45 minutes for the average student) was not unsatisfactory, but any reduction in length without the loss of information, would help increase the efficiency of the main survey. A final trial also enabled last-minute adjustments to be made to the phraseology, layout etc., established by the previous survey.

The 38 students were asked to complete the questionnaires in their own time. Thirty-four responses were received but one had to be discarded because it was incorrectly completed. The information from the remaining 33 questionnaires, each containing 78 variables (34 bio-data, 29 academic and 15 social - see appendix B), was transferred to data coding sheets using cellulose templates. Missing values and alternative responses were coded separately. The data was then punched on to computer cards and subjected to a number of statistical analyses. The majority of this work was carried out on an ICL 2904 computer, using sub-routines from the Statistical Package for Social Science (SPSS), Version G, (1975). (Because of core limitations experienced with this package when using factor analytic techniques, some of the work was

transferred to an IBM 370/145 and the Scientific Subroutine Package, Version 3, 1970).

The following statistical procedures were tried out: (a) The population sample was analysed using the "frequencies" and "condescriptive" subprogrammes. Thus, the number of students falling into certain categories was obtained, (e.g. 27 males, 6 females; twenty education students, 8 humanities students, 5 natural sciences students, etc., etc.), together with the means, standard deviations etc. of the numerical data, (e.g. the average age of these students was 20.7 years, S.D = 2.8 years, etc., etc.)

(b) The condescriptive and frequencies subprogrammes were also used to focus on each of the 44 adjustment problems in turn and to establish their relative potency and generality. For this particular population sample, the most potent adjustment problem coincided with the most generally experienced problem, namely "obtaining the prescribed texts for course work."

(c) To examine the adjustment problems experienced by particular categories of student it was necessary to create two new variables, "NOAPS" and "SEVAPS". The first stage in the computation, was to assign numerical values to the student responses of "a severe problem", "a problem" and "a slight problem". In the subsequent statistics, "a severe problem" has been given a weighting of 3, "a problem" a weighting of 2, "a slight problem" a weighting of 1 and "NOT a problem" a weighting of zero.

NOAPS is simply the number of adjustment problems experienced by a student and is obtained by counting all the non-zero weightings. For this particular population sample, the mean of NOAPS was 20, i.e. the average number of problems experienced by the students was 20. The maximum possible NOAPS was 42 (two of the questions were for men only and two for women only - see appendix B).

SEVAPS is an index of the severity with which each student experiences the adjustment problems and is obtained by summing the weightings given by the student to all the problems. The mean of SEVAPS for this sample was 34; the maximum possible being 126, (3x42).

The relationships between NOAPS and SEVAPS and various bio-data were then investigated using Pearson product-moment, chi-square and Kendall's Tau C statistics. The results were mainly negative, probably as a result of the small student population size. Two exceptions were, rural/urban background and marital status, which gave significant relationships with NOAPS at the .05 level.

(d) In order to investigate adjustment problem variable redundancies, factor analyses of the 29 academic and 15 social variables were carried out using the Scientific Subroutine Package on the IBM 370/145. A varimax factor analysis of the 29 academic variables, initially yielded 10 factors when Kaiser's (1958) criterion was applied, but this was subsequently reduced to four by the application of Uberla's (1973) principle. The composition of the factors is shown in table 5 below.

Table 5: A factor analysis of the 29 academic adjustment problem variables of the second trial questionnaire.

ADJUSTMENT PROBLEMS (see appendix B)		Rotated Factor Loadings			
		Factor 1	Factor 2	Factor 3	Factor 4
1	MOTN	.082	-.027	-.030	.152
2	TECHS	.226	.374	-.236	.006
3	SPOKENG	.226	.218	.104	.774
4	WRITENG	.190	-.063	.086	.763
5	UNDTEXTS	.177	-.136	.050	.318
6	UNDLECTS	.051	-.146	.059	.656
7	CRITIC	.804	.097	-.124	.101
8	MEMORIZ	-.051	-.139	.170	.265

(Contd.)

Table 5 (Contd)

ADJUSTMENT PROBLEM		Rotated factor loadings			
		Factor 1	Factor 2	Factor 3	Factor 4
9	SIMPBREV	.470	-.335	-.266	.524
10	POLITICS	.027	.391	-.215	.119
11	INTERWO	.114	.070	-.011	.202
12	INTERMEN	-.025	-.162	.065	-.010
13	OBTTEXT	.271	.179	-.182	.066
14	NUMBOOKS	.423	-.158	-.675	.033
15	LENGLOAN	.257	.489	-.318	-.143
16	USELIBR	.071	.136	-.045	.040
17	READSPED	.092	.139	-.063	.809
18	STAFSTUD	.736	.036	.240	.331
19	TYPTEACH	.593	.010	.073	.296
20	MARKSYST	.139	.025	-.067	.288
21	DIFFSTAF	.174	-.009	-.347	.498
22	WOMLECTS	.031	.868	.060	.111
23	MENLECTS	Population sample too small			
24	COURSAD	.529	.255	-.123	.065
25	FORCPROG	-.071	.174	-.098	.184
26	WORKLOAD	.305	-.089	-.183	.311
27	TTABLE	-.202	.076	-.861	.016
28	FAMILY	.231	.086	-.353	.214
29	BOOKCASH	.516	-.190	.077	.003

The criteria of significance for the factor loadings was chosen as .6. This is somewhat higher than usually suggested (Child, 1970), but it is necessary because of the relatively small size of the population sample. Thus, in factor 1 there are two variables above the significance level (CRITIC and STAFSTUD), but an inspection of the original statements (see appendix B), shows them to be relatively discrete. The same situation is found in factor 3, (factor 2 has only one variable above the significance level). Factor 4 however, shows a distinct group of four variables which could be labelled "problems of

the English language." The variable with the heaviest loading (READSPED) was subsequently retained, the one with the lowest loading (UNDLECTS) was omitted - it was also relatively unimportant in the student estimates of potency and generality - and the other two factors, (SPOKENG and WRITENG), were amalgamated into a new statement which read: "expressing myself clearly in English".

A factor analysis of the 15 social variables is shown in the next table, (Uberla's criterion was again applied).

Table 6: A factor analysis of the 15 social adjustment problem variables of the second trial questionnaire.

ADJUSTMENT PROBLEM		Rotated factor loadings		
		Factor 1	Factor 2	Factor 3
1	PERSCASH	.009	<u>.675</u>	.030
2	FRIENDS	.122	-.151	.373
3	TRIBAL	<u>.919</u>	-.062	.020
4	RACIAL	<u>.761</u>	.049	.356
5	OPPSEX	.163	-.247	<u>.684</u>
6	CAMPsize	.118	-.075	.560
7	RELSTUD	.151	.119	.076
8	POLSTUD	.138	.071	-.048
9	ROOMMATE	-.121	-.005	.021
10	ENTERTAIN	.174	.183	.148
11	SPORT	-.068	-.104	-.089
12	INTELSOC	.192	.087	.041
13	ALCOHOL	.234	-.466	-.132
14	DINING	-.011	<u>.702</u>	.004
15	ACCOM	.259	-.477	-.588

As a result of the above table, RACIAL was also declared a redundant variable and discarded in favour of TRIBAL, which had the highest factor loading. An inspection of appendix B verifies that

the two statements were very similar in nature. The two significant loadings on factor 2 are relatively discrete (appendix B), and were also rated highly by the students on NOAPS and SEVAPS. Factor 3 contains only one significant variable.

One other adjustment problem variable was discarded from the questionnaire; in this case because it was not responded to by any of the students. The problem statement: "having men lecturers" had originally been added to the second trial questionnaire, at the suggestion of two female members of staff. It was put alongside the existing statement "having female lecturers" (derived from item 24, table 2), but as none of the present population referred to the problem, it was subsequently omitted.

The incorporation of the above amendments resulted in a reduction of the questionnaire size by four variables. The number of bio-data variables was also reduced by omitting items 16, 18, 27 and 28 (see appendix B). The information provided by these variables could be derived (albeit less easily), from bio-data items 14, 15 and 17, and adjustment problem variables 36 and 37 (appendix B). The total reduction in questionnaire size from 78 to 70 items, was expected to result in a saving of about seven minutes on the average completion time.

The alterations to the Second Trial Questionnaire were completed by a few minor amendments to the phraseology and layout, e.g. "what language do you speak on campus?" (appendix B, item 11) was changed to "what language do you mainly speak on campus?" This was to prevent students from listing two or three languages, when only one language was required. The layout was also changed by prefacing all the reasons for the adjustment problems with the word "because". Once again, this was to stop students responding to the reasons for

the problems along the rating scale, (two questionnaires in the sample, had been completed in this manner).

The final version of the questionnaire, containing 30 bio-data variables, 26 academic problem variables and 14 social problem variables (see appendix C), was the one given to the main sample of first-year students. The method of presentation and the results obtained, are given in the next chapter.

CHAPTER 6

The Main Survey

The purpose of the main survey was to test the hypotheses given in chapter 3 and to test any further hypotheses generated by the research results. The survey was conducted over a period of 10 weeks in the University's third term, (May - July 1981) and by the end of this period, 258 questionnaires had been completed by students in various parts of the University.

Selection of the subjects

The University Admissions Office indicated that 697 new students were admitted into the four entry schools of the main campus in the 1980/81 academic year. The statistics for these entrants are shown below.

Table 7: Entrants to the University of Zambia main campus, 1980/81

Entry School	Natural Sciences - 356, Education - 181, HSS - 145, Agriculture - 15
Sex	Male - 544 (78%), Female - 154 (22%)
Age at Entry	Mean - 20.2 years, Standard Deviation 2.7 years

To have used all the 1980/81 entrants in the survey, would have made the population sample very large and unwieldy. Consequently, it was decided to take every third student in the three larger entry schools and all the students from Agriculture. The latter measure was adopted in order to obtain sufficient Agriculture students to compare with students from other Schools. Thus, the final sample was to consist of 119 Natural Sciences students, 60 Education, 48 Humanities and Social Sciences and 15 Agriculture students; 242 undergraduates in all. The students in Natural Sciences, Education and Humanities and Social Sciences were obtained

by administering the questionnaire to randomly chosen seminar and lecture groups within each School, until the number of questionnaires completed was slightly greater than that required. A total of 258 questionnaires were completed - 12 more than necessary, (four questionnaires had to be discarded because of insufficient data). The extra questionnaires enabled an adjustment to be made to the male/female ratio of the sample, in order that it more accurately reflected the total first-year population - see later.

The representativeness of the sample

The selected students were representative of the total population along the three major variables: entry school, sex and age. The statistics for entry school have already been described - one in three students were selected from each of the three largest entry schools.

The percentage of females in the first 242 questionnaires selected, was slightly less than the 22% reported for the whole first-year population (see table 7). Thus some of the male questionnaires from each school were substituted by females from the 12 extra questionnaires. The result was that the population sample contained 21.5% females (see table 8) compared with 22% in the total population.

The mean age of the sample population is shown in table 9. It should be remembered that this mean of 20.8 years was taken between May and July 1981 and approximately nine months (.75 years) needs to be subtracted in order to compare it with the average age of the total first-year population when they entered University in October 1980. Thus, a mean of 20.05 for the sample population and 20.2 for the total population compare very favourably.

The administration of the questionnaire

The administration of the questionnaire was carried out during normal seminar and lecture-hours. No advance warning was given to

the students. This procedure was adopted in order to reduce the possibility of sample bias. If the questionnaire was given to students to complete in their own time or if they had advance warning of the questionnaire being administered, then it was possible that only students with large numbers of adjustment problems (or severe adjustment problems) would respond and the sample would be biased. Thus, having obtained permission from lecturers, various classes in the four Schools were visited and after a short introductory talk, the questionnaire was given to the students to complete. The general reaction to the survey was favourable and no problems of co-operation were encountered; indeed many students stayed behind after the sessions, to discuss their difficulties. A few students were unable to finish the questionnaire in the time available and were subsequently allowed to complete in their own time. (In a typical group, one third of the students had finished within 35 minutes, two thirds within 45 minutes and virtually all within 55 minutes). 12 classes were visited in all, ranging in size from 8 to 81 students.

The processing of the results

This was essentially the same as that described in chapter 5. The 30 bio-data variables and 40 adjustment problem variables were encoded via cellulose templates. A "severe problem" was weighted 03, a "problem" 02, etc, etc. Missing values were encoded as "99" and alternative responses (which were very few, owing to the response limits having been well defined in the trial questionnaires), were given a value of "98". Spot-checks were carried out to ensure the accurate transfer of data from questionnaire to coding sheet and from coding sheet to computer card. The Statistical Package for Social Science (SPSS) and Scientific Subroutine Packages, were again used to provide information on the distribution of the 70 variables and the relationships between the variables.

Analysis of results: (a) Non-numeric bio-data variables

The first analysis was carried out on the 17 non-numeric, bio-data variables. Using the SPSS subprogramme "frequencies", information was obtained on the number of students falling into various categories.

Table 8: The number of first-year students in various categories

BIO-DATA VARIABLE		CODE NAME	NUMBER OF STUDENTS (missing cases plus alternative responses in brackets)
1	Student's sex	SEX	52 females, 190 males.
2	Marital status of student	MARIT	15 marrieds, 220 single, (7).
3	School registered in	SCHOOL	15 Agriculture, 48 HSS, 60 Education, 119 NS.
4	University address	ADDRESS	230 in Halls of Residence, 3 off-campus, (9).
5	Urban or rural background	BACKGR	67 rural, 149 urban, 21 rural and urban, (5).
6	Language mainly spoken on campus	LANGUAGE	118 English, 53 Zambian languages, 67 a combination of languages, (4).
7	Mother tongue of students	TONGUE	49 Nyanja, 42 Bemba, 30 Tonga, 23 Lozi, 4 Kaonde, 42 other languages, 39 a combination of langs., (13).
8	Boarding school experience	BOARDING	81 non-boarders, 151 with some experience (96 of these had 5 years experience), (10).
9	Zambia National Service	ZNS	32 had not done ZNS, 69 had completed ZNS, 138 had partly completed ZNS, (3).
10	Division achieved in Grade 7 exam	GRADE	209 division 1, 24 division 2, (9).
11	Division achieved in Form 3 exam	FORM	192 division 1, 46 division 2, 1 division 3, (3).
12	Division achieved in Cambridge School Certificate	CSC	176 division 1, 50 division 2, 10 division 3, (6).
13	Student Counselling Service visits	SCS	220 had not visited, 15 had visited, (7).
14	Father's education	DADEDN	135 not completed secondary education, 46 had completed secondary education. (29 of these had degrees), (61).

(Contd.)

Table 8 (Contd)

BIO-DATA VARIABLE		CODE NAME	NUMBER OF STUDENTS (missing cases plus alternative responses in brackets)
15	Mother's education	NUMEDN	91 not completed primary education, 65 had completed primary education. (15 of these had completed secondary education and 3 had degrees), (86).
16	Father's (Guardian's) occupation	DADOCC	63 professional, 13 semi-professional, 35 commercial, 17 clerical, 19 skilled, 24 semi-skilled, 8 unskilled, 14 unemployed, 28 retired (21).
17	Mother's occupation	MUMOCC	13 professional, 16 semi-professional, 9 commercial, 9 clerical, 7 skilled, 19 semi-skilled, 17 unskilled 126 unemployed, 12 retired (14)

Some of these population statistics are worthy of comment, particularly with respect to their influence on adjustment. Firstly, the number of women who gain entrance into the university, is quite small. This is probably a reflection of the subservient role, still occupied by women in Zambia (see chapter 3). Items 15 and 17 in the table, support this conclusion. Very few mothers have occupations which are classified as "professional" or "semi-professional" and the majority have not completed primary education. The traditional role occupied by women in Zambia is expected to cause problems for the female students when they first enter university.

The situation regarding residency, is much as expected, with only three students indicating that they live "off campus." This number is too small to permit comparisons to be made with residential students. However, the residential nature of the campus is expected to help students adjust to the university, especially in the first

year (see chapter 2).

Rural students are expected to experience more adjustment problems than urban students (chapters 2 and 3), but fewer "rurals" (31%), are present in the population sample, than would be predicted from the national statistic (P. 29). This is probably a reflection of the inferior educational facilities, available in the rural areas.

A large proportion of students (65%), indicate that they have attended boarding school at some time during their pre-university education. This boarding school experience is expected to assist student adjustment to university. (hypotheses 13, table 1).

The number of students who have visited the Student Counselling Service during their first year, is very small indeed - about 6% of the sample. Compared with other universities (e.g. Keele, U.K., where 44% of the students, were counselled in one year, Newsome et al., 1973) this particular university facility is grossly under-utilised.

Finally, as predicted in chapter 2, the general level of parental education is very rudimentary; 75% of the student's fathers have not completed their secondary education and 58% of mothers have never finished their primary schooling. Undergraduates with poorly educated parents are unlikely to receive the same amount of academic assistance and encouragement as students who have educated parents and this is expected to adversely affect the former student's university adjustment.

(b) Numeric bio-data variables

The next analysis was carried out on the 12 numeric bio-data variables. The SPSS subprogramme "condescriptive" produced the following set of means, standard deviations, etc..

Table 9: A statistical analysis of the first-year population sample

BIO-DATA VARIABLE	CODE NAME	MEAN	MIN.	MAX.	STAND. DEV.	SKEW-NESS	KURT-OSIS	MISS-ING CASES
1. Age (years)	AGE	20.8	17	35	2.9	2.6	8.0	9
2. The 18 students with children	CHILDREN	2.4	1	7	1.7	-	-	0
3. Number of siblings in family	SIBLINGS	6.2	0	15	2.9	.3	.2	6
4. Number of years of prim. education	PRIMED	7.3	2	13	1.1	2.6	14.1	2
5. Number of years of sec. education	SECED	5.0	2	8	0.4	-.6	37.0	1
6. The 151 studs. with boarding experience	BOARDING	4.9	1	12	2.1	-	-	0
7. The 207 studs. who had been to Z.N.S.	ZNS	8.5	1	20	2.9	-	-	0
8. The number of "O" levels obtained	OLEVEL	7.0	1	9	1.2	1.5	4.5	5
9. The 6 studs. who had taken "A" levels	ALEVEL	2.5	1	4	1.0	-	-	0
10. The 15 students who had visited the Student Counselling Service(No. of visits)	SCS	3.3	1	12	4.3	-	-	0
11. Father's income (Kwacha per month)	DADINC	318	0	1000	2.8	-	-	53
12. Mother's income (Kwacha per month)	MUMINC	79.5	0	1000	1.5	-	-	42

Two of the above results are particularly worthy of comment.

Firstly, it will be observed from item 3 above, that the average size of family is approximately seven children. This figure is considerably larger than that encountered in most industrially developed countries and it will be interesting to see if this variable is related to the students' university adjustment (chapter 3).

Secondly, as predicted in chapter 2, the income of the parents is small. A father's income is 318 kwacha per month, approx. 190 pounds sterling. The average income of the student's mothers is considerably less; K80 or 48 pounds per month. It should be borne in mind however,

that a large number of mothers are unemployed (table 8).

(c) The adjustment problem (AP) variables

The responses given by the 242 students to the 40 adjustment problem variables, finally confirm the preliminary conclusion drawn in chapter 4; i.e. as shown in tables 10 and 11, Zambian students do experience a large number and wide variety of adjustment problems when they transfer from school to university.

The results also confirm that the 26 academic adjustment problem variables and the 14 social AP variables contained in the questionnaire, encompass the main body of adjustment problems encountered by these students. This is because the section which requested "any other adjustment problems", only evoked 18 responses and none of the new problems remotely approached the frequency of referral of the least reported problem in table 11 - TTABLE. Thus, as no other social problems have been consistently reported, it is accurate to state that the majority of Zambian student adjustment problems are academic in nature (hypothesis 1).

Now that the 40 adjustment problem statements have been responded to in their final form, it is also possible to confirm that some of the Zambian problems are similar to those reported by other students (hypothesis 2), e.g. "obtaining the necessary motivation to study hard" (table 10, item 7), while others are associated with particular circumstances prevailing on the Zambian campus (hypothesis 3), e.g. "the University dining facilities" and "obtaining the prescribed texts for course work" (table 10, items 1 and 2).

(d) The AP variables - potency

To obtain an indication of the potency with which each adjustment problem was experienced, the subprogramme condescriptive was used.

This programme summated the severity ratings given by the students to each problem (where "severe problem" = 3 etc., etc.,) and then divided by the number of valid cases to give a mean index of severity. The mean severity ratings for the 40 adjustment problems are given below.

Table 10: The severity with which each adjustment problem is experienced - (S) denotes a social adjustment problem

RANK ORDER	ADJUSTMENT PROBLEM STATEMENT (See appendix C)	CODE NAME	MEAN SEVERITY
1st(S)	"The University dining facilities"	DINING	2.00
2.	"Obtaining the prescribed texts for course work"	OBTTEXT	1.92
3.	"Being forced to take a particular academic programme"	FORCPROG	1.54
4.	"The amount of academic work I have to get through"	WORKLOAD	1.52
5.	"The money I have available to buy books"	BOOKCASH	1.45
6.	"The marking systems used by most lecturers"	MARKSYST	1.42
7.	"Obtaining the necessary motivation to study hard"	MOTN	1.31
8.	"The type of teaching given by staff"	TYPETEAC	1.26
9.	"The technique of learning and studying at university"	TECHS	1.23
10.	"Adopting a critical approach to the material I am studying"	CRITIC	1.22
11. (S)	"The money I have available for personal needs"	PERSCASH	1.21
12.	"Getting advice on which courses to take"	COURSAD	1.18
13. (S)	"The accommodation provided in the Halls of Residence"	ACCOM	1.06
14.	"The number of books that can be borrowed from the library at any one time"	NUMBOOKS	1.06
15.	"Understanding academic work rather than just memorizing it"	MEMORIZ	.96
16.	"Working alongside women students"	INTERWO	.90
17.	"The amount of interaction between staff and students"	STAFSTUD	.89

(Contd)

Table 10 (contd)

RANK ORDER	ADJUSTMENT PROBLEM STATEMENT (see appendix C)	CODE NAME	MEAN SEVERITY
18.	"Reading through material quickly and scanning books for information"	READSPED	.84
19.	"The length of time for which it is possible to loan books from the library"	LENGLOAN	.83
20.	"Writing simply and briefly in assignments and exams"	SIMPBREV	.77
21.	"Knowing how to make the best use of the library"	USELIBR	.77
22.	"The interaction of student politics with academic life"	POLITICS	.66
23. (S)	"Making friends with members of the opposite sex"	OPPSEX	.66
24.	"The interaction of family affairs and academic work"	FAMILY	.64
25. (S)	"The amount of general entertainment available on the campus"	ENTERTAI	.58
26. (S)	"The amount of provision for sporting activities on the campus"	SPORT	.55
27.	"Understanding the English used in textbooks"	UNDTEXTS	.49
28. (S)	"Making friends with other university students"	FRIENDS	.46
29.	"Working alongside men students"	INTERMEN	.44
30.	"Expressing myself clearly in English"	EXPENG	.43
31. (S)	"Being a student with strong religious beliefs, I find integration into the university community"	RELSTUD	.42
32. (S)	"Learning to live with my room-mate in my residence"	ROOMMATE	.42
33. (S)	"The multi-tribal nature of the university"	TRIBAL	.39
34.	"Having to adapt to staff from different cultural backgrounds"	DIFFSTAF	.38
35.	"Having women lecturers"	WOMLECTS	.38
36. (S)	"The opportunity to drink alcohol"	ALCOHOL	.35
37. (S)	"The number of intellectual societies and clubs functioning on the campus"	INTELSOC	.31
38.	"The number of timetable clashes I have"	TTABLE	.23
39. (S)	"The size and complexity of the university campus"	CAMPsize	.22
40th(S)	"Being a student with strong political beliefs, I find integration into the university community"	POLSTUD	.22

The potency of individual adjustment problems was the subject of the fourth hypothesis. The most potent problem in table 10, "DINING", has a severity index of 2.0, i.e. the overall rating given by this group of students, is that DINING constitutes a "problem" rather than a "slight problem" (because "problem" was given a weighting of 2).

Similarly, three other problems: OBTEXT, FORCPROG and WORKLOAD have mean severities that place them nearer the category of a "problem" than a "slight problem" (i.e. they have weightings greater than 1.5). Thus, these results confirm the fourth hypothesis; some of the student problems are sufficiently potent to be a cause for concern. The nature of the problems and ways in which they might be overcome will be discussed at a later stage.

(e) The AP variables - generality

The fifth hypothesis was concerned with the generality of the adjustment problems. It was predicted that some problems would be experienced by a third or more of the student population (table I). In order to test this hypothesis, the frequencies subprogramme was applied to the AP variables. The resultant table is shown below.

Table 11: The generality of the adjustment problems (S) denotes a social problem

RANK ORDER	VARIABLE (see table 10)	% students referring to problem			
1st	OBTEXT	90.1%			
2 (S)	DINING	89.7%			
3	WORKLOAD	79.4%			
4	TECHS	78.9%			
5	MARKSYST	76.1%			
6	CRITIC	75.2%			
7	TYPETEAC	74.8%			
8	MOTN	71.8%			
9 th	FORCPROG	69.4%			
			RANK ORDER	VARIABLE	% students referring to problem
			10 th	BOOKCASH	68.2%
			11	COURSAD	67.3%
			12	MEMORIZ	59.9%
			13 (S)	PERSCASH	58.7%
			14 (S)	ACCOM	58.3%
			15	NUMBOOKS	56.2%
			16 th	STAFSTUD	55.7%

(Contd.)

Table 11 (Contd)

RANK ORDER	VARIABLE (see table 10)	% students referring to problem			
17 th	SIMPBREV	49.9%			
18	INTERWO	48.9%(N=190)			
19	LENGLOAN	48.4%			
20	READSPED	47.5%	29 (S)	SPORT	30.6%
21	USELIBR	45.9%	30 (S)	FRIENDS	30.2%
22 (S)	OPPSEX	40.2%	31 (S)	RELSTUD	25.0%(N=212)
23	POLITICS	38.9%	32	DIFFSTAF	24.4%
24 (S)	ENTERTAI	38.8%	33	WOMLECTS	24.4%(N=190)
25	UNDTEXTS	38.0%	34 (S)	ROOMMATE	24.4%
26	FAMILY	33.0%	35 (S)	TRIBAL	23.9%
27	EXPENG	31.4%	36 (S)	INTELSOC	20.7%
28 th	INTERMEN	30.8%(N=52)	37 (S)	CAMPSIZE	15.8%
			38 (S)	ALCOHOL	15.7%
			39 (S)	POLSTUD	14.2%(N=204)
			40 th	TTABLE	12.8%

(Footnote to table 11: missing cases have generally been included in the calculation of the above percentages, i.e. no response, has been taken to mean, not a problem. Consequently, the percentages given, could be a slight underestimate of the frequency of referral. Exceptions have been made, however, in the case of RELSTUD and POLSTUD. In these variables, missing cases have been subtracted from N=242 in order to calculate the percentages, i.e. a missing case has been taken to mean that the student is not religious or political. This slight amendment will probably give a more accurate picture of these variables)

The table show that there are a large number of problems which are generally experienced. The most frequently referred to problem, OBTTTEXT was mentioned by 9 out of 10 students and no fewer than 25 problems are sufficiently generally experienced to be a cause for concern. Thus, the fifth hypothesis is confirmed.

(f) "NOAPS" and "SEVAPS"

By creating two variables, NOAPS (the number of adjustment problems experienced - chapter 5) and SEVAPS (an index of the severity with which a student experiences the problems), it is possible to compare the experiences of different categories of students. NOAPS was

created by the COUNT control card and SEVAPS by the COMPUTE card.

The frequencies subprogramme indicated the mean number of problems experienced by this population sample to be 18.38; minimum = 3, maximum = 38, SD = 6.17, skewness = .25, kurtosis = .10. The theoretical maximum for NOAPS was 39 for men and 38 for women - see appendix C.

The mean severity index for the sample was 32.08; minimum = 4, maximum = 84, SD = 14.62, skewness = .71, kurtosis = .40. The theoretical maximum for SEVAPS was 117 for men (3x39) and 114 for women (3x38).

(g) Comparisons of student categories for NOAPS and SEVAPS

The comparison of different groups of students was accomplished by the subprogramme T-TEST, which provides the capability of computing Student's t and testing whether or not the difference between the two sample means is significant. Two-tailed probability values were used for ascertaining the significance levels (Guilford, 1965, P.204).

The cut-off points used to create the various student categories were obtained from tables 8 and 9, e.g. table 8 item 6, indicates that there are 118 English-speaking students on campus and 53 non English-speaking students. These two groups were compared in order to test hypothesis 7 in table 1. For the categories of parental income, siblings and age, the cut-off points were the corresponding means shown in table 9.

Socio-economic background, the subject of the eighth hypothesis, was subdivided into its constituent components: father and mother's education, income and occupation. Suitable cut-off points for each component were chosen by consulting tables 8 and 9.

With regard to hypothesis 13 (table I), it was decided to compare non-boarders with students who had been at boarding school for five years - probably at the secondary level. The latter group was suitably large for comparison purposes and students who had only attended boarding

school for one or two years were probably little different from non - boarders.

The results obtained when categories of students are compared for NOAPS and SEVAPS, are given in table 12 below. The order of presentation of the student categories, corresponds with hypotheses 7 to 18 in table 1.

Table 12: Comparisons of student categories for NOAPS and SEVAPS

HYPOTHESIS (see table 1)	COMPARED GROUPS	Number of Students	NOAPS			SEVAPS		
			Group Mean	Signifi- cance		Group Mean	Significance	
				.01	.05		.01	.05
7.	Non English-speaking on campus.	53	19.5	NO	NO	35.2	NO	NO
	English-speaking on campus.	118	17.9			30.9		
8.	Student's fathers not completed sec. ed..	135	19.6	YES	YES	35.1	YES	YES
	Student's fathers have completed secondary education.	46	15.4			24.3		
8.	Student's fathers earn <K300 p.m..	92	20.1	NO	YES	37.7	YES	YES
	Student's fathers earn ≥K300 p.m..	97	18.0			29.8		
8.	Student's fathers un- employed.	14	20.8	NO	NO	40.2	NO	YES
	Students fathers profe- ssional(and commercial). (These were the only significant comparisons).	63	17.3			29.5		
8.	Student's mothers not completed prim. education.	91	19.4	NO	YES	35.5	YES	YES
	Student's mothers have completed primary educa- tion.	65	17.3			27.8		
8.	Student's mothers not earning.	141	19.1	NO	NO	35.1	NO	YES
	Student's mothers earn ≥K100 p.m..	59	18.4			29.5		
8.	Students with unskilled, semi-skilled and unemployed mothers experience a greater <u>severity</u> of AP, than students with professional or semi-professional mothers.							

(Contd.)

Table 12 (Contd)

HYPOTHESIS (see table 1)	COMPARED GROUPS	NUMBER of Students	NOAPS			SEVAPS		
			Group Mean	Signifi- cance		Group Mean	Significance	
				.01	.05		.01	.05
8.	e.g. Student's mothers unskilled.	17	20.2			37.9		
	Student's mothers professional.	13	15.8	NO	NO	22.9	YES	YES
9.	Students with ≥ 6 siblings.	141	18.8			32.8		
	Students with < 5 siblings.	95	17.7	NO	NO	30.5	NO	NO
10.	Rural background students.	67	19.7	NO	YES	36.6	YES	YES
	Urban background students.	149	17.9			30.5		
11.	Students who have not done ZNS.	32	15.2	YES	YES	24.7	YES	YES
	Students who have completed ZNS.	69	19.0			34.4		
12.	Students < 21 years age.	130	17.6	NO	YES	29.7	YES	YES
	Students ≥ 21 years age.	103	19.1			34.5		
13.	Students with no boarding experience.	81	18.4	NO	NO	32.3	NO	NO
	Students with 5 years experience.	96	18.4			32.2		
14.	Married students.	15	14.9	NO	YES	24.3	NO	YES
	Single students.	220	18.5			32.6		
15.	Female students.	52	17.2	NO	NO	28.5	NO	YES
	Male students.	190	18.7			33.1		
16.	Students with Div. 2 in Grade 7 examination.	24	18.4	NO	NO	30.1	NO	NO
	Students with Div. 1 in Grade 7 examination.	209	18.6			32.8		
16.	Students with Div. 2 in Form 3 examination.	46	18.8	NO	NO	32.1	NO	NO
	Students with Div. 1 in Form 3 examination.	192	18.3			32.2		
16.	Students with Div. 2 in CSC.	50	19.0	NO	NO	34.1	NO	NO
	Students with Div. 1 in CSC.	176	18.2			31.9		

(Contd.)

Table 12 (Contd)

HYPOTHESIS (see table 1)	COMPARED GROUPS	NUMBER of Students	NOAPS			SEVAPS		
			Group Mean	Signifi- cance		Group Mean	Significance	
				.01	.05		.01	.05
17.	School of Education students.	60	18.5	NO	YES	31.9	NO	YES
	School of Agriculture students. (Only Agriculture students have significantly greater APs than students from other Schools)	15	22.7			44.1		
18.	Lozi speaking students.	23	21.1			34.2		
	Bemba speaking students. (The only significant result)	42	17.5	NO	YES	27.8	NO	NO

Table 12 indicates that certain categories of student experience significantly more adjustment problems and/or a significantly greater severity of adjustment problem, than related groups of students. The .05 level is taken to indicate significance. For example, those students who come from a rural background (about one third of the student population - table 8), have a significantly higher NOAPS and SEVAPS than urban students. This particular result confirms the tenth hypothesis.

Similarly, hypotheses 8 and 18 are confirmed. Students with a low socio-economic background, as indicated by parental education, income and occupation, do experience greater adjustment problems. (Education and income were particularly significant, while parental occupation only gave significant results with SEVAPS). "Tribal groupings" (hypotheses 18), compared Nyanja, Bemba, Tonga and Lozi speaking students. Only one significant difference emerged, namely the Lozi/Bemba comparison, where Lozis were found to have a significantly higher number of adjustment problems.

Other categories of student showed significant differences for

NOAPS and SEVAPS, but in the opposite direction to that predicted in the hypotheses. Thus, students who had not done ZNS, younger students and married students (hypotheses 11, 12 and 14, experienced significantly fewer adjustment problems(.05 level) and less severe problems (.05 level) than ZNS, older and single students, respectively. Similarly, the adjustment problems experienced by females (hypotheses 15), were less severe (.05 level) than those experienced by males, (the results for NOAPS were in the same direction, but were not significant). Consequently, hypotheses 12, 13, 15 and 16 were rejected. The reasons for these results, (i.e. why ZNS, older, single and male students experience greater problems will be discussed in chapter 9).

The remaining hypotheses (7, 9, 13 and 16), did not produce significant differences. Students who were not speaking English on campus, who came from large families, or had a relatively poor scholastic record, experienced slightly greater adjustment problems, but the results were not statistically significant. Day and boarding-school students (hypothesis 13) had virtually the same number and severity of adjustment problems. The results for hypothesis 17, indicated that students from three of the university entry schools, Education, HSS and Natural Sciences, experienced a similar number and severity of problems. The Agricultural students however, experienced greater problems (.05 level) than students in any of the other schools.

Results of the hypothesis testing

A summary of the results concerning 17 of the original hypotheses given in table I, is presented below, (the remaining hypothesis, number 6, is dealt with in chapter 7).

Table 13: Results of the hypotheses testing

Hypothesis Number:	Outline of hypothesis (see table 1)	Confirmed, rejected, or no difference between groups
1.	The majority of Zambian student adjustment problems will be academic rather than social in nature.	Confirmed
2.	Some of the adjustment problems will be similar to those experienced by "foreign" students.	Confirmed
3.	Some of the adjustment problems will be peculiar to the Zambian campus.	Confirmed
4.	Some of the adjustment problems will be "potent" and a cause for concern.	Confirmed
5.	Some of the adjustment problems will be "general" and a cause for concern.	Confirmed
7.	Non English speaking students will have greater adjustment problems than English speaking students.	No difference
8.	Low socio-economic students will have greater adjustment problems than high socio-economic students.	Confirmed
9.	Students from large families will have greater adjustment problems than students from small families.	No difference
10.	Rural background students will have greater adjustment problems than urban background students.	Confirmed
11.	Non ZNS students will have greater adjustment problems than ZNS students.	Rejected
12.	Younger students will have greater adjustment problems than older students.	Rejected
13.	Non boarding students will have greater adjustment problems than boarding students.	No difference
14.	Married students will have greater adjustment problems than single students.	Rejected
15.	Female students will have greater adjustment problems than male students.	Rejected
16.	Students with a relatively poor scholastic record will have greater adjustment problems than students with a good record.	No difference
17.	School of Education students will have greater adjustment problems than other students.	No difference
18.	Some tribes will have greater adjustment problems than other tribes.	Confirmed

The "high-AP" groups

Table 12 indicated that 13 categories of student experienced significantly more adjustment problems and/or more severe adjustment problems.

The 13 "high-AP" groups are: students with fathers who have not completed secondary education, students with fathers who earn less than K300 per month, students with unemployed fathers, students with mothers who have not completed primary education, students with mothers who are not earning, students with mothers who are unskilled, semi-skilled or unemployed, students from a rural background, students who have completed ZNS, students greater than or equal to 21 years of age, single students, males, agriculture students and Lozi - speaking students.

It should be noted that the above groups are not mutually exclusive. For example, the category, "students from a rural background" might include "students who have completed ZNS". Certainly some categories of student are so large that they are bound to include students from another category, e.g. single students and male students. In order to establish which of the 13 variables is most influential with regard to NOAPS and SEVAPS, a multiple regression analysis was carried out, using the SPSS subprogramme "regression". The relative contribution of each of the 13 independent variables, to NOAPS and SEVAPS (the dependent variables), is indicated by the beta values given in table 14 below. The significance of the beta values was ascertained from the F ratios using 1 and $n-k-1$ degrees of freedom (d.f.), where n = number of cases, and k = number of independent variables. (Nominal variables such as SCHOOL and TONGUE were incorporated into the regression equation through the use of "dummies", SPSS, 1975, p.321) The results show, that father's education (DADEDN) and marital status (MARIT) are the most influential variables with regard to NOAPS and mother's education (MUMEDN) mother's income (MUMINC), AGE and marital status (MARIT), with regard to SEVAPS. Put in other words, the "profile" of the student who is particularly susceptible to greater adjustment problems (i.e. more adjustment problems and/or more severe adjustment problems), is a single, elderly student, emanating from a low socio-economic background.

Table 14: The relative contribution of the 13 "high AP" variables to NOAPS and SEVAPS

INDEPENDENT VARIABLE		NOAPS				SEVAPS			
		Beta value	F ratio	d.f. (1 and..)	Signif. Level	Beta Value	F ratio	d.f.	Signif. Level
1.	DADEDN	.33	4.26	169	YES	.09	.30	169	NO
2.	DADINC	.03	.04	176	NO	.01	.01	176	NO
3.	DADOCC	.07	.51	207	NO	.09	.68	207	NO
4.	MUMEDN	.04	.05	143	NO	.33	4.22	143	YES
5.	MUMINC	.09	.55	187	NO	.24	4.45	187	YES
6.	MUMOCC	.05	.12	213	NO	.02	.01	213	NO
7.	BACKGR	.06	.40	203	NO	.02	.06	203	NO
8.	ZNS	.01	.00	226	NO	.02	.06	226	NO
9.	AGE	.14	.68	220	NO	.44	7.08	220	YES (.01)
10.	MARIT	.31	4.43	222	YES	.43	8.81	222	YES (.01)
11.	SEX	.04	.18	228	NO	.19	3.62	228	NO
12.	SCHOOL	.08	.79	228	NO	.11	1.52	228	NO
13.	TONGUE	.02	.06	177	NO	.03	.09	177	NO

The "high-AP" groups and academic/social problems

It has been established that the high - AP groups experience greater adjustment problems, but it is not known whether they experience greater academic or social problems. The dominance of academic problems in the previous results suggest that the majority of groups will report academic difficulties, but one or two of the groups could experience greater social problems. For instance, older students might be well adjusted academically but have social difficulty because of the generation gap and Lozi students might have particular problems in social integration. The formally stated hypotheses for these two high-AP groups are given below:

(1) Students aged twenty one years or over will experience significantly greater social adjustment problems than academic adjustment problems.

(2) Lozi speaking students will experience significantly greater

social adjustment problems than academic problems.

(Academic and social problems are defined in table 10, the word "greater" refers to NOAPS and/or SEVAPS, P. 41 and the .05 level is taken to indicate significance).

The results of the t-tests used to make the academic/social comparisons for all 13 high - AP groups, are given in table 15 below. Two - tailed probability levels were employed to ascertain significance, and academic and social means were divided by 26 and 14 respectively, to take into account the disparity in factor sizes.

Table 15: A comparison of the academic and social problems experienced by the "high-AP" groups

High-AP groups	Group Size	Mean No. of acad. probs.	Mean No. of social probs.	.01 sig. level	Mean sev. of acad. probs.	Mean sev. of social probs.	.01 sig. level
1. Student's fathers not completed sec. ed.	135	14.3/26	5.3/14	YES	25.4/26	9.7/14	YES
2. Student's fathers earn less than K300 p.m.	92	14.7/26	5.3/14	YES	28.7/26	9.1/14	YES
3. Student's fathers un-employed.	14	16.2/26	4.6/14	YES	31.9/26	8.4/14	YES
4. Student's mothers not completed prim. ed.	91	14.0/26	5.4/14	YES	25.5/26	10.0/14	YES
5. Student's mothers not earning.	141	14.2/26	4.9/14	YES	25.9/26	9.2/14	YES
6. Student's mothers un-skilled etc.	181	13.8/26	4.8/14	YES	25.8/26	8.8/14	YES
7. Rural students.	67	14.6/26	5.1/14	YES	27.0/26	9.5/14	YES
8. Students who have completed Z.N.S.	69	13.9/26	5.1/14	YES	26.4/26	8.2/14	YES
9. Students > 21 years.	103	14.1/26	5.0/14	YES	25.2/26	9.3/14	YES

(Contd.)

Table 15 (Contd)

High-AP groups	Group Size	Mean No. of acad. probs.	Mean No. of social probs.	.01 sig. level	Mean sev. of acad. probs.	Mean sev. of social probs.	.01 sig. level
10. Single students.	220	13.6/26	4.9/14	YES	24.4/26	8.3/14	YES
11. Male students.	190	13.6/26	5.0/14	YES	24.0/26	9.1/14	YES
12. Agriculture students.	15	16.6/26	6.1/14	YES	32.1/26	12.0/14	YES
13. Lozi - speaking students.	23	15.4/26	5.7/14	YES	24.9/26	9.3/14	YES

It will be seen from the above results, that all 13 groups experience significantly greater academic adjustment problems than social problems. Thus the hypotheses concerning older students and Lozi-students are rejected.

A Factor analysis of the academic adjustment problems

A factor analysis of the 26 academic variables was next conducted in order to see if there were any academic sub-scales to which the high-AP groups were particularly susceptible. The Scientific Subroutine Package (1970) was used with an IBM 370/145 computer. The loadings shown in table 16 below, were those obtained from a varimax rotated factor matrix. Originally, nine factors with eigen values greater than one were extracted, but the scree test (Cattell, 1966) reduced this number to five.

Table 16: A factor analysis of the 26 academic variables

ADJUSTMENT PROBLEMS (see appendix C)		Rotated Factor Loadings				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1.	MOTN	.41	-.04	.08	-.17	-.05
2.	TECHS	.62	.04	.13	-.14	.24

(Contd.)

Table 16 (Contd)

ADJUSTMENT Problems (see appendix C)		Rotated Factor Loadings				
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
3.	EXPENG	.23	.00	.01	-.07	-.07
4.	UNDTEXTS	.51	.21	-.02	.25	-.04
5.	CRITIC	.50	.09	.14	.00	-.22
6.	MEMORIZ	.37	.05	-.09	.04	-.53
7.	SIMPBREV	.59	.05	-.14	.06	.00
8.	POLITICS	.08	-.06	.06	.01	-.05
9.	INTERWO	.25	.24	.01	-.63	.03
10.	INTERMEN	.18	.06	.03	.75	-.07
11.	OBTEXT	-.02	.58	-.14	-.07	-.10
12.	NUMBOOKS	.07	.76	-.02	.05	-.08
13.	LENGLOAN	.07	.57	.36	.09	-.30
14.	USELIBR	.19	-.07	.82	-.03	-.08
15.	READSPED	.66	.10	.26	.07	-.02
16.	STAFSTUD	.06	.17	.02	.00	-.73
17.	TYPETEAC	.11	.09	.11	.02	-.65
18.	MARKSYST	.07	.10	.18	-.02	-.24
19.	DIFFSTAF	.10	.01	-.17	.19	.27
20.	WOMLECTS	.16	.21	.17	-.36	.30
21.	COURSAD	.08	.23	.22	.20	-.09
22.	FORGPROG	.03	.24	.40	-.03	.13
23.	WORKLOAD	.10	.11	-.05	.00	-.27
24.	TTABLE	.02	.17	.05	-.07	.09
25.	FAMILY	.06	.34	-.04	-.10	-.27
26.	BOOKCASH	.13	.70	-.02	-.12	-.07
EIGEN VALUES		5.3	1.8	1.8	1.4	1.2

When loadings of greater than plus or minus .3 are considered (Child, 1970), the variables MOTN, TECHS, UNDTEXTS, CRITIC, MEMORIZ, SIMPBREV and READSPED are seen to form a large, influential sub-scale on factor I. This could be described as "study-skill problems" and is similar to a grouping that had been identified in the preliminary survey and labelled "study problems" (table 3). Another variable EXPENG was subsequently included in the sub-scale, as it was clearly associated with studying at the University and had a loading which

approached Child's criterion.

The other potential sub-scales in the matrix were considerably less significant than that contained in factor I (eigen value 5.3, relative percentage 20.5%) and were also smaller in size and less cohesive. For instance, the next largest sub-scale indicated in factor 2, would have been reduced from five to four variables, owing to FAMILY being an extraneous variable in a cluster otherwise concerned with book problems.

The "high-AP" groups and study-skill/"other" academic problems

An academic sub-scale ("study skills") has been identified, consisting of eight variables: MOTN, TECHS, UNDTEXTS, CRITIC, MEMORIZ, SIMPBREV, READSPED and EXPENG. Do the 13 high-AP groups have particular difficulties with this group of variables? A comparison of study-skills and the remaining 18 academic problems (referred to as "other APs") was conducted using t-tests. The results are shown below.

Table 17: A comparison of the study-skill/"other" academic problems experienced by the "high-AP" groups

High-AP groups		Mean No. of St. skill Probs.	Mean No. of other probs.	Sig. level	Mean sev. of St. skill Probs.	Mean sev. of other Probs.	Sig. Level
1.	Students' fathers not completed sec. education.	.60	.56	YES	.95	1.05	YES(.01)
2.	Students' fathers earn less than K300 p.m.	.60	.59	NO	1.00	1.27	YES
3.	Students' fathers unemployed.	.59	.68	NO	1.01	1.40	YES(.01)
4.	Students' mothers not completed prim. education.	.58	.55	NO	.94	1.07	YES(.01)
5.	Students' mothers not earning.	.59	.56	NO	.95	1.08	YES(.01)
6.	Students' mothers unskilled, semi-skilled, unemployed.	.58	.57	NO	.90	1.09	YES(.01)
7.	Rural students.	.59	.58	NO	.98	1.14	YES(.01)

(Contd.)

Table 17 (Contd)

High-AP groups		Mean No. of St. skill Probs.	Mean No of other Probs.	Sig. level	Mean sev. of St. skill Probs.	Mean sev. of other Probs.	Sig. Level
8.	Students who have completed ZNS.	.57	.55	NO	.91	1.19	NO
9.	Students \geq 21 years of age.	.58	.56	NO	.90	1.15	YES
10.	Single students.	.57	.54	YES	.90	1.04	YES
11.	Male students.	.55	.54	NO	.86	1.06	YES(.01)
12.	Agriculture students.	.71	.65	NO	1.21	1.33	NO
13.	Lozi-speaking students.	.63	.61	NO	.91	1.04	NO

As will be observed, the general finding is that the high-AP groups do not find study-skills to be as problematic as the other 18 academic adjustment problems. Ten of the groups indicated that "other adjustment problems" were significantly more severe than the study-skill variables.

(This is in accord with the results given in table 7 where study-skill variables only occupy 3 of the top 10 places in the rank order of severity of adjustment problems). Only two of the NOAPS results were significant (.05 level) and in an opposite direction to the SEVAPS results. Thus, students with fathers who "have not completed sec. education" and single students, experienced a significantly greater number of study-skill problems, (compared with "other" academic problems), but their study-skill problems were significantly less severe than the "other" academic adjustment problems.

Table 17 concludes the statistical analysis of the first-year results. A discussion of the findings is contained in chapter 9. One hypothesis still remains to be tested. It concerns the persistency of the adjustment problems and in order to investigate this aspect of the student's difficulties, a further sample of students was taken from the fourth-year of the university. The results are described in the next chapter.

CHAPTER 7

THE FOURTH-YEAR SURVEY

The persistency of the student's adjustment problems, i.e. the extent to which the problems continue into the fourth-year, is the subject of the sixth hypothesis and the present chapter. To investigate this aspect of the student's difficulties, a sample of fourth-year undergraduates was given the main-survey questionnaire during the University's first term (October - December 1981) and then first and fourth-year responses were compared. This method is not as ideal as a longitudinal study, but provided the populations are reasonably matched, an indication of the persistency of the problems will be obtained.

Matching the first and fourth-year populations

In the present sample of 60 fourth-years, the SEX and SCHOOL variables were experimentally controlled to approximately reflect the first-year population. This control was achieved by choosing seminar groups from each School with an appropriate number of students and the right proportion of males to females. The situation with regard to other bio-data variables, can be ascertained by consulting tables 18 and 19. (The first-year results were derived from tables 8 and 9).

Table 18: Percentages of various students in the fourth-year sample(N=60)

VARIABLE (see table 8)		NUMBER OF STUDENTS (<u>first-year</u> percentages given in brackets)	Missing Cases
1.	SEX	25% females (21%), 75% males (79%)	0
2.	MARIT	5% marrieds (6%), 93% single (94%), 2% separated (0%)	1
3.	SCHOOL	7% Agriculture (6%), 20% HSS (20%), 25% Education (25%), 48% N.S. (49%)	0
4.	ADDRESS	98% in Halls of Residence (99%), 2% off-campus (1%)	1

(Contd.)

Table 18 (Contd)

VARIABLE (see table 8)	NUMBER OF STUDENTS (<u>first-year</u> percentages given in brackets)	Missing Cases
5. BACKGR	39% rural (28%), 56% urban (63%), 5% rural and urban (9%)	3
6. LANGUAGE	50% English (50%), 12% Zamb. langs. (22%), 38% combination of langs. (28%)	2
7. TONGUE	19% Nyanja (21%), 12% Bemba (18%), 20% Tonga (13%), 5% Lozi (10%), 2% Lunda, 42% a combination of languages (17%)	1
8. BOARDING	31% non-boarders (35%), 69% with some experience (65%)	1
9. ZNS	5% students had not done ZNS (13%), 32% had completed ZNS (29%), 63% had partly completed ZNS (58%)	4
10. GRADE	85% division 1 (90%), 15% division 2 (10%)	1
11. FORM	63% division 1 (80%), 36% division 2 (19%), 2% division 3	1
12. CSC	44% division 1 (74%), 54% division 2 (21%), 2% division 3 (4%)	3
13. SCS	96% students had not visited SCS (94%), 4% had visited SCS (6%)	4
14. DADEDN	77% not completed sec. education (75%), 23% had completed secondary education (25%)	21
15. MUMEDN	62% not completed prim. education (58%), 38% had completed primary education (42%)	26
16. DADOCC	28% professional (29%), 6% commercial (16%), 7% clerical (8%), 4% skilled (9%), 17% semi-skilled (11%), 11% unskilled (4%), 9% unemployed (6%), 19% retired (13%)	6
17. MUMOCC	4% professional (6%), 7% semi-professional (7%), 2% commercial (4%), 9% semi-skilled (8%), 13% unskilled (7%), 61% unemployed (55%) 4% retired (5%)	6
18. DADINC	64% student's fathers earn less than K300 p.m. (49%)	10
19. MUMINC	69% student's mothers not earning (70%)	15

Table 19: A statistical analysis of the fourth-year sample
(First-year results in brackets)

VARIABLE (see Table 9)	MEAN	MIN.	MAX.	S.D	MISSING CASES
1. AGE	23.7 yrs. (20.8)	20 (17)	36 (35)	2.6 (2.9)	2
2. CHILDREN	1.6 children (2.4)	1 (1)	4 (7)	1.0 (1.7)	0 (N=11)
3. SIBLINGS	5.9 sibs. (6.2)	0 (0)	14 (15)	3.1 (2.9)	2

(Contd.)

Table 19 (Contd)

VARIABLE (see Table 9)		MEAN	MIN.	MAX.	S.D	MISSING CASES
4.	PRIMED	7.4 yrs. (7.3)	6(2)	12(13)	1.2(1.1)	2
5.	SECED	5.1 yrs. (5.0)	4(2)	8(8)	0.5(0.4)	0
6.	BOARDING	5.2 yrs. (4.9)	2(1)	9(12)	1.5(2.1)	0(N=41)
7.	ZNS	8.4 mths(8.5)	3(1)	20(20)	2.6(2.9)	0(N=53)
8.	CLEVEL	6.8 (7.0)	2(1)	9(9)	1.5(1.2)	0
9.	ALEVEL	Only 2 students had taken "A" levels				
10.	SCS	Only 2 students had visited the Student Counselling Service.				
11.	DADINC	K276 p.m.(318)	0(0)	1000(1000)	2.9(2.8)	10
12.	MUMINC	K 71 p.m.(79)	0(0)	1000(1000)	1.7(1.5)	15

It will be observed, that the first and fourth-year samples are well matched on most of the variables. For example, the proportion of married to single students is approximately the same for both populations (table 18, item 2) and the average time spent at ZNS is similar (table 19, item 7). There are however, some exceptions, e.g. BACKGR and DADINC. These will be discussed, following a comparison of first and fourth-year students for number and severity of adjustment problems.

First and fourth-years compared for NOAPS and SEVAPS

A t-test was used to compare the mean number of adjustment problems and severity of problem, experienced by the two population samples. The somewhat surprising results are given in table 20 below. The fourth-years were found to experience slightly more problems and more severe problems than the first-years although the differences between the two groups were not significant.

Table 20: First and fourth-years compared for number and severity of adjustment problems (APs) experienced

	Number of students	Number of APs experienced			Severity of APs		
		Mean	S.D.	Signif. Level	Mean	S.D.	Signif. Level
First years	242	18.4	6.2	Not sig.	32.1	14.6	Not sig.
Fourth years	60	19.6	5.8	Not sig.	34.2	14.8	Not sig.

The above results could be accounted for by a disproportionate number of "high - AP" students being present in the fourth-year sample. A scrutiny of table 18 shows that the fourth-year sample does contain a slightly higher proportion of students whose counterparts in biographical statistics in the first-year sample are known to have more adjustment problems and more severe problems, (see table 15 for a list of the high-AP categories). This difference is largely taken up by three categories of student, namely: those from a rural background (table 18, item 5), students with unskilled, semi-skilled and unemployed mothers (item 17) and students with fathers earning less than K300 per month (item 18). In the BACKGR category, there should have been 16 fourth-year students with a rural background, if the first-years were to be matched exactly (i.e. 28% of the 57 student responses). In fact there were 22 rural students (39% of 57), i.e. there are 6 rural students too many in the fourth-year sample. Similarly, there were seven fourth-year students too many in the MUMOCC categories and eight too many in DADINC. A theoretical adjustment can be made for these 21 students by consulting table 12. The difference in the average number of adjustment problems experienced by the typical rural and typical urban student, is 1.8 problems (19.7 minus 17.9; item 10, table 12). Thus, six extra rural students will contribute an additional 10.8 problems to the total number of problems from which the mean for the fourth-years is calculated. Similarly, seven students with mothers who are unskilled etc., will contribute 18.9 problems and eight students with fathers earning less than K300 p.m. will

contribute 16.8 problems. Consequently, an adjustment of about 47 APs ($10.8 + 18.9 + 16.8$) has to be made to the number of adjustment problems experienced by the 60 fourth-year students, i.e. the mean number of problems experienced by the fourth-years in table 20, is reduced by a factor of $\frac{47}{60}$ from 19.6 to 18.8. A similar calculation for SEVAPS gives an adjusted mean for the fourth-year students of 31.4. It will be noted that the size of these adjustments is relatively small and they have no significant effect on the conclusion that the fourth-year students experience a similar number and severity of adjustment problems to the first-years.

Another possibility which had to be considered, was that the survey had underestimated the number and severity of problems experienced by the fourth-years. This is feasible because the survey instrument was developed on first-year students and the fourth-years might have other problems not indicated by the questionnaire. It is unlikely however, as only six out of the 60 students responded to the section requesting "other APs" and most of their responses emphasised or reiterated previously mentioned difficulties.

The nature of the fourth-year problems

The next question to consider, was whether the fourth-year students were experiencing the same kind of problem as the first-years. The nature of the fourth-year problems was investigated by producing "severity" and "generality" tables (tables 21 and 22) similar to those of the first-year survey (tables 10 and 11). Table 21 below, shows that there is very little difference between the types of problem severely experienced by the first and fourth-year populations. The rank correlation between the two sets of results was .92. Furthermore three out of the four problems that were a cause for concern in the first-year sample, (i.e. having a severity rating greater than 1.5), are found to be a cause for concern in the fourth-year sample.

These are: the dining facilities, obtaining the prescribed texts and the workload. "Being forced to take a particular academic programme" (first year severity index = 1.54) is somewhat less potent in the fourth-year, presumably because the students have become reconciled to their enforced programme. Conversely, MARKSYST ("the marking system"), which was just below the potency cut-off point in the first-year sample, has taken on greater prominence (severity index 1.63), probably because of the approaching final examinations. The changes in potency between the first and fourth-year students, will be discussed later in chapter 9.

TABLE 21: THE SEVERITY WITH WHICH FOURTH-YEARS EXPERIENCE EACH ADJUSTMENT PROBLEM (FIRST-YEAR RESULTS IN BRACKETS)

RANK ORDER		VARIABLE	MEAN SEVERITY		Persistent "severe" problems
(1st)	1st	DINING	(2.00)	2.22	x
(2)	2	OBTTEXT	(1.92)	2.22	x
(4)	3	WORKLOAD	(1.52)	1.75	x
(6)	4	MARKSYST	(1.42)	1.63	
(5)	5	BOOKCASH	(1.45)	1.47	
(13)	6	ACCOM	(1.06)	1.40	
(3)	7	FORCPROG	(1.54)	1.34	
(10)	8	CRITIC	(1.22)	1.32	
(11)	9	PERSCASH	(1.21)	1.32	
(12)	10	COURSAD	(1.18)	1.30	
(7)	11	MOTN	(1.31)	1.23	
(14)	12	NUMBOOKS	(1.06)	1.19	
(8)	13	TYPETEAC	(1.26)	1.03	
(25)	14	ENTERTAI	(.58)	1.03	
(17)	15	STAFSTUD	(.89)	1.00	
(9)	16	TECHS	(1.23)	.97	
(19)	17	LENGLOAN	(.83)	.83	
(26)	18	SPORT	(.55)	.78	
(18)	19	READSPED	(.84)	.77	
(15)	20	MEMORIZ	(.96)	.75	
(20)	21	SIMPBREV	(.77)	.71	
(21)	22	USELIBR	(.77)	.71	
(22)	23	POLITICS	(.66)	.67	

(Contd.)

Table 21 (Contd)

RANK ORDER		VARIABLE	MEAN SEVERITY		Persistent "severe" problems
(29)	24	INTERMEN (N=15)	(.44)	.65	
(23)	25	OPPSEX	(.66)	.62	
(16)	26	INTERWO (N=45)	(.90)	.59	
(38)	27	TTABLE	(.23)	.59	
(35)	28	WOMLECTS (N=45)	(.38)	.58	
(24)	29	FAMILY	(.64)	.58	
(34)	30	DIFFSTAF	(.38)	.55	
(31)	31	RELSTUD (N=46)	(.42)	.50	
(30)	32	EXPENG	(.43)	.49	
(33)	33	TRIBAL	(.39)	.48	
(28)	34	FRIENDS	(.46)	.45	
(37)	35	INTELSOC	(.31)	.42	
(27)	36	UNDTEXTS	(.49)	.37	
(32)	37	ROOMMATE	(.42)	.35	
(36)	38	ALCOHOL	(.35)	.29	
(40)	39	POLSTUD (N=50)	(.22)	.18	
(39th)	40th	CAMPsize	(.22)	.22	

The percentage of fourth-years experiencing a particular problem, is given in table 22 below. Once again, the fourth-year results are found to be very similar to those of the first-year, (the rank correlation was again .92). If the criterion of generality is applied, (one third of the population experiencing a problem), then no fewer than 24 out of the 25 adjustment problems which were a cause for concern in the first-year (table 11), are still a cause for concern in the fourth-year. Only "Understanding the English used in textbooks" has moved below the cut-off point; presumably as a result of the fourth-year's greater experience and practice of English. When the fourth-year results alone are considered, a total of 31 adjustment problems are a cause for concern, i.e. they are experienced by more than one third of the fourth-year population (see table 22). A further discussion of these results and the changes in generality between the first and fourth-years, will be found in chapter 9.

Table 22: The generality of the fourth-year adjustment problems

(First year results in brackets)

RANK ORDER		VARIABLE	% of fourth-years referring to problem		Persistent "general" problems
(2nd)	1st	DINING	(89.7)	96.6%	x
(3)	2	WORKLOAD	(79.4)	95.0%	x
(1)	3	OBTTEXT	(90.1)	93.4%	x
(5)	4	MARKSYST	(76.1)	91.7%	x
(14)	5	ACCOM	(58.3)	80.0%	x
(6)	6	CRITIC	(75.2)	78.3%	x
(8)	7	MOTN	(71.8)	70.0%	x
(11)	8	COURSAD	(67.3)	69.9%	x
(7)	9	TYPETEAC	(74.8)	68.4%	x
(13)	10	PERSCASH	(58.7)	68.3%	x
(4)	11	TECHS	(78.9)	66.7%	x
(10)	12	BOOKCASH	(68.2)	65.1%	x
(16)	13	STAFSTUD	(55.7)	65.0%	x
(24)	14	ENTERTAI	(38.8)	58.4%	x
(15)	15	NUMBOOKS	(56.2)	56.7%	x
(12)	16	MEMORIZ	(59.9)	51.6%	x
(9)	17	FORCPRG	(69.4)	50.1%	x
(19)	18	LENGLOAN	(48.4)	50.0%	x
(18)	19	INTERWO	(48.9)	47.0% (n=45)	x
(28)	20	INTERMEN	(30.8)	47.0% (n=15)	
(17)	21	SIMPBREV	(49.9)	46.6%	x
(21)	22	USELIBR	(45.9)	44.9%	x
(22)	23	OPPSEX	(40.2)	43.3%	x
(29)	24	SPORT	(30.6)	41.7%	
(20)	25	READSPED	(47.5)	40.0%	x
(33)	26	WOMLECTS	(24.4)	40.0% (n=45)	
(26)	27	FAMILY	(33.0)	38.3%	
(32)	28	DIFFSTAF	(24.4)	38.3%	
(30)	29	FRIENDS	(30.2)	36.6%	
(23)	30	POLITICS	(38.9)	35.1%	x
(27)	31	EXPENG	(31.4)	33.4%	
(35)	32	TRIBAL	(23.9)	33.3%	
(40)	33	TTABLE	(12.8)	30.0%	
(25)	34	UNDTEXTS	(38.0)	30.0%	
(31)	35	RELSTUD	(25.0)	28.0% (n=45)	
(36)	36	INTELSOC	(20.7)	23.3%	
(34)	37	ROOMMATE	(24.4)	23.3%	

(Contd.)

Table 22 (Contd)

RANK ORDER	VARIABLE	% of fourth-years referring to problem		Persistent "general" problems
(37) 38	CAMPSIZE	(15.8)	13.4%	
(39) 39	POLSTUD	(14.2)	12.0% (n=50)	
(38th) 40th	ALCOHOL	(15.7)	11.7%	

Conclusions of the fourth-year survey

The evidence presented in tables 20, 21 and 22, indicates that there is a considerable degree of persistence in Zambian student adjustment problems. Table 20, even after amendment for the higher proportion of "high-AP" students in the fourth-year, still shows that the fourth-years experience a similar number and severity of problem to the first-years and tables 21 and 22 indicate that it is the same type of problem that is experienced by both groups. As first and fourth-years are well matched along the majority of bio-data variables (tables 18 and 19), it is unlikely that any extraneous factors account for these results and consequently hypothesis 6 is confirmed - a large number of Zambian student adjustment problems are persistent and constitute a cause for concern.

The nature of the persistent problems is shown in the last columns of tables 21 and 22. From table 21, three problems which were a cause for concern in the first-year because of their severity, (DINING, OBTTEXT and WORKLOAD) are still found to be a cause for concern in the fourth-year. Similarly from table 22, another 21 problems which were originally found to be a cause for concern owing to their generality, are still found to be a cause for concern in the fourth-year. Thus, a total of 24 potent and generally experienced problems persist into the final-year at University.

The "serious" adjustment problems

In the ensuing chapters, only adjustment problems which are

"potent" (severity index greater than 1.5) or "general" (experienced by one third or more of the student population) in the first or fourth year will be considered. These problems will be termed, "serious". (The 24 persistent problems are included by definition, as they are the potent or general problems in the first and fourth year).

The serious problems on the potency criterion, are: DINING, OBTEXT, FORCPROG and WORKLOAD from table 10 and MARKSYST from table 21. With respect to generality, the serious adjustment problems are the 25 problems from OBTEXT to UNDTEXTS in table 11, plus INTERMEN, SPORT, WOMLECTS, FAMILY, DIFFSTAF, FRIENDS and EXPENG from table 22. (A description of these problems is given in table 10). Because the list of general adjustment problems includes the potent problems, it will be observed that a total of 32 problems fall within the serious category. Thus, eight problems (RELSTUD, ROOMMATE, TRIBAL, INTEL SOC, CAMPSIZE, ALCOHOL, POLSTUD and TTABLE) are not included in the subsequent discussion, because they are neither sufficiently potent or generally experienced to be a cause for concern.

A summary of the findings

All 18 hypotheses concerning Zambia student adjustment problems have now been investigated and a summary of the results is given in table 23 below.

Table 23: A summary of the findings.

Number	Findings	Page Reference
1.	Forty APs (see table 10) have been identified as the most important difficulties faced by Zambian students, following transition from school to university. 26 of the APs are academic in nature and 14 social.	62, 70-72.
2.	Some of the Zambian APs are typical of those experienced by students in other countries, others are peculiar to the Zambian campus.	45, 70.
3.	The average number of APs indicated by the Zambian students is 18.	75
4.	Five of the adjustment problems are sufficiently potent to be a cause for concern. These "serious" problems are DINING, OBTTEXT, FORCPROG, WORKLOAD (table 10) and MARKSYST (table 21). (see table 10 for a description of the APs).	71-73, 92-93.
5.	Thirty two of the APs are sufficiently general to be a cause for concern. These serious problems (which include the aforementioned potent problems) are: OBTTEXT to UNDTEXTS, (table 11), INTERMEN, SPORT, WOMLECTS, FAMILY, DIFFSTAF, FRIENDS and EXPENG (table 22).	73-74, 94-96.
6.	Twenty-four of the serious problems persist into the final-year at the university (tables 21 and 22). The 24 problems are included in the list of 32 general problems indicated above.	96
7.	Students with a low socio-economic background, experience significantly greater APs than high socio-economic students.	76-78.
8.	Students from rural areas experience significantly greater APs than urban students.	77-78.
9.	Students who have done their Zambia National Service experience significantly greater APs than students who have not attended ZNS.	77, 79.
10.	Younger students experience significantly greater APs than older students.	77, 79.
11.	Single students experience significantly greater APs than married students.	77, 79.
12.	Male students experience significantly more severe APs than female students.	77, 79.

(Contd.)

Table 23 (Contd)

Number	Findings	Page Reference
13.	Students from the school of Agriculture experience significantly greater APs than students from other entry schools.	78 - 79.
14.	Lozi students experience significantly more APs than Bemba students.	78
15.	All the student categories listed in items 7 to 14 above, experience significantly more academic problems than social problems.	83 - 84.
16.	The student categories in 7 to 14 above, do not find the academic sub-scale labelled "study-skills" to be particularly problematic.	85 - 87.
17.	The variables which are particularly influential with regard to the number and severity of APs are: the student's marital status, student age, the parents' education and income.	81

CHAPTER 8

THE AMELIORATION OF THE ADJUSTMENT PROBLEMS

This chapter is primarily involved with finding ways to help students overcome their adjustment problems; particularly those problems which have been defined as "serious" owing to their potency or generality. A list of the serious problems was given at the end of the last chapter. The first stage in the process of amelioration, is to identify as precisely as possible, the causal factors for each of the problems.

The causes of the adjustment problems

The majority of the information concerning the causes of the student's problems, was obtained from the completed first and fourth-year questionnaires (P. 54). The follow-up interviews also helped to fill-in some of the informational gaps - see P. 104. Table 24 below, indicates the frequency with which first and fourth-years, refer to a particular causal factor. It was possible to combine the first and fourth-year causes, because the results for the two population samples were very similar. In 29 out of 40 variables, the same prime reason was given by both populations and in 7 out of the 11 remaining variables, the prime reason given by the first-years, was placed second by the fourth-years, or vice versa.

The first item in table 24, was "the University dining facilities". The students indicated that these were primarily a problem, because of the lack of variety in the menu (196 students referred to this causal factor) and because of the poor cooking of the food (195 students referred to this cause). The other reasons, queueing for meals (135 references), the quality of the food (131 refs.), hygiene (70 refs.) and the size of the meals (26 refs.), were relatively less important. In the case of the second most serious problem ("obtaining the prescribed

texts") the most frequently indicated reason was "insufficient copies in the library," (215 refs.). The prime causes for the other "serious" adjustment problems, are stated verbatim in the table below. Other causal factors are indicated in the right hand column and can be identified by consulting appendix C.

Table 24: The causes of the adjustment problems indicated by first and fourth-year students combined.

	The 32 "serious" adjustment problems (APs)	The most frequently given cause of the AP.	No. of refs. made (Max=302)	Refs. made to other causes (see appendix C).
1.	DINING	"The menu lacks variety."	196	Cause B - 195, C-135, D-131, F-70, A-26.
2.	OBTTEXT	"There are insufficient copies in the library".	215	B-180, D-82, C-55.
3.	FORCPRG	"It has lowered my general academic performance".	103	D-86, B-84, C-58, E-26, F-23.
4.	WORKLOAD	"My work-load is too heavy".	119	C-104, E-84, D-75, B-6.
5.	MARKSYST	"Lecturers have different standards of marking."	135	A-80, F-51, C-44, E-41, D-3.
6.	TECHS	"I have specific difficulty with regard to organising a study schedule."	86	A-74, F-65, D-58, B-35, C-33, G-17.
7.	CRITIC	"I do not have time to study the material in sufficient depth."	135	D-69, C-28, A-26.
8.	TYPETEAC	"Lecturers talk too quickly".	96	G-78, E-69, D-52, F-31, C-28, B-6.
9.	MOTN	"I am not following the academic programme I want to follow."	75	H-55, C-34, F-31, D-27, B-19, G-17, I-11, E-2.
10.	BOOKCASH	"The university allowance to buy books is too small."	157	B-63, C-45.
11.	COURSAD	"Fellow students often give misleading advice."	63	E-61, B-59, D-53, C-49, I-29, H-28, A-27, F-21.

(Contd.)

Table 24 (Contd)

The 32 "serious" APs.	The most frequently given cause of the AP.	No. of refs. made (Max=302).	Refs. made to other causes (see appendix C)
12. MEMORIZ	"I have insufficient time to think deeply about the work I am doing."	117	D-36, A-31, C-14.
13. PERSCASH	"The amount of money I receive from my sponsors is too small."	124	B-59, C-46, D-8, E-5.
14. ACCOM	"The maintenance of the Halls of Residence is poor."	110	C-59, A-53, G-47, D-30, H-27, E-21, B-12.
15. NUMBOOKS	"The subjects I am studying involve me in referring to many different books."	106	A-51, C-51.
16. STAFSTUD	"The opportunities to meet staff with regard to academic matters are too few."	87	F-58, B-46, A-15, E-14, C-10.
17. SIMPBREV	"It is difficult to write simply and briefly in a second language."	52	A-43, D-17, C-11.
18. INTERWO	"They distract me and interfere with my studies." (N=235)	48	D-45, B-29, E-14, A-6.
19. LENGLOAN	"I need to read the books fully and not just refer to them."	72	C-69, A-32.
20. READSPED	"I need training in how to read quickly."	66	C-41, B-15.
21. USELIBR	"The Introduction to the Library course is not adequate."	43	A-32, D-24, B-19, E-19.
22. OPPSEX	"I was educated in a single-sex school."	58	C-38, E-20, D-7, A-4.
23. POLITICS	"Political influence does not allow you to think freely."	39	A-35, B-28, C-19.
24. ENTERTAI	"There is too little and I am bored."	49	D-37, B-24, E-15, C-11.
25. UNDTEXTS	"The vocabulary in the books is too complicated."	45	C-41, A-33, D-3.

(Contd.)

Table 24 (Contd)

The 32 "serious" APs.		The most frequently given cause of the AP.	No. of refs. made (Max.=302)	Refs. made to other causes (see appendix C).
26.	INTERMEN	"Men students expect women students to be less intelli- gent." (N=67)	9	B-9, G-9, D-8, C-1, E-1, F-0.
27.	SPORT	"There is too little and I am bored."	47	B-15, C-14, D-14, E-4.
28.	WOMLECTS	"They over-react to their newly acquired status." (N=235)	47	B-15, A-8, C-4.
29.	FAMILY	"No one in my family gives me support while I am at university."	46	F-19, B-16, G-13, E-8, E-6, C-6.
30.	DIFFSTAF	"Staff from different countries have different standards."	41	B-24, D-22, C-2.
31.	FRIENDS	"The opportunities for mixing socially are too few."	37	E-32, F-24, A-5, D-4, B-2.
32.	EXPENG	"I have to think about what I am going to say before I say it."	40	A-34, B-22, E-18 D-16, F-13.

The follow-up interviews

The next stage in the process of problem amelioration was to conduct a number of follow-up interviews. The main function of these interviews was to obtain suggestions from the students as to how they thought their problems could be best overcome. Thus, the nature and causes of each problem were studied and a number of questions composed to form the basis of the interview programme, e.g. with regard to the dining facilities (table 24, item 1), the interviewees were asked, (1) "What type of food would you like to see served up in the dining halls?" and (2) "What particular complaints do you have about the cooking of the food?" A list of the other more important "set questions" which were used in the interview sessions, are given in appendix D.

In addition to the above, the follow-up interviews fulfilled three other important functions: (a) they helped to fill in any informational gaps concerning the nature or causes of individual problems, (b) they provided a measure of the reliability of the main survey data, and (c) they gave some insight as to why "high-AP" students experienced greater problems.

A total of 54 interviews were conducted with first, second and fourth-year students. The second-year students were used because the first-year sample had moved into the second year by the time the interviews were conducted. The fourth-year students were included, because they had spent a greater length of time in the University and consequently might have a better idea of how some of the problems could be solved. Forty-four of the interviewees were men and 10 were women.

The individual interviews

The first 15 students were seen individually. These students had previously completed the main questionnaire and indicated on it that they were willing to be interviewed (see appendix C). Representatives of all four entry schools were included in the sample. The procedure for the interviews was to use the student's completed questionnaire as a focal point and to go through each problem in turn, asking the set-questions, elaborating the student's response and requesting suggestions as to how the problems could be overcome. The interviewer recorded the responses on a purpose-designed interview record-sheet.

The reliability of the main survey questionnaire

The reliability of the questionnaire returns were checked by comparing the student's interview response with his previously recorded questionnaire response. Out of a total of 95 scrutinised items, 87 showed very little or no variation, a further five could be accounted for by changes in the student's circumstances, (e.g. the student had overcome his initial difficulty) and three items would probably have been discarded as unreliable.

Thus, a high student reliability of about 97% is indicated, which concurs with the serious manner in which the students were observed to complete the questionnaires and conduct themselves at interview.

The group interviews

One disadvantage of the individual interview procedure, which had become apparent as the interviews progressed, was the lack of anonymity afforded in the face-to-face situation. The students were reluctant to critically evaluate the existing university structure or give any information which they considered might be prejudicial to themselves. This reluctance was exacerbated by the periodic confrontations which took place between university administration and students, during the course of the research study. Despite assurances of confidentiality, changes of interviewer, the introduction of coffee-breaks, etc, the problem was not satisfactorily overcome and it was consequently decided to try a different interview procedure.

In the revised interview format, small groups of about five students had the set-questions read out and explained to them by the interviewer. They were then asked to record their own responses on an amended interview record-sheet. Individual students were encouraged to enter into a discussion of the adjustment problems and suggest ways in which they could be overcome. The interviewer took no part in the recording of responses. This "half-way house", inbetween group administration of a questionnaire and the face-to-face interview, was found to be a considerable improvement on the original procedure. The provision of anonymity for the student, whilst preserving some flexibility and rapport for the interviewer, resulted in a higher total number of responses per student, more candid comments and a large number of appropriate suggestions for the amelioration of adjustment problems. A total of 30 first-year and 9 fourth-year students, were subsequently interviewed using this revised procedure.

Student suggestions for ameliorating the problems

The suggestions given by the 54 students, for the amelioration of their problems are shown in table 25 below. First, second and fourth-year responses were not analysed separately, owing to the considerable overlap that existed between their responses.

Table 25: Suggestions made by the interviewed students for the amelioration of their problems

	The 32 "serious" APs.	Suggestions for amelioration (Frequency of referral to suggestion. Max=54)
1.	The dining facilities	A greater variety of vegetables (21), meat (9), fruit (7), eggs for breakfast (6). More care to be taken over cooking of food (27), (e.g. chickens undercooked, nshima "lumpy"). Improve basic quality of food (4). Reduce queueing for meals (7). Establish independent caterers (30). Establish student cooking facilities? Yes (17), No (14)
2.	Obtaining text-books	The University should spend more money on books (25). Library stocks more important (14) than bookshop stocks (8)
3.	Being forced into an academic programme	Select students after a general first year at the University (12). The dissemination of information on UNZA courses to secondary schools, should be improved (18), [student would try to revert to original career (15), keep new career (6)]
4.	The workload	University courses should cover less material and concentrate on study-in-depth (21) [vice-versa (9)]. More emphasis should be placed on continuous assessment (21), than final exams (8). [Laboratory work useful (18), not useful (4)]
5.	The University marking system	The amount of feedback from staff concerning test and exam results, should be increased (9), [certain groups of students are marked preferentially e.g. females (13)]
6.	The technique of university learning and studying	First-years should have a special half-course in university study-skills (34), (organising a study schedule, obtaining information from books, revising for exams, note taking, seminar work, etc.). Secondary schools need to prepare students more adequately for university life (23), (8 students felt that secondary schooling prepared them adequately)
7.	Adopting a "critical" approach	(allow more time to study in depth: the majority of the main student sample suggested this solution, see item 4. A majority of students, (25:8) did not want to see the university 4 year programme extended)

(Contd.)

Table 25 (Contd)

The 32 "serious" Aps.	Suggestions for amelioration (Frequency of referral to suggestion. Max=54)
8. The type of teaching given by staff	More time should be given to: tutorials (25), seminars (8), lectures (7), practicals (7). Lecturers should pay attention to: speaking too quickly (9), poor presentation methods; e.g. lecture read out, material poorly organised, no illustrations (6). <input checked="" type="checkbox"/> Lecturers not interested in the material they teach (4) <input checked="" type="checkbox"/>
9. Motivation to work	General motivational level of students thought to be sufficiently high (28), disagreed (5). Social distractions include: opposite sex (11), beer (2), discos (2), sport (2)
10. Money for books	Increase students' book allowance (K85 p.a. (av.) at present): average of K145 p.a. suggested (N = 36). Termly payment (26), preferred to annual payment (10) (Fourth-years tended to prefer annual payment).
11. Getting advice on which courses to take	Early, accurate advice required from: staff advisors (31), school handbook (15), <input checked="" type="checkbox"/> fellow students (8) <input checked="" type="checkbox"/> . Important to have UNZA course information while still at school (28), disagreed (2)
12. Understanding not memorization of academic material	(allow more time for comprehension, a majority of the main student sample complained of "insufficient time"). Cover less material in more depth (see item 4). (21 students thought that previous schooling encouraged comprehension, and 17 "memorization")
13. Money for personal needs	Increase student's personal allowance (K250 p.a. at present), average of K400 p.a. suggested (N = 34). Establish a university shop on campus (34), (clothes, toiletries, basic food), (a majority of students (24:8) thought that most parents/relatives were not financially able to contribute to students up-keep)
14. Accommodation	Introduce (or repair): individual study lamps (21), air conditioning (6), hot water for washing (7), wardrobe locks to secure personal belongings, (10). Renew broken light bulbs promptly (11). Introduce rules to curtail noise at night-time (8). <input checked="" type="checkbox"/> Improve cleaning of rooms and toilets (15) <input checked="" type="checkbox"/>
15. The number of books that can be borrowed	Increase the number of books that can be borrowed from the library: from 4 to 6 suggested (N = 43)
16. Staff/student interaction	Increase the number of office-hours reserved by staff for interaction with students: 7 hours per week suggested (N = 36). Introduce staff/student social links in: sporting activities (7), social drinking (6), (9 students thought that the existing social links were satisfactory)

(Contd.)

Table 25 (Contd)

	The 32 "serious" APs.	Suggestions for amelioration (Frequency of referral to suggestion. Max=54)
17.	Writing simply and briefly	Introduce an (optional) half-course in written (spoken) English (21), (13 students disagreed). [Lengthy/complex essays, get higher marks (9), disagreed (20)]
18.	Working alongside women students	Have more coeducational secondary schools (20), (14 students disagreed), (most students, 20: 12, did not want the female/male university ratio increased. 3 women in this sample wanted the ratio increased, 3 did not)
19.	Library loan- period	Increase the library loan period: from 2 weeks to 2.5 weeks suggested (N = 40). Extend library opening-hours: in the evening from 22.00 - 23.00 hours (10), in the mornings from 08.00 to 08.30 hours (5) and at weekends - Sat.P.M. - (5). [Opening-hours satisfactory as they are (14)]
20.	Reading speed	(Special half-course including study of reading skills, suggested - see item 6)
21.	Using the library	Improve the "Introduction to the Library" session by: having smaller student groups (8), having a "refresher course" after a short period at the university (5). Make available a concise, simple, written guide to the library (6)
22.	Making friends with the opposite sex	(Have more coeducational secondary schools see item 18. 30:2 students thought that women students prefer men-friends from outside the university)
23.	Student politics and work	Refrain lecturers from proselytizing during univer- sity lectures and seminars (15 students felt that certain lecturers "imposed" their political views, 14 disagreed)
24.	Campus enter- tainment	(A majority of the main student sample said there was too little entertainment and they were bored). Increase the number of: films (13) spectator matches (13), drama (8), cultural dances (6), discos (6). (32:2 students would like to see the university introduce regular transport facilities to the city- centre)
25.	Understanding text-books	(students reported approx. 1 book in 3 to have a "vocabulary which was too complicated", N = 15). Lecturers should use books with an appropriate vocabulary and provide glossaries of difficult terms. (Zambian academics need to write more text- books)
26.	Working along- side men students	(Have more coeducational secondary schools, see item 18)
27.	Sporting facilities	(a majority of the main student sample said there were too few). Build a swimming pool (22). (No other single facility was given consistent support)

(Contd)

Table 25 (Contd)

The 32 "serious" APs.		Suggestions for amelioration (Frequency of referral to suggestion. Max=54)
28.	Women lectures	(6 students thought there should be a larger proportion of women lecturers, 25 disagreed)
29.	Family and work	Increase students' personal allowance, see item 11. <u>[</u> Students most frequently return home because of financial problems (8), family sickness (6), boredom (4) <u>]</u>
30.	Staff background	Increase the proportion of qualified Zambian lecturers (17), (8 students disagreed)
31.	Making friends	(17:19 students had experienced feelings of "loneliness" since coming to the campus). Increase the "social" facilities on campus, see also item 24 and 27
32.	English expression	(Introduce an optional half-course in spoken (written) English, see item 17)

Reasons for the "high-AP" group's problems

In addition to providing information on the 32 serious adjustment problems, the interviews also provided an opportunity to ask members of the high-AP groups, why they experienced greater problems. The answers given by the students are shown in table 26 below:

Table 26: Reasons given for "high-AP" students experiencing greater APs.

"HIGH AP" GROUP		REASONS GIVEN FOR GREATER APs BEING EXPERIENCED
1.	Students from a "low" socio-economic background. (parental: education, income and occupation)	These students consider that financial problems are the major hindrance to their university adjustment. Lack of encouragement and stimulation (from less educated parents) are also mentioned by the students
2.	Rural-background students (cf. Urban background students)	Rural-background students are not used to the "urban life-style" of the campus; they come from a relatively poor educational background and are often less affluent than urban students
3.	Students who completed ZNS (cf. students who have not done ZNS)	ZNS students have had their academic education interrupted. During ZNS they are "brainwashed", "victimized", allowed no academic stimulation taught very few skills and not allowed to think for themselves

(Contd.)

Table 26 (Contd)

"HIGH AP" GROUP		REASONS GIVEN FOR GREATER APs BEING EXPERIENCED
4.	Older students (21 years or over)	Older students feel "more out of place," they do not adapt as well to the campus social life and are more concerned about finding a marriage partner
5.	Single students	Married students are "content ";wives were made responsible for looking after family. (Single students sexually frustrated)
6.	Male students	Male students are more anxious to succeed, are concerned about their career and are "distracted" by females. Females are more phlegmatic and receive more academic assistance from lecturers and "bright" students
7.	Agriculture students (cf. the other 3 entry schools)	Agriculture students have little agricultural training before reaching UNZA and are overworked compared with other students
8.	Lozi students (cf. Bemba students)	Lozi students do not integrate as well as other students and come from a predominantly rural background (see item 2)

Table 26 concludes the empirical part of the study of Zambian student adjustment problems. A total of 440 students and 31 staff had been used to provide the data. The final section of this thesis contains a discussion of the research results and a number of recommendations for helping the students overcome their problems.

CHAPTER 9

DISCUSSION AND RECOMMENDATIONS

The previous chapters have indicated that Zambian students are little different from students in many other parts of the world in that they do experience adjustment problems when transferring from school to university and many of the problems experienced, are similar to those reported by other university graduates. Thus, the common student problems discussed in chapter 2 - motivation, lectures, language, loneliness, male/female interaction and residency, are also referred to by the Zambian student community. Motivation for instance, was a relatively "serious" Zambian problem, being referred to by over 70% of the student population and having a severity rating of 1.3 (tables 11 and 10). The main reason the Zambian students gave for this problem-"not following the (desired) academic programme", is probably atypical of most university students, although the second most frequently given reason, "social distractions" (table 24, item 9, option H) is often mentioned in the research literature (P. 17).

Deciding which adjustment problems constitute a cause for concern, because of potency or generality, is a matter for individual judgement. In this study, a problem was considered "serious", if the average rating given to it by the students, was greater than 1.5, (where 2 = "problem", 1 = "slight" problem). If the student's average response was nearer a "slight" problem (or less), then the difficulty was not considered serious, but simply an "educational experience", helping to prepare students for the "vicissitudes of the world at large" (P. 12). The most potent problem, mentioned by the Zambian first and fourth-year students, was the university dining facility - table 21. The average response for both populations, was that it constituted "a problem" and the main reasons for this were (a) the lack of variety in the menu, and (b) the poorly cooked food. Another four problems were included in the serious category, when the potency

criterion was applied (table 23).

In respect of generality, an arbitrary cut-off point of one third of the student population was chosen. If more than one in three students experienced a particular problem, then it was considered an undesirable situation for both academic and social reasons and a potentially serious situation, because it could lead to student unrest (P. 12). Some readers might feel that this cut-off point has been set too low and one in two students experiencing a particular problem, is a more realistic criterion. This decision can be left to the individual. In the discussion that follows, 32 adjustment problems are discussed; the result of applying the 1 in 3 criterion (table 23). Only 16 first-year adjustment problems need to be examined if a 1 in 2 criterion is applied, (table 11), or the reader can make his own decision based on the information presented in table 11. The most generally experienced Zambian first-year problem, was "obtaining the prescribed texts for course work" (table 11). It was mentioned by 9 out of 10 students in the first-year population sample.

It is not possible to compare the overall size of the Zambian student's difficulties with those of other undergraduates, owing to the non-existence of comparative research data; (as previously indicated, some overseas data will be available in the near future). However, there is no doubt that Zambian students do refer to a considerable number of problems. The average number of adjustment problems experienced by the first and fourth-years combined, is 19, (table 20). Furthermore, the student's problems are persistent. No fewer than 24 of the serious problems listed in tables 10 and 11, exist as serious problems in the fourth-year, (tables 21 and 22). Adjustment problems should be transient and diminish as the students become familiar with the university and develop new skills, but these problems are still as potent and generally experienced after three years on the campus. One reason for this could be that

the predominantly academic set of problems experienced by the Zambian students, have become more poignant in the last two years of the university; the grades obtained in the last two years determine the classification of the degree, (see MARKSYST, P. 123). The majority of the students in the fourth-year are in the final phase of their university education and they are keen to obtain a good degree in order to promote their career prospects. The strength of this argument is somewhat reduced when it is noted that the fourth-year survey was conducted at the beginning of the academic year and the first-year survey at the end of the year. The students however, are used to being assessed throughout the year, (the "continuous assessment" system) and the great importance attached by the students to the final examination results could be a crucial factor in raising the potency and generality of fourth-year problems - see also WORKLOAD, P. 121.

It is also possible however, that the overall size of the student's difficulties, has been exaggerated. The problems could be "artifacts", stimulated by a list of hypothetical difficulties given in a questionnaire. There may be a certain amount of exaggeration on the part of some students (and staff), but the validity of their responses is supported by a number of concurrent factors. Firstly, there is the incidence of student unrest. Undergraduates who are happily adjusted are unlikely to confront the university authorities as frequently as they do at the University of Zambia (P. 11). Secondly, the experience of persons in close everyday contact with the students (staff, counsellors, administrators), indicate that the students do have numerous problems (see for instance, Tembo's study "The need for Guidance and Counselling for female students at the University of Zambia," 1980) and thirdly, the degree of student wastage from the university (P.9) will include students who have experienced serious adjustment problems.

No information regarding the predictive validity of the data is yet available, but this is an obvious area for future research. For example:

(1) Are the students who experience severe adjustment problems (or large numbers of problems), more likely to drop-out? (2) Do the above students achieve as much academic success, as "low-AP" students? (3) Are the older, single students from a low socio-economic background (identified on P. 81), more likely to subsequently drop-out? etc., etc..¹

The large number and severity of adjustment problems experienced by Zambian undergraduates, was predicted in chapter 2. Some of the reasons for this expectation, were the student's language difficulties, school/university teaching-method differences, financial constraint and considerable numbers of students from a low socio-economic or rural background, (P. 30). The proportion of students with a rural background turned out to be smaller than expected from the national statistics (P. 68), but rural students were found to experience greater adjustment problems than students from the urban areas (table 12). The reasons given by rural students in the follow-up interviews, were similar to those presented on P. 30, i.e. problems of adjusting to the urban life-style of the university, poor rural educational facilities and less affluence, compared with urban students (table 26).

Students from a low socio-economic background were also found to experience greater adjustment problems and as predicted in the discussion on P. 29, a high proportion of Zambian students do have poorly educated/low-income parents. (Family size however, was not found to be related to the number or severity of adjustment problems; table 12, item 9). In the follow-up interviews, the students were asked which aspect of their socio-economic background - parental education, income or occupation, had the most affect on their education. The majority emphasized parental income, followed by education, (table 26).

(1. Footnote: The content validity of the questionnaire is beyond reproach, as the adjustment problems were originally generated by the students and staff themselves - see chapter 4)

Somewhat contrary to expectations, student language difficulties were not found to be as important as previously thought. The variables associated with language, EXPENG, SIMPBREV, READSPED and UNDTEXTS all fell within the "serious" category, but the highest position achieved by any one of them in the rankings of potency or generality, was SIMPBREV. It was the 17th most generally experienced problem, for the first-years (Table 11), i.e. there are many other difficulties which the students consider to be more important. As might be expected, all the above variables are less important in the fourth-year than in the first, indicating that the student's expression and comprehension of English, improves as he progresses through the university. Another result which confirms the comparative unimportance of the language problem, was the finding that students who used their mother tongue on campus, did not have greater problems of adjustment than students who conversed in English all the time (table 12). Presumably the former students were sufficiently competent in English as well as their mother tongue, not to experience more academic or social adjustment problems.

Chapter 2 also predicted that the difference between school and university teaching methods, would cause problems of adjustment. There are a number of variables associated with university teaching, for example TYPETEAC, TECHS, CRITIC and MEMORIZ and they do indeed appear problematic for the students. The first three variables are amongst the top 10 difficulties for first-year students in both severity and generality (tables 10 and 11). MEMORIZ is ranked a little lower down. There is some diminution of the problem, as the students progress from the first to the fourth-year. This is presumably the result of an increasing familiarity with university study-methods and the requirements of lecturers. It should be noted however, that even MEMORIZ was still acknowledged by over 50% of the fourth-year population (table 22).

One final predicted area of difficulty for the students, was finance and the rankings of the variables BOOKCASH and PERSCASH (tables

10 and 11) indicated the keenness with which the students experience these problems. The variables are probably not as highly placed as might have been expected from the results of the Preliminary Survey (see tables 3 and 4), but a revision of the student's book and personal allowances took place shortly after the preliminary survey had been completed.

The previous discussion has ranged over the first 11 hypotheses of chapter 3, but has not yet covered the four hypotheses that were subsequently rejected. Contrary to expectations, non-ZNS, younger, married and female students were found to have significantly less adjustment problems (hypotheses 11, 12, 14 and 15). A lack of "maturity" (P. 36) was the reason given for expecting the first two categories of student (and non-boarding school students), to experience greater adjustment problems. This particular intervening variable however, is either not relevant, (i.e. non-ZNS and younger students are sufficiently mature for university life) or is negated by other more powerful factors, (e.g. those given in table 26). Both points of view are probably valid. For instance, most Zambian students have experienced a considerable amount of autonomy during their upbringing. The Zambian "extended family" has made them relatively independent of their mothers and fathers and taught them to fend for themselves. This experience would be of assistance when they first enter the university. Conversely, older students in the follow-up interviews, indicated that they sometimes felt "out of place" and ZNS students pointed to a number of factors which they felt had made it more difficult for them to quickly settle into university life, (see table 26, item 4).

An exception within the older category of undergraduates was the group of 15 students who were married. It was originally thought that this small group (average age 29.6 years) would experience greater problems because they had to "attend to their family needs at the same

time as pursuing their university career", (P. 37). (All the married students had children, ranging from 1 to 7 and averaging 2.8). Contrary to expectations however, the married students were found to have significantly less adjustment problems than single students. The mean number of problems for married students was 14.9 (table 12, item 14); the lowest for any of the different student categories. The follow-up interviews indicated that the married students had successfully delegated their family responsibilities to their wives and were thus able to concentrate fully on their university studies (table 26). The married students also felt that they were more "happy and contented" than their single counterparts, because they had the background comfort of a wife and children (see P. 37).

The evidence concerning sex-difference and adjustment problems, was indicated in the Review of Literature, to be somewhat contradictory (P. 37). It was thought that in Zambia where women usually occupy a subservient role, the female undergraduates would have more problems of adjustment. This was not found to be the case. Women students experienced significantly less severe adjustment problems. (There was no difference in the number of problems experienced). Some possible reasons for these results were given in the follow-up interviews, (table 26, item 6). The men students claimed that there was more pressure on them to succeed and consequently they were "hyper-sensitive" to academic problems. The women on the other hand, adopted a phlegmatic approach to university life. They quietly enjoyed their "privileged" position and appreciated the attention given to them by the men.

The three remaining hypotheses, were concerned with the student's scholastic record, the School of Education and tribal background. Considering the well documented relationship between university success and previous scholastic performance (P. 38), it was rather surprising that the Zambian undergraduate adjustment problems were not related to the

divisions achieved by the students in their grade 7, form 3 and Cambridge School Certificate examinations. Either the students are a very homogeneous group, or more probably, the divisions are inadequate discriminators of scholastic performance, and a more detailed study of the student's academic background would reveal the generally recorded inverse relationship between school record and university adjustment problems.

The hypothesis that School of Education students would experience greater adjustment problems (P. 39) was not supported, despite the considerable number of students in Education who would prefer to be studying elsewhere. It would seem that the students rapidly recover from their disappointment of not studying in the School of their first choice and soon settle down to the all important task of obtaining a university degree. In addition, a number of students indicated in the follow-up interviews, that they considered being placed in an alternative School, a temporary set-back to their plans and they would try to revert to their original career, after they had left university. This problem is examined again later in the section entitled "being forced into an academic programme" (P. 120).

The relationship between adjustment problems and tribal background, revealed only one statistical difference. The Lozi students had a significantly larger number of problems compared with the Bembas. The information subsequently obtained on this relationship (from Lozis and other tribal groups, table 26) indicated that the Lozis sometimes found it difficult to integrate as fully as students from other tribes. They tended to "stick together", speak their own language and be more conscious of their cultural heritage. In general however, the tribal differences of the undergraduates, does not seem to cause too many problems on the Zambian campus. The variable "TRIBAL" which was included in the questionnaire to investigate this factor, was not found to be a "serious" problem (see tables 10 and 11).

The next section moves on to discuss the nature of the 32 serious adjustment problems and to suggest ways in which the difficulties might be overcome. The order of presentation of the problems, will be the same as that given in table 25, (i.e. the five serious problems ranked according to potency, followed by the 27 serious problems ranked according to generality).

(1) The dining facilities (DINING) This is the most serious problem experienced by the undergraduate population. It is the most potent problem for both first and fourth-years and was experienced by over 90% of the combined first and fourth-year populations (tables 21 and 22). It is the only social adjustment problem in the first 12 serious adjustment problems. The major student complaints, concern the monotony of the diet and the poor cooking of the food (e.g. "nshima is lumpy", chickens/meat under-cooked" or "burnt"). There were also a large number of complaints about the length of the meal queues (135 references, table 24) and the basic quality of the food (131 refs). The hygiene of the canteens was not particularly criticised and only a very small minority of the students complained about the size of the meals.

The dining facilities at the university are a prime cause of discontent for the student body and have led to major disturbances in the past (P. 11). Serious efforts should be made to relieve the monotony of the diet by including a greater variety of vegetables, meat, fruit etc. (see table 25). Culinary skills need to be upgraded and the quality of the food improved. Because of the seriousness of the dining problem, it is probably necessary to institute a further, in-depth study of the catering facilities, using the above information as a starting point.

(2) Obtaining text-books (OBTTEXT) This is the second most serious problem for the Zambian undergraduate population. It ranks only slightly below dining facilities for potency and is again experienced by

over 90% of the total population sample (tables 21 and 22). Virtually all the university courses are affected by the shortage of books. The simple solution to the problem, is for the university to allocate more money for book purchases. Unfortunately however, this might not be feasible, especially where the texts have to be bought in foreign currency. One possible answer, might be to acquaint an overseas aid-donor with the predicament of the university students as indicated by this survey and have book purchases included on an aid programme. A certain amount of assistance has been obtained in the past, e.g. from the British Council and World Bank, but the amount of help received is nowhere near sufficient to meet the continuing needs of the students. Until additional funds are made available, the University should give preference to library acquisition (as opposed to bookshop acquisition, table 25, item 2) and institute a scheme for the recycling of second-hand books.

(3) Being forced into an academic programme (FORCPROG)

This problem was found to be the third most potent difficulty experienced by the first-years. Interestingly it was ranked much lower for generality (9th), showing that those students who do experience the problem, find it to be particularly poignant. Understandably, the fourth-years rated it a less serious problem than the first-years, (tables 21 and 22). A number of students (34% of the total sample; table 24 item 3), referred to the debilitating effect, "being forced into a particular programme" had upon their subsequent performance. This was discussed with respect to those Education students who would have preferred to study in another School (P. 118). Eighty-six students also referred to their careers being "frustrated" (table 24, item 3D), but as mentioned before, some of these students would probably try to revert to their originally intended career after they had left university (table 25).

It is very difficult to see any alternatives to the quota-system operated by the University, when there are man-power requirements in

"unpopular" professions. An obvious (but perhaps impracticable) long-term solution, is to improve the status of these professions by increasing salaries. One proposal for improving the quota system which was taken up with some enthusiasm in the follow-up interviews, was to allocate students to different schools after a preliminary general year at the university. This suggestion has a number of advantages: (1) It would enable students to make a more informed choice, regarding the University School they should enter and the subsequent career they should embark upon. The problem with the present system is that the secondary schools are often ignorant of the content and structure of the University courses and the amount and quality of advice received from the teachers with regard to careers, is heavily criticised by some of the students (the follow-up interviews; table 25, items 3 and 11). (2) It would also enable the University to identify the most suitable students for the various University Schools. Entry into the Schools would be on the basis of the first-year performance and would consequently give all students an equal chance of entering the School of their first-choice. (3) Presuming that the preliminary year extended the length of existing programmes by one academic year, then the students could be given more time to study in-depth. "Time pressure" was a constant complaint made by students in both the questionnaire surveys and follow-up interviews, e.g. table 24, item 7: "I do not have time to study the material in sufficient depth", and item 12: "I have insufficient time to think deeply about the work I am doing". (4) A preliminary general year would enable additional courses which are recommended later in this section, to be incorporated into the existing University programme (see Study Skills, P.124 and Written and Spoken English, P.132).

(4) The Workload (WORKLOAD) The workload was a potent, generally experienced problem, particularly for the fourth-year students. The

severity index of 1.52 for the first-years increased to 1.75 in the fourth-year and the generality of the problem increased from 80% to 90%, (tables 21 and 22). This is in keeping with the previous comments made with regard to the general level of problems experienced by the fourth-year students (P. 112). The fourth-years are under pressure to obtain as good a degree as possible and consequently are sensitive to a wide range of academic problems.

The main reason the students gave for their heavy workload, was that the "assignments all (came) at the same time" (table 24, item 4c; P. 26) and in the follow-up interviews, they indicated that lecturers should coordinate their activities more, in order that assignments could be staggered. It should be noted that these comments were not criticisms of the concept of continuous assessment, as a large majority of students in the follow-up interviews, indicated that they preferred continuous assessment to final examinations (table 25, item 4).

There are two alternative solutions for an excessive academic workload. The first is to reduce the amount of material the students have to study. This is the solution which would probably be favoured by the students (e.g. "cover less material and concentrate on study-in depth", table 25, item 4; indicated by 21 students in the follow-up interviews), especially as the majority of students do not want to see the university four-year programme extended (table 25, item 7). However, employers of University graduates and University lecturers are likely to be concerned about any proposal which adversely affects the quality of the University degree. The other alternative is to increase the amount of time available to the students, either by increasing the length of the academic year, or as mentioned in the previous section, by extending the length of the degree programme by a year. At present, there is not enough time for the students to digest all the material they are presented with at the university and as a result they feel "pressurised." The origins of the problem might

be traced to the Lockwood Commission (P. 23). A four-year degree programme is probably too short to compensate for the "O" level entry-point of the students into the university.

(5) The University marking system (MARKSYST) This is the last of the problems in the serious category when the potency criteria alone is applied (table 23). The fourth-years found it to be more of a problem than the first-years, probably because they were particularly aware of the influence the grades would have on their final degree classification. The students' main criticism of the marking system, was the difference in the standards applied by different lecturers (see also DIFFSTAF). Some lecturers were considered an "easy option" while others were more severe and "A" grades were difficult to achieve. This not only affected the students' final degree classification, but also influenced those students in large courses, where more than one tutor is involved in assigning grades. Other complaints were: (1) Lecturer bias toward certain students, [26% of the first and fourth-years referred to this problem, (table 24, item 5A); 24% of the follow-up interviewees, indicated that it was the female students who were given preferential marks (table 25, item 5)] 7, (2) Inadequate feedback from staff concerning test and examination results.

It is beyond the scope of this thesis to go into a detailed analysis of the different marking systems used in the University of Zambia. Indeed it might be this diversity of systems, that contributes to the differing standards of the lecturers and the University should endeavour to impose a more uniform system throughout the various schools. Individual lecturers can also bear in mind the grievances indicated by the students and if possible institute local changes which will help lead to their amelioration.

(6) The technique of university learning and studying (TECHS)

The technique of university learning and studying was the fourth most generally experienced adjustment problems for the first-year students. The rankings shown in tables 21 and 22 indicate that it is less important for the fourth-years (i.e. these students had acquired some of the necessary study-skills) but nevertheless, a surprisingly high proportion of final-year students still experienced difficulties, (67%, table 22). The major problem-areas for the students were: (1) organising a study schedule (table 24, item 6), (2) obtaining information quickly from books (table 24, item 6F), (3) revising for examinations (item 6D) and (4) note taking (item 6C).

The differences between the teaching methods used in the schools and in the University had been expected to produce problems for the students (P. 25). It was also noted that Zambian students do not have the benefit of a "sixth-form" type of training, with its emphasis on independent study. The students themselves indicated in the follow-up interviews, that their secondary schools had not prepared them adequately for studying at the University (table 25, item 6). Consequently, the University needs to provide some training in university study-skills. This could be included in the preliminary general year (see previous, FORCPRG) and should have both a theoretical and practical component, (the practical component could include training in the use of the library, see later - USELIBR). The concept of a study-skills course was put to the students and was enthusiastically received (see table 25, item 6).

(7) Adopting a "critical" approach (CRITIC) This problem was originally derived from staff comments on the student's inability to critically analyse academic material, (see table 2). It was subsequently acknowledged to be a difficulty by the students who completed the first and second trial-questionnaires and was shown to be one of the "serious" problems in the first and fourth-year surveys. Seventy-five percent of

the population acknowledged it as a problem. The questionnaires established the student's desire to critically analyse academic material, but also indicated that the majority of undergraduates were unable to do so, mainly because they had insufficient time to study the material in depth (table 24, item 7). The solution for this variable is consequently covered by the recommendation given for "workload" (P. 121) i.e. extend the length of time the student spends at the University.

(8) The type of teaching given by staff (TYPE TEAC) The type of teaching given by staff was considered to be a problem by three-quarters of the first-year sample and a slightly smaller proportion of the fourth-years. A similar trend was observed with regard to the intensity of the variable, i.e. fourth-years find the problem less intense, presumably because they are more used to the kind of teaching given by lecturers. The students had three major criticisms of the teaching they received: (1) Lecturers talked too quickly, particularly when giving lectures, (32% of the total sample mentioned this problem, table 24, item 8). (2) Presentations given by lecturers were "boring", (23% referred to this problem, table 24 item 8E). The reasons given included: lecturers "not interested" in their subject material, haphazard presentation of material, no visual-aids and lectures read out. (3) Some lecturers were "biased" in their presentation of material, (17% of the total sample referred to this problem, table 24, item 8D). Examples of bias ranged from "proselytism", to lecturers only presenting material that interested them.

In the follow-up interviews, the students were asked which method of teaching they preferred (appendix D, item 23). They indicated a strong preference for tutorials, i.e. small-group teaching, of up to about five students. There was little difference in the appreciation of seminars, lectures and practicals (table 25, item 8).

The student criticisms of lecturing standards and their preference for certain types of teaching, suggest the need for a "Teaching Methods

Workshop" for lecturers. This could include a wide range of topics from, the advantages and disadvantages of the various forms of staff/student interaction, to demonstration lectures. It should be of particular value in the University of Zambia where the staff come from many different cultural backgrounds (see DIFFSTAF) and would be of obvious assistance to new lecturers who are regularly joining the University staff.

(9) Motivation (MOTN) The students in the follow-up interviews were asked whether they considered the general motivational level of the student body regarding work, to be satisfactory. The majority of responses (28:5 - table 25, item 9) indicated that the students were adequately motivated, despite the existence of numerous motivational problems. University staff would probably agree with these observations. Most students appear to work hard and are keenly motivated to obtain a degree. One set of students who expressed particular concern, were those who were not following the academic programme of their first choice. These students felt that their motivation had been adversely affected, although as previously indicated on P.118, they seem to quickly overcome their disappointment and settle down to the prime task of obtaining a university qualification. Doubtless the demands of the continuous assessment system, assist in this process.

The most significant group of motivational problems could be described as "campus distractions". They are associated with the adjustment to intrinsic motivation that the students have to make, when they transfer from secondary school to University (see chapter 2, P. 17). The distractions are usually of a general nature (e.g. socialising on the campus and in friends rooms) although more specific examples are also given, e.g. "the opposite sex", beer drinking, dancing and sport, (table 25, item 9). Noise in the Halls of Residence was also mentioned by the students as being a factor which affected their work output, (table 24, item 9F).

A recommendation regarding noise is found in the section headed "accommodation".

(10) Money for books (BOOKCASH) The amount of money given to students for buying books is a frequent source of student complaint (tables 21 and 22). The first-year students in the follow-up interviews, were asked how much money they needed for essential course texts. The average response given was K145 (N=36); a 70% increase on the existing book allowance of K85 per annum. Shortly after these interviews, the first-year book allowance was raised to K150 and consequently the problem was eliminated.

The major short-coming with regard to the student allowances, is that they tend to lag behind the national inflation rate. Regular, frequent reviews of the allowances are necessary in order that the students can purchase their essential texts.

One suggestion which was put to the follow-up interviewees, was that the book allowance should be paid termly rather than annually. A large majority of first-years preferred this method (table 25, item 10), while the smaller group of fourth-years (N=9) voted for retaining the existing annual payment. Termly payment, or the institution of some kind of book voucher system, would be particularly suitable to the 15% of students who have difficulty in budgeting their allowances (table 24, item 10C). It has been known for students to spend all their allowance within days of receiving it, on commodities other than that for which the money was intended.

(11) Getting advice on which courses to take (COURSAD) Getting advice on which course to take, was found to be a problem for about two-thirds of the first and fourth-year sample (see table 22). The students indicated that they obtained their advice from four major sources: the secondary schools, University staff, University School-handbooks and

fellow students. The advice given by secondary schools has already been commented upon (see FORCPROG) and there is a need for the University to improve its dissemination of course information to the schools. In response to the question, "Is it important to have information on UNZA courses while still at secondary school?" (appendix D, item 36), 16 respondents indicated that it was important and 12 that it was very important.

The University staff were the most preferred means of obtaining advice, followed by School-handbooks and fellow students (table 25, item 11). Thus, it is important for staff to be readily available for student consultations, particularly at the beginning of the academic year (see also STAFSTUD).

The School-handbooks were criticised in a variety of ways. Firstly, they were often published late and were thus unavailable for consultation when most needed (20% mentioned this problem; table 24, item 11E). Secondly, they were too complicated for many students to understand (18% referred) and thirdly, they sometimes contained insufficient (or misleading) information concerning the nature and content of the courses, (16% referred).

Most of the students also consulted fellow undergraduates for informal advice on courses; in particular for the "inside information", e.g. whether the course was well taught, was an "easy option" etc., etc.. However, a number of students felt that they had been misled by the advice they had received from fellow-students (table 24, item 11).

(12) Understanding, not memorization of academic material(MEMORIZ)

This problem is similar to the previously discussed difficulty of "adopting a critical approach" (CRITIC). It was one of the "deficiencies" of Zambian students pointed out by members of staff and subsequently confirmed as an adjustment problem by the students themselves (see table 2).

The first-years found it to be more of a problem than the fourth-years (tables 21 and 22).

One of the reasons for the student tendency to try and memorize academic material, was originally thought to be the training they had received in school (P. 25). However, although 17 students in the follow-up interviews, thought that their previous schooling had encouraged memorization, (as opposed to comprehension), 21 thought that their schools had encouraged comprehension (table 25, item 12). Thus, the more crucial influence on the students behaviour, is once again demonstrated to be "time pressure"; 39% of the total population indicated they had insufficient time to think deeply about the work they were doing, (table 24, item 12). Consequently, the recommendations that were made on Pages 122 and 125, also apply to this variable. The length of the student's academic programme needs to be extended.

(13) Money for personal needs (PERSCASH) This problem is very similar to that of "money for books" (BOOKCASH) and the recommendation is the same - there should be regular, frequent reviews of the allowances given to the students. The average personal allowance received by the students at the time of the interviews was K250 per annum, whereas the students indicated that they needed an average of K400 per annum, (table 25, item 13).

The personal effects most required by the students were clothes, toiletries and food, (table 25, item 13). It was suggested in the follow-up interviews, that such commodities could be made available in a "university shop" (appendix D, item 33). This idea was enthusiastically received (34:0), particularly if the shop was operated on a non-profit making basis.

Another question put to the students, concerned parental contributions to the financial upkeep of undergraduates, while at University,

(appendix D, item 34). Most students felt that their parents were too poor to make any significant contribution to their upkeep (see also tables 9 and 19), but a few favoured the introduction of a parental "means test", in order that the richer parents helped in the running of the campus.

(14) Accommodation (ACCOM) The accommodation provided in the Halls of Residence was considered a problem by about 60% of the first-year students. The fourth-years were particularly critical of the accommodation, with 80% of the students referring to it as a problem.

There were three main areas of student complaint. The first concerned the maintenance of the Halls of Residence; 36% of the total sample referred to problems such as: broken furniture and equipment, no hot water, broken light bulbs and fluorescent tubes, etc., etc., (table 24, item 14). Some of these problems are presumably a result of the financial constraint under which the University operates (P. 27). Then, 20% of the students referred to an excessive level of noise in the Halls of Residence, particularly at night, making it difficult for individuals to sleep or work. This kind of problem is frequently referred to by undergraduate populations (e.g. P. 21) and can only be prevented by students adhering to previously agreed "rules of conduct." Finally, 16% of the students indicated that they had problems regarding the security of their personal belongings. The follow-up interviewees suggested that the best solution for this difficulty, was to provide (or mend) the student's wardrobe locks (table 25, item 14).

(15) The number of books that can be borrowed from the library (NUMBOOKS) This was a relatively straight forward problem experienced by 56% of the first and fourth-year sample (table 22). It forms part of the larger constellation of "book problems" originally identified in table 3.

The students in the follow-up interviews indicated that they would like to see the number of books that can be borrowed from the library raised from four to six, (N=43). This proposal would probably necessitate increasing the number of books stocked by the library. However, as stated in OBTTEXT, preference should be given to central resources (e.g. the library) rather than purchasing books for individual acquisition (the bookshop).

(16) Staff/student interaction (STAFSTUD) This adjustment problem was experienced by 56% of the first-years and a slightly higher proportion of the fourth-year students. The student's main complaint, was that the opportunities to meet staff for academic consultation, were too limited, (table 24, item 16). Nineteen percent of the total sample indicated they would like to see staff office-hours increased (table 24, item 16F) and the students in the follow-up interviews, subsequently suggested seven hours per week (table 25, item 16). (This is probably two to three hours longer than the time presently reserved by staff).

Most students felt that their social contacts with staff were adequate, although a number of proposals were made for increasing social interaction, e.g. via staff/student sporting links, a staff/student drinking facility, etc., etc., (table 25, item 16).

(17) Writing simply and briefly (SIMPBREV) This is the first of the four variables specifically associated with language. It has already been mentioned (P.115) that these language variables were not as generally experienced (or potent) as had originally been expected. SIMPREV was acknowledged to be a difficulty by just under 50% of the first and fourth-year students (table 22).

The students indicated that the main reason for their not being able to write simply and briefly in assignments, was because they were writing in a second language (table 24, item 17). Fourteen percent of the

population sample, also considered that lecturers preferred "lengthy, complex" essays (table 24, item 17A). However, when this impression was further investigated in the follow-up interviews, a majority of students said that they did not find lengthy, complex essays obtained higher grades (table 25, item 17).

The recommendation for SIMPREV, which is made in conjunction with the other language problems, READSPED (P. 133), UNDTXTS (P. 136) and EXPENG (P. 141), is that a special course in written and spoken English should be made available to any first-year student who wants to improve his competence in the English language. The above four variables, have identified a considerable number of students in the main survey, who are concerned about their low level of English proficiency and the debilitating effect this has on their general course results. The students in the follow-up interviews were subsequently asked whether they needed a special (half) course in written/spoken English (appendix D, item 53). Twenty-one students thought the course would be a good idea, 13 students indicated that it was not necessary.

(18) Working alongside women students (INTERWO) This adjustment problem was indicated to be a difficulty by just under 50% of the male students (N=235) in the first and fourth-year samples (table 22). It was previously discussed in chapter 2 (P. 20) and was expected to be a problem, particularly for those students who had been educated in single-sex schools. It will be observed in table 21, that the problem is less severe for the fourth-year males, presumably because they have grown accustomed to working alongside women. The major difficulty for the men, was indicated to be that the women were a "distraction" and "interfered" with their studies (table 24, item 18 and see also later, OPPSEX). Some of the men were also critical of the female undergraduates for being "shy" and "withdrawn" in class discussion, table 24, item 18B.

One long-term solution to this problem, would be to increase the

proportion of co-educational schools in Zambia. Twenty students (males and females) in the follow-up interviews, said that they would like to see more co-educational schooling, while 14 students thought the present situation was satisfactory. When asked whether the proportion of University female students should be increased, the majority of students indicated that the present ratios were satisfactory and that any change should be on the basis of merit, rather than social consideration (table 25, item 18; note however, that only six women were present in this population sample).

(19) Library loan-period (LENGLOAN) This problem is part of the larger set of difficulties that students have in obtaining textbooks (see also OBTTEXT and BOOKCASH). The length of time for which it is possible to loan books from the library (two weeks), was indicated to be a problem by just under 50% of the first and fourth-year samples (table 22). However, the results of the follow-up interviews only advocated a very slight increase in the loan-period (to $2\frac{1}{2}$ weeks; table 25, item 19) and consequently it is unlikely that any change in the present system is required.

The library opening-hours were also reviewed, as they are associated with the amount of time a student has available for consulting books. Twenty-two students indicated they would like to see the hours extended, while 14 considered the present arrangements satisfactory. The most favoured change, was an extension from 2200 to 2300 hours in the evening (particularly before examinations), when studying in the halls of residence was said by some students, to be adversely affected by noise (see ACCOM).

(20) Reading speed (READSPED) This is another of the variables associated with language (see P.132). It was reported to be a difficulty

by just under 50% of the first-years and a smaller proportion of fourth-years (table 22). Presumably the student's reading speed improves as he progresses through the University, although 40% of the final-year students still indicate it to be some degree of a problem.

The recommendations for READSPED have already been covered in the sections concerned with "the technique of university learning" and "writing simply and briefly" (Ps.124 and 131). The two new courses that were subsequently recommended, "Study-skills" and "Written and Spoken English", should both assist in overcoming the student's difficulties with regard to reading speed.

(21) Using the library (USELIBR) This variable is referred to as a problem by 46% of the first-year students and only slightly fewer fourth-years (table 22). Knowing how to make the best use of the library is particularly important to Zambian students, because of the shortage of private study material.

The main reason given by the students for their difficulty in using the library, was that the library introduction course was "inadequate" (table 24, item 21). The students recommended that the course should be conducted with smaller group-sizes and that there should be some "follow-up" sessions to assist students after they had become personally aware of the practical difficulties involved in using a library (table 25, item 21). The latter recommendation is particularly important, as many students are experiencing a library for the first time. Another useful aid would be to have a written guide on "How to use the Library." This should be simply written and concise, and be readily available to the students from the first week of term.

(22) Making friends with the opposite sex (OPPSEX) This problem was more frequently referred to and more potently experienced, than the more general problem of making friends with other university students

(see later, "FRIENDS"). About 40% of the first-years found it difficult to relate to the opposite sex and once again the students who had been at single-sex schools, found themselves to be at a particular disadvantage, (table 24, item 22). The problem is compounded by the unequal number of men and women on the campus (table 7), but as noted on P. 133, the majority of students do not want to have the male/female ratio changed purely for social reasons. Presumably, as with INTERWO (P. 132), an increase in the number of co-educational secondary schools would help to overcome the student's difficulties.

Unlike INTERWO however, where the problem diminishes in the fourth-year, OPPSEX was found to be more generally experienced by the fourth-year population. One reason for this could be that female undergraduates are indicated (by the men) to develop an increasing "appetite" for non-university boyfriends. When asked in the follow-up interviews (appendix D, item 57), 30 male students thought that women students preferred men-friends from outside the university ("they have more money!") and this opinion was frequently confirmed by the female interviewees (see table 25, item 22).

(23) Student politics and work (POLITICS) The interaction of student politics with academic work, was a problem referred to by just under 40% of the fourth years (table 22). This problem, rather like WORKLOAD (P. 121) is "episodic" in nature. Since the above results were obtained, politics have gone "out of favour" with Zambian University students, owing to a closure of the campus and the subsequent expulsion of some politically active undergraduates. Prior to the closure, the level of political activity was considerably greater and many students resented the incursion of student politics into their academic lives, not just by fellow students but also by staff (table 25, item 23). Zambian students now have to sign a "code of conduct" before entering the

University and a similar "guideline" for new staff who are unaware of the political history of the University, would also be useful.

(24) Campus entertainment (ENTERTAI) A lack of general entertainment on the campus, was indicated to be a problem, particularly by the fourth-year students. Thirty-nine percent of the first-years referred to the problem and nearly 60% of the fourth-years, (table 22). The potency of the problem was also considerably greater for the fourth-years - see table 21. Presumably the majority of the first-years find the University new and sufficiently exciting not to be bored.

However, even for the first-years the problem is sufficiently acknowledged to constitute a cause for concern. Boredom leads to campus unrest and consequently the students in the follow-up interviews were asked what kind of entertainment they would like to have available on the campus (appendix D, item 59). Films and spectator matches (e.g. football, boxing etc.) were the most frequently given responses, followed by drama productions, cultural dances and discos (table 25, item 24).

(25) Understanding text-books (UNDTEXTS) This problem fell within the serious category for the first-year students alone (i.e. more than one in three students mentioned the problem). Only 30% of the fourth-years referred to it, presumably because university education has increased their ability to comprehend text-books.

There were two major difficulties associated with the problem. The first was that the vocabulary of the student's text-books was too complicated (table 24, item 25). The follow-up interviewees indicated that approximately one book in three had a vocabulary that they found difficult to understand (table 25, item 25). Thus lecturers of first-year undergraduates need to be aware of their student's shortcomings and

choose their text-books accordingly. The previously recommended course in written and spoken English will be of assistance to the students, (see SIMPBREV, P. 131 and READSPED, P. 133) and it may be necessary to compose "glossaries" of the more difficult words and concepts.

The other problem indicated by the students, was that many of the text-books gave examples, described customs etc., which were "foreign" to Zambian undergraduates. This is a difficulty frequently encountered in developing countries and the only real answer is for Zambian academics to find more time to write their own study materials.

The above 25 adjustment problems were serious problems for the first-year students and with the exception of UNDTXTS, for the fourth-year students as well, i.e. they were given a potency of greater than 1.5 and/or they were experienced by more than one in three of the population samples.

The remaining seven adjustment problems (INTERMEN, SPORT, WOMLECTS, FAMILY, DIFFSTAF, FRIENDS and EXPENG) are serious for the fourth-year students alone, i.e. less than one in three first-years experience these problems.

(26) Working alongside men students (INTERMEN) (It should be noted that the sample size of 15 for this variable, is considerably smaller than for the other variables (table 22) and consequently the ranking of the adjustment problem is relatively less reliable).

The main difficulties referred to by the women, were male "prejudice" against academic females and lack of confidence due to social upbringing and single-sex secondary education. A certain amount of criticism of female students, particularly with regard to their reticence in tutorials has already been noted (see INTERWO). Presumably this problem would be ameliorated by co-educational secondary schooling (P. 132)

With regard to the lack of confidence, lecturers need to help women students to play as full a role as possible in the academic life of the University.

The University Student Counselling Service has a full-time woman counsellor dealing with female student problems. As noted earlier (P. 68) this Service is considerably under-utilised and female students with psycho-social problems should be encouraged to visit the counselling centre.

(27) Sporting facilities (SPORT) This problem is similar in nature to "campus entertainment" (ENTERTAI). It is concerned with the facilities available to the students outside their working hours. Forty-two percent of the fourth-years considered the sporting facilities to be deficient - the variable did not exceed the generality criterion for the first-years.

When asked how the sporting facilities could be improved, the follow-up interviewees gave a wide variety of responses e.g. replace broken sports equipment, employ professional coaches, build squash courts, floodlight playing fields, introduce gymnastics, etc., etc.. One consistently mentioned deficiency, was the lack of a swimming pool. Several students suggested that this might be built on a "self-help" basis, using expertise from within the University (e.g. School of Mines and School of Engineering).

One general problem for the University of Zambia with regard to sports and entertainment, is that the campus does not have the diversity of student-organised "clubs" and "societies" that contribute so greatly to the education and integration of undergraduates in other universities of the world. Some efforts should be made to stimulate this aspect of University life (see also P. 140).

(28) Women lecturers (WOMLECTS) Forty percent of the fourth-years

thought that having women lecturers constituted a problem, mainly because they "over reacted to their newly acquired status" (table 24, item 28). (The variable was not a cause for concern for the first-years). As with INTERWO (P. 132), WOMLECTS exemplifies the difficulty that arises when a new institution such as the University of Zambia, cuts across existing traditional social boundaries. There is no recommendation that can be made with regard to this adjustment problem, other than to await the time when women are more frequently encountered in lecturing posts and their role in male dominated professions, acquires a greater degree of acceptance.

(29) Family and work (FAMILY) "The interaction of family affairs and academic work" was a cause for concern in the fourth-year population alone (38% referred to it, table 22). The main reason it was found to be a problem, was not because of student obligations to his family (table 24, items 29A, 29B, 29C, 29F) but because of "unfulfilled" family obligations to the student. The students felt that their families should give them greater assistance (table 24, item 29) and the most frequent reason given by the students for returning home, was to seek financial help (table 25, item 29). Consequently, the recommendations that were made for PERSCASH are applicable to the amelioration of this problem, i.e. ensure the students are given an adequate allowance for their basic personal needs (P.129).

(30) Staff-backgrounds (DIFFSTAF) "Having to adapt to staff from different cultural backgrounds" was a serious problem for the fourth-year population. They felt that the different backgrounds of the staff, contributed to the variation in marking standards (table 24, item 30) and as previously noted, the fourth-years are particularly sensitive to this problem (P. 123). The recommendations that applied to MARKSYST also apply to this variable. Other difficulties such as linguistic

variations and prejudice were relatively insignificant in comparison (table 24, items 30B, 30C, 30D).

In the follow-up interviews, the students were asked if they would prefer to have a larger proportion of Zambian or expatriate staff, (appendix D, item 68). The majority (17:8) indicated Zambian staff; assuming they were adequately qualified. The Zambianisation of the University staff is an ongoing process and the time is not far distant when the more usual university ratios of indigenous to overseas staff, are attained.

(31) Making friends (FRIENDS) This adjustment problem was previously discussed in chapter 2 (P. 19). Bloom (1971) found evidence of loneliness among Zambian University students and thought that they were more isolated than their British or South African counterparts.

The results of the present study showed that 30% of the first-years and 37% of the fourth-years had difficulty making friends (table 22). The main reason given for the problem, was that the opportunities for mixing socially were too few (table 24, item 31). This finding emphasises the importance of the recommendation given in SPORT and ENTERTAINMENT (pages 138, and 136). Despite the intimate size of the University and the fact that most of the students are in Halls of Residence (P. 30), there is a need to increase the number of "catalytic" activities on the campus, in order that students are more fully integrated and benefit from the experience of relating to individuals from different social and cultural backgrounds.

(Two students in the sample were found to be suffering from a pathological state of isolation. When such cases are discovered by staff, it is most important that they are referred to the Student Counselling Service for onward transmission to the Psychiatric Unit).

(32) English expression (EXPENG) The student's ability to express himself clearly in English, is the last of the four variables associated with language problems (table 22).

The recommendation for the problem has already been outlined in the previous discussion - there should be a special course provided in the first year, for those students who experience difficulty with spoken or written English (P. 132).

A summary of the recommendations

"English expression", concludes the discussion and recommendations concerning the 32 serious problems experienced by the first and/or fourth-year undergraduate populations. A summary of the main recommendations made in the preceding pages, is given in the final table below:

Table 27: A summary of the recommendations

Number	Recommendations	Page reference
1.	(a) Increase the variety of food served up in the University canteens. (b) Improve the standard of cooking. (c) Improve the basic quality of the food. (d) Institute an in-depth study of the catering facilities.	119
2.	(a) Allocate more money for the purchase of undergraduate text-books. (b) Include student text-book purchase in an overseas aid-programme. (c) Give preference to the purchase of books for the library, as opposed to the bookshop.	120
3.	Allocate students to the various University teaching Schools after the first year at the University.	121
4.	Increase the length of the existing University course by one year.	121, 122, 124, 125, 129.
5.	Introduce a greater degree of uniformity into the marking systems used by the various University Schools and lecturers.	123
6.	Provide a course in university study-skills for all first-year undergraduates.	124
7.	(a) Institute a "Teaching Methods Workshop" for lecturers. (b) Increase the proportion of small-group contacts (tutorials) with the students.	125, 126.
8.	Revise student book and personal allowances at frequent, regular intervals.	127, 129, 139.
9.	(a) Improve the dissemination of University of Zambia course information to secondary schools. (b) Ensure that University School Handbooks are out on time and that the information given in them is simply presented and accurate.	128
10.	Establish a non-profit making University Shop to sell basic student requirements, (for specific examples see P. 129).	129
11.	(a) Improve the maintenance of the Halls of Residence, (for specific examples, see P. 130). (b) Introduce some mutually agreed, student rules of conduct for the Halls of Residence.	130

(Contd.)

Table 27 (contd.)

Number	Recommendations	Page reference
11(Contd)	(c) Improve security of student's belongings, (wardrobe locks).	130
12.	Increase the number of books that students can borrow from the library from 4 to 6.	131
13.	Increase the office-hours reserved by lecturers for student consultation (about 7 hours per week indicated).	131
14.	Provide an optional course in written/spoken English for first-year undergraduates.	132, 133, 136, 141.
15.	(Increase the number of co-educational secondary schools in Zambia).	133, 137.
16.	Extend the University library opening-hours during exam. times from 2200 to 2300 hours.	133
17.	(a) Use smaller groups of students in the Introduction to the Library Course. (b) Have follow-up sessions on How to use the Library. (c) Make available a simply written, concise guide on "How to use the University Library".	134
18.	Give new members of staff some "Guidelines" concerning acceptable political involvement.	136
19.	Increase the amount of general entertainment available on the campus (for specific examples see P. 136).	136
20.	(a) First-year lecturers should chose text-books with an appropriate vocabulary. (b) Compose glossaries of difficult words and concepts.	136, 137.
21.	Encourage students with psycho-social problems to visit the University Student Counselling Service.	140
22.	(a) Upgrade the existing sporting facilities (for specific suggestions, see P. 138). (b) Build a swimming pool; perhaps on a self-help basis. (c) Stimulate the students to form more student organised "clubs" and "societies."	138

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A P P E N D I C E S

APPENDIX A - The first trial questionnaire.

APPENDIX B - The second trial questionnaire.

APPENDIX C - The main survey questionnaire.

APPENDIX D - Set questions, (a list of the more important questions put to students during the course of the interview sessions).

The questionnaires in appendices A, B and C have been condensed in order to save space. The wording however, remains the same as in the original.

APPENDIX A - THE FIRST TRIAL QUESTIONNAIRE

This questionnaire on student adjustment problems will provide information which is not at present available. Such information is not only of academic interest, but may help the University to prevent or alleviate student's problems. This is not an official investigation. Your replies will be treated in strictest confidence. Thank you for your assistance.

PERSONAL INFORMATION (Use block letters):

1.	<u>Name (underline surname)</u>				
2.	<u>Computer number:</u>				
3.	<u>Age in years:</u>				
4.	<u>Male/female</u>	5.	<u>married/single/separated/divorced:</u>	6.	<u>number of children:</u>
7.	<u>Degree registered for:</u>				
8.	<u>Campus address:</u>				
9.	<u>If you live off campus, with whom do you stay: Parents/guardian or other relative/other students/own accommodation/religious community/other</u>				
10.	<u>Permanent home address:</u>				
11.	<u>Mother's occupation:</u>				
12.	<u>Father's occupation:</u>				
13.	<u>(If applicable) Guardian's occupation:</u>				
14.	<u>Previous education:</u>	<u>Name of school/ college/university:</u>	<u>District:</u>	<u>Dates attended:</u>	<u>Day/ boarding:</u>
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

15. Qualifications gained with date:
Grade 7/standard 6
Form 2/form 3
Cambridge School Certificate
G.C.E. "O" levels (with details)
.....
G.C.E. "A" levels (with details)
.....
Diplomas
Other

16. List the brothers and sisters in your immediate family in order, starting with the eldest:

	<u>Name</u>	<u>age</u>	<u>Brother/sister</u>	<u>Highest educational qualification</u>	<u>Present occupation</u>
1.					
2.					
3.					

THE QUESTIONNAIRE
ACADEMIC ADJUSTMENT PROBLEMS

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
1. Studying hard				
Because:				
A. my teachers fail to encourage me.				
B. there are many other things to do on campus.				
C. the work is too difficult.				
D. the work is too easy.				
E. my residence is too noisy.				
F. <u>Other reasons or comments:</u>				
2. The technique of learning and studying at University.....				
Because:				
A. the University system of teaching is different to that of school.				
B. there is no University course specifically devoted to study skills.				
C. I have specific difficulties with regard to note taking.				
D. I have specific difficulties with regard to revising for tests and exams.				
E. I have specific difficulties with regard to organising a study schedule.				
F. I have specific difficulties with regard to obtaining information from books quickly.				
G. I have specific difficulties with regard to getting the most benefit from seminars.				
H. <u>Other reasons or comments:</u>				
3. Expressing myself clearly in spoken English.....				
Because:				
A. English is not my home language.				
B. I need a course in <u>spoken</u> English.				
C. I have to think about what I am going to say before I say it.				
D. I find speaking difficult in <u>all</u> languages.				
E. <u>Other reasons or comments:</u>				
4. Expressing myself clearly in written English.....				
Because:				
A. English is not my home language.				
B. I need a course in <u>written</u> English.				
C. I have difficulty with spelling.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
D. I find writing difficult in <u>all languages.</u> E. <u>Other reasons or comments:</u>				
5. Understanding the English used in text books.... <u>Because:</u> A. English is not my home language. B. the vocabulary in the books is too complicated. C. the authors describe customs, give examples etc. that are "foreign" to me. D. I find reading difficult in <u>all languages.</u> E. <u>Other reasons or comments:</u>				
6. Understanding the English used in lectures and seminars.... <u>Because:</u> A. English is not my home language. B. the lecturers speak too quickly. C. the lecturers use too many complicated words. D. the accent of the lecturers is difficult to understand. E. <u>Other reasons or comments:</u>				
7. Adopting a critical approach to the material I am studying.... <u>Because:</u> A. lecturers do not like students being critical. B. just learning the material takes up all my time. C. the material presented is "fact" and does not need to be critised. D. <u>Other reasons or comments:</u>				
8. Understanding academic work rather than just memorizing it... <u>Because:</u> A. of a lack of assistance from lecturers. B. I have insufficient time to think deeply about the work I am doing. C. of my language difficulties. D. lecturers seem to prefer memorization to comprehension. E. <u>Other reasons or comments:</u>				

		.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
9.	Writing simply and briefly in assignments and examinations....				
	Because:				
	A. lecturers prefer complex, lengthy essays.				
	B. it is difficult to write simply and briefly in a second language.				
	C. in my home language we express ideas differently.				
	D. Other reasons or comments:				
10.	The quality of my previous schooling....				
	Because:				
	A. my previous education did not prepare me sufficiently for university work.				
	B. the range of subjects I studied was too narrow.				
	C. school facilities and equipment were poor.				
	D. I did not study some subjects in sufficient depth.				
	E. Other reasons or comments:				
11.	The interaction of student politics with academic life....				
	Because:				
	A. politics distract me from my work.				
	B. politics adversely affect staff/student relationships.				
	C. politics should have nothing to do with university life.				
	D. Other reasons or comments:				
	<u>FOR MEN STUDENTS ONLY</u>				
12.	The relationship between men and women students....				
	Because:				
	A. I consider women less intelligent than men.				
	B. women students seldom contribute to class discussion.				
	C. working alongside women confuses me.				
	D. socializing interferes with my studies.				
	E. women students do not work as hard as men.				
	F. Other reasons or comments:				
	<u>FOR WOMEN STUDENTS ONLY</u>				
13.	The relationship between women students and men students....				

		.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
	<u>Because:</u> A. men students expect women students to be less intelligent. B. men student dominate discussions in class. C. I feel uncomfortable when I try to express opinions in front of men. D. working alongside men confuses me. E. socializing interferes with my studies. F. men students have a prejudice against women students who are academically successful. G. men students do not work as hard as women. H. <u>Other reasons or comments:</u>				
14.	Obtaining the prescribed texts for course work....				
	<u>Because:</u> A. there are insufficient copies in the library. B. there are insufficient copies in the bookshop. C. copies are misplaced on library shelves. D. I do not have enough money to buy books. E. <u>Other reasons or comments:</u>				
15.	The numbers of books that can be borrowed from the library at any one time....				
	<u>Because:</u> A. I have insufficient money for buying the number of books I require. B. the subjects I am studying involve me in referring to many different text books. C. <u>Other reasons or comments:</u>				
16.	How many books would you like to be able to borrow from the library at any one time? _____				
17.	The length of time for which it is possible to loan books from the library....				
	<u>Because:</u> A. I am a slow reader. B. I need to read the books fully not just refer to them. C. <u>Other reasons or comments:</u>				
18.	What length of time would you like to see the library loan-period changed to? _____				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
19. Knowing how to make the best use of the library....				
Because:				
A. a written guide on how to use the library is not available.				
B. the present system of cataloguing the books is too complicated.				
C. the "introduction to the library" course is not adequate.				
D. I do not really need the library for my academic work.				
E. Other reasons or comments:				
20. Reading through material quickly and scanning books for information....				
Because:				
A. I need training in "speed reading" (how to read quickly).				
B. I am not reading the material in my home language.				
C. I am not sufficiently interested in the material I am studying.				
D. Other reasons or comments:				
21. The amount of interaction between staff and students....				
Because:				
A. the staff are unfriendly.				
B. the students have no opportunity to meet the staff socially.				
C. many staff originate from a non-Zambian background.				
D. the opportunities to meet staff with regard to academic matters are too few.				
E. Other reasons or comments:				
22. The quality of teaching given by most staff...				
Because:				
A. lecturers talk too quickly.				
B. lecturers use too complex a vocabulary.				
C. lecturers are biased in the information they give.				
D. lecturers present their material in a boring way.				
E. lecturers present their material illogically, in a haphazard fashion.				
F. lecturers do not tell students what is expected of them.				
G. Other reasons or comments:				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
23. If you have a problem with the quality of teaching then delete the words in the following sentences which are not appropriate..				
(a) The quality of teaching in <u>lectures</u> is mainly, good/satisfactory/poor.				
(b) The quality of teaching in <u>tutorials</u> is mainly, good/satisfactory/poor.				
(c) The quality of teaching in <u>practicals</u> is mainly, good/satisfactory/poor.				
24. The marking systems used by most lecturers....				
<u>Because:</u>				
A. lecturers are biased toward certain students.				
B. lecturers have different standards of marking.				
C. lecturers have too high a standard.				
D. lecturers have too low a standard.				
E. lecturers have too many assessments.				
F. the amount of information I get from staff concerning my academic progress is too little.				
G. <u>Other reasons or comments:</u>				
25. Having to adapt to staff from different cultural backgrounds....				
<u>Because:</u>				
A. staff from different countries have different standards.				
B. staff speak English differently.				
C. I dislike staff from certain countries.				
D. <u>Other reasons or comments:</u>				
<u>FOR MEN STUDENTS ONLY</u>				
26. Having women lecturers....				
<u>Because:</u>				
A. I consider them less academically competent than men lecturers.				
B. I am not used to being taught by women.				
C. I feel that women should be more concerned with the home and family.				
D. <u>Other reasons or comments:</u>				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
27. Getting advice on which courses to take				
<p><u>Because:</u></p> <p>A. there are too many courses to choose from.</p> <p>B. course combinations are confusing.</p> <p>C. School Handbooks do not give enough information.</p> <p>D. School Handbooks are not clear.</p> <p>E. staff advisors are ignorant of the system.</p> <p>F. fellow students often give bad advise.</p> <p>G. <u>Other reasons or comments:</u></p>				
28. Being forced to take a particular academic programme....				
<p><u>Because:</u></p> <p>A. it has lowered my <u>general</u> academic performance.</p> <p>B. it has lowered my performance in specific subjects.</p> <p>C. it has made me dissatisfied with the university system.</p> <p>D. my career has been frustrated.</p> <p>E. my family are very disappointed.</p> <p>F. <u>Other reasons or comments:</u></p>				
29. Given a free choice which University School would you have entered? The School of _____				
30. The number of time-table clashes I have				
<p>If you have time -table clashes delete the phrase(s) which are not appropriate:</p> <p>My time-table clashes, have been quickly sorted out/have taken a long time to sort out/have never been satisfactorily resolved.</p>				
31. The amount of academic work I have to get through....				
<p><u>Because:</u></p> <p>A. my work load is too heavy.</p>				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
B. I have insufficient work to do. C. the work-load is unevenly distributed over the academic year. D. <u>Other reasons or comments:</u>				
32. The interaction of family affairs and academic work.....				
<u>Because:</u> A. I am having to support my parents. B. I am having to support my brothers and/or sisters. C. I am having to support my children. D. no one in my family gives me support while I am at university. E. I have a marriage problem. F. <u>Other reasons or comments:</u>				
33. The money I have available to buy books.....				
<u>Because:</u> A. the University allowance to buy books is too small. B. I get no financial contribution from my parents. C. I have difficulty putting money aside for books I might need later in the year. D. <u>Other reasons or comments:</u>				
34. How much money do you estimate you need for <u>essential</u> books in the first year? Kwacha _____				

This is the end of the section on academic adjustment. Are there any other academic adjustment problems which you have experienced and which have not been referred to in the questionnaire so far?

SOCIAL ADJUSTMENT PROBLEMS

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
35. The money I have available for personal needs (e.g. clothes, transport, entertainment etc., excluding books).....				
Because:				
A. the amount of money I receive from my sponsors is too small.				
B. I get no financial support from my parents.				
C. I find that I spend all my money as soon as I get it.				
D. I feel inferior having so little money.				
E. Other reasons or comments:				
36. How much money do you estimate you need for essential personal requirements every month? Kwacha _____ per month.				
37. Making friends with other university students				
Because:				
A. students at the University are unfriendly.				
B. students at the University are shy.				
C. the opportunities for mixing socially are too few.				
D. I find it difficult to mix socially.				
F. Other reasons or comments:				
38. The multi-tribal nature of the University.....				
Because				
A. I dislike certain tribal groups.				
B. students only socialize with their own tribal group.				
C. tribal groups use their own language and not English.				
D. it causes friction and aggression in the University Community.				
E. it prevents me integrating fully into the University Community.				
F. Other reasons or comments:				

		.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
39.	The multi-racial nature of the University....				
	<u>Because:</u> A. I dislike certain races. B. students only socialize with their own racial groups. C. racial groups use their own language and not English. D. it causes friction and aggression in the University Community. E. it prevents me integrating fully into the University Community. F. <u>Other reasons or comments:</u>				
40.	Making friends with members of the opposite sex....				
	<u>Because:</u> A. members of the opposite sex do not like me. B. I was educated in a single sex school. C. I am shy in the presence of the opposite sex. D. I have a sexual problem. E. members of the opposite sex are not interested in <u>students</u> . F. <u>Other reasons or comments:</u>				
41.	The size and complexity of the University Campus....				
	<u>Because:</u> A. the University is the largest social organization I have ever been part of. B. there is no official guide to the University Campus. C. the University Orientation Programme for new students is inadequate. D. it makes me feel small and unimportant. E. <u>Other reasons or comments:</u>				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
42. Being a student with religious convictions, I find integration into the University Community....				
<u>Because:</u> A. my religion is sneered at by other students. B. I am not allowed to practice my religion in peace. C. I am isolated from others who practice the same religion. D. <u>Other reasons or comments:</u>				
43. Learning to live with my room-mate in my residence....				
<u>Because:</u> A. I do not like him/her. B. previously I have always had my own room. C. it is difficult to entertain my friends with my room-mate being there. D. <u>Other reasons or comments:</u>				
44. The amount of general entertainment available on the campus....				
<u>Because:</u> A. I am bored and need amusement. B. entertainment helps me relax from work. C. entertainment facilities would help me make friends. D. I have to go into town for my entertainment. E. entertainment interferes with my academic work. F. <u>Other reasons or comments:</u>				
45. If you feel the University lacks adequate entertainment facilities, place a tick against those facilities you would like to have more of:				
A. Discos, _____ B. Films, _____ C. Concerts, _____ D. Television sets, _____ E. Bars for social drinking, _____ F. Plays, _____ G. Spectator sports, _____ H. Other comments:				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
46. Who do you think should organise the entertainment, the University authorities or the students? _____				
47. The amount of provision for sporting activities on the campus.....				
<u>Because:</u> A. facilities for my sport are not available. B. sport helps me relax from work. C. sporting facilities would help me make friends. D. I have to go into town for my sport. E. sport interferes with my academic work. F. <u>Other reasons or comments:</u> _____				
48. If you feel the University lacks adequate sporting facilities, place a tick against those facilities you would like to have more of: A. Football, _____. B. Swimming, _____. C. Tennis, _____. D. Athletics, _____. E. Hockey, _____. F. Judo, _____. G. Basketball, _____. H. Netball, _____. I. Volleyball, _____. J. Rowing, _____. K. Other comments: _____				
49. Who do you think should organise sport the University authorities or the students? _____.				
50. The number of "intellectual" societies and clubs functioning on the campus.....				
51. If you feel the University lacks such societies and clubs, place a tick against the ones you would like to have more of: A. clubs related to academic work (e.g. "Physics Club"), _____.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
B. Zambian cultural societies, ____.				
C. debating societies, ____.				
D. choral societies, ____.				
E. chess clubs, ____.				
F. bridge clubs, ____.				
G. Other comments:				
52. The drinking of alcohol.....				
Because:				
A. I am not able to stop drinking.				
B. it interferes with my work.				
C. it uses up all my money.				
D. Other reasons or comments:				
53. The University dining facilities....				
Because:				
A. I get too little food.				
B. the food is poorly cooked.				
C. I have to wait too long for my food.				
D. the food is of poor quality.				
E. the menu lacks variety.				
F. Other reasons or comments:				
54. The accommodation provided in the Halls of Residence.....				
Because:				
A. I would prefer to be in a single room.				
B. I would prefer to be in a shared room.				
C. there is too much noise during the day - time.				
D. there is too much noise at night - time.				
E. there is a lack of privacy in the toilets and bathroom.				
F. the maintenance of the Halls of Residence is poor.				
G. it is difficult to prevent my belongings from being stolen.				
H. there is favouritism shown in the allocation of accommodation.				
I. Other reasons or comments:				

This is the end of the section on social adjustment problems and the end of the questionnaire. Are there any other adjustment problems of any nature which you have experienced and which have not been referred to in this questionnaire?

APPENDIX B - THE SECOND TRIAL QUESTIONNAIRE

This questionnaire on student adjustment problems will provide information which is not at present available. Such information is not only of academic interest, but will help the University to prevent or alleviate student's problems. Your replies will be treated in strictest confidence and if you prefer you can remain anonymous. However, after the data has been collected, it is hoped to interview some students in order to examine the adjustment problems in greater depth. If you are willing to be interviewed, please indicate your name and computer number in the space provided below. Thank you for your assistance.

Name: (underline surname)

Computer Number:

Section A. PERSONAL INFORMATION

Next, complete this section by circling the appropriate number, word or phrase.

1. What is your age? 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Over 30yrs.
2. What is your sex? Female Male.
3. What is your marital status? Divorced Married Separated Single.
4. How many children do you have? 0 1 2 3 4 5 6 7 8 9 10 Over 10.
5. What degree are you registered for? B.A. B.A.(acc.Finance) B.A.(B.Admin) B.A. (Ed.) B.A. (Lib.St.) B.Eng. B.Min.Sc. B.Sc.(Agric.) B.Sc.(Ed.) B.S.W. LL.B. M.B.Ch.B.
6. What school are you registered in? Agriculture Education Engineering H.S.S. Law Medicine Mines Natural Sciences.
7. When did you enter this university? 1980 1979 1978 1977 1976 1975 1974 1973 Other.
8. What is your university address? Africa International Kafue Kwacha October Pamodzi President Soweto Zambezi Off-Campus.
9. In what geographical areas have you spent the majority of your life? Chililabombwe Chingola Chipata Choma Kabwe Kafue Kalulushi Kasama Kitwe Livingstone Luanshya Lusaka Maamba Mansa Mazabuka Mbala Mongu Monze Mpika Mufulira Ndola Solwezi Other areas in Zambia, outside Zambia.
10. Who is your main financial sponsor? Foreign government G.R.Z. Guardian Mines Parents Relatives Self U.N. Other.
11. What language do you speak on campus? Bemba English Kaonde Lozi Lunda Luvale Nyanja Tonga Other.
12. What is your mother tongue? Bemba English Kaonde Lozi Lunda Luvale Nyaja Tonga Other.
13. How many blood brothers and sisters do you have? 0 1 2 3 4 5 6 7 8 9 10 11 12 Over 12.
14. How many years of primary education have you had? 0 1 2 3 4 5 6 7 8 9 10 11 12 Over 12.
15. How many years of secondary education have you had? 0 1 2 3 4 5 6 7 8 9 10 11 12 Over 12.
16. What is the total number of years of pre-university education you have had? Under 6 years 6 7 8 9 10 11 12 13 14 15 16 17 18 Over 18 years.
17. How many years of pre-university education have you spent in a boarding school? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Over 18 years.
18. How many years of pre-university education have you spent in a day school? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Over 18 years.

19. How many years of pre-university education have you spent outside Zambia? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Over 18 years.
20. How many months of Zambia National Service have you completed? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Over 18 years.
21. What division did you achieve in the grade 7 (or standard 6) examination? Div. 1 Div. 2 Div. 3 Div. 4 Exam. not taken.
22. What division did you achieve in the Form 3 (or Form 2) Examination? Div. 1 Div. 2 Div. 3 Div. 4 Exam not taken.
23. What division did you achieve in the Cambridge School Certificate? Div. 1 Div. 2 Div. 3 Div. 4 Exam not taken.
24. How many "O" levels did you obtain? 0 1 2 3 4 5 6 7 8 9 10 Exam not taken.
25. How many "A" levels did you obtain? 0 1 2 3 4 5 Exam not taken.
26. How many visits have you made to the University student counselling Service? 0 1 2 3 4 5 6 7 8 9 10 Over 10 visits.
27. Do you have strong religious beliefs? YES NO
28. Do you have strong political beliefs? YES NO
29. What is your father (or guardian's) occupation? (see below for further information) "Clerical" "Commercial" "Professional" "Semi-professional" "Semi-skilled" "Skilled" "Unskilled" unemployed.
30. What is your mother's occupation? (see below for further information) "Clerical" "Commercial" "Professional" "Semi-professional" "Semi-skilled" "Skilled" "Unskilled" "Unemployed".
31. What is the approximate income of your father (or guardian), per month? 0-K100 K100-K200 K200-K300 K300-K400 K400-K500 K500-K600 K600-K700 Over K700 Not known.
32. What is the approximate income of your mother per month? 0-K100 K100-K200 K200-K300 K300-K400 K400-K500 K500-K600 K600-K700 Over K700 Not known.
33. What is your father's highest educational qualification? Sub A (Grade 1) Sub B (Grade 2) Standard 1 (Grade 3) Standard 2 (Grade 4) Standard 3 (Grade 5) Standard 4 (Grade 6) Standard 5 (Grade 7) Standard 6 Form 1 Form 2 Form 4 Form 5 Form 6 T 5 T 4 T 3 T 2 T 1 University degree None of the above Not known.
34. What is your mother's highest educational qualification? Sub A (Grade 1) Sub B (Grade 2) Standard 1 (Grade 3) Standard 2 (Grade 4) Standard 3 (Grade 5) Standard 4 (Grade 6) Standard 5 (Grade 7) Standard 6 Form 1 Form 2 Form 3 Form 4 Form 5 Form 6 T 5 T 4 T 3 T 2 T 1 University degree None of the above Not known.

Classification of Occupations. Examples of occupations classified under the various headings are as follows:

- "Clerical" e.g. accountant (without degree or professional qualification), book-keeper, cashier, civil servant (lower or middle level), clerk, draughtsman, foreman, proof reader, receptionist, secretary, supervisor, storekeeper, telephonist, typist, member or lower level officer of the army or police, etc.
- "Commercial" e.g. businessman (owner), commercial farmer, musician (self employed), salesman, shopkeeper, storekeeper, trader, etc.
- "Professional" e.g. accountant or engineer (with degree or professional qualification), army or police captain or above, chief (full time), diplomat, doctor, high national or state government officer, lawyer, manager of a firm (not owner), Member of Parliament, priest or minister, teacher (with a University degree etc.
- "Semi-Professional" e.g. dispenser, herbalist, journalist, librarian, nurse, teacher (without degree), welfare worker etc.

- "Semi-skilled": e.g. assembly worker, basket maker, bus conductor, butcher, cook, driver, factory worker, fisherman, hair dresser, hunter, machine operator, miner, peasant farmer etc.
- "Skilled": e.g. blacksmith, carpenter, electrician, engineer (without degree or equivalent) fitter, mechanic, painter, photographer, printer, radio repairman, shoemaker, surveyor, technician, watch repairman, weaver, welder, etc.
- "Unskilled": e.g. cleaner, driver's mate, house boy, labourer, messenger, boy, security guard, store boy etc.

If you wish to add any further information or make any comments, please use the space below:

Section B. ADJUSTMENT PROBLEMS

Instructions for filling-in Section B.

- (1) Firstly, complete each of the following statements by placing a tick in the appropriate column.

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
e.g. Travelling between the University campus and town....		✓		

- (2) If you have indicated that there is "NOT a problem", move straight on to the next statement.
- (3) If you have indicated that there is a "severe problem", "a problem" or "a slight problem", then place a tick against one or more of your reasons for experiencing the problem.
e.g. Because: A. the distance is too far to walk. ✓
B. the University transport is inadequate. ✓
C. I have no personal transport.
- (4) Finally, if your reason for experiencing the problem is not mentioned, or you wish to make some other comment, use the line labelled "Other reasons or comments:" e.g. (with regard to the above example)

ACADEMIC ADJUSTMENT PROBLEMS

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
1. Obtaining the necessary motivation to study hard.....				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
<p><u>Because:</u></p> <p>A. I am not following the academic programme I want to follow.</p> <p>B. my teachers fail to encourage me.</p> <p>C. there are many other things to do on campus.</p> <p>D. the work is too difficult.</p> <p>E. the work is too easy.</p> <p>F. my residence is too noisy.</p> <p>G. I suffer from health problems.</p> <p>H. there are too many social distractions.</p> <p>I. the library is not open long enough.</p> <p>J. <u>Other reasons or comments:</u></p>				
<p>2. <u>The technique of learning and studying at university....</u></p>				
<p><u>Because:</u></p> <p>A. the university system of teaching is different from that of school.</p> <p>B. there is no university course specifically devoted to study skills.</p> <p>C. I have specific difficulties with regard to revising for tests and exams.</p> <p>D. I have specific difficulties with regard to note taking.</p> <p>E. I have specific difficulties with regard to organising a study schedule.</p> <p>F. I have specific difficulties with regard to obtaining information from books quickly.</p> <p>G. I have specific difficulties with regard to getting the most benefit from seminars.</p> <p>H. <u>Other reasons or comments:</u></p>				
<p>3. <u>Expressing myself clearly in spoken English....</u></p>				
<p><u>Because:</u></p> <p>A. English is not my home language.</p> <p>B. I need a course in <u>spoken</u> English.</p> <p>C. I have to think about what I am going to say before I say it.</p> <p>D. I find speaking difficult in <u>all</u> languages.</p> <p>E. I feel embarrassed by my lack of fluency.</p> <p>F. <u>Other reasons or comments:</u></p>				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
4. Expressing myself clearly in written English....				
<u>Because:</u> A. English is not my home language. B. I need a course in <u>written</u> English. C. I have difficulty with spelling. D. I find writing difficult in <u>all</u> languages. E. I have difficulty with English grammar. F. <u>Other reasons or comments:</u>				
5. Understanding the English used in text books....				
<u>Because:</u> A. English is not my home language. B. the vocabulary in the books is too complicated. C. the authors describe customs, give examples etc. that are "foreign" to me. D. I find reading difficult in <u>all</u> languages. E. <u>Other reasons or comments:</u>				
6. Understanding the English used in lectures and seminars....				
<u>Because:</u> A. English is not my home language. B. the lecturers speak too quickly. C. the lecturers use too many complicated words. D. the accent of the lecturers is difficulty to understand. E. <u>Other reasons or comments:</u>				
7. Adopting a <u>critical</u> approach to the material I am studying....				
<u>Because:</u> A. Lecturers do not like students being critical.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
B. I do not have time to study the material in sufficient depth. C. the material presented is "fact" and does not need to be criticised. D. my previous schooling did not encourage a critical attitude. E. <u>Other reasons or comments:</u>				
8. <u>Understanding academic work</u> <u>rather than just memorizing it....</u>				
<u>Because:</u> A. of a lack of assistance from lecturers. B. I have <u>insufficient</u> time to think deeply about the work I am doing. C. of my language difficulties. D. lecturers seem to prefer memorization to comprehension. E. <u>Other reasons or comments:</u>				
9. <u>Writing simply and briefly</u> in assignments and examinations....				
<u>Because:</u> A. lecturers prefer complex, lengthy essays. B. it is difficult to write simply and briefly in a second language. C. in my home language we express ideas differently. D. long essays get higher grades. E. <u>Other reasons or comments:</u>				
10. <u>The interaction of student politics with academic life....</u>				
<u>Because:</u> A. politics distract me from my work. B. politics adversely affect staff/student relationships.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
C. politics should have nothing to do with university life. D. political influence does not allow you to think freely. E. <u>Other reasons or comments:</u>				
<u>FOR MEN STUDENTS ONLY</u>				
11. The interaction with women students.....				
<u>Because:</u> A. I consider women less intelligent than men. B. women students seldom contribute to class discussions. C. working alongside women distracts me. D. socializing interferes with my studies. E. women students do not work as hard as men. F. <u>Other reasons or comments:</u>				
<u>FOR WOMEN STUDENTS ONLY</u>				
12. The interaction with men students....				
<u>Because:</u> A. men students expect women students to be less intelligent. B. men students dominate discussions in class. C. I feel uncomfortable when I try to express opinions in front of men. D. working alongside men confuses me. E. socialising interferes with my studies. F. men students do not work as hard as women. G. men students have a prejudice against women students who are academically successfully. H. <u>Other reasons or comments:</u>				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
13. Obtaining the prescribed texts for course work....				
<u>Because:</u> A. there are insufficient copies in the library. B. there are insufficient copies in the bookshop. C. copies are misplaced on library shelves. D. I do not have enough money to buy books. E. <u>Other reasons or comments:</u>				
14. The number of books that can be borrowed from the library at any one time....				
<u>Because:</u> A. I have insufficient money for buying all the books I require. B. the subjects I am studying involve me in referring to many different text books. C. my friends also use the books that I borrow. D. <u>Other reasons or comments:</u>				
15. The length of time for which it is possible to loan books from the library....				
<u>Because:</u> A. I am a slow reader. B. I need to read the books fully and not just refer to them. C. the topics I am studying usually continue for more than two weeks. D. <u>Other reasons or comments:</u>				
16. Knowing how to make the best use of the library....				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
<p><u>Because:</u></p> <p>A. a written guide on how to use the library is not available.</p> <p>B. the present system of cataloguing the books is too complicated.</p> <p>C. the "Introduction to the Library" course is not adequate.</p> <p>D. I do not seem to need the library for my academic work.</p> <p>E. books are not replaced on the correct shelves.</p> <p>F. <u>Other reasons or comments:</u></p>				
<p>17. Reading through material quickly and scanning books for information.....</p>				
<p><u>Because:</u></p> <p>A. I need training in "speed reading" (how to read quickly).</p> <p>B. I am not reading the material in my home language.</p> <p>C. I am not sufficiently interested in the material I am studying.</p> <p>D. <u>Other reasons or comments:</u></p>				
<p>18. The amount of interaction between staff and students....</p>				
<p><u>Because:</u></p> <p>A. the staff are unfriendly.</p> <p>B. the students have no opportunity to meet the staff socially.</p> <p>C. many staff originate from a non-Zambian background.</p> <p>D. the opportunities to meet staff with regard to <u>academic matters</u> are too few.</p> <p>E. staff are not interested in students.</p> <p>F. <u>Other reasons or comments:</u></p>				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
19. The type of teaching given by staff....				
<u>Because:</u> A. lecturers talk too quickly. B. lecturers talk too much. C. lecturers use too complex a vocabulary. D. lecturers are biased in their presentation of information and material. E. lecturers present their material in a boring way. F. lecturers present their material illogically, in a haphazard fashion. G. lecturers do not tell students what is expected of them. H. <u>Other reasons or comments:</u>				
20. The marking system used by most lecturers....				
<u>Because:</u> A. lecturers are biased toward certain students. B. lecturers have different standard of marking. C. lecturers have too high a standard. D. lecturers have too low a standard. E. lecturers have too many assessments. F. the amount of information I get from staff concerning my academic progress is too little. G. <u>Other reasons or comments:</u>				
21. Having to adapt to staff from different cultural backgrounds...				
<u>Because:</u> A. staff from different countries have different standard.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
B. staff speak English differently. C. I dislike staff from certain countries. D. staff from some countries have no respect for Africans. E. <u>Other reasons or comments:</u>				
<u>FOR MEN STUDENTS ONLY</u>				
22. Having women lecturers....				
<u>Because:</u> A. I consider them less academically competent than men lecturers. B. I am not used to being taught by women. C. I feel that women should be more concerned with the home and family. D. they over-react to their newly acquired status. E. <u>Other reasons or comments:</u>				
<u>FOR WOMEN STUDENTS ONLY</u>				
23. Having men lecturers....				
<u>Because:</u> A. I consider them less academically competent than women lecturers. B. I am not used to being taught by men. C. they over-react to their newly acquired status. D. they make sexual advances to women students. E. <u>Other reasons or comments:</u>				
24. Getting advice on which course to take....				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
<p><u>Because:</u></p> <p>A. there are too many courses to choose from.</p> <p>B. course combinations are confusing.</p> <p>C. School Handbooks do not give enough information.</p> <p>D. School Handbooks are not clear.</p> <p>E. School Handbooks are not out on time.</p> <p>F. staff advisors are ignorant of the system.</p> <p>G. fellow students often give misleading advice.</p> <p>H. I do not have any particular career in mind.</p> <p>I. I do not know where to go for advice.</p> <p>J. <u>Other reasons or comments:</u></p>				
<p>25. Being forced to take a particular academic programme.....</p>				
<p><u>Because:</u></p> <p>A. it has lowered my <u>general</u> academic performance.</p> <p>B. it has lowered my performance in specific subjects.</p> <p>C. it has made me dissatisfied with the university system.</p> <p>D. my career has been frustrated.</p> <p>E. my family are very disappointed.</p> <p>F. the University should be able to resolve it's timetable clashes.</p> <p>G. <u>Other reasons or comments:</u></p>				
<p>26. The amount of academic work I have to get through....</p>				
<p><u>Because:</u></p> <p>A. my work load is too heavy.</p> <p>B. I have insufficient work to do.</p> <p>C. the assignments all come at the same time.</p> <p>D. I find it difficult to organise my study time.</p> <p>E. <u>Other reasons or comments:</u></p>				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
27. The number of time-table clashes I have.....				
<u>Because:</u> A. the clashes take too long to sort out. B. the clashes have never been satisfactorily sorted out. C. the clashes have adversely affected my general motivation to work. D. the clashes put me at a disadvantage with other students. E. the clashes involve me in a lot of extra work. F. <u>Other reasons or comments:</u>				
28. The interaction of family affairs and academic work....				
<u>Because:</u> A. I am having to support my parents. B. I am having to support my brothers and/or sisters. C. I am having to support my children. D. no one in my family gives me support while I am at University. E. I have a marriage problem. F. my work is frequently interrupted by my having to return to my family. G. <u>Other reasons or comments:</u>				
29. The money I have available to buy books....				
<u>Because:</u> A. the University allowance to buy books is too small. B. I get no financial contribution from my parents. C. I have difficulty putting money aside for books I might need later in the year. D. <u>Other reasons or comments:</u>				

This is the end of the section on academic adjustment. Are there any other academic adjustment problems which you have experienced and which have not been referred to in the questionnaire so far?

<u>SOCIAL ADJUSTMENT PROBLEMS</u>		.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
30.	The money I have available for personal needs (e.g. clothes, transport, entertainment etc., excluding books)....				
	<u>Because:</u> A. the amount of money I receive from my sponsors is too small. B. I get no financial support from my parents. C. I find that I spend all my money as soon as I get it. D. I feel inferior having so little money. E. I am not used to handling large sums of money. F. <u>Other reasons or comments:</u>				
31.	Making friends with other university students....				
	<u>Because:</u> A. students at the University are unfriendly. B. students at the University are shy. C. the opportunities for mixing socially are too few. D. I live off-campus. E. I find it difficult to mix socially. F. students are too involved in academic work. G. <u>Other reasons or comments:</u>				
32.	The <u>multi-tribal</u> nature of the University....				
	<u>Because:</u> A. I dislike tribal groups.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
B. students only socialize with their own tribal groups. C. tribal groups use their own languages and not English. D. it causes friction and aggression in the University community. E. it prevents me integrating fully into the University community. F. <u>Other reasons or comments:</u>				
33. The multi-racial nature of University.....				
<u>Because:</u> A. I dislike certain races. B. students only socialize with their own racial groups. C. racial groups use their own language and not English. D. it causes friction and aggression in the University community. E. it prevents me integra- ting fully into the University community. F. <u>Other reasons or comments:</u>				
34. Making friends with members of the opposite sex....				
<u>Because:</u> A. members of the opposite sex do not like me. B. I was educated in a single sex school. C. I am shy in the presence of the opposite sex. D. I have a sexual problem. E. members of the opposite sex are not interested in students. F. <u>Other reasons or comments:</u>				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
35. The size and complexity of the University campus....				
<u>Because:</u> A. the University is the largest social organization I have ever been part of. B. there is no official guide to the University campus. C. the University Orientation Programme for new students is inadequate. D. it makes me feel small and unimportant. E. <u>Other reasons or comments:</u>				
36. Being a student with strong religious beliefs, I find integration into the University Community....				
<u>Because:</u> A. my religion is sneered at by other students. B. lecturers ridicule my religion. C. I am not able to attend the religious meetings I would like to. D. On the campus I am isolated from others who practice the same religion. E. <u>Other reasons or comments:</u>				
37. Being a student with strong political beliefs, I find integration into the University Community....				
<u>Because:</u> A. my politics are sneered at by other students. B. lecturers ridicule my political beliefs. C. I am not able to attend the political meetings I would like to. D. on the campus, I am isolated from others who hold similar political views.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
E. <u>Other reasons or comments:</u>				
38. Learning to live with my room-mate in my residence....				
<u>Because:</u> A. I do not like him/her. B. previously I have always had my own room. C. it is difficult to entertain my friends with my room-mate being there. D. <u>Other reasons or comments:</u>				
39. The amount of general entertainment available on the campus....				
<u>Because:</u> A. there is too little and I am bored. B. there is too little and it helps me relax from academic work. C. there is too little and it would help me make friends. D. there is too little and I have to go into town for my entertainment. E. there is too much and it interferes with my academic work. F. <u>Other reasons or comments:</u>				
40. The amount of provision for sporting activities on the campus....				
<u>Because:</u> A. there is too little and I am bored. B. there is too little and it helps me relax from academic work.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
C. there is too little and it would help me make friends. D. there is too little and I have to go into town for my sport. E. there is too much and it interferes with my academic work. F. <u>Other reasons or comments:</u>				
41. The number of "intellectual" societies and clubs (e.g. chess clubs, cultural societies, debating societies) functioning on the campus.....				
<u>Because:</u> A. there are too few and I am bored. B. there are too few and they would assist my academic work. C. there are too few and they would help me make friends. D. there are too many and they interfere with my academic work. E. <u>Other reasons or comments:</u>				
42. The opportunity to drink alcohol.....				
<u>Because:</u> A. I am not able to stop drinking. B. it interferes with my work. C. it uses up all my money. D. <u>Other reasons or comments:</u>				
43. The University dining facilities.....				
<u>Because:</u> A. I get too little food.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
B. the food is poorly cooked. C. I have to wait too long for my food. D. the food is of poor quality. E. the menu lacks variety. F. they are not hygienic. G. <u>Other reasons or comments:</u>				
44. The accommodation provided in the Halls or Residence....				
<u>Because:</u> A. I would prefer to be in a single room. B. I would prefer to be in a shared room. C. there is too much noise at night-time. D. there is too much noise at day-time. E. there is a lack of privacy in the toilets and bathroom. F. the maintenance of the Halls of Residence is poor. G. it is difficult to prevent my belongings from being stolen. H. there is favouritism shown in the allocation of accommodation. I. <u>Other reasons or comments:</u>				

This is the end of the section on social adjustment problems and the end of the questionnaire. Are there any other adjustment problems of any nature which you have experienced and which have not been referred to in this questionnaire?

APPENDIX C - THE MAIN SURVEY QUESTIONNAIRE

This questionnaire on student adjustment problems will provide information which is not at present available. Such information is not only of academic interest, but will help the University to prevent or alleviate student's problems. Your replies will be treated in strictest confidence and if you prefer you can remain anonymous. However, after the data has been collected, it is hoped to interview some students in order to examine the adjustment problems in greater depth. If you are willing to be interviewed, please indicate your name and computer number in the space provided below. Thank you for your assistance.

Name: (underline surname)

Computer Number:

Section A PERSONAL INFORMATION

Next, complete this section by circling the appropriate number, word or phrase.

1. What is your age? 17 18 19 20 21 22 23 24 25 26 27 28 29
30 31 32 33 34 35
2. What is your sex? Female Male
3. What is your marital status? Divorced Married Separated Single
4. How many children do you have? 0 1 2 3 4 5 6 7 8 9 10 11
12 13 14 15
5. What degree are you registered for? B.A. B.A. (Acc. Fin.)
B.A. (Lib.St.) B.Min.Sc. B.Sc. B.Sc. (Agric.) B.A. (Ed.)
B.Eng. B.Sc. (Ed.) B.S.W. LL.B. M.B.Ch.B B.A. (B.Admin.)
6. What school are you registered in? Agriculture Education
Engineering H.S.S. Law Medicine Mines Natural Sciences.
7. When did you enter this University? 1980 1979 1978 1977
1976 1975 1974
8. What is your University address? Africa International Kafue
October Kwacha Pamodzi President Soweto Zambezi Off-Campus.
9. Have you spent the majority of your life in an urban area (e.g.
Lusaka, Livingstone, Kabwe The Copperbelt Towns) or a rural
area? URBAN RURAL.
10. Who is your main financial sponsor? Foreign government G.R.Z.
Guardian Mines Parents Relations Self U.N. Other.

11. What language do you mainly speak on campus? Bemba English
Kaonde Lozi Lunda Luvale Nyanja Tonga Other
12. What is your mother tongue? Bemba English Kaonde
Lozi Lunda Luvale Nyanja Tonga Other.
13. How many blood brothers and sisters do you have?
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
14. How many years of primary education have you had?
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
15. How many years of secondary education have you had?
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
16. How many years of pre-university education have you spent in a boarding school? 0 1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
17. How many years of pre-university education have you spent outside Zambia? 0 1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
18. How many months of Zambia National Service have you completed?
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24
19. What division did you achieve in the grade 7 (or standard 6) examination? Div. 1 Div. 2 Div. 3 Div. 4
20. What division did you achieve in the Form 3 (or Form 2) examination? Div. 1 Div. 2 Div. 3 Div. 4
21. What division did you achieve in the Cambridge School Certificate? Div. 1 Div. 2 Div. 3 Div. 4
22. How many "O" levels did you obtain? 1 2 3 4 5 6
7 8 9 10 Exam not taken.
23. How many "A" levels did you obtain? 1 2 3 4 5
Exam not taken.
24. How many visits have you made to the University Student Counselling Service? 0 1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20.
25. What is your father (or guardian's) occupation? (see below for further information) "Clerical" "Commercial" "Professional" "Semi-professional" "Semi-skilled" "Skilled" "Unskilled" Retired Unemployed.
26. What is your mother's occupation? (see below for further information) "Clerical" "Commercial" "Professional" "Semi-professional" "Semi-skilled" "Skilled" "Unskilled" Retired Unemployed.

27. Which of the following figures is closest to your father's (or guardian's) income, per month? 0 K100
K200 K300 K400 K500 K600 K700 K800 K900 K1000.
28. Which of the following figures is closest to your mother's income, per month? 0 K100 K200 K300 K400 K500
K600 K700 K800 K900 K1000.
29. What is your father's highest educational qualification?
Sub A (Grade 1) Sub B (Grade 2) Standard 1 (Grade 3)
Standard 2 (Grade 4) Standard 3 (Grade 5) Standard 4
(Grade 6) Standard 5 (Grade 7) Standard 6 Form 1
Form 2 Form 3 Form 4 Form 5 Form 6 T5 T4 T3 T2 T1
University degree None of the above Not known.
30. What is your mother's highest educational qualification?
Sub A (Grade 1) Sub B (Grade 2) Standard 1 (Grade 3)
Standard 2 (Grade 4) Standard 3 (Grade 5) Standard 4
(Grade 6) Standard 5 (Grade 7) Standard 6 Form 1 Form 2
Form 3 Form 4 Form 5 Form 6 T5 T4 T3 T2 T1 University
degree None of the above Not known.

Classification of Occupations. Examples of occupations classified under the various headings are as follows:

- "Clerical": e.g. accountant (without degree or professional qualification) book-keeper, cashier, civil servant (lower or middle level), clerk, draughtsman, foreman, proof reader, receptionist, secretary, supervisor, storekeeper, telephonist, typist, member or lower level officer of the army or police, etc.
- "Commercial": e.g. businessman (owner), commercial farmer, musician (self employed), salesman, shopkeeper, storekeeper, trader, etc.
- "Professional": e.g. accountant or engineer (with degree or professional qualification), army or police captain or above, chief (full time), diplomat, doctor, high national or state government officer, lawyer, manager of a firm (not owner), Member of Parliament, priest or minister, teacher (with a university degree) etc.
- "Semi-professional": e.g. dispenser, herbalist, journalist, librarian, nurse, teacher (without degree), welfare worker, etc.
- "Semi-skilled": e.g. assembly worker, basket maker, bus conductor, butcher, cook, driver, factory worker, fisherman, hair dresser, hunter, machine operator, miner, peasant farmer etc.
- "Skilled": e.g. blacksmith, carpenter, electrician, engineer (without degree or equivalent) fitter, mechanic, painter, photographer, printer, radio repairman, shoemaker, surveyor, technician, watch repairman, weaver, welder, etc.
- "Unskilled": e.g. cleaner, driver's mate, house-boy, labourer, messenger boy, security guard, store boy, etc.

If you wish to add any further information or make any comments, please use the space below:

PLEASE READ THESE INSTRUCTIONS BEFORE CONTINUING FURTHER

- (1) Firstly, complete each of the following statements by placing a tick in the appropriate column:

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
e.g. Travelling between the University campus and town....		✓		

- (2) If you have indicated that there is "NOT a problem",
move straight on to the next statement.
- (3) If you have indicated that there is a "severe problem",
a "problem" or a "slight problem", then place a tick
against one or more of your reasons for experiencing
the problem.

e.g. A.✓... because the distance is too far to walk.
B.✓... because the University transport is inadequate.
C.✓... because I have no personal transport.

- (4) Finally, if your reason for experiencing the problem is
not mentioned, or you wish to make some other comment,
use the line labelled "Other reasons or comments:" e.g.
with regard to the above example.

"I have a medical condition that requires specialist
attention in town."

SECTION B. ACADEMIC ADJUSTMENT

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
1. Obtaining the necessary motivation to study hard....				
A..... <u>because</u> I am not following the academic programme I want to follow.				
B..... <u>because</u> my teachers fail to encourage me.				
C..... <u>because</u> there are many other things to do on campus.	DO	NOT	WRITE	
D..... <u>because</u> the work is too difficult.				
E..... <u>because</u> the work is too easy.	IN	THIS	SPACE	
F..... <u>because</u> my residence is too noisy.				
G..... <u>because</u> I suffer from health problems.				
H..... <u>because</u> there are too many social distractions.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
I..... <u>because the library is not open long enough.</u>	DO	NOT	WRITE	
J..... <u>Other reasons or comments:</u>	IN	THIS	SPACE	
<hr/>				
2. The technique of learning and studying at University....				
<hr/>				
A..... <u>because the University system of teaching is different from that of school.</u>				
B..... <u>because there is no University course specifically devoted to study skills.</u>				
C..... <u>because I have specific difficulties with regard to note taking.</u>	DO	NOT	WRITE	
D..... <u>because I have specific difficulties with regard to revising for tests and exams.</u>				
E..... <u>because I have specific difficulties with regard to organising a study schedule.</u>	IN	THIS	SPACE	
F..... <u>because I have specific difficulties with regard to obtaining information from books quickly.</u>				
G..... <u>because I have specific difficulties with regard to getting the most benefit from seminars.</u>				
H..... <u>Other reasons or comments:</u>				
<hr/>				
<hr/>				
3. Expressing myself clearly in English....				
<hr/>				
A..... <u>because English is not my home language.</u>				
B..... <u>because I feel embarrassed by my lack of fluency.</u>	DO	NOT	WRITE	
C..... <u>because I have to think about what I am going to say before I say it.</u>				
D..... <u>because I have difficulty with English grammar.</u>	IN	THIS	SPACE	

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
<p>E..... <u>because</u> I have difficulty expressing myself in <u>all</u> languages._____</p> <p>F..... because when writing I have difficulty with spelling._____</p> <p>G. Other reasons or comments:_____</p> <p>_____</p> <p>_____</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			
<p>4. Understanding the English used in text books....</p>				
<p>A..... <u>because</u> English is not my home language._____</p> <p>B..... <u>because</u> the vocabulary in the books is too complicated._____</p> <p>C..... <u>because</u> the authors describe customs, give examples etc. that are "foreign" to me._____</p> <p>D..... <u>because</u> I find reading difficult in <u>all</u> languages.____</p> <p>E..... Other reasons or comments:_____</p> <p>_____</p> <p>_____</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			
<p>5. Adopting a <u>critical</u> approach to the material I am studying...</p>				
<p>A..... <u>because</u> lecturers do not like students being critical._____</p> <p>B..... <u>because</u> I do not have time to study the material in sufficient depth._____</p> <p>C..... <u>because</u> the material presented is "fact" and does not need to be criticised._____</p> <p>D..... <u>because</u> my previous schooling did not encourage a critical attitude._____</p> <p>E..... Other reasons or comments:_____</p> <p>_____</p> <p>_____</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			
<p>6. <u>Understanding</u> academic work rather than just memorizing it..</p>				
<p>A..... <u>because</u> of a lack of assistance from lecturers._____</p> <p>B..... <u>because</u> I have insufficient time to think deeply about the work I am doing._____</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
C..... because of my language difficulties. D..... because lecturers seem to prefer memorization to comprehension. E..... Other reasons or comments: _____ _____ _____		DO	NOT	WRITE
	IN	THIS	SPACE	
7. Writing simply and briefly in assignments and examinations..				
A..... because lecturers prefer complex, length essays. B..... because it is difficult to write simply and briefly in a second language. C..... because in my home language we express ideas differently. D..... because long essays get higher grades. E..... Other reasons or comments: _____ _____ _____		DO	NOT	WRITE
	IN	THIS	SPACE	
8. The interaction of student politics with academic life...				
A..... because politics distract me from my work. B..... because politics adversely affect staff/student relationships. C..... because politics should have nothing to do with university life. D..... because political influence does not allow you to think freely. E..... Other reasons or comments: _____ _____ _____		DO	NOT	WRITE
	IN	THIS	SPACE	
9. Working alongside women students....				
A..... because I consider women less intelligent than men. B..... because women students seldom contribute to class discussions.		DO	NOT	WRITE
	IN	THIS	SPACE	

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
<p>C..... because they distract me and interfere with my studies.</p> <p>D..... because I am only used to working alongside males.</p> <p>E..... because women students do not work as hard as men.</p> <p>F..... Other reasons or comments:</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			
<p>FOR WOMEN STUDENTS ONLY</p>				
<p>10. Working alongside men students.....</p>				
<p>A..... because men students expect women students to be less intelligent.</p> <p>B..... because men students dominate discussions in class.</p> <p>C..... because I feel uncomfortable when I try to express opinions in front of men.</p> <p>D..... because I am only used to working alongside females.</p> <p>E..... because socialising interferes with my studies.</p> <p>F..... because men student do not work as hard as women.</p> <p>G..... because men students have a prejudice against women students who are academically successful.</p> <p>H..... Other reasons or comments:</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			
<p>11. Obtaining the prescribed texts for course work.....</p>				
<p>A..... because there are insufficient copies in the library.</p> <p>B..... because there are insufficient copies in the bookshop.</p> <p>C..... because copies are misplaced on library shelves.</p> <p>D..... because I do not have enough money to buy books.</p> <p>E..... Other reasons or comments:</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
12. The numbers of books that can be borrowed from the library at any one time....				
A..... because I have insufficient money for buying all the books I require. B..... because the subjects I am studying involve me in referring to many different text books. C..... because my friends also use the books that I borrow. D..... Other reasons or comments: _____ _____ _____	DO NOT WRITE IN THIS SPACE			
13. The length of time for which it is possible to loan books from the library.....				
A..... because I am a slow reader. B..... because I need to read the books fully and not just refer to them. C..... because the topics I am studying usually continue for more than two weeks. D..... Other reasons or comments: _____ _____ _____	DO NOT WRITE IN THIS SPACE			
14. Knowing how to make the best use of the library.....				
A..... because a written guide on how to use the library is not available. B..... because the present system of cataloguing the books is too complicated. C..... because the "Introduction to the Library" course, is not adequate. D..... because I do not seem to need the library for my academic work. E..... because books are not replaced on the correct shelves.	DO NOT WRITE IN THIS SPACE			

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
F..... Other reasons or comments: _____ _____ _____	DO	NOT	WRITE	
	IN	THIS	SPACE	
15. Reading through material quickly and scanning books for information.....				
A..... because I need training in "speed reading" (how to read quickly)._____				
B..... because I am not reading the material in my home language._____	DO	NOT	WRITE	
C..... because I am not sufficiently interested in the material I am studying._____				
D..... Other reasons or comments: _____ _____ _____	IN	THIS	SPACE	
16. The amount of interaction between staff and students....				
A..... because the staff are unfriendly._____				
B..... because the students have no opportunity to meet the staff socially._____	DO	NOT	WRITE	
C..... because the opportunities to meet staff with regard to academic matters are too few._____				
D..... because staff office hours are too short._____				
E..... because many staff originate from a non-Zambian background._____	IN	THIS	SPACE	
F..... because staff are not interested in students._____				
G..... Other reasons or comments: _____ _____ _____				
17. The type of teaching given by staff....				
A..... because lecturers talk too quickly._____	DO	NOT	WRITE	
	IN	THIS	SPACE	

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
18. The marking systems used by most lecturers....				
A..... because lecturers are biased toward certain students. _____	DO NOT WRITE			
B..... because lecturers have different standards of marking. _____				
C..... because lecturers have too high a standard. _____				
D..... because lecturers have too low a standard. _____				
E..... because lecturers have too many assessments. _____				
F..... because the amount of information I get from staff concerning my academic progress is too little. _____				
G..... Other reasons or comments: _____ _____ _____				
19. Having to adapt to staff from different cultural backgrounds....				
A..... because staff from different countries have different standards. _____	DO NOT WRITE			
B..... because staff speak English differently. _____				
C..... because I dislike staff from certain countries. _____				
D..... because staff from some countries have no respect for Africans. _____				
E..... Other reasons or comments: _____ _____ _____				
<u>FOR MEN STUDENTS ONLY</u>				
20. Having women lecturers.....				
A..... because I consider them less academically competent than men lecturers. _____	DO NOT WRITE			
B..... because I am not used to being taught by women. _____				
C..... because I feel that women should be more concerned with the home and family. _____				

		.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
D.....	<u>because</u> they over-react to their newly acquired status.	DO	NOT	WRITE	
E.....	Other reasons or comments:	IN	THIS	SPACE	
21.	Getting advice on which courses to take.....				
A.....	<u>because</u> there are too many courses to choose from.	DO	NOT	WRITE	
B.....	<u>because</u> course combinations are confusing.				
C.....	<u>because</u> school handbooks do not give enough information.	DO	NOT	WRITE	
D.....	<u>because</u> school handbooks are not clear.				
E.....	<u>because</u> school handbooks are not out on time.				
F.....	<u>because</u> staff advisers are ignorant of the system.	IN	THIS	SPACE	
G.....	<u>because</u> fellow students often give misleading advice.				
H.....	<u>because</u> I do not have any particular career in mind.				
I.....	<u>because</u> I do not know where to go for advice.				
J.....	Other reasons or comments:				
22.	Being forced to take a particular academic programme.....				
A.....	<u>because</u> it has lowered my general academic performance.	DO	NOT	WRITE	
B.....	<u>because</u> it has lowered my performance in specific subjects.				
C.....	<u>because</u> it has made me dissatisfied with the university system.				
D.....	<u>because</u> my career has been frustrated.	IN	THIS	SPACE	
E.....	<u>because</u> my family are very disappointed.				
F.....	<u>because</u> the university should be able to resolve it's timetable clashes.				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
G..... Other reasons or comments: _____ _____ _____	DO NOT WRITE IN THIS SPACE			
23. The amount of academic work I have to get through.....				
A..... because my work load is too heavy. B..... because I have insufficient work to do. C..... because the assignments all come at the same time. D..... because I find it difficult to organise my study time. E..... because as a science student, I get too many labs. F..... Other reasons or comments _____ _____ _____	DO NOT WRITE IN THIS SPACE			
24. The number of time-table clashes I have				
A..... because the clashes take too long to sort out. B..... because the clashes have never been satisfactorily sorted out. C..... because the clashes have adversely affected my general motivation to work. D..... because the clashes put me at a disadvantage with other students. E..... because the clashes involve me in a lot of extra work. F..... Other reasons or comments: _____ _____ _____	DO NOT WRITE IN THIS SPACE			
25. The interaction of family affairs and academic work....				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
A..... <u>because</u> I am having to support my parents.				
B..... <u>because</u> I am having to support my brothers and/ or sisters. _____				
C..... <u>because</u> I am having to support my children. _____				
D..... <u>because</u> no one in my family gives me support while I am at University. _____				
E..... <u>because</u> I have a marriage problem. _____				
F..... <u>because</u> my work is frequently interrupted by my having to return to my family. _____				
G..... <u>because</u> I am "homesick". _____				
H..... Other reasons or comments: _____ _____ _____				
26. The money I have available to buy books.....				
A..... <u>because</u> the university allowance to buy books is too small. _____				
B..... <u>because</u> I get no financial contribution from my parents. _____				
C..... <u>because</u> I have difficulty putting money aside for books I might need later in the year. _____				
D..... Other reasons or comments: _____ _____ _____				

This is the end of the section on academic adjustment. Are there any other academic adjustment problems which you have experienced and which have not been referred to in the questionnaire so far?

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
B..... <u>because</u> students only socialize with their own tribal groups. C..... <u>because</u> tribal groups use their own language but not English. D..... <u>because</u> it causes friction and aggression in the University community. E..... <u>because</u> it prevents me integrating fully into the University community. F..... Other reasons or comments:	DO	NOT	WRITE	
4. Making friends with members of the opposite sex....				
A..... <u>because</u> members of the opposite sex do not like me. B..... <u>because</u> I was educated in a single sex school. C..... <u>because</u> I am shy in the presence of the opposite sex. D..... <u>because</u> I have a sexual problem. E..... <u>because</u> members of the opposite sex are not interested in students. F..... Other reasons or comments:	DO	NOT	WRITE	
5. The size and complexity of the University campus...				
A..... <u>because</u> the University is the largest social organization I have ever been part of. B..... <u>because</u> there is no official guide to the University campus. C..... <u>because</u> the University Orientation Programme for new students is inadequate. D..... <u>because</u> it makes me feel small and unimportant. E..... Other reasons or comments:	DO	NOT	WRITE	
	IN	THIS	SPACE	

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
6. Being a student with strong religious beliefs, I find integration into the University Community.....				
A.... <u>because</u> my religion is sneered at by other students. B.... <u>because</u> lecturers ridicule my religion. C.... <u>because</u> I am not able to attend the religious meetings I would like to. D.... <u>because</u> on the campus I am isolated from others who practice the same religion. E.... Other reasons or comments: _____ _____ _____ _____	DO NOT WRITE IN THIS SPACE			
7. Being a student with strong political beliefs, I find integration into the University Community.....				
A..... <u>because</u> my politics are sneered at by other students. B..... <u>because</u> lecturers ridicule my political beliefs. C..... <u>because</u> I am not able to attend the political meetings I would like to. D..... <u>because</u> on the campus, I am isolated from others who hold similar political views. E..... Other reasons or comments: _____ _____ _____ _____	DO NOT WRITE IN THIS SPACE			
8. Learning to live with my room-mate in my residence.....				
A..... <u>because</u> I do not like him/her. B..... <u>because</u> previously I have always had my own room. C..... <u>because</u> it is difficult to entertain my friends with my room-mate being there.	DO NOT WRITE IN THIS SPACE			

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
D..... Other reasons or comments: _____ _____ _____	DO	NOT	WRITE	
	IN	THIS	SPACE	
9. The amount of general entertainment available on the campus.....				
A..... <u>because</u> there is too little and I am bored.				
B..... <u>because</u> there is too little and it helps me relax from academic work.	DO	NOT	WRITE	
C..... <u>because</u> there is too little and I have to go into town for my entertainment.				
D..... <u>because</u> there is too little and it would help me make friends.	IN	THIS	SPACE	
E..... <u>because</u> there is too much and it interferes with my academic work.				
F..... Other reasons or comments: _____ _____ _____				
10. The amount of provision for sporting activities on the campus.....				
A..... <u>because</u> there is too little and I am bored.				
B..... <u>because</u> there is too little and it helps me relax from academic work.	DO	NOT	WRITE	
C..... <u>because</u> there is too little and it would help me make friends.				
D..... <u>because</u> there is too little and I have to go into town for my sport.	IN	THIS	SPACE	
E..... <u>because</u> there is too much and it interferes with my academic work.				
F..... Other reasons or comments: _____ _____ _____				
11. The number of "intellectual" societies and clubs (e.g. chess clubs, cultural societies, debating societies) functioning on the campus.....				

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
<p>A..... <u>because</u> there are too few and I am bored.</p> <p>B..... <u>because</u> there are too few and they would assist my academic work.</p> <p>C..... <u>because</u> there are too few and they would help me make friends.</p> <p>D..... <u>because</u> there are too many and they interfere with my academic work.</p> <p>E..... Other reasons or comments:</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			
<p>12. The opportunity to drink alcohol.....</p>				
<p>A..... <u>because</u> I am not able to stop drinking.</p> <p>B..... <u>because</u> it interferes with my work.</p> <p>C..... <u>because</u> it uses up all my money.</p> <p>D..... Other reasons or comments:</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			
<p>13. The University dining facilities.....</p>				
<p>A..... <u>because</u> I get too little food.</p> <p>B..... <u>because</u> the food is poorly cooked.</p> <p>C..... <u>because</u> I have to wait too long for my food.</p> <p>D..... <u>because</u> the food is of poor quality.</p> <p>E..... <u>because</u> the menu lacks variety.</p> <p>F..... <u>because</u> they are not hygienic.</p> <p>G..... Other reasons or comments:</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>DO NOT WRITE</p> <p>IN THIS SPACE</p>			

	.. is a severe problem for me	.. is a problem for me	.. is a slight problem for me	.. is NOT a problem for me
14. The accommodation provided in the Halls of Residence.....				
A..... because I would prefer to be in a single room.				
B..... because I would prefer to be in a shared room.				
C..... because there is too much noise at night-time.				
D..... because there is a lack of privacy in the toilets and bathroom.				
E..... because there is too much noise during the day-time.				
F..... because the maintenance of the Halls of Residence is poor.				
G..... because it is difficult to prevent my belongings from being stolen.				
H..... because there is favouritism shown in the allocation of accommodation.				
I..... Other reasons or comments:				

This is the end of the section on social adjustment problems and the end of the questionnaire. Are there any other adjustment problems of any nature which you have experienced and which have not been referred to in this questionnaire?

APPENDIX D - SET QUESTIONS, (a list of the more important questions put to students during the course of the interview sessions).

1. What type of food would you like to see served up in the dining halls?
2. What particular complaints do you have about the cooking of the food?
3. Should students be given facilities to cook their own food?
4. Should independent caterers be established on campus?
5. Do you buy any food yourself?
6. Would you prefer to see more text-books in the library or the bookshop?
7. Which of your courses are most affected by text-books not being available?
8. Which academic programme were you "forced" into?
9. What forced you into it?
10. Have you overcome your disappointment?
11. How can the University improve its quota system?
12. Will you try to revert to your originally intended career when you leave university?
13. Should a greater emphasis be placed on continuous assessment or the final examination?
14. Should the university courses cover less material and concentrate on study in depth?
15. How useful is laboratory work, (if conducted), to your studies?
16. How much money do you need for essential books in the first year?
17. Should the book allowance be paid out termly?
18. Do the standards required in the courses you are taking vary greatly?
19. Which students are marked preferentially?
20. Which lecturers have high (low) standards of marking?
21. What are the (social) distractions that affect your motivation?
22. Do you consider the general level of student motivation to work, to be sufficiently high?
23. Should more time be devoted to lectures/seminars/tutorials/practicals?
24. Why are some lecturers "boring"?
25. In what way are lecturers biased in their presentation of material?
26. Do first-years need a special (half) course on "how to study at university"?
27. Did your secondary school prepare you sufficiently for university life?

28. How would you like to see the university system of teaching changed?
29. Should lecturers encourage a student's critical appraisal?
30. Is the university 4 year programme too short?
31. How much money do you need for essential personal requirements in the first year?
32. What are the personal requirements you most need?
33. Should a university shop be established on campus?
34. Should parents/relatives be expected to assist financially?
35. How would you prefer to obtain your advice on which courses to take: (a) school handbooks (b) staff advisors (c) fellow students?
36. Is it important to have information on UNZA courses while you are still at secondary school?
37. What aspects of maintenance could be improved in the Halls of Residence?
38. How can the "noise problem" at night be remedied?
39. How can the security of personal belongings be improved?
40. Which halls have the worst/best accommodation?
41. How can study facilities be improved in the Halls of Residence?
42. How many books would you like to be able to borrow from the library at any one time?
43. Which lecturers prefer memorization to comprehension?
44. Did your previous schooling encourage memorization of facts rather than comprehension?
45. Would it be preferable to have coeducational secondary schools in Zambia?
46. Should the female/male ratio at the university, be increased?
47. How many hours a week should staff reserve for office-hours?
48. What staff/student social links would you like to see introduced?
49. Would some instruction on how to scan books quickly for information, be of help to you?
50. Would texts written by Zambian authors be more suitable for you?
51. For how long would you like to be able to borrow books from the library?
52. What library opening-times would you like to see instituted?
53. Do first-years need a special (half) course in written/spoken English?
54. Do you find that long/complex essays get higher marks?
55. How can the "Introduction to the Library" course be improved?

56. Do certain lecturers impose their political views on students?
57. Do women students prefer to have men-friends from outside the university?
58. Why do you have to return home to your family during term time?
59. What kind of campus entertainment would you like to see more of?
60. Should the university provide regular transport facilities into town?
61. What additional sporting facilities would you like to have on campus?
62. What proportion of your text-books, have a vocabulary which is too complicated?
63. Have you suffered from feelings of "loneliness" since coming to the campus?
64. Why are girls "shy" in tutorials?
65. Are there any religious groups in the university, which are too influential?
66. Would you like to be able to choose your room-mate?
67. Which tribal/ethnic groups in the university tend to stick together?
68. Should there be a larger proportion of Zambian/expatriate staff at the university?
69. Should there be a larger proportion of women/men lecturers at the university?
70. How much alcohol have you drunk over the last month?
71. What additional "intellectual" societies would you like to have on campus?
72. How many time-table clashes did you experience at the beginning of this year?
73. How could the University Orientation Programme be improved?
74. Are there any political groups in the university which are too influential?

Questions put to the "high AP" student

75. Why do students aged 21 years and over experience greater academic problems than younger students?
76. Why do male students have more severe academic problems than female students?
77. Why do single students have greater academic problems than married students?
78. Why do Agriculture students have greater academic problems than students from other Schools?

79. Why do students from a rural background have greater academic problems than students from an urban background?
80. Why do Lozis have greater academic problems than Bembas?
81. Why do students who have completed ZNS experience greater academic problems than students who have not done ZNS?
82. Why do students with: unemployed fathers/unskilled semi-skilled, unemployed mothers/fathers earning less than K300 per month/mothers not earning/fathers who have not completed secondary education/mothers who have not completed primary education, experience more/more severe, APs than other groups of students?