

CHAPTER 9 : OVERVIEW AND DISCUSSION OF RESEARCH RESULTS

9.1 The chapter in brief

Chapter 9 is a synthesis of the results of the various ways in which data from this study has been treated and brings together the outcomes of the statistical analysis of the questionnaire data as well as the qualitative interpretation of the interview data. This is followed by a discussion of the findings with respect to the study objectives and questions and also in terms of their comparability with research findings in the literature. The final section of the chapter covers the results of multiple regression and analysis of variance procedures and the implications which these have for the USP distance education programme.

9.2. Introduction

In Chapter 1 the USP and its Region were presented as the context of this study, unique in that the USP is the only regional University of its kind in the world, owned by and serving 12 island nations, scattered across more than 30 million square kilometres of ocean in the South Pacific. In this presentation, the influence of the diverse and heterogenous nature of the Region on the personal, situational and study environments of the USP distance students was seen as a significant cause of the variant learning needs throughout its member countries. This diversity, across the Region's physical, socio-cultural, political and economic dimensions (see Tuimaleali'ifano, 1990), emerged as the single, most challenging factor in the realisation of the educational goals of the USP. In summary, on the physical front, nations of the Region are either a single island or comprised of several scattered islands. The islands are either coral atolls or volcanic in origin, a factor which has implications for natural resource endowment and for the potential for economic development. Socio-cultural differences not only occur among the broad population groups of Melanesians, Polynesians and Micronesians, there are in-country differences among the numerous Melanesian language communities, and also among the international migrant communities settled throughout the countries of the Region and adding to the language and cultural diversity. Educational, governmental and economic systems

inherited from former colonial governments and now found to be inadequate for and irrelevant to the needs and ethos of the societies of the South Pacific, are currently undergoing policy redirection for localisation and nationalistic purposes, posing major challenges for the USP as the main provider of tertiary education and skilled manpower training for the Region.

The bulk of the intake into the USP's distance education programme were adults. Principles of adult learning discussed in Chapter 2, and the psychological perspectives from which they were derived, indicated certain attributes that were accepted as generic to adulthood and influenced the approach to and style of learning by adults (see Powell, Conway and Ross, 1990). In discussing the literature on distance education learners, Lauffer (1988) provided an apt summary of these features of distance students in terms of common characteristics among themselves and in comparison with students in traditional modes of study (pp. 31-32). Empirical studies examining these attributes, agreed with the generalisability of these features to a large degree but cautioned about the extent of their effect on adult learning behaviours beyond the conditions, location and context of the studies from which they were derived. In this respect, there was strong recognition of the significance of variables within the personal, situational and educational environments of the students in influencing and contributing to the attributes of adults as distance learners. Furthermore, it has been questioned whether certain learning behaviours were not so much an attribute of adulthood as they were a personal learning style preference irrespective of age.

Two of the more popularly acknowledged features of adult learners as derived from theoretical and empirical studies were their independence and self-directedness. These features were accountable for some of the features of adult learners indicated by Lauffer above, that adults were expected to be more aware of the purposes and kind of education they wanted and that they were inclined to draw upon life and work experience in their learning and were therefore more problem-centred in their approach to learning. The humanists of the '60s and '70s saw adult learning as a self-initiated process motivated by intrinsic reasons and this was thus a process of holistic self-actualization. Developmental psychologists in the same period postulated that the participation of adults in learning activities was best understood by examining their interaction with the environment. Both of these perspectives formed the basis of current accepted principles of adult learning and have particularly highlighted the

significance of the adult learner's environment in motivating persistence and completion of courses of study. Some of the more effective of these features in shaping the disposition of adult learners towards study, as identified by the literature, were family, social and vocational life, past educational opportunities, educational environment and study support facilities, and opportunities for interactive and group learning. The extent to which these features helped to shape the confidence and positive self-perception of the students, their motivation to study, their development particularly as independent learners and orientation to learning, varied not only across educational contexts, but also with each group of adult learners.

If the teaching of these adults in the distance mode is to be effective, then two aspects in particular of the teaching/learning process are to be seriously considered. Firstly, knowledge about the features governing the students' predisposition and preparedness to learn is an imperative precondition for the distance educator aiming to produce learning opportunities that avoid or find alternatives to learning barriers within the students' personal, situational and study environments. Secondly, where this knowledge is not available, then assumptions about their disposition and preparedness to study must be properly informed particularly by relevant research findings so that they are given the appropriate and right amount of learning support. In this case, the applicability of the research information, especially if extraneous to the situation in question, must first be established

In relation to this knowledge and information, this study set out to achieve several objectives. Firstly, using responses to the study questionnaire, a profile of the typical distance vocational student at the USP was developed that would provide the distance educator at the institution with a general idea of the features and personal attributes peculiar to the student and relevant to the appropriate targeting of learning opportunities by the USP course development team. Next it was hoped to be able to provide the answers to a series of study questions related to the degree of influence of variables within the personal, situational and study contexts of the adult distance learner at the USP on his/her learning needs and disposition to study, particularly at a distance. Multivariate statistical analyses of the questionnaire data were conducted towards this end. In addition, the interview responses of selected students provided further insight into the student dimension which complemented the statistical findings by revealing real life situations in the case studies provided in Chapter 8. The following discussion will focus on the

extent to which the results of the profile exercise and multivariate data analyses have provided answers to the questions raised in this study and consequently their significance and implications for the distance teaching/learning processes at the USP. The discussion will focus first on major findings under the general sub-headings followed in previous chapters. These findings will then be examined in light of the study questions and issues deriving from them.

9.3 The USP Distance Learner: How Typical, How Unique?

9.3.1 Personal and family attributes

The typical distance education student in the USP's Accounting and Management vocational programmes is male, with approximately two-thirds of the respondents in this study being men, and one-third being women. Hence this chapter uses the male pronoun in reference to the student. It is evident, from the composition and discussion of the profile of the USP distance learner in Chapter 4 that one of the most significant characteristics to emerge from the data is the age of the student. By comparison to the typical age of distance students, particularly in the Western world, the USP distance learners, falling in the 21-40 years age bracket with a slight emphasis on the 21-30 year old group, are some years younger than their cohorts in developed countries where the typical adult distance learner is between the ages of 35 and 40 years (Lauffer, 1988). This might well be a characteristic of distance students in developing countries as it is for Indonesian distance learners (Hiola and Moss, 1990). The data in Chapter 4 has also suggested that this factor is crucial in determining several other features of the USP distance learner with regard to the personal environment within which he operates. This is to be expected given the wide age range of the students. The several different age cohorts inherent in this age range will reflect variations in the physical, psychological and sociocultural, and situational characteristics that constitute the dimensions of Cross's (1981) Characteristics of Adult Learners model which are responsible for variations in any one group of adult learners. Results of the factor analysis of the data indicated age as a variable loading highly on the Demography Factor which accounted for 18 percent of the direct and joint variance in the data. Demographic variables were also significant performance predictors for

the USP group which did not appear to be as much the case for adult distance students elsewhere (Gibson, 1990; Eisenberg and Dowsett, 1990).

The reasons for this difference must lie within the differences in age. With respect to the USP group, the wide age range makes it possible and necessary to group and discuss younger and older students separately, as borne out by the data. Younger students have been shown to be less likely to perform successfully in their distance courses than older students. Various reasons for this are suggested in Chapter 5. In particular, it is clear that the age factor places the student in a specific demographic and family environment combining variables especially challenging for the younger distance students such as being single and still living a relatively less independent life with parents; or being married for relatively fewer years with young children of a more demanding age; household economics are likely to be more challenging for younger income earners, who, without sufficient work experience or post-secondary study opportunity, find themselves in lower income brackets. In addition, the typical USP extension student is a major income earner for the family, and with the help of one other earner therein, supports between three and five people altogether on an annual salary of up to \$F10,000, apart from other financial commitments such as his study. It is not surprising, therefore, that for these students, the 'teachable moment' (see Havighurst, 1974), comes from the economic 'push' enshrouded particularly by matters of the household. For the typical USP extension student, economic pressures may not necessarily arrive any earlier for him than for students elsewhere in the world, but combined with other circumstances of his life, wherever in the wide age cohort of 21-40 years this typical student may fall, these pressures have made him return to formal education as a highly logical if not only option for life's solutions. Interviewee 3 from Western Samoa, for instance, was 25 years old at the time of the interview, and expecting her second child. She described her family situation thus:

I'm just working at the moment to get some money to support the family because we're living with my parents at the moment and my husband's working as well.

Her 21 year old compatriot, Interviewee 4, was single and also still lived with her father, stepmother, three siblings and five half-siblings. In addition,

I have extended family - got three cousins living with me and my brother is married so he's staying with his wife at our place as well with their daughter.

Interviewee 4 is also expected to make her financial contribution to the family's budget as well as participate in household chores as is required by Samoan family values. Other 'circumstances' exemplifying the lives of USP distance students, were discussed in detail in Chapters 7 and 8 and will be referred to throughout this chapter.

9.3.2 The Socio-cultural environment

The USP distance learner's life, at face value, is almost a typical one where he is seen to hold a full-time job through which he supports a family. His next most important commitments are those related to his family and household outside of which he has very little time, although he does observe some religion, and gets involved in the occasional cultural and community activity. However, as a multilingual person, his social community very likely extends beyond his own language/cultural group to include members of other ethnicity. The fact that he is a frequent user of the English language relative to his native tongue and other language(s) is most likely a reflection of the work situation where English is the official language as it is for all countries in the USP Region. However, the language situation is not uniform across the USP Region. In some countries, English is rarely used even at work, and the native tongue, or in the case of the Solomon Islands and Vanuatu, pigin, constitute the main language of communication. Matthewson (1994), former Director of University Extension, USP, throws further light on this situation:

For the main ethnic groups, therefore - Polynesian, Micronesian, Melanesian and Indian - the varying 'distances' between them, and between them and the university, begin with language: not only in their differing familiarity with the vocabulary in course materials but also in the differing world views proceeding from or created by language. These can differ not only from country to country, but from island to island, atoll to atoll. Our students do not live in a common world but in diverse linguistic worlds of differing conceptual frameworks (p. 30).

Variables loading on the Social Disposition and Socio-cultural Factors were significant performance predictors for the USP group. The relationship between these variables and the performance of the respondent as a distance student suggests quite clearly the influence that the socio-cultural circumstances and social disposition of the respondent has on his disposition to study. In the case of the USP Region, it would be plausible to argue that aside from special problems related to the variant language situation described above, social and cultural obligations bring more pressure to bear on South Pacific communities than they might do in other cultures, particularly those of the Western world. Many students continue to live in extended family situations where, as married or single students, they continue to provide income for the household. In the male-dominated cultures of Melanesia, 25 year old Interviewee 8 finds that, after the death of his father, the pressure on him to resume his father's role as head of the family, was mounting. In spite of the fact that he was hardly able to speak his mother tongue, he felt obliged to participate in cultural ceremonies, or bring shame and social rejection on himself and his family, and be accused of the snobbery of using his educational status to socially segregate himself from his people. Interviewee 1 from Tonga, a mature 32 year old at the time of interview, now finds that her major hurdle to studying at home is the daughter that she was pushed into 'adopting' partly to reassure her mother that she would have someone to take care of her in her old age, and partly to fend off criticism by her community of being still unmarried at her mature age. Although she had learned over the years to live with the curiosity and criticism of her community, it did have enough of an effect on her initially to push her into having her own 'family', a circumstance which now poses a challenge to her studies. While the adoption of a child might not be a regular occurrence in the context of USP Regional cultures, the cultural pressures and circumstances that provoke this kind of behaviour as well as the renewed sense of cultural obligation felt by Interviewee 8, still prevail, and have varying consequences across the Region. In the interview discussions, both from the group and individual perspectives in Chapters 7 and 8, it is quite evident that one of the major benefits to their study for the students the fact that they lived in urban areas in their respective countries, away from their cultural communities. Being thus cut off and physically distanced from 'home', the students were less obligated and came under lesser pressure to respond to cultural and/or communal commitments. Indeed, comments confirming this knew no national boundary. From the Solomon Islands across to the Cook Islands, students echoed the comment of Interviewee 12 from the island of Wagina, now living in Honiara:

... here we are living in the town area so ... we don't seem to be having any cultural activities. If it was back home, yes I think it will be almost every week.

The near or total abstinence of respondents from things cultural, communal and/or religious has therefore become possible, and for many a deliberate move in support of, and to protect and accommodate their student status. Time spent on religious, community and cultural activities loading on factors referring to social disposition and the socio-cultural situation of students, suggest that the degree of involvement in these areas are good predictors of performance. In addition, factor analysis results indicate that Melanesian, Polynesian and Micronesian students (ethnic cultures of the South Pacific), are likely to be more involved in activities in these areas than the large number of Fiji Indian students in the programme. This might be a reflection of cultural differences in attitudes towards education. At 25 years of age, Interviewee 15 from Kiribati was still not allowed out after dark without proper escort as unmarried girls in particular are highly protected by the male members of their family. On the other hand, when there was a family function being held, girls of the family are expected to participate particularly in the work that is required such as cooking, cleaning and serving, as a priority activity about which they appear to have no say. This 'enforced' participation can interfere with study, as indicated by Interviewee 15:

Maybe the family if they like to have a party or something like that then they will bring us like to help first instead of doing our studies.

Among the Christian communities of the South Pacific Region, religious duties have become synonymous with community activities. The Christian Youth work of Interviewee 1 of Tonga, LDS Church Women's community work of Interviewee 16 of Kiribati and Interviewee 7's participation in drama and related activities to convey messages of his SDA faith in Vila, Vanuatu are all examples, among others, of community work done under the auspices of the church. While these activities have a strong community base, they are seen by participants as religious obligations and therefore as expressions of their faith. Fiji Indians, on the other hand, do not appear to have this community/religion overlap, and community involvement on their part is largely to do with the work of voluntary organisations such as the Jaycees and Lion's Club, and especially with activities close to the family such as PTAs and other school related work. In the case of Interviewee 21, the only community work that he does is as Treasurer of

the PTA of the primary school attended by his children. Beyond this he claims he is unable to afford the time because of the priority commitment to his study and family. Invitations to social functions organised at work are also avoided:

I think it's better for me to stay here and study - I get more marks rather than I go and have drinks and I come back I cannot study.

The suggestion in the literature that individuals who are well established in family, social and vocational life achieve more than younger students who are not married, living with their parents and often coming directly from other traditional schools and having only minor vocational experience (Rekkedal, 1988, p. 219) appears to need modification for the USP context. These features are obviously Western conceptions of society; the south pacific cultural feature of married students still living with parents, for instance, is not accommodated in this suggestion. Furthermore, the dynamics of socio-cultural life in the South Pacific represented above and particularly seen in the lives of the students in Chapters 7 and 8 suggest that the idea of being 'well established in family, social and vocational life' is a foreign concept in the South Pacific context and particularly with reference to its ethnic cultures, in that age, better jobs and experience are associated with increased family and social responsibility rather than with the stability implied by Rekkedal. So much is this so that Interviewee 8 of Vanuatu indicated that if he were to get anywhere in his career and his life, he might have to leave Vanuatu altogether.

9.3.3 Economics

The typical distance vocational student at USP is either a teacher, or works in a financial accounting position. It is logical to assume that at the most, given his age, he is at the mid-point of his career, and in this situation, has most likely come to the end of the usefulness of his first qualification in terms of making any further progress in the work and/or financial situation. The most popular reasons for his return to study - interest and the upgrading of qualifications - bear this out. His economic reasons for studying constitute a significant variable loading on Factor 6 concerned with study habits which is the second most significant predictor

of performance in this study. The variable combination in this Factor suggests that younger students hope to achieve more immediate economic solutions through their studies and qualifications such as increments and job promotions while older students (30+ years) are associated with longer term objectives such as eligibility for better jobs, presumably in terms of pay and status. Interviewee 23 from Kiribati, 23 years old and married with three young children, perhaps sums up the situation very well for his age cohort:

I think money is a big problem, because you know the salary is very low. I get only \$150 in two weeks, that's not enough.

His situation is generally representative of the group of young married students described in Chapter 7, living with parents or in-laws because they are unable to afford to break out on their own. Aside from the physical limitations this poses for the respondents and their families, there are negative social implications in that the relationships among respondents, spouses and children are strained by the lack of privacy. Together with the resulting psychological stresses, all these features combine to portray a reality that might be described as economically grim. For these students, a university qualification is overwhelmingly an economic solution with the awarding of increments as they progress towards it, and a promotion or better-paying job at the end of it. The primary objective for attaining better salaries is the opportunity to move out and get their own homes as well as all of the benefits associated with the independence that come with it. This economic situation fits the USP students into Houle's (1961) goal-oriented group of adults, and represents a learning phase described by Tough (1979), (as cited by Cross, 1981) in which environmental features are key determinants of motivation. It also supports the developmentalist view that adult participation can be understood through an analysis of interaction between individual and environment, that adults are motivated to participate as a result of perceiving and balancing positive and negative forces in the situation, and that the individual can determine his or her own destiny (Cross, 1981, p. 123).

That promotions to higher-paying levels in the workforce for this cohort has become more competitive and therefore difficult to achieve without formal qualifications is a reflection of the economy of the USP Region in general where competition for jobs is increasing in terms of numbers and skills. Respondents in older age cohorts in this study have been more fortunate

in that they have managed under the more accommodating economic circumstances of their earlier years to get to higher employment levels on the basis of accumulated work experience and through short vocational training courses over the years which supplemented initial qualifications.

The economic situation of this latter group, however, cannot be described as being very much better than that of younger married students. The data indicates that students generally over 30 years of age are living in a nuclear family situation with spouse and children. Although it also indicates that older students are associated with higher income, this group are also major providers and the fact that their children are older also suggests that their costs include school fees which become more expensive as the children progress upwards. Having their own home, either rented or owned, and related maintenance expenses are additional costs not specific to younger students in this study. Thirty-three year old Interviewee 2 from Tonga is the second wife of her husband from whom she inherited six school age sons and to whom she had her only son. Although her family size is not typical, her financial circumstances and responsibilities are representative in real life terms of the kinds of financial obligations that students particularly in her age cohort have. Apart from the wide-ranging needs of her own immediate family which include living expenses, school fees, repayment of house and car loan and donations to the church, Interviewee 2 and her husband assist members of the extended family with food and money, especially in the form of church donations for her parents-in-law and niece living in their home island of Vava'u; food for her own parents; school fees for her youngest brother; unexpected events such as weddings and funerals to which contribution in kind and money must be made and the occasional request for cultural artefacts from her sisters living abroad. Although the data on socio-cultural features of the study population indicated a physical isolation from matters cultural by the majority of students, it is obvious from the interview data that cultural obligations and commitments continue to be a prominent part of the lives of students. Those single or married and still living at home continue to contribute in cash and kind to the running of the family; those married and independent, usually older students, have culturally-based obligations not different from those listed by Interviewee 2 above. For this older group, it is likely that they represent the first generational move into modern, salary-based lifestyles from a traditional, custom-bound upbringing whose values which are still very close to the heart continue to be a reality of life. Younger students are

likely to be at least one generation removed from the traditional lifestyles of their parents and although affected by them, are involved to a lesser degree than their older counterparts.

As revealed by factor analysis, study hours are associated with the economic situation and appear to be related to economic reasons for studying. It is plausible that younger students have fewer hours for studying because their time is diverted more necessarily towards money-making and money-saving opportunities than the case may be for older students. Many of the younger interviewees, talk about overtime work at the office for instance, as a time-consuming but necessary activity not just in terms of the additional income, but as a factor in the building and improvement of their careers. In the case of Interviewee 3, her potential study time at night is usually taken up with babysitting while her husband worked overtime hours for money that they badly needed. Considering the study objectives of younger students for additional increments at work, these are awarded on the basis of a pass in the course rather than on that quality of that pass. Older students on the other hand, are looking to improve their marketability for better jobs in which case quality performance becomes the crucial criterion. The study hours put in by the students might thus be a reflection of the differing requirements in performance as perceived by the students in the pursuit of intra- and inter-job objectives.

9.3.4 Educational experience and environment

The typical USP distance vocational student not only completed high school but passed all his courses, which included some Commerce, in the New Zealand University Entrance. This, plus the fact that he did some college level education before his current involvement in university studies means that he was fairly well prepared, both in terms of subject area background and study skill requirements, for his present level of education. Factor 10 which combines variables on educational background, is the most significant predictor of performance. In this respect, the last school form attended appears to be crucial to performance at further levels. Furthermore, the last school form variable appears to be related to the ability of the respondent to work and learn as an independent student, a quality highly required by distance learning and associated with adult learners, although this latter situation has been recently challenged by the literature (Jarvis 1987). The more current argument has been that independent learning is not

so much a feature associated with adulthood as it is a human learning preference. USP students appear to have been given some initial exposure to it in their higher levels of high school study. In the student interviews it becomes evident that this field independence was acquired under a variety of circumstances. Of the students who indicated that they went abroad for the final high school years, and one interviewee did her first degree as a scholarship student in New Zealand, it was clear that this experience represented their first encounter with learning independence and self-direction. This experience was related either to the teaching philosophy of the institution they attended, or to the fact that they were living away from home and were therefore in charge of their own lives, or both. Having come from teacher- and family-dominated backgrounds, the experience in independence was associated with maturity for the USP group and understandably had negative repercussions for many involved in that they did not know how to cope with the new-found freedom and spent it on other activities more than on study. Consequently, many were not successful. However, the negative consequence was in itself an important lesson in independence and contributed to what can be described for this group as a more holistic appreciation of what it took and meant to be in charge. This experience shaped an appropriate attitude towards independence and an appreciation of its requirements and management, more than it fitted them with the relevant learning skills for studying at distance. However this attitude and appreciation predisposed them towards acquiring these skills such as time management and peer assistance when it came to distance study.

Within the Region, Interviewee 21 from a rural town in Fiji, described his last year at high school as an exercise in educational survival and independent resourcefulness. In Fiji, as in all other countries of the Region, the educational provision pyramid is characterised by a very wide base, with very narrow provisions at the top. Numerous primary schools feed their students into fewer high schools and into even fewer institutions catering for senior secondary education. In the Fairbairn Report of Seminar on South Pacific Post Secondary Education, 1992, he pointed out that

The reality is that many countries do not have the capacity to run Forms 6 or 7 and those that do, have great trouble running quality programs (p. 44)

In the case of Interviewee 21, he went from a small, well-catered community rural school into an overcrowded urban high school, which was under-resourced and understaffed. He described his experience thus:

From Form 6 I learned - study is ours. We have to bother how to study, how to grab information. If you need something to ask them we ask. Otherwise sort of they were not bothered.

Interviewee 21 represents the experience of being forced to 'learn how to learn' under adverse school circumstances presumably common to many students in the USP Region where places in high school are limited and competitive, and well-trained teachers and resources scarce. In the Fairbairn report quoted above, the reasons for poor quality secondary education in the Region were poorly qualified teachers, poor quality and quantity of educational materials and resources, variations in provision of secondary education across the Region and often incomplete provision especially in rural areas and in Melanesian countries. The result was low quality graduates from primary and secondary schools (pp. 44-45). Without proper training in the mental skills appropriate to different learning needs and situations, the question needs to be raised about the kind of learning independence that is being acquired by these students, seeking, at all odds, to pass the final examination through which either to get a job or gain admission into some post-secondary institution. It is quite feasible that this objective can be achieved with limited and surface learning skills such as memorisation techniques which, also quite possibly, are the only cognitive strategies familiar and available to these students with which to undertake their university education. This, therefore, is not a case of learning how to learn, but rather a kind of pseudo-independence based on intensifying the art of stretching limited learning skills and strategies, most likely producing gruelling study situations, in order to succeed. Landbeck and Mugler (1994) call this the 'achieving' approach to learning in which the student's main preoccupation is to pass the course, and which often involves highly organised study methods. This approach best described that of the majority of the 16 USP on-campus students that Landbeck and Mugler interviewed with respect to their approaches to study and conceptions of learning. The results of their survey showed that the students associated their first year at university with the acquisition of new approaches and attitudes towards learning that replaced the limiting effects of teacher-domination in high school which were reflected in their initial approaches to study. The students surveyed were affected by

factors such as study time limitations of part-time students, lack of appropriate reading and study skills for university level, lack of appropriate and adequate information about courses, course expectations and lecturers, etc., features similar to those affecting adult learners studying at a distance. Landbeck and Mugler also indicate that the factor of being ESL students played a major role in learning strategies in that for these students, memorisation was the safest way for them to remember. This strategy was adopted in situations where they did not particularly understand what they were learning and for tests and final examinations. For these students, as for adult distance learners either studying at university level for the first time or left to cope largely on their own, the questions are raised: to what extent then can they cope with the deeper level mental skill requirements associated with university study; will they reach a learning saturation point and level off, or can surface level learning skills take further intensification; or can such students learn to unlearn inappropriate learning habits for more appropriate ones? In view of this situation, the recommendation by Landbeck and Mugler that for first year students,

The transition to university could be helped by teaching students about learning styles and study techniques in orientation workshops, and by greater explicitness on the part of lecturers about what they expect from university students in their discipline on one hand, and on the other about practical applications and connections between the subject they teach and the 'real world' (p. 23).

is also quite appropriate for the adult distance learners under survey in this study.

With respect to the current involvement of the respondents in distance education, as distance learners much of their work is done at home where facilities are comparatively better than are available to them elsewhere, including their USP Centre. Many of the students in this survey were critical of the quality and availability of support facilities and services provided by their respective Centres. The largest group of students (31%) assessed their Centre facilities and services as inadequate, while for another 20 percent these facilities and services were not available. These students were therefore deprived of institutional support in varying degrees. Comments from the interviewees throw further light on the situation:

I don't know with others but I find that satellite was a problem and I find it should be at a good condition (Interviewee 2, Tonga).

... my problem would be especially to our local tutor. ... I've only attended two tutorials and I've just said to myself it's waste time, you know. Not really worth it (Interviewee 6, Cook Islands).

No, I don't have anyone (at the Centre) who tells me ... about encouraging us and all. We just get along on our own (Interviewee 10, Vanuatu).

I think there are lots of things that need sort of improvement. In the Centre here that is one of our biggest problem as well is that we don't have enough reference at the library especially the science courses. ... All of the books that are on the shelf are very early secondary level. So sometimes when we run into difficulties with our work we have to find other students who probably understand it because we wouldn't be able to get any help from the library. Even we don't have tutors as well so there's no other way we can find help (Interviewee 12, Solomon Islands).

... because doing extension, that is the thing that you do. I wouldn't know what benefits people doing extension and are from Suva, have compared to us. Probably they have the Library, but I can't really say or point out any difference (Interviewee 22, Lautoka, Fiji).

Educational environment is seen in the literature as a significant variable and the extent to which it can be modified and enhanced by the quality and range of services that it offers can improve motivation and success rates to a large degree (Gibson, 1990). Study facilities and services, however, do not rate as performance predictors for the USP students. In light of the presentation above, and the likelihood that the USP intake is used to coping with adverse study conditions, this does not seem to be an unexpected outcome. In the words of Interviewee 1:

I really put all my effort into this ... my studies because I knew the tutor is not there and the Centre is right out there and I have to do it and because the deadline is next week I have to do it ... the answer is right here in the textbook and I have to get it.

There are obviously stronger overriding, and compensating features for the USP group such as number of study hours, and in the case of students such as Interviewee 1, sheer motivation. For the typical distance vocational learner, two to three hours are allocated for studying daily. As a variable loading highly on Factor 6, study hours are a highly significant predictor of performance. The data appears to suggest, in this case, that for the USP students, limitations posed by poor or just adequate study facilities are compensated by increasing the length of study period. These 'study economics' - balancing one resource against another - might well be a feature of the USP group and other students in the developing world in general, where facilities are either unavailable, inaccessible or inadequate, and the ability of the student to improvise and juggle the elements in his environment in order to achieve his educational objectives, become the mark of success or lack of it. This argument has some foundation in

the lives of the study interviewees. In Chapters 7 and 8, students across the Region - Honiara, Tonga, Tarawa, - describe strategies for coping with inadequate learning support systems. Interviewee 12 from Honiara consults a more knowledgeable friend when he himself is 'stuck' and does not have a tutor to turn to. In Tonga, Interviewee 2 quizzes an on-campus student who had previously undertaken the course in question, 'checks out' and compares the material covered in the lectures and the performance of the student and uses this as a yardstick for her own progress. Interviewee 16 in Tarawa finds support among a group of friends and together they gather courage to approach a more senior student for help, in the absence of tutorial provision by the study Centre. In this respect, the 'independence' of the USP student is especially marked by the quality of self-reliance, and is personality-related rather than a feature of cognition.

Another significant feature of the typical USP vocational student is his preference for courses that allow him to apply the knowledge and/or information gained in his courses. In fact, opportunities for application in real-life situations, particularly at work, are, for this group, an important learning situation, a trait which they share with adult learners in general (Knowles, 1990, pp 9-10). Considering the intra-subjective objectives of the younger members of the group, it is likely that the programme of study was chosen for its relevance to the work of the students. The ensuing complementarity of work and study provide immediacy of meaning to what is being learned and enhance the motivational levels of students inclined towards applications-learning. In this respect, the USP group share a universal trait among adult learners in being experience-oriented in their learning and deriving learning advantage from being able to apply experience gained from relatively more years of life and work to what is being learned. Interviewee 24 from urban Fiji claims that

In fact the management doesn't only relate to work type of management. It can relate to life as well - time management, how you manage your money at home - so that's helped me a lot too.

Also important to the issue of application is the matter of relevance. Again Interviewee 24 provided insight:

... the book that I'm using, I can't really relate to it because of the fact that it's more western, you know what I mean? Or the courses themselves they're more geared towards ... western ways, you know.

This comment provides an additional dimension to the issue of applicability for the USP students. With textbooks written for the western world and foreign course writers responsible for their learning materials, these students are dealing with concepts and information that have no (equivalent) referents in their life experiences. Furthermore, it is possible that foreign lecturers bring to their teaching expectations of students based on their experience abroad, and particularly in western contexts, that do not match the learning capacity and behaviour, as well as the ethos of South Pacific students. This can lead to alienating learning situations for the USP students.

It is also a possibility that the preference for applications is a reflection of the oral traditions of South Pacific cultures. Ong (1982, as quoted by Murphy, 1991), suggests that

those who live in cultures with strong oral roots are likely to express themselves in terms of practical situations rather than in abstract terms.

The suggestion here is that, for the USP students, applications opportunities are attractive to them because they do not require as much use of the English language, particularly in terms of the sophistication required by abstraction as indicated by Ong above. This idea is developed further in the following section in relation to the need for group and tutorial assistance expressed by the USP students.

9.3.5 Disposition and preparedness to study

Attributes in this category are intra-personal traits in the students that deal with attitudinal and mental preparedness for their current educational involvement. In this study, the students' motivational levels, their self-perceptions and confidence as students, field dependence/independence, orientation to learning and learning style are examined in terms of their importance to successful studying at a distance. Gibson's (1990) examination of the literature showed that dispositional variables (attitudes and perceptions), as well as cognitive styles and learning variables were all good indicators of performance.

With respect to the USP students, aside from the degree of independence associated with level and experience of high school study, other dispositional variables and variables of preparedness to study are, on the contrary, not good predictors of performance. As a group, and also typically, students in this study indicated that they were well-motivated and confident as students towards their studies. Motivational theories range from those that focus on personal goals and objectives to those that see participation as motivated by available opportunities for further study (Lauffer, 1988). As seen earlier, circumstances in the USP students' personal lives such as family economics and work situations provided a strong push towards improving qualifications. Also significant was the fact that the USP's distance education programme was available and seen as the opportunity for some solution to problems in these areas. The data seemed to indicate that for the group of students under survey, confidence was derived from a combination of both personal and extraneous features such as past family support for education, supportive individuals in their lives both past and present, high school performance and post-secondary level experience and the relevance of their subjects to the work context. Lauffer describes such students as 'supplemental-confident', in that their participation in studies, although part-time and therefore can be broken when necessary, is purposeful, and they are assured of their ability to learn, look forward to educational challenges and have a positive attitude towards their learning. The fact that the USP students strongly expressed the need for the provision of at least some group learning and face-to-face tutorial support is also a feature of the 'supplemental-confident' student in that they require support services to be available but will make their own decisions about using them.

The literature describes the need for personal contact associated with group and face-to-face learning as opportunities for dialogue and interaction (Daniel and Marquis, 1988) and sees them as a general need of all distance learners for a variety of reasons. Social participation, for instance, is conducive to academic success for adults (Houle, 1963; Garrison and Shale, 1990); women have a specific need to meet other students as a specific learning strategy (Kirkup and von Prummer, 1990; Ross and Powell, 1989); and students coming from strong oral cultural traditions learn best in a group situation. With reference to this last point, literacy for the South Pacific is a relatively recent feature (Mangubhai, 1987) which might partly explain the tendency of the USP group towards group participation and opportunities for oral exchanges. Related to this feature, the second/other language status of English among the USP students

and the variant processes of its acquisition, especially through English language programmes in schools, have resulted in relatively poor reading skills in Fiji (Elley, 1980) and indeed throughout the USP Region that have prevailed throughout the formal school years and beyond (Tuimaleali'ifano, 1988). Students coming from such a background might feel inclined towards group situations in which they might feel more comfortable. This comfort is also derived from the fact that South Pacific cultures, including the culture of the Fiji Indians, are community-based where group activities are major features of life and living. Another significant cultural feature of the South Pacific which is possibly related to group learning tendencies, is the trait of deferment to authority figures for decision-making. This attitude has been nurtured through the teacher-dominated formal education system described by the interviewed students as a key feature of their educational background influencing their current attitude and approach to tertiary education. The same characteristics are ascribed to Indonesian and Turkish students by Dunbar (1991) and Murphy (1991) respectively. In addition, Turkish students exist within a system of patronage where reciprocal links of service and protection are established between individuals of unequal status (Murphy, p. 43). As a result, both groups of students are unable to meet the demands for autonomy and authority over their own learning progress. Likewise, to a large extent, the group and tutorial sessions serve the tendency and need by USP students to defer to knowledgeable and authority figures to endorse their own legitimacy and to provide whatever assurances are needed by the students in order to maintain their esteem and confidence as students. Daniel and Marquis (1988) point out that contrary to popular belief, adult learners may not have the information to make sound decisions about their education, or the skills and background knowledge needed to meet their educational goals. The group therefore allows the student some guideline in measuring the pace of his/her work. For Interviewee 24, the group provides her with the opportunity to check her progress against that of fellow students and more importantly to assess the quality of that progress against their performance. For Interviewee 16, the more experienced friend at the Centre was the authority figure she and her peers sought for the information and assurance they required. The same principle applied in the case of Interviewee 2 for whom the on-campus student represented the authority and information on the requirements and expectations of the course in which she was enrolled and about which she sought assurances. For Interviewee 6, no higher level study, even in the independent mode, was possible without tutorial assistance, and in the case of Interviewee 12, the adequate learning of Mathematics was not possible without a skilled tutor

in whose absence a more knowledgeable friend posed as substitute. However, these latter cases may be symptoms of poor course packages and lack of appropriate support facilities and services rather than a reflection of the learning tendencies of the students under survey. This notion has already been mentioned and will be further explored later in this chapter.

With respect to the group as a special learning strategy for women, the interview data revealed this inclination among many of the women in comparison with the men who tended more towards tutorial assistance rather than the sharing of ideas among peers. As women constitute more than a third of the student population, this learning strategy is worthy of note by distance educators as one of the variety of learning needs represented by their adult clientele.

The need for support with study and cognitive skills was also a stated requirement which, in view of the gap of time since their last formal educational experience, and the novelty of university study, is not unexpected.

What is unexpected is that disposition and preparedness variables, aside from learning independence, are not good predictors of performance. This finding confirms for the USP group, as for distance students worldwide, that the ability to learn independently is an overriding need for successful studying at a distance. Although the USP students indicated that they had a preference for learning in and with a group, it would appear from their situational and study circumstances, that for many this was not the case. As has been seen, many students did not have access to Centre facilities including group and tutorial meetings for reasons of physical inaccessibility and/or other commitments. For even more students, Centre support left much to be desired. This left little alternative for the students but to become independent learners who were self-reliant with respect to learning responsibility. Independence, therefore, has become an overriding predeterminant for successful performance in the case of the USP student, and is associated with an initial exposure at high school and continued practice under the relatively adverse distance education circumstances that characterise the learning environment of USP distance students. The data and findings suggested that the confidence expressed by the students refers to their ability to continue to 'improve' on their levels of independence and self-reliance as they become more 'mature' distance learners. A significant element of this maturity is the ability to manage time more appropriately which also implies

the ability to place study high in priority over other involvements. Some of the interviewees had already achieved this state. Interviewee 5 from the Cook Islands describes the transition thus:

this time, second time around it's been much better. I'm actually thinking about it and doing what I want to do or what is required of me, more prepared, better able to manage my time ...

Other interviewees were in varying positions on the way to this maturity level. Many talked about the need to give up their sports, cut down on family and community socials and even be able to say no to the invitations of well-meaning relatives and friends to participate in other things.

9.4 The Study Questions

9.4.1 USP distance students and characteristics of adult learners

A key question of this study is related to the extent to which adult distance learners at USP portray characteristics universally typical of adult distance learners as identified by the literature. In particular, this study sought to find out if USP distance learners were independent and self-directing; if they were highly and intrinsically motivated; the extent to which they were confident in their self-perceptions as students and whether, like other adult learners, they preferred experience-based and applications learning. An important objective of this question is to find out the extent to which extra-contextual research and findings are appropriate to the USP context and therefore the extent to which they can be used to inform the distance education process at USP.

From the discussion of the data and its various treatment in this study, the indications are that the students under survey had some form of independence acquired through their high school experiences and developed further as distance students. As a significant predictor of performance for the USP students, this finding appears to confirm yet again the importance of being an independent learner in distance education, whatever the learning context. However,

the degree and quality of this independence might vary according to context as has been seen with respect to the USP Region. The USP students under survey came by their independence because adverse educational conditions forced them into it. Consequently, the question needs to be asked whether, indeed, this independence involved acquiring the appropriate learning skills that would lead to their 'liberation' as learners that

will ensure that once equipped with self-learning capabilities, learners will become their own best teachers and will not be dependent upon the provision of a school and a teacher to acquire knowledge (Sharma, 1989, p. 18).

The USP students under survey admitted to being tutor-dependent for much of their learning and many saw their poor quality performance as a direct result of inadequate or lack of tutor support. It is also clear from the interview data that tutorials were more an opportunity for the further enhancement of the learning materials than they were for teacher-student interaction and dialogue. In this respect, the USP students cannot be said to be self-directing in the degree to which they saw their tutors as providing the guidance they needed to progress satisfactorily through their courses. A complementary view of this situation would be to do with whether or not the distance teaching materials of the USP are conducive to independence and self-reliance for the students with regard to their teaching strategies and resource provision. Sharma summarises these as notions thus:

It is clear that the distance education materials, tools and technologies chosen must suit the needs of the learner -not the preferences of the teacher. ... Distance education informs learners that learning depends on themselves, on their own motivation to learn, on their commitment to learn the lessons on their own, with guidance and support from tutors and learning materials (ibid, p. 23).

There was no doubt from the survey and interview data that the USP students were prepared to work independently and to seek help whenever it was necessary, from limited sources within their study environment. That it is highly possible that the nature of the help they seek is related to their cognitive, learning and study skills inadequacies is borne out by their own admission of needing assistance in these areas. That this assistance was rarely forthcoming, also by their assessment of learning support available to them, suggests that persistence in their study for this group was aided by more personal attributes such as motivation and self-esteem.

That the USP students were highly motivated there could be no doubt from the evidence of the data to hand. The questionnaire responses indicated the strong economic push factors that provided the extrinsic motivation for these students. However, in conjunction with the interview data, it becomes clear that these difficult economic conditions are essentially barriers to the self-determination and the emergence of the self-identity of these students. Motivation to study is therefore destiny-related once the economic barriers are removed. In this sense, the USP students are indeed intrinsically compelled to seek qualifications towards a better way of life and an improved self-image. Interviewee 2 from Western Samoa represents it thus:

... and we just realised how really important - you had to have a degree to get to the top and like around here if you don't have a degree people just really look down on you. And so we really regret what we did during our school years so that really made me want to take some more courses through extension.

Formal studies are associated with high self-esteem (see Rubenson and Boshier, as cited by Cross, 1981), and the return to it by the USP students reflects the self-expressed confidence in their ability to be involved successfully. This confidence is also a reflection of having arrived at an appropriate 'teachable' moment in their lives where, according to Cross' COR model (see Chapter 2), motivation is spurred on by the perceived importance of the educational involvement to the achievement of the student's goals. When this perception is accompanied by the expectation of successful performance and achievement, student self-esteem is high. Interactionist theory indicates that the strength of the combination of positive and negative forces within the individual and the environment determine the strength of the individual's motivation (Cross, p. 116). In the case of the USP students, the desire for improved economic status and self-determination, as inhibited by a negative economic environment has culminated in the decision to seek the solution in further education.

Another feature of adulthood displayed prominently by the USP group is that of being inclined towards learning situations that are experienced-based and applications-oriented. Analysis of data has shown this to be a learning orientation of the majority of the students in the study through which much of their learning is achieved. A number of possible reasons for this have been discussed in previous sections of this chapter.

9.4.2 Personal, situational and study environments: do they shape and influence disposition and preparedness to study?

The literature, both theoretical and empirical, is rife with indications of the significance of the context of the student and environmental variables in predisposing and preparing students to study. Dispositional variables in this study refer to personal attributes that relate to attitudes and perceptions, in particular the student's confidence and self-perception as a student and his/her motivation to study. Preparedness to study is measured largely by learning orientation and styles, field dependence/independence and by language skills.

With regard to the USP group, the discussions above and previous presentations of data analyses results have covered much of the connection between contextual variables and their degree of influence on the disposition and preparedness of the students to study. Results of data analyses have shown, for instance, that personal and family variables loading on the demographic factor were significant predictors of performance. Furthermore, family and personal variables, particularly those associated with the economic situation of the students, provided the major reasons for studying.

Motivation and confidence levels were related to the extent to which these educational goals of the students were expected by them to be achievable. Also related to the economic situation of the students were the amount of study hours they were willing and able to make available for study daily. Those bearing a higher proportion of financial responsibility in relation to income were not able to put in the amount of study time associated with successful performance, and vice versa.

Factor 10 associated with educational background, combined variables which were the most significant performance predictor, in particular the variable of last school form attended. This variable was associated with the disposition of learning independence. Educational background also played a part in the kind of attitudes to independence and self-reliance brought to further education by the students. Circumstances of high school were also seen to have had some influence on the degree of self-directedness of the USP students in that, although many students were able, because of adverse study conditions and circumstances to work

independently, the availability of a tutor would have made a difference in the quality of their learning and achievement.

In terms of the social disposition of the students and their socio-cultural environment, several features here were suggested by data analysis results to influence approach and attitude to study. There was a suggestion that heavy socio-cultural commitments predisposed students to applications learning particularly at work as an alternative to other learning strategies such as attending tutorials or using the library that might be time-consuming. Circumstances that promoted more frequent use of the English language provided opportunities for improving the level of English language usage which was more conducive to successful learning at a distance.

Clearly, these contextual circumstances indicate that, for this study, variables within the personal, situational and study environments of the students are associated in varying degrees with their motivation and confidence levels, and with cognitive and study skills that characterise the USP distance learners.

9.4.3 Are dispositional and learning preparedness variables good predictors of performance by the USP students?

The most unexpected results of the multiple regression exercise has been the indication that the disposition and learning preparedness of the student measured by the variables cited above, are not predictors of performance. In the previous section, the strength of the environmental variables in determining the attitude, approach and cognitive preparedness of the adult distance learner at the USP is quite evident from the study data. These variables predominate as significant performance indicators, suggesting that in the case of the USP group, the contextual dynamics of the USP students' hold much more sway over the performance levels of the students than the personal traits derived from these dynamics. In other words, positive attitudes, strong motivation and appropriate study skills are not as necessary preconditions to successful distance learning by the USP group as are the features of the environment peculiar to them. This is a significant finding for the USP with strong implications in particular for course development and support services and facilities that comprise their distance learning programme and the policies that govern them.

9.4.4 Inferential analysis: who performs best and why

The results of cluster analysis produced four large groups of students from the study sample on the basis of a combination of characteristics unique to each one. Using an analysis of variance procedure, the mean aggregate score for final course examinations for each group was investigated. Cluster 6 was found to have significantly outperformed both Clusters 1 and 8, with comparative results to Cluster 10. Features of Cluster 6, particularly those that differentiate it from other Clusters, were described in detail in Chapter 6.

With regard to the discussion presented in this chapter, several of the features that were associated with successful performance, and attributable to Cluster 6 students, confirm the research findings. This group of students, for instance, lived in extended families with the largest number of people, had the largest number of children of mixed ages and supported the most people with their income with the assistance of one other person. These circumstances make for the economic and financial pressures that were seen as the dominating external reason for the involvement of the USP student in further education. Cluster 6 students displayed some typical demographic features, namely, being Fiji Indian male in the age category of 21-40 years and being married. The economic reasons for studying might also be a reflection of generational differences within the wide age cohort. Some students were keen to gain qualifications that would contribute towards improving economic activities, presumably older students in the group, while younger students might be associated with requiring qualifications to improve their intra-employment opportunities.

In terms of educational background, the fact that many Cluster 6 students did not pass all of the subjects in their public examination in Form 6, reinforces, from a different angle, the finding that it was the exposure to independent learning associated with senior high and not the level and achievement factors, that was important to successful tertiary study at a distance. Cluster 6 students were different from students in the other clusters in being the only group to assess themselves as independent learners, confident in their ability and preparedness to meet the challenges of the return to formal education. However, as with the majority of students in the study sample, they were inclined towards tutor direction and support, most likely a reflection of high school experiences. It is also important to note that Cluster 6 students were

the only group with a commercial studies high school background, a feature which was associated with the factor of demography that was a significant performance predictor. This feature, plus the level of high school achieved, probably made up for the fact that many of the students in Cluster 6 did not do any post-secondary study which is a significant performance predictor.

As an applications-oriented group, Cluster 6 students stood out from the rest as the group doing most learning from work experience. In addition, they complemented this learning skill with more study hours daily than any of the other clusters. In combination, these two variables, as high predictors of performance, must ensure the success of Cluster 6 students to a large extent.

With access to and use of USP Centres being variable for this group, and work and community facilities being largely inadequate, much of their study is done at home where facilities are rated as very good. Considering the possibility of overcrowdedness as a feature of family life associated with Cluster 6, it is possible that within the large household there are compensating factors among the numbers and household generations involved. It is suggested, for instance, that older generations within Cluster 6 households relieve the students of their household management and maintenance responsibilities which allows the students to invest the time saved in study hours. As much of their study is done after hours (see interview data, Chapters 7 and 8) overcrowdedness may not be an issue.

A crucial finding of this study with regard to its implications for the USP distance education vocational programme, is the fact that the typical student enrolled in the Accounting and Management programmes does not share a number of key features with students in Cluster 6. Notably, the typical student lives in a nuclear family consisting of fewer people including fewer and younger children. He also supports proportionately fewer people. Considering the significance of family circumstances in providing the economic push towards economic solutions associated with further studies, it would appear that for the typical student, motivation to study may not have the strength of that attributable to students in Cluster 6 who were associated with more difficult, family-related economic circumstances.

With regard to educational background, the typical student comes from a mixed science/commerce background as against the concentration of Cluster 6 students on commerce subjects. This latter situation has stood the Cluster 6 group in good stead in terms of successful performance in their current vocational programmes, and the likelihood that they had a good subject area background preparation is strong.

In terms of their current study, the typical student does not put in as many hours of study as those in the Cluster 6 group. Again, study time is a significant predictor of performance, more hours being associated with success. In addition, the typical student does not appear to be sufficiently prepared for and disposed to distance learning. His motivation to study as determined by relevant circumstances, has been questioned above. Consequently, his confidence level, seen in previous discussions to be related to motivation, must also be questioned. The typical student does not see himself as an independent learner with an expressed preference for group learning and tutor-direction. With regard to learning style, although the typical student is inclined towards application-type courses, only up to 50 percent of his learning comes from experience at work compared to as much as 75 percent for Cluster 6 students.

9.5 Concluding comments

From the results of the profile exercise and the various statistical analyses of the data, the significance of the variables within the personal, situational and study contexts of the student in influencing his ability and study capacity is clear. This significance is seen, in real life terms, in the analysis of the interview data and especially in the case studies. To some extent, the USP data confirms the generalisability of certain features of adult and distance learning to the USP situation, although in other respects, the USP students are unique in their attributes and characteristics as adult distance learners. Certain of the variables within the student's environment and attributes of the students were identified by regression analysis as significant predictors of performance. Through the process of cluster analysis, these study features gained confirmation with regard to their association with the highest performing cluster of students. By comparison with this cluster of students, the typical distance vocational student at USP appears to be different to some degree with respect to select significant performance predictors.

This finding would have important ramifications for the way distance education is approached and operated in the USP context.

9.6 The Chapter in Summary

In this chapter the results of all the various statistical procedures used to analyse the data and render it meaningful with respect to the study objectives and questions, were discussed. Wherever possible and relevant, interview data was used to bring 'real life' to statistical outcomes. In this respect, the USP student in his environment was able to be compared, as well, to distance students elsewhere and questions regarding the universality of certain features of adult and distance learning confirmed or rejected with regard to the USP situation. Finally, the results of inferential analyses and their implications for the USP distance education programme were also covered in this chapter.

CHAPTER 10 : CONCLUSIONS AND RECOMMENDATIONS

10.1 Chapter Outline

This chapter begins with a discussion of the limitations of the study and the extent to which outcomes may be adversely affected by them. It then goes on to discuss the implications that the outcomes of the study have for adult learning and distance education theory, and for practice at the USP. This discussion focuses especially on ways in which these outcomes show the USP group and situation to be comparable with or different from adult distance learners in other contexts. In so doing it is able to recommend practice and research specifically for the USP group, as well as the use of research findings from abroad whose relevance and applicability for the USP context have been previously determined. In conclusion it confirms the usefulness of the data in spite of the limitations of the study.

10.2 Introduction

This study was generated out of the general concern that, in the absence of firsthand knowledge and information about the students studying at a distance at the USP, it was possible that the teaching and learning objectives of the USP distance learning course packages did not match the learning requirements of its targeted students. Related to this concern was the idea that alternative sources of information about distance education, and in particular about the student dimension might not be relevant and applicable to the USP situation. This would be especially so if this information was derived from empirical and theoretical studies of distance education in other contexts, particularly those of the western world and culture. The situation, too, that University Extension did not appear to have a defined philosophy of education nor a development policy for the growth of University Extension (see Chapters 1 and 2) might well be partly attributable to the lack of knowledge about its students, current and potential, and their educational needs and goals. The preoccupation of the University with meeting the training needs decided by the national and economic growth policies of the countries of the Region might well continue to dominate its functional direction and draw it

away from addressing necessary initiatives and developments in the area of the students and learning. Because knowledge of the learners is crucial to the provision of appropriate learning opportunities, the lack of such constitutes a serious deficiency for any educational institution. These broad-based thoughts and concerns lent this study its research questions and objectives couched within the framework of principles of adult learning and the psychological perspectives from which they were derived. The overall objective of the study to examine the extent to which variables within the personal, situational and study environments of the students under survey influence their disposition and preparedness to study by distance, is an approach much recommended by adult educationists and researchers. It recognises the significant role of the environment, and the student's place within it, in moulding and shaping the adult learner's perception of and attitude to education, his/her motivation and confidence levels, and preparation for undertaking further studies.

The fact that research on distance learning in the USP context on a regional basis was almost non-existent at the time of this study necessitated this project be conducted on an exploratory basis into this area. Studies that are exploratory in nature usually serve two general purposes: they seek to discover new information and knowledge and, from this, they look for useful and relevant directions for future research and practice. For this study there can be no question that the area to be explored in both the physical and conceptual sense was vast and beset with challenges for the research project envisaged. The nature and effect of some of these challenges were seen in the relevant preceding chapters of this study. The overriding challenge was to undertake a regional survey in spite of the logistical difficulties affecting the research process. The exploratory nature of the exercise brought difficulties associated with the need for the researcher to arrive at best-informed assumptions under the circumstances, about the area to be studied and to make decisions about how best to make an exploration into these assumptions as close to reality as possible. These requirements were influential in the methodological approach to the study and in the design and development of the study questionnaire which, in turn, defined in various ways the data that was returned. The qualitative dimension added to this data by the interviews helped to provide 'real world' contexts for the results of the statistical analysis of the questionnaire data. Some notable results have been achieved from the analyses of both the questionnaire and interview data which have implications for existing

theory of adult and distance learning and especially for the effective practice of teaching adults in the distance mode at the USP.

However, given the challenges envisioned at the outset for studies of such scope and magnitude, some research limitations were to be expected both foreshadowed and unexpected at the time of the undertaking, with regard to the framing of the study, its realisation in the field and resulting outcomes. The following section focuses on these limitations and discusses them in relation to their effect on the findings of the study.

10.3 Limitations of the Study

One of the major limitations of the study concerned the degree to which the characteristics and features of students who returned questionnaires were representative of those of the population under study. Many of the problems related to this representation issue were touched on in Chapter 3. In addition, the regional nature of the study and its related magnitude meant that the whole process of questionnaire distribution and return had necessarily to be assisted by many people and thus was dependent to a large extent on the commitment and goodwill of these assistants. Given that the most appropriate and effective assistants were Centre Directors and staff, the required assistance for the study was an encroachment into their already full work schedules. It was anticipated, as a result, that the amount and quality of assistance would vary in relation to the amount of time available to Centre staff to commit to this requested support. This would, consequently, lead to bias in the study sample.

It was envisaged at the outset that because of the popularity of the diploma programmes under study, one way of offsetting this likely bias was to increase the chances of a high number of responses and thereby the chances of an acceptable level of representation of each USP country as well as of student characteristics. With respect to the latter, the prohibited access to the student database at the USP by the researcher meant that there was no opportunity to compare characteristics of the respondents with those of the study population. Conclusions in this study on student characteristics were thus subject to this limitation and presented with a rider on caution in their wider application.

The response rate of 23 percent was disappointing, although the high number of responses this represented enabled the study to be continued. Not all countries were adequately represented in terms of the proportion of returned questionnaires to their total enrolments (see Table 4.1). For these countries, in particular, (Tonga, Vanuatu, Western Samoa), the statistical evidence and conclusions of this study must be applied with added caution and tentativeness.

With regard to assessing how well the student characteristics of the study sample represented known characteristics of the study population, there were certain limitations. On the one hand, the USP student database did not encompass a wide range of student information and was confined to mainly demographic data, the location of the students (by postal address, which posed a problem for students who were to be reached by postal boxes), gender, educational background and admission criteria. In addition, at the time of the survey, print access to the information was not available due to problems associated with newly installed software which was still being trialled. For reasons of confidentiality and software access, the researcher was not permitted direct access to the electronic database by the USP. Because of this, the researcher was unable to obtain much of the information that would have enabled the comparison of the sample population data with that of the study population. The student list released to the researcher prior to fieldwork contained, apart from names and registration numbers, the postal addresses of the students which could not be used with accuracy because of the large number of postal box addresses given. The generalisability of information and attributes of the respondents to the students enrolled in the DACS and DMS is therefore based solely on chance representation associated with the high number of questionnaires returned, and must therefore also be treated with caution.

Limitations related to the interview process also posed problems for the study although in a less significant way. All but one of the interviewed students were in full-time employment and at the time of the visit of the researcher to their respective countries the only convenient times available to most for interview were lunch breaks. The breadth and depth of the interview data was therefore constrained in a temporal sense and affected by how quickly rapport could be achieved between interviewer and interviewee. As the latter varied according to the individual student, this reflected on what and how much was able to be extracted during the interview and resulted in variations in the comprehensiveness and detail of the information obtained.

Conclusions on some issues in the interview data analysis may therefore have been reached on information of insufficient depth and detail.

10.4 Implications of Research Findings for Theory and Principles of Adult and Distance Education

The overriding aim of this study was to determine the extent to which environmental variables mediated the performance of students in both direct and indirect ways. It had also to confirm or reject the increasing current acceptance that distance education was in fact concerned only with the teaching of adults. The USP data did confirm that distance education in the South Pacific Region was indeed about adult education in that the bulk of the students in the study were 21 years old and over, falling mainly in the age category of 21-40 years.

Interactionist theory claims that for adults, life, and aspects of it including attitudes to learning, is directed and motivated by how they perceive and balance positive and negative forces in their environment (Cross, 1981). Data from the USP students generally confirmed the influential role of the environment on their personal, situational and study milieu and on their disposition and preparedness to learn in both direct and indirect ways. In so doing, it not only confirmed interactionist theory but supported as well the recommendation in the literature (Gibson, 1990) for the inclusion of environmental variables in models of distance education as significant determinants of effective adult learning.

However, findings from this study also indicated that environmental dynamics were context specific to a fairly large extent, and this must also be accounted for in models of adult learning in any mode of education. It was seen for instance, that demographic variables were more significant predictors of performance for the South Pacific students than they were for students in the western world in particular. Demographic variables, and age in particular, signalled the variety of family conditions and circumstances associated with various age categories, that provided strong economic reasons for the return to formal study. This was associated with the upgrading of qualifications as the prerequisite for improving economic situations. Because they were strongly related to various cultural features of the South Pacific such as the focus on the

extended family, communal/cultural obligations as well as socio-religious commitments, economic pressures tended to increase with age. This is quite unlike the situation in western contexts where maturity was associated with stable (and by implication, more comfortable) economic situations. Thus, throughout the wide age range of 21-40 years, USP distance students were mainly driven by economic reasons. Students in western contexts on the other hand, were largely clustered in the 35-40 year age group (Lauffer, 1988). As, by this stage, life would have relatively stabilised economically for this latter group, it would be logical to assume that while economic reasons were important motivational factors for them, these reasons were not driven by the same kind of economic pressures peculiar to the USP students. It might also be logical to assume that western culture, being more oriented towards the nuclear family fostering values of independence and self-sufficiency, would not bring to bear the same kind of cultural pressures on the individual as would the more communally-oriented cultures of the South Pacific Region. In addition therefore to economic commitments specific to students in this study, it was seen that cultural, communal and religious obligations also made their demands on the USP student in ways unique to the way of life in the South Pacific.

It was implicit as well, in the discussion about economic motivation that the adult distance students at USP, like their counterparts abroad, were in full-time employment and were therefore studying on a part-time basis. Moreover, their priority attention was directed towards family and work, and studies were in heavy competition with commitments in these areas. These features are becoming increasingly accepted as generic characteristics of adult distance learners and confirmed for the USP group by the findings of this study.

An equally important aim of this study was to find out the extent to which learning attributes of the distance student in the South Pacific compared with those of distance learners in various other contexts. This aim was driven by the concern that in the absence of information and knowledge about the learner and learning in the USP Region, the course development process at the USP was necessarily guided by extraneous information in this area. This raised the question of the relevance and suitability of the information and knowledge gained by this process for the USP Region and its students, and more specifically of the theories and principles on which they were grounded. Little, if any attempt has been made to date towards finding answers to this question and it is therefore a possibility that the course development

process of the USP is founded on inaccuracies as far as its students and their learning requirements are concerned.

Aside from features long under survey and now recognised by the literature as generic to adult and distance learning such as the need for some form of interaction and dialogue in the learning process, the use of technology to assist this communication in distance education, and the need for some form of mediation in the learning process either through the local tutor or by artificial means, there is on-going debate about the universality of other attributes closely associated with the teaching and learning of adults in the distance mode. Significant in this debate is the issue of independence and self-learning, found to be essential to learning at a distance and associated with the adult learner in particular. However, recent studies have challenged this association and have specified instead that independence in learning is more a human trait associated with learning need and preference across all age groups. A significant feature in determining the development of this trait is the attitude of society towards the way its members learn (Jarvis, 1987). Thus, because adults have been expected to rely less on a teacher and more on themselves in the learning process, they have come to be seen as independent learners. In the case of the USP students under survey, the data appeared to confirm this perspective. Close examination of the last school form variable as a significant performance predictor pointed to its strength being in the learning independence forced upon students by adverse school conditions (Chapter 9). In addition, the interview data showed that those students who went abroad for high school studies were exposed to a great deal of independence in both their personal and school lives and returned with an appreciation of the requirements of independent study which was later transferred to, and even partly motivated their distance study. That their performance in their public examinations in this last school year, and any post-secondary undertaking were not associated with their performance as distance learners, also lent support to the conceptual perspective represented by Jarvis. However, data from students in this study, as well as from the on-campus USP students interviewed by Landbeck and Mugler (1994), appeared to indicate that the state of independence was acquired by the synthesis, in stages, of its various characteristics. Students in this study who were exposed to an independent life understood that it came by appropriate time and self-management. Students who were forced to learn on their own associated it with learning and study skills that ensured that they passed their final examinations. These were

usually surface learning skills involving the memorisation of information and its regurgitation at the examination. Yet others saw successful self-study as the willingness and ability to pursue and seek help when it was needed. In view of the limited human and material resources within the environment of the USP distance learner, this task could very well require certain personality traits such as a personable approach and the art of persuasion. All of these students saw their partial experience of independence as the ability to study alone, but conceded the need for tutorial and group support in their learning endeavours. It is proposed that this tendency might be an indication of the partial nature of the independence of USP distance learners still yet to acquire aspects of the trait that would make for holistic independence. Continued experience as a distance student plays a part in the acquisition and development of all of the skills required for complete independence. However, if this persistence is to be assured then the perspectives of independence represented by the 'independent' students in this study must be considered in the discussion and definition of the qualities and concept of independence as presented by theory. This definition is important because distance learning, by its very nature, is about learning on one's own, and if education is to be appropriately geared towards independent learning then both teacher and learner must be properly informed as to their individual roles in such a scheme.

Adult distance learners have also been deemed in theory and principle to be more intrinsically than extrinsically motivated. Thus their studies are geared towards self-actualization in a holistic development sense. Relative to the USP group, adult learners in the Western world in particular, and on whose development western theory and principles of adult learning have been derived, are older. This group of students can therefore be expected, generally, to be at stage of their lives where careers have either been made or are being consolidated. Study can therefore be expected to be more interest-driven and intrinsically stimulated than can be said for a group of younger adults still striving to prove themselves and their capacity for a career to an outside world. At face value, it does appear that adult distance learners in this study were driven largely by external forces in their quest for solutions to demanding economic circumstances. However, on close examination, it also became clear that the process of increasing their ability to cope with economic conditions increased also their opportunities for realising personal growth. Aside from economic reasons for studying, the USP students also cited interest and improved qualifications as popular motivating factors. In the interview data

these reasons were articulated in terms of the development of chosen careers. In this regard, motivation can then be seen to be more personally related and driven by the students themselves rather than imposed from without. Hence the 'teachable moment' for the USP student came as a combination of external forces coupled with a personal disposition towards learning and development. The combined attributes of this 'teachable moment' were also responsible for the claimed confidence by the USP students to return to and continue formal studies. It is a shortcoming of this study that the definition of confidence was left to the subjective interpretation of the students. In this event, therefore, variations in the perception of the concept by the student, were expected. However, there was some consistency in the answers given to questions that could well be related to confidence levels such as the willingness to work independently and the realisation that extension study meant a commitment to proper time management and the prioritisation of study over other time-consuming and less important activities. Taken together, these answers provided a fair indication of how confidence might have been interpreted by the USP students in relation to the requirements of distance study. In this context it is possible to say that the USP students were a confident group of students. Whether this confidence is the same feature attributable by the literature to adult distance learners in general needs to be ascertained.

Adult distance learners are also expected, in principle, to be oriented towards group learning. The literature has cited this orientation in terms of the special needs of groups of students studying at a distance. Culturally, some students, particularly those coming from traditional and oral cultures, learned best this way as it is a key feature of their cultural background. It was also a feature of the working class whose associated low esteem as students inclined them towards learning by sharing and comparing. Women were a group of students who needed to be in a social context to be motivated to learn. A key feature of the USP group was their strongly declared need for group and tutorial assistance. In the probe for further detail in the interviews, every one of the reasons cited above appeared to hold true for the USP group. In this respect, the USP data can be said to contribute to and confirm the social learning tendencies of adult distance learners universally, and for the various reasons cited. In addition, it can also be seen as related to the isolation factor of the distance mode and is an opportunity for each student to find in one another and in a tutor a means for measuring his/her own progress and performance, in the physical absence of the course teacher.

Finally, the tendency of adults towards applications and experience-based learning is well established as a feature of adult learning. One of the most frequently cited reasons for adult persistence in their learning is the immediacy of application of what is being learned to aspects of everyday living and to the work situation. The USP students were no different in this inclination. Learning from work experience (and by implication the ability to apply newly learned knowledge and information to carry out the requirements of their work) was a strategy used most frequently by the highest performing cluster of students (Chapter 6). Relevance to their work was also cited by interviewed students as a highly appreciated opportunity to learn. In addition, some students also acknowledged the applicability of the knowledge and information to their personal lives as a factor in their motivation to continue.

In the above section, the discussion clearly shows that the USP group have both features unique to itself as a group, and those that they share universally with other adult distance learners. In this respect, it contributes towards a general implication for theory by pointing out the need for caution in applying extraneous evidence to new contexts. It is well-advised that theories are examined for relevance and suitability prior to being accepted and operationalised in a new context.

10.5 Implications and Recommendations for Practice at the USP

The second purpose for the exploration undertaken here into the world of the adult distance learner at the USP was the search for guidance towards more effective practice and towards appropriate and relevant research. Being the first extensive study of its kind on learning and the learning attributes of the students in the USP Region, many of the outcomes of this study represent new information which will have implications for the way the USP approaches the teaching and learning support of its adult distance learners. Major implications are discussed below including recommendations for the institution where these are judged to be appropriate from the data concerned.

10.5.1 Implications for teaching and learning at a distance

1. Matching teaching and learner features

One of the more outstanding features of Cluster 6 students which set them aside not only from students in the three other study clusters, but from the typical vocational student as well, was their application of three hours and more to their daily study. Data analysis revealed that this feature was highly likely to be the reason for their high performance in their final examination in comparison to the other students. The implication that this had for the USP is that the work entailed in a vocational diploma course required this amount of time for successful completion and pass in the examination. However, the University Extension blueprint for the design and development of distance education courses recommends that students allocate between six to ten hours of study each week. This ‘mismatch’ was found by Lockwood (1987) to have existed at the USP in 1987 and it would appear that his suggestion of reconciling the amount of teaching materials produced with the need to package them for periods of study time did not receive serious attention. For the USP the problem might have its roots further back in the process in that course content for the distance students was often produced by overseas staff. It was suggested in Chapters 1 and 2 that such staff might well bring with them expectations of their students which did not match the realities of the Region.

In addition, it was also possible that for many staff at the USP writing for the distance mode was an unfamiliar exercise in which they had limited or no experience.

In the course of assisting with the implementation of the COL and CFTC recommendations in 1993, Thomas (Wah and Thomas, 1993) noted that instructional design staff at University Extension did not all have the experience and training to undertake their work effectively, and by implication therefore, could not offer appropriate instructional design advice towards course development. The implications of inadequacy for the basic course development team at the USP made up of teaching staff and instructional designers, coupled with University Extension’s possible lack of

accurate and appropriate information, could well lead the course development process on an errant path.

This study has several recommendations for this situation: firstly, that University Extension ensure the training and upgrading of its instructional design staff as an integral part of its role in the course development process at the USP. This can be done on a regular basis within University Extension itself with assistance from qualified personnel from within and outside the University Region, as well as on a needs basis as in the case of specialist training such as proficiency in relevant computer software. That a number of the staff at the Distance Education Unit are currently enrolled in postgraduate diplomas in distance education is indicative of the awareness of University Extension of the problem, and a step in the right direction.

Secondly, University Extension should make the running of course development seminars and workshops a regular feature of its operations, in order to provide the USP teaching staff with guidelines necessary for the development of effective distance courses. This recommendation was also proposed by the COL Review report which now gains additional substance with the research evidence of this study. These training sessions can well be run by properly qualified and experienced staff within University Extension, or with external assistance.

Thirdly, it is recommended that University Extension put into place an appropriate formula to determine the right amount of course workload consistent with the recommended hours for study by the students. In arriving at this formula, it will be important to take cognisance of the fact that courses can become difficult for many reasons other than their length and depth of demand. In particular, for the ESL students of the USP Region, a heavy dependence on print material and insufficient and/or inadequate instruction and opportunities for dialogue might constitute two such reasons. For the students in this study, their inclination towards group and applications learning and the general low level of proficiency in English prompt the further recommendations that effort be put into providing opportunities for a variety of learning opportunities to

include various kinds of group support, and learning applications and multi-media approaches in place of total print packages.

2. Socio-cultural demands on the USP students

Significant to the implications and recommendations above is the revelation by the data that most students in this study were not able to allocate three hours to their study daily, with the typical student managing between two and three hours. It is also surmised very strongly from the data that this situation was a reflection of the student's socio-cultural environment and its demands on the time available to the students outside of that committed to work and family. Furthermore, there were inequities in this demand in that the ethnic cultures of the Region were found to be more responsive to socio-cultural obligations than the Fiji Indian students. The latter group of students were therefore, as the dominating group in Cluster 6, able to do a lot more studying daily. For the USP then, increasing the expected hours of study per course might not be the solution for the bulk of its students in vocational programmes as revealed by this study. The recommended solution is the improvement and upgrading of course support facilities which is discussed in detail in the following section.

3. Distance learning support and assistance

Cluster 6, as the highest performing group of students in this study (see Chapter 6) was the only group of students able to allocate more study hours than recommended by University Extension to their extension courses. In addition, with regard to the algorithm used in the computation of their examination results, the average aggregate score of 2.25 by Cluster 6 students (Table 6.1) represented a pass at the C grade. For the rest and majority of the students in this study, therefore, the average aggregate score of under two represented fail grades. This finding implies that those students doing less than three hours of study daily are predicted to be unsuccessful in their efforts.

The allocation of three study hours daily was shown in the data as possibly an alternative study strategy making up for the unavailability or lack of adequate teaching/learning support and assistance for the extension courses. For instance, the typical student made limited or infrequent use of his USP Centre whose facilities were

described by most students as just satisfactory to inadequate with respect to supporting their courses and learning. The situation was a little worse with respect to work and community facilities, with most students having no other option but to study and support themselves at home. Often, opportunities at home were no more than the bare minimum. For the USP, this has two possible implications: that either the course package must be totally self-sufficient so that no help outside of it is needed for its successful completion, or that the USP must upgrade and improve its learning support facilities at its USP Centres if these are to be part of the total learning exercise. University Extension claims to have in place a 'standalone' policy which ensures the self-sufficiency of course packages. However, even if this were the case, a 'standalone' policy in itself cannot fully account for the dominant learning orientations indicated by the students in this study towards some group learning and tutorial assistance. As has been suggested in previous Chapters, these orientations might well be a reflection of inadequate course packages so that group and tutorial support were supplementary rather than real needs. Further study is needed to clarify this situation. In any event, two recommendations are made with regard learning materials and support: that courses continue to be produced as standalone packages so that the isolated students for whom the policy was originally intended, are able to complete the courses successfully; secondly, it is recommended that University Extension place in priority the upgrading and improving of its Centre support facilities. In so doing, it would allow Centre staff to be able to help students make up for shortcomings in their courses by providing additional and supplemental assistance, as well as accommodate different learning orientations and needs among the students. Furthermore, given the indication by students that Centres were inclined to be reactive rather than proactive to their learning needs, it is also recommended that the USP put in place a policy which will extend the ability and authority of the Centre to take the initiative in finding out what learning needs were best taken care of locally and to respond to them accordingly. This recommendation would be in keeping with the original vision and purpose behind the setting up of the local Centre (see Chapter 1).

4. Implications of the economic situation

It was strongly suggested by the data in this study that access to the USP Centre by the students was partly related to affordability. Although the average income of \$F5,000 to \$F9,999 was seen to be adequate for a comfortable living by South Pacific standards, a fairly large proportion of it was absorbed by obligations to the community and extended family. In this event, then, part of USP's commitment to the support and maintenance of its distance learning programme and students should also include an attempt at meeting the affordability levels of its students. The location of support services and facilities, for instance, is crucial in this accessibility issue. Many students indicated that the physical distance of the Centre was a problem not just for the isolated students but in the case of centrally located students as well. For the many students in this latter group this 'distance' was a function of either poor and irregular public transport, or inability to afford public transport or both. Much of the USP's efforts at providing support services and facilities could therefore be wasted if students were not able to reach them.

5. Age-related study and learning implications

From information elicited on post-secondary study, it was clear that for almost all of the students in this study, this current educational undertaking was their first attempt at university level studies. This obviously had implications for the disposition and preparatory states of the students for this endeavour. Considering the wide age range of the respondents, younger students could be expected to be able to recall high school and any other post-secondary experience more easily than older students. However, younger students would not have had the wider life and work experiences of the older age cohorts. In addition, family life experiences of the younger students in this group differed from those of the older students and these defined different kinds of learning barriers for the different age cohorts. All of these features, specifically related to age and demographic variables in the contexts of students across the 21-40 year age bracket have certain implications for the way they approach and deal with their tertiary studies. Because it is clear from the literature that the introductory years are important in determining the continuation of studies, USP is recommended to provide for its new intake in particular, as has been recommended for first year on-campus students

(Landbeck and Mugler, 1994), an introduction and orientation programme which takes into account potential dispositional and preparatory problems and barriers to learning at the tertiary level, related to the demographic makeup of the vocational students studying at a distance. This programme will benefit also from the inclusion of information regarding the structure of the various programmes of study offered by the University which was indicated by a great number of the students to be unavailable to them. It should also include an introduction to cognitive and study skills crucial to successful studying at tertiary level focussing on the effective achievement of understanding, analysis and applications techniques which most students indicated in this study as being their greatest need in their transition to university studies. In addition, qualities of a good distance learner, such as independent learning and its requirements, and proper time and self-management should also be made known and taught in this orientation programme so that learners are offered the opportunity to 'learn how to learn' and in so doing, become more able independent distance learners.

6. Educational Background

A notable finding of this study was the association of learning independence with the attainment of upper high school levels, and that this independence was a significant predictor of performance. Given the USP's mature entry policy, and given the data indication that many of the older students in particular might have gained entry in this manner, it was possible that a large group of students might not have been exposed to some form of learning self-dependence (see Chapter 4). It was also established that the students under survey were generally highly motivated and confident in their return to formal studies. However, these dispositional variables were not important in predicting performance and were overridden by the independence gained from having attained sixth form during which time, in various ways, they were exposed to some facet of self-dependence. It was thus also seen in Chapter 4 that students assessing themselves independent learners were, in fact, not independent in a holistic sense. It is recommended yet again, therefore, that the requirements of self-study be taught as a conscious effort by the USP to educate their distance students in learning how to learn. The literature has indicated that this is possible and recommended universally for distance study which is synonymous with self-study. In this educational endeavour, it

is possible that at least some of the problems currently being experienced by USP distance students will be taken care of

10.5.2 Implications for further research

With all its limitations, this study has some useful recommendations for further research both into the world of the adult distance learner as well as in other aspects of distance education related to it.

1. Further and more detailed exploration into adult distance learning at the USP is recommended first and foremost, which would benefit from recognising the limitations associated with this study as well as its results. Such a study would serve to make research in this area as comprehensive as possible with the depth required to ensure a thorough investigation of the world of the adult distance learner at the USP. Part of this extension would be a further examination of the barriers to learning contained in the personal, situational and study contexts of the USP group identified in this research as more significant predictors of performance than issues of disposition and preparedness to study. The recommendation for additional research in this area is made in light of the outcome of multiple regression analysis that the 10 Factors of this study accounted for only 16.4 percent of the variance in final examination performance. Two things are suggested by this result: that this study did not explore the area fully enough, and that accountability for the balance of this variance is located elsewhere, most likely in the institutional and teaching dimensions of the distance education programme.
2. The second recommendation is therefore for research into the institutional and teaching dimensions of distance education at the USP. From the implications raised above in respect to both theory and practice, it is clear that a number of the shortcomings for the adult distance learner at the USP are related to and associated with the teaching, teaching support, maintenance and delivery of the courses. These matters fall outside of the learner's ability to overcome them on his/her own within his/her learning environment, and call for an educational policy by the institution that recognises and

promotes the partnership of institution, teacher and learner in the educational endeavour. In this regard, it is also recommended that such an educational policy, based on sound educational principles and philosophy especially of the teaching of adults in the distance mode, be put in place. Both such policy and philosophy were found by the COL Review (Renwick et al. 1991) to be missing; this study supports that finding.

3. In the course of this research, it was found that certain aspects of the learning and learner dimension needed more clarification and detailed investigation. One such area was mentioned above in the need for a further examination of the reasons for group and tutorial assistance tendencies by this group. It was suggested that this orientation was probably brought about more by gaps in the learning materials than by the real learning needs of the students.

Another area that will benefit from further study is the examination of various concepts such as confidence, independence, self-direction and dialogue associated with distance and adult learning, in more detail in the USP context, in the interest of ascertaining the degree to which these concepts have universal meaning. This exercise is important if University Extension is to benefit from ongoing empirical studies outside the Region given the difficulty that it has had in conducting its own research. In this case, ascertaining whether or not such research findings are relevant and useable for the USP context may mean that more time will be available for USP staff to spend on context-specific issues.

One such issue might well be the requirements of special needs groups among the adult distance learners at USP. One such group is women; data from the literature, confirmed in a limited way by findings in this study, showed that women have an approach to study different from that of men, in that they had a greater need for the social group. Another special interest group might be termed the socially-distanced; nursing mothers, physically handicapped, culturally-disadvantaged (eg. Interviewee 15 - Chapter 8) all fall into this category because they are not able to gain access to the institution and its services and facilities whenever they need or want to. Accommodating these groups of students will mean a special effort on the part of the institution to identify and meet

their special needs. As women alone form at least one-third of the distance student intake, this effort is necessary if USP is to attempt to ensure the successful performance of a large number of its distance students.

10.6 Chapter Summary, Conclusion and Final Statement

In this chapter, the limitations of the study were discussed in order to ascertain the extent of their influence on the final outcomes of the study. This was followed by a discussion of the implications that the findings of the study had for theory of adult and distance learning and for practice at the USP. Recommendations related to these implications were also proposed and found in conclusion to be sound in spite of the limitations of the study.

Questionnaire survey and complementary interview data provided an extensive insight into the world of the adult distance learner enrolled in two of USP's most popular vocational programmes of study. These programmes represented a large number of the total distance education intake. Although the findings of this study must be treated with caution in the areas of deficiency identified at the beginning of this Chapter, much of the information gained could be useful to the USP in two broad respects. Firstly, it has laid the foundation for future studies of its kind in nature and scope to be undertaken with respect to the adult distance learner and other dimensions of distance education at the USP. Secondly, it has identified several implications for the relevance of theory and the practice of distance education at the USP, and further research to assist in this. At the level of operation, new information about the USP distance learner in context has indicated that he/she operates largely under conditions peculiar to the USP Region and its various cultures. These conditions set individual USP countries, ethnic groups and special needs groups apart as much as they set the USP group apart from the rest of the world. In undertaking this study, the overriding intention of the researcher was to open up the world of adult distance learners at the USP in order to ascertain what their learning needs were and the environmental determinants of such. In so doing it was also intended that the information gained by this insight would contain useful implications and recommendations for the adult distance teaching/learning programme at the USP. Study limitations accommodated, these overall aims have been achieved and presented in the hope

that they have not only extended the boundaries of knowledge, they have done so by usefully informing and guiding practice. It is hoped and recommended that once the initial exploration is made into the three dimensions of learning, teaching and institution, research will not stop here. There will always be an ongoing need for evaluation and review not only at these broad levels but also at the level of operation where time and new information will bring about changes that will be of relevance to the effective development of the USP distance education policy, philosophy and operation.