Mature Students' Perception of Stress on Returning to Learn

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The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

Abstract

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In this thesis we present a theoretical model for mature students' perception of stress. The study examines the sources of institutional, dispositional and situational stress of students who are age thirty-to fifty-five. The research involved mature students in England (Yorkshire) and the United States of America (Minnesota). The stress inquiry is phenomenological action research with an interpretive and empirical approach. The design included in-depth interviews (N=60) and application of a questionnaire (N=382). The respondents were asked to describe what is it like to be a student at this time in his or her life. The data collected included perceptions of the student experience, institutional support, personal reactions to returning to learn, balancing family, work and study roles, primary sources of stress, change and transition experienced, evidence of psychological support, healthy and energy levels, and coping strategies.

The study results indicate the primary sources of stress are managing roles, time management and institutional management of coursework. Students in the study did not report increased illness while returning to learn but did report fatigue. Significant gender-country differences include management of roles, workplace support, sources of funding, student status, and physical exercise as a coping strategy. Gender-country similarities include reactions to returning to learn, institutional support, response to change, psychological support, health and energy status, and personal status.

The inquiry has implications for counselling mature students on stress and time management, instructional management of coursework, and recommendation for facility improvements to support efficient and effective learning. Education institutions have and will continue to experience increased mature student enrolment. This research provides specific information on the student experience with the institution, the student-self and the balancing of work, family, and study.

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General Introduction

Mature Students' Perception of Stress on Returning to Learn

1.1. Introduction and aim of the study

The aim of this study was to research the perceptions of stress experienced by mature students on returning to learn. The study examines the sources of institutional, dispositional, and situational stress. We explore the impact of mediating factors such as gender, psychological support, change, health and energy levels, and coping strategies. The study design was phenomenological action research with an interpretive and empirical approach. The design included in-depth interviews (N=60) and application of a questionnaire (N=382) to mature students in England and the United States of America.

1.2. The problem

Stress is a part of life. Returning to learn creates additional demands on adults who already have multiple roles with families, communities and the workplace. In the past two decades increasing numbers of these mature students have enroled in various educational insitutions. This trend appears to be the result of advancing technology, restructuring of business and industry, and mid-life personal career changes. In this thesis we present a theoretical model of mature student stress, the results of data collected through interviews and survey instruments and propose a mature student stress integration model. The data collection involved mature students in England, primarily West Yorkshire, and the United States of America, primarily Minnesota. Implications for this model involve supporting and understanding mature students who have returned to higher and further education

1.3. Status of mature student stress research

The research of Selye, (1956) Lazarus, (1966) Cooper and Eaker, (1988) and Cox, (1988) have had primary influence on this study. This is demonstrated in the proposed model of mature student stress and the formation of the theoretical framework to conceptualize the problems and demands mature students experience. Specific to this work are: one, identifying stress as perceived by students; two, understanding gender differences; three, identifying some similarities and differences between populations in two countries; and four, proposing a model of mature student stress.

Research on mature student stress is limited. Most research on returning learners examined learning abilities, access, psychological support and barriers. In quantifying some common issues amongst mature students, the research indicates that students encounter problems with time management, role management, institutional barriers, self-doubt, psychological support and the health and energy resources available, (Cleugh, 1972; Mechanic, 1978; Cross, 1981; Lanzillotti, 1982; Lemoncilli, 1984; McLaren-Tigar, 1985; Lauzon, 1989; Fisher, 1994). McLaren-Tigar (1985) reported that research on returning learners often ignores the mature students encounter in returning and remaining with struggles Lanzillotti (1982) and Lauzon (1989) argued that mature their studies. student stress was a product of tension between conflicting aspects created by managing multiple roles. The stress and resulting role negotiations potentially changed not only the student, but also the environments he or she interacted with.

1.4. Increased enrolment in higher and further education

Throughout the history of education, adult learning has been influenced by demographic and societal changes. These changes were evidenced in the industrial age as populations shifted to meet the growing demands for knowledge and skills. Thirty years ago approximately fifty percent of all workers in the industrialised countries were making *things*. Handy (1989) states that in the coming millenium we will experience the end of the industrial labour intensive period. As a result, there will be a greater value for knowledge and creativity. He writes, "Fewer people thinking better, helped by clever machines and computers, add more value than gangs or lines of unthinking human resources," (1989:52). Handy argues that times are changing and we must change with them. "If you want to change, try learning one might say, or more precisely, if you want to be in control of your change, take learning more seriously," (:56).

This change has already effected higher and further education. Education institutions have experienced a gradual increase in enrolment of mature students over the past two decades. Older students offer institutional challenges and present unique opportunities for the learners themselves. This paper will identify the perceived stress experienced by returning learners and discuss some of the issues encountered when returning to learn. Some of the issues discussed are: self doubt, anxiety, the influence of past learning experience, attitudes of faculty, integrating of life experience and where students find support.

1.5. The research design and objectives

This research evolved out of the author's experience in counselling, developing and managing courses for mature students. The study was undertaken because of a desire to better understand the perceptions of mature students, the level of stress they experience, and what barriers institutions may be presenting that interfere with efficient and effective learning. The concern was that if the mature student's energy is diverted to barrier removal and crisis management he or she will not be learning effectively or efficiently.

The literature review appeared to categorize sources of student stress as: the institution, the student self, and role management, (Cross, I981). The literature also indicated that individuals experienced varying levels of perceived stress, (Lazarus, I966). The student stress literature identified mediating factors that appeared to impact and mitigate stress levels, (Lance, Lourie, & Mayo,1979; Lauzon, I989; Hutchinson & Hutchinson, 1978; Smithers & Griffins, I986; Fisher, I994), and others.

Investigating the sources of stress would seem to be a manageable task, however, understanding another's perception of stress challenges a researcher to a higher level of analysis and consideration. The objective of this study was to ask students what they perceived as a source of stress and to what degree the named source was stressful. This inquiry incorporated the following objectives:

1. Review and understand the current literature on the sources of stress for mature students

2. Research specific student populations in England and the U.S.A. for their perceived stress. Criteria for these student populations were:

age thirty to fifty-five
enroled full-or part-time in a programme leading toward a degree or qualification

2.1. Conduct in-depth interviews with returning students in England and the U.S.A.

2.2. Analyze the data for identified stressors and emerging themes on student stress

2.3. Design a questionnaire based on the interview findings

2.4. Survey populations of students aged thirty to fifty-five enroled in higher and further education while obtaining a qualification

2.5. Analyze the data to compare gender and country differences

- 3. Investigate specific mediation factors including:
 - gender
 - · level of perceived support available
 - perceptions of change
 - perceptives of health status and energy level
 - · types of coping strategies used

4. Compare findings by gender and country to identify and rate the significance of mature student stress and gender differences

1.6. The study limitations

This research, like all real world research, contains flaws and problems. The potential for error and related issues will be discussed throughout the chapters. Of primary concern in doing the study was the efficacy of interpreting another's meaning. To mitigate this potential problem, a large sample of interviewees (N=60) and questionnaire respondents (N=382) was used. This study is specific to respondents aged thirty to fifty-five years, and the findings drawn from a volunteer-convenience sample representing middle class participation may not be

generalizable to other populations. The use of self—reported data is 21 subject to bias, reliability and validity criticism. The comparative aspects of the study created challenges in viewing two socio-cultural groups. The opportunity to do cross-cultural research was the result of a International Rotary Foundation scholarship and a program for part-time overseas study at the University of Leeds, England.

1.7. The chapter outlines

Chapter Two will present an overview of literature conceptualized by the mature student theoretical framework. We will present concepts on the adult learner, mature student stress research reported in 1970, stress theory and the evolution of stress models, the student's environment, mature student stress reported in the 1980's, stress mediation factors and the further development of the mature student theoretical framework.

Chapters Three and Four cover the purpose and scope of the inquiry with emphasis on the problem of mature student stress interfaced with the general problems of stress research. The discussion in Chapter Four focuses on the research question: *What is it like to be a student at this time in your life?* and discusses how and why particular methods were selected. In this section we discuss the concerns of self_reported data, volunteer samples, difficulties in doing analysis of perceptual meaning and interpretative data analysis.

Chapter Five will present the interview and questionnaire. The interview findings (N=60) are reported by quantitative analysis, discussion, emergent themes and finally a general summary of the interview phase. The questionnaire data (N=382) is submitted with some discussion, the means rating of the total sample, means ratings and graphic illustration of gender and country significance, and concludes with a general summary of the questionnaire phase.

Chapter Six begins with a discussion of some educational comparisons such as, lifelong learning implications and mature student participation. The section also includes workplace and employment issues, management of roles and related social-cultural comparison. We will discuss the significant findings listed below, implications for future research, methodology issues and concerns and themes for future investigation.

The significant findings of this study are:

•the mature student experience is a eustress event

•the management of roles is a significant source of stress with specific gender differences involving both males and females

•mature students identify course management and time management as major sources of stress

• mature students report ambiguity regarding the mix of young and mature students, workplace support and same sex parents as sources of least support

 mature students report no increased illness while returning, they report fatigue and lack of ability to maintain an exercise schedule

•the two country sample indicates more similarity than difference in both interview and questionnaire results

Chapter seven discusses role management and proposes direction for future research in gender differences, causality, and the impact of mediation on stress preceptions. The author reflects on the research design and some advantages and disadvantages of doing research in two countries. This chapter concludes with five recommendations for implementation of the findings.

The appendix material includes: the instruments used in the study, the interview, questionnaire, samples of interview transcripts, and specific forms and letters to students an institutions. And, Havighurst's stages of development, age 18 to 55, sample responses to open-ended question number 25—sub-item 7, and historical frameworks of Adult Education in America and Britain.

Chapter Two

The Literature Review

Mature Students' Perception of Stress on Returning to Learn

Everything can be taken from a person but one thing: the last of human freedoms - to choose one's own attitude in any given set of circumstances, to choose one's own way.

Victor Frankl

2.1. Introduction: Adults return to learn

In England and in the United States of America millions of adults are returning to college. This is a study about some of those adults men and women, who have chosen to return to or enter educational institutions. They come to higher and further education for many reasons: to change careers, to earn an upgrade in their present job, to achieve personal goals, to find a new job after the loss of paid employment, or as the result of a significant life event. This investigation will consider the perceptions of stress when a mature student enrols in college during midlife to seek a degree or qualification. Our study will focus on students who are thirty to fifty-five years of age and currently living in England or the United States of America. It will explore the demands and pressures mature students experience when managing multiple roles, entering an education institution, and confronting self-doubt about learning.

2.1. The increased enrolment of mature students

The steadily increasing number of mature students in higher and further education has become a permanent part of academic administration. The reasons are an amalgam of technology, transferability of skills, recognition of prior experiential learning, the social acceptance of lifelong learning, relocation of employment, and the implications of the present rapidly changing world we inhabit. Whatever the reason for returning, the mature students' world is not what they thought it might be when they reached thirty-seven or forty-nine years of age. What was once meaningful, for example one career for a lifetime, may not longer be viable in a world of changing information and technology. So change comes to individuals and this change is reflected by the institutions that provide further and higher education.

Participation in post-school education has been noted by the National Institute of Adult and Continuing Education in England and Wales, which reported that approximately one-half of the adult population has continued their education or training in some way or other after their full-time (initial) education had ceased, (NIACE, 1982). In the U.S.A., the National Centre for Education Statistics points out that by the year 2000 the population will be dominated by persons in their middle years. The largest age group will be thirty to forty-four year olds with an increasing involvement of forty-five to sixty-four year olds. Non-traditional students (defined as over twenty-five, less than full-time and fulfilling several adult roles) will make up sixty-percent of all students in higher education, (NCES:1982).

The Department of Education reports that the increase of older students in higher and further education was one of the contributing factors in bolstering declining enrolments, (DES:1985). Predicted enrolment drops did not occur as mature students filled the chairs of a diminishing secondary student population in the I980's. The average age of college students has since continued to rise. Older students offer new challenges for educational institutions as they examine prior philosophy and mission statements. Until recently most Further Education and Higher Education (FE/HE) institutions saw their primary role as serving school leavers. That primary role is now challenged as institutions recognize the increasing number of mature students either returning to study or entering FE/HE for the first time.

In the U.S.A. and in England, the concepts of upgrading careers, lifelong learning opportunities and distance learning emerged in the 1970's, particularly through Open University options in England and Universities Without Walls in the U.S.A. These innovations provided the part-time, employed, mature student an opportunity to learn while continuing to work. Governing bodies saw the need to support education and training by increasing opportunities for mature students and providing access to courses and financial assistance.¹

2.2. The challenges of mature student entry

The increased number of mature student and the general enthusiasm for enrolment presents challenges for both institutions and students. Some emerging questions are: Are institutions accepting and recruiting mature students with any real comprehension of the needs these students bring to learning? How will mature students manage work, home and study schedules within the regimentation of the university? Can mature students be credited for knowledge gained through work and life experience? Will returning students perceive the experience as challenging or frightening? What impact will returning to learn have on the students' lives, jobs, and families? Will the students perceive this experience as stressful, and if so, what will they identify as sources of stress?

Societal change offers the opportunity to examine new questions and paradigms. Within our educational settings, basic research such as NIACE's report on continuing education, provides some answers to these emerging questions. While much of the research in education is basic, many people in the field often have a strong applied interest in the practical implications of inquiry, (Bogdan and Biklen,1982). This investigation is a response from the field of practice to the phenomenon of mature student entry, and an interest in the practical implications of mature student entry and the potential for stress. This investigation considers what might be useful information, theory and knowledge for institutions, practitioners, mature students, their families and employers

¹ "Mature students with families will find it difficult to give up their earnings for as long as three or four years. They and other students could be helped by the availability of modular courses...credit transfer...which allows students to build on their studies progressively and to mix full-time and part-time study,"(DES:1985, Cmnd 9545).

2.3. Content of Chapter Two: Literature Review

The literature review will present definitions and related research on mature students, adult development, stress models, sources of identified mature student stress, mediating factors in stress transactions, and lastly, a theoretical framework for the organization of the mature student stress pehenomenon.

2.2. The adult learner

The established body of knowledge in adult education includes adult education definitions, characteristics of adult learners, and developmental aspects of adults, (Knowles, 1972; Kidd, 1973; Cross, 1981; Tough, 1968). In this section, we will review these concepts and their application.

2.2.1. Adult education terminology

Multiple labels have been used to describe the older student including: mature students, adult students, adult learner, returning learners, etc. The labels can be used interchangeably. For example, adult learners may be 'students' in the institutional sense or adults involved in an independent or self-directed learning project. The term adult education has been defined as any organization designed to help adults to learn whatever they may wish to learn, (Harris,1980). The term 'mature' usually refers to students who are beyond the age of twenty. Research reports do not always differentiate the age of the mature student, however, from the implication of family and employment, one assumes that mature students may be 'twenty something'. Some reports define the mature student as an individual who is twenty-five years old or older. The 'age of twenty-one' often appears in the United Kingdom for administrative financial allocation purposes. The Open University generally accepts students who are twenty-one or older, (NIACE, 1982:48).

The literature on mature student stress did not reflect a consistent age grouping. Some studies included students over twenty-one, others over twenty-five. The concept of adult education, as described earlier, implies the education of individuals who have previously left

school. Frequently, adult education is viewed as an umbrella for all activities involving the education of adults, both non-vocational and vocational, but the purpose and intent of this study is to review the literature involved with mature students pursuing *vocational* adult education in England and the U.S.A who are thirty to fifty-five years old. We will interchange the terms mature student, adult learner, and returning learner and refer to the adult learner's education environment as higher and further education,(FE/HE).

2.2.2. Adult learner characteristics

Researchers have expressed broad agreement on some basic assumptions about adult learners and what characterizes their learning, (Knowles, 1978; Cross, I981; Tough, 1968).

Box 2.1. Some characteristics of adult learners

- 1. Adults use past experience as the foundation of future learning.
- 2. Adult learners are self-directing. They approach learning with a style all their own.
- 3. Adults have an immediate or problem solving orientation regarding learning. Their learning must be relevant.
- 4. Some adults may be inhibited from learning by low self-esteem.

Recent life experiences and current circumstances motivate adults to engage in learning activities. These experiences include: the desire for future employment or advanced employment, encouragement by significant others to obtain education, recent role changes requiring adaptation or necessitating further education, or a personal goal or desire to learn something. These life changes prepare the adult for potential developmental change. For most people, Knox (1977) contends, the first half of adulthood has more role changes, encouragement regarding education and optimism for the future than the last half, however, there are developmental concerns, tasks, and role changes during the middle and latter half of adulthood that provide incentives to educative activity and a focus for application of new skills and new learning.

2.2.3. Psychology of adult development

Studies of adulthood reveal periods of change and development not unlike childhood and adolescence. These studies challenge common assumptions that adulthood consists of long periods of stability with occasional erratic periods of change, crisis events, and developmental growth, (Crain, 1980; O'Neill & O'Neill, 1974). In their middle years, adults may take up long-neglected projects and interests and may even make incomprehensible career and life changes. Many mid-life adults experience a life changing event that causes them to question past career decisions. They may look upon the second half of their life with a sense that they have not achieved important goals or yearnings.

Carl Jung observed, "Although growth during the second half of life creates tensions and difficulties, the greatest failures come when adults cling to the goals and values of the first half of life, (I933:109). The resulting changes, crisis events, and personal growth are frequently accompanied by positive and negative stress. An assumption that adulthood may be comprised of one long period of stability where one earns a living on a single career skill, or nurtures a family and a community with knowledge from secondary schooling is questioned by many nowadays. This concept, while still true for some people, is obsolete for those who need new skills and direction. Defining new skills, direction, and achievement often comes out of necessity brought about by environmental or developmental change.

O'Neill and O'Neill challenged the 'mythology of achievement' in the American culture with a critical appraisal of adult development issues. They proposed that as adults we have been enculturated with a belief that happiness is in achieving. Therefore, a goal achieved or plateau reached brings with it a sense of completion and satisfaction. (e.g. leave school, obtain gainful employment, own home, raise children, etc.) However, when adults completed goals, they also find a sense of being illat-ease and question why they don't feel 'satisfied' or 'happy'. There is often a foreboding sense of "Is this all there is?" O'Neill and O'Neill (1974) argue that adults may need to go beyond the completed goal to another challenge. This, they claim is part of the nature of adult development and individuals must not spend their life in the false pursuit of calm. Knox observes the pursuit of goals as a developmental task. He views development as a orderly and sequential change in adult attitudes and characteristics over time and that individuals continue to evolve and change throughout life, (I977: 5-9).

Periods of adult change including role changes in family, work and community seem to precipitate development and teachable moments, ((Havighurst, 1972). Some adults fear and resist change, reacting and feeling remorse about what might have been and then using this as an excuse for inaction. Other adults create a 'readiness to learn, (Knowles, 1978). Change events, though difficult, may heighten individuals' potential, increase their susceptibility to influence and provide an impetus for growth. Research on individuals and families who have experienced extraordinary and traumatic change has provided some characteristics of these 'survivors', (Veninga, 1985). Veninga found that what distinguishes survivors is: one, they refused to live in the past; two, they perceive the experience as a challenge for growth; three, they identify someone who will stand by them; and four, they are not bitter or angry about what happens. These individuals transform trauma into growth and positive change.

Change may be a critical component of adult development. Adult change is sometimes sequential, sometimes abrupt, as in a unexpected life event. In her developmental theory, Neugarten argues that, "...events themselves do not necessarily precipitate crisis or change. What is more important is the timing of these events. If they occur 'off-time', that is, outside the normal expectable life cycle (widowed in young adulthood or fired close to retirement, for example), these changes are much more likely to cause trauma or conflict." (1964:21-22). From this perspective, the study of adult development moves toward understanding the timing of life events within the context of our socially held beliefs, whereas in the psychological tradition, the focus was on the life events themselves, both as markers and processes, (Merriam and Caffarella 1991).

Theories of adult development may also integrate life events and developmental tasks. This integration may provide some focus or direction. However, there are problems in integrating theories of adult development; these problems are chronological, sociological, appropriateness of research designs, and exclusion, (Tennant, 1988; Merriam & Cafferella, 1991; Gilligan, 1983).

First, adult development theories have primarily emerged from the traditions of psychology and focused on the individual's internal process of development. Because of this, prevalent theories were moulded or sequentially ordered to chronological time, (Merriam and Cafferella: 1991). Second, Gilligan (1983) argues that the emphasis on the development of the individual identity has an aspect of gender bias that pervades the literature, (1983). Third, Tennant (1988) observes that the time ordered schemes are equivalent to social approval for expected individual growth and development. He argues that in a pluralistic society this timetable will not reflect differences between social groups, (1988:41-62) Fourth, Tennant indicates that a common methodological problem in doing adult development research may be inherent in the research designs.² Many of the influential studies use research designs that fail to accurately assess time-age comparatives. The studies also do not take into account different life experiences or allow for the emergence of shifts in the developing knowledge bases over time, (Tennant, 1988). Fifth and finally, in America, Merriam and Caffarella (1991) criticize the lack of integration of perspectives on adulthood such as physical aging and social-cultural forces, and propose that this calls for a new perspective that draws equally on biology, psychology and social science as well as on the humanities so we can fully understand the complex and intricate patterns of development in adulthood.

It is understood there are problems with the developmental theories and that some of the frameworks may not apply to an emerging pluralistic society, (Tennant,1988:41-62). However problematic development theory is, the question remains, "What are some common reference points and common tasks of mature students?".

² "A common methodolgocial problem is in constructing a research design which generates comparative data (on whatever dimension) but indicates the effects of age changes only.(where the effects of other factors, such as history and time of measurement are neutralised) Many of the most influential studies in adult development used research designs which failed to do this," (Tennant, 1988:47).

2.2.4 Development tasks

It seems common tasks of mid-life include; adjusting to physiological changes, adjusting to growing children and aging parents, earning a living, relating to one's partner or extended family, parenting, developing leisure activities and fulfilling civic responsibilities. These 'tasks' create demands that require energy, skill, exact labour or some personal effort. These tasks are consistent with Havighurst's findings (1972). Therefore the Havighurst framework of adult tasks should be appropriate for the adults between the age of thirty and fifty-five included in this study. The inclusion of some of these tasks might also establish a broader understanding of the mature student's environment. The middle age tasks are described as:

	Box	2.2	Havighurst:	Middle	age	tasks
--	-----	-----	-------------	--------	-----	-------

•Accepting and adjusting to physiological changes of middle
age
 Adjusting to aging parents
•Establishing and maintaining an economic standard of living
•Relating to one's spouse-partner as a person
•Assisting teenage children to become responsible, happy
adults
•Developing adult leisure-time activities
•Achieving adult civic and social responsibility ³

This study assumes that not all mature students are involved in all of the developmental tasks and we have reordered the tasks from what may be considered the most common to the least common tasks for persons between the ages of thirty and fifty-five. Specifically this age group also provided the means to control the age diversity amongst mature students and describe some of the phases or themes of these adults' lives.

2.2.5. Adaptive developmental frameworks

The primary contribution of adult life and adult stage theory was provided by Jung and Erikson (Crain, 1980). Jung's and Erikson's adult development work was further extended into psycho-social based theories by Levinson, Loevinger, Valliant, Gould, Lowenthals, Neugarten, Chickering,(1981). However, Merriam and Cafferella (1991) suggest that

³ See Appendix for a listing of the developmental tasks of adults aged 18 to 55 and over

the established adult development models may be restrictive. "The established adult development models have been mainly limited to psycho-social disciplines. In evaluating any developmental theory it seems prudent to explore alternative perspectives. Practitioners are cautioned to be mindful of the impact of single-perspective theories, on shaping and maintaining conventionally held views about what it means to be a mature healthy adult," (Merriam and Cafferella 1991:118). Therefore, in this inquiry of mature student stress, the integration of the psychological, socio-cultural and biological factors will provide a broader view of the developmental aspects of the adult. This view seems critical in understanding some of the age related factors of development. For example, mid-life students today may face unique challenges involving the care of aging parents, birthing their own children, and entering education to seek a first degree. Some researchers have called this the 'sandwich generation', (Thomas, 1984). They are parenting their own children and have reversed roles with their aging parents to oversee their parents' health and welfare issues.

Tasks change with time and with social shifts. Mature students nowadays may not fit earlier time ordered frameworks. This creates problems in common understandings of mature student roles. Lemoncilli found this to be a problem in that the demographic data on mature students was often misleading or incomplete, (1984). He proposed this may be due to the variation of age definitions of a mature student, the methodology used in data collection, and the continued focus in education of school leavers.

To maintain a common focus on the mature student, this study has positioned some of the early studies on student stress between the discussion of adult development issues and stress theory. This choice originates from the author-practitioner's desire to keep the focus on the student first and foremost.

2.3. Early research specific to mature student stress

Stress research in education covers broad topics on school age stress, teacher stress, stress among college students, and academic stress. A preliminary review may suggest a void on mature student stress, however, the research on mature student stress is tucked away in related topics regarding barriers and problems of adult learners. The earliest works on the topic include Mechanic (1978), Cleugh (1972), and minor references to 'workstudent' (students coming from workplaces) as described by Hoggart (1978). The 1970 studies were limited by small sample sizes and gender bias. However, the studies were 'stress specific' in contrast to the general reports of problems experienced by older students.

2.3.1 Mechanic: Stress study of a PhD student group

Mechanic (1978) researched a male student group taking Ph.D. exams for social-psychological problems in adaptation. His thesis was that the social environment could affect the individual's ability to adapt to conflict. Mechanic theorized that, like troops trained for combat, the student group would; prescribe limit setting, make provision for alternatives and give meaning to various situations. Theoretically, the Ph.D study group was contrasted with a combat group to identify group cohesiveness, support, and adaptation ability. Mechanic described student stress in exam anxiety, fatigue, time management, group adaptability, and communication problems. The model, however, was specifically gender biased and environmentally limited to the group involved with the study. Other aspects of Mechanics' work will be incorporated later in this chapter.

2.3.2. Cleugh's study of mature students

Cleugh's 1972 study was 'a simple survey' that represented students in teacher training courses. Students were ask to anonymously record the main sources of strain which they had observed either in themselves or in others.

Financial	13*	Stress in facing new ideas	1
Dear accommodation	1	Pressure of time	11
What job shall I do next?	2	Clashes of personality	2
Sort out confusions	1	New role-loss of identity	3
Travel strain	13	Feeling of being assessed	3
Family don't share in course	1	Pressure of group	10
Unsure in new situations	7	Work more slowly now	1
How is job going?	2	Language difficulty	3
Physical	3	No time for social chat	1
Family distractions	4	Lack of leisure	5
Family responsibilities	17	Shyness	4
Guilt at neglect of children	5	Unused to study	7
Away from home	7	Lack of clear direction	1
Lonely	3	Responsibility to sponsors	3
Unsympathetic friends	2	Lot of work	5
Wife's stress	1	Criticism of lectures	3
Fear of failure or anxiety	7	Lack of responsibility	1
Memory	4		
(*indicates how many times this iter	n was cited by	the 29 students)	

Box 2.3. Mature student stress as identified by Cleugh (N=29)

Cleugh's list of identified student 'stress' provides the author an initial reference point in exploring other research on mature students. It is the only study that identifies stress as described by the students themselves. The ability to name the stress, as we shall discuss in the section of stress theory, is an important aspect in understanding stress research.

2.3.3. Stressors of adult learners from literature

A second, but separate, list was compiled from reports on mature student issues, (1970-90). This second list (see Box 2.4) was summarized from research on student participation, institutional access, barriers to learning, role conflict, student success, and financial concerns in returning to learn.

•Stressors identified by students fro	om general literature review
STRESSORS OF ADULT	LEARNERS
Financal	Lack of family support
Feelings of inadequacy	Role conflict
Lack of time management skills	Test taking
Admission procedures	Lack of study skills
Lack of ability to learn	Fear of dulled memory
Low level of confidence	Peer pressure
Difficulty with children	Too much responsibility
Neglecting the family	Neglect-household tasks
Loss/lack of family time	Dividing family time
Lack of partner support	Writing anxiety
Programme/course insecurity	Too many choices
Meeting new people	Lack of trust
Re-organizing their lives	Self-doubt
Feeling of 'last chance'	General uncertainty
Learning to think academically	Guilt
Reduced income	Caring for ill family
Ambiguity about future	Lack of study time
Instructor generated loads	Travel to college
Difficulty concentrating	Physical limitations

The two lists are compared below. The stress identified by students in the 1972 report is not measureably different from later reports. Comparing the lists reveals that the perceived demands have not changed significantly over the past twenty years.

Box 2.5: Comparative list of 'stressors' over twenty year period

Mature Student Stressors

•Cleugh Sample 1972 Financial Stress in facing new ideas Dear accommodation-away from home Pressure of time What job shall I do next Clashes of personality Sort out confusions New role-loss of identity Travel strain Feeling of being assessed Family don't share in course Pressure of group Unsure in new situations Work more slowly now How is job going? Language difficulty Physical No time for social chat Family distractions Lack of leisure Family responsibilities Shyness Guilt at neglect of children Unused to study Lonely Responsibility to sponsors Unsympathetic friends Lot of work Wife's stress Criticism of lectures Fear of failure:anxiety Lack of responsibility Memory Away from home

Financal Learning to think academically Reorganizing their lives Lack of time management skills Too many options: choices Meeting new people Ambiguity about the future Role conflict Travel to college Low level of confidence Neglecting family Peer pressure Uncertainty in general Guilt Lack of ability to learn Feelings of inadequacy Physical limitations Lack of study time Lack of family time Too much responsibility Neglecting household tasks Self-doubt Difficulty with children Lack of study skills Lack of partner support 'Last chance' Lack of trust Writing anxiety Lack of partner support

Instructor generated workloads

Programme insecurity

Lack of clear direction

Difficulty concentrating

Test taking

•Literature sample 1972-90

The list of mature student stressors (see Box 2.5) supports the development of a mature student theoretical framework for organizational pruposes, which will be discussed in Chapter Four. This list of stress and problems as identified by students reflects the perception that return to learning is a time of conflict, fears, financial concern, and recognition of limitations.

2.4. Theoretical models and concepts of stress

This section will overview models relative to the concept of stress especially within the mature student population. The literature begins with early biological and psychological stress models and reports how stress theory evolved into a wider base of knowledge and personal application.

2.4.1. Defining stress

The word stress is derived from the Latin *stringere*, meaning to draw tight. The term stress was used in the seventeenth century to describe hardships or affliction. Later the term was also found to denote pressure or force and was commonly used in the context of physics and engineering, (Cooper, Cooper and Eaker, 1988). Another source indicates that the word came into the English language (via Middle English) from the Old French *destresse*, which means to be placed under narrowness or oppression (Old French *estresse*). In its Middle English form it was therefore 'distress,' and over the centuries the 'di' sometimes got lost through slurring, leaving us with two words 'stress' and 'distress', which have now come to carry different meanings, one ambivalent, the second always indicating something unpleasant, (Fontana 1989:2).

Defining stress is one thing; understanding it is another. Stress is an elusive topic to research. Mechanic (1978) observed, "One of the dilemmas facing researchers in the stress field is whether to conceptualize stress as an appraisal of the individual or as an assessment of situational demands and coping resources independent of the person's perception," (I978:pxvii).

Stress research is about the human response to events and experiences. It is a study of human behaviour. By its nature, stress research cannot be an area of pure or exact research; there will be limitations in how accurately we can measure human behaviour, (Watson, 1963), and there will be moral and ethical guidelines to be considered when seeking human answers from human subjects, (Robson, 1994).

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2.4.2. Problems in identifying stress

Identifying stress theories nowadays is complicated by increased awareness of the personal element in printed media material about stress and attitudinal bias regarding stress and stress responses. The present popularity of stress-related information abounds in printed and broadcast media. However, stress is a problem of individuals, not mass groups, and the understanding of stress involves the acceptance of individual perceptions as a valid way of knowing. Stress research cannot be neatly categorized or consistently defined. The nature of stress is individual, perceptual, and private, therefore, investigators are encouraged to be prudent in their search for stress 'truths', (Cox:1988:26).

Cox (1988) acknowledges the very private nature of a stress experience. "Stress is the experience which 'troubles' the individual, and by its very nature the phenomenon can only be shared indirectly. It is a private event. As with other experiences, it is an intimate and protected phenomenon. Only as individuals can we experience stress. The existence of stress in others must be inferred from verbal or written reports or from behaviours and appearance. Most often, it is unavailable to direct public scrutiny and will become available to the person through some spontaneous occurrence or by deliberate introspection. One of the primary ways to access this information is through oral or written word. The interpretation of written or spoken reports are subject first, to the individual's ability to put into words what they have experienced, and second to be interpreted with accuracy by another who may lack understanding of the use of another's lexicon of words, language and labels," (Cox,1988:26).

In reporting an experience as 'stressful,' one risks being vulnerable to how another may interpret 'stress.' The popularization of stress in the media confounds this. In one sense, there is a current notion that to be stressed is to have 'come of age.' It may be viewed as a twentieth century symbol of success. "But for today's businessmen, stress has become almost a status-symbol; it means that you're mean, modern, and successful, not a drop-out wimp," (Guardian:I990). On the other end of the continuum, in what Kyriacou (1989) calls the 'sensationalizing of stress.' Stress is seen as a pathological state and there is something wrong if you experience it. Kyriacou indicates that identifying the problem of stress in individuals is halfway to blaming them for their malaise. This involves yet another discrepancy, the problem of self-awareness and denial. Between acknowledgement, successful coping and denial rests a body of research that has been built into the knowledge base of this century. The stress continuum ranges from distress (negative) and eustress (positive) as identified by Hans Selye, (1956).

2.4.3. Stress - the research base

When Selye, an Austrian endocrinologist, published *The Stress* of *Life*, it was as if he had some predetermined understanding of the chaos he was going to generate. He wrote; "This text is dedicated....to those who are not afraid to enjoy the stress of a full life, nor so naive as to think that they can do so without intellectual effort,"(1956:1). He spoke about the realities of stress but said it need not necessarily imply a morbid change; normal life, especially with its intense pleasure and joy of fulfillment, also causes some wear and tear on our machinery. He called stress a nonspecific response of the body to any demand. Identifying the responsibility in research he wrote, "It is not to see something first, but to establish solid connections between the previously known and the hitherto unknown that constitutes the essence of scientific discovery," (1956:1)

What Selye and his colleagues first saw in 1910 was a change in the structure and chemical composition of the human body, a change that could be measured. Some of this was damage caused by the body's adaptive responses. Homeostatis is the steady state of our human body, the balance kept. However when they examined patients clinically they found, "Each patient felt and looked ill; a coated tongue, diffuse aches and pains in the joints, intestinal disturbances with loss of appetite; fever, mental confusion and enlarged spleen or liver, tonsil inflammation and skin rash....these signs were 'nonspecific' and hence of no use diagnostically to the physician...the syndrome of just being sick," (1956:16). Proposing the connection between demand and damage, Selye's viewpoint was not accepted. "Almost none of the recognized experienced investigators whose judgement one could usually trust agreed with my views," (1956:16). Yet he maintained that no living organism could be ŧ

reasonably maintained in a continuous state of alarm without becoming incompatible with life.

Selye called the syndrome 'general' because it was produced only by agents that had a general effect upon a large portion of the body. He called it 'adaptive' because it stimulated defense mechanisms in the body and a 'syndrome' because its individual manifestations were coordinated and partly dependent upon each other. The concepts of stress and strain in physics corresponded in his estimation with those of stress and strain evidenced in biology. He presented his evidence to College de France in 1946 and a new word was coined 'le stress.' He cautioned that it was important to know the difference between stress and stressor and to appreciate that having knowledge about something is one way to acquire power over it, (Selye,1956).

Selye's pioneering work was controversial. The controversy involved his concept of 'non-specific response.' He believed that humans have the ability to continually adjust and self regulate, however, "... when self regulation fails, there is disease or even death, "(1956:64). He felt strongly that disease is not only defeat, but also a fight for health. The stress continuum came from this perspective; distress (negative) at one one end of the scale and eustress (positive) on the other end. Controversial as it was, Selye maintained that the body undergoes virtually the same nonspecific responses to the various positive or negative stimuli acting upon it. Hence, the definitions listed in Box 2.6. were conceived.

	Box	2.6.	Selye	definitions	of	stress
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 Stress is the 	ne nonspecific response of the body to any
demand	
 Distress is 	s negative stress
•Eustress	is positive stress
•Stressors	are those demands which produces stress as
perceived	by the individual

From the basic definitions emerged an initial stress model, the General Adaptation Syndrome model (G.A.S.). Working with a concept of adaptive energy, Selye's primary percepts are: one, the physiological stress response does not depend on the nature of the stress or alarm but

is programmed as a universal pattern of defence to protect the individual; two, the defence reaction moves through the three stages of alarm, resistance, and finally, exhaustion; three, if the defence responses are prolonged or traumatic, the disease of adaptation would result; and four, this response is the organism's price for a prolonged battle of resistance when physical, mental and emotional energy is depleted. In brief, the body has a limited supply of energy and when energy is exhausted because of continuous use, the body breaks down. In this preprogrammed theory, it is only a matter of time and a question of how the disease will manifest, through heart disease, cancer, ulcers, migraines, etc.(Selye,1956).

The G.A.S. encompasses all the non-specific changes that occurred during exposure to a stressor. The stressor is a 'snapshot,' and the response is a 'motion picture' of the response to the non-specific demand. Box 2.7 offers a graphic representation of these biological processes.

'The snapshot'	'The motion picture'
Stressor U Hypothalmus-Pituitary U Adrenal V Stomach Thymus White blood cells Urganic changes occur •Theory: Continuous "snapshots-motion pictures" will result in organ damage and disease.	General Adaptation Syndrome resistance phase I phase II phase III alarm stage of reaction resistance exhaustion

Box 2.7. Perspectives of the General Adaptation Syndrome

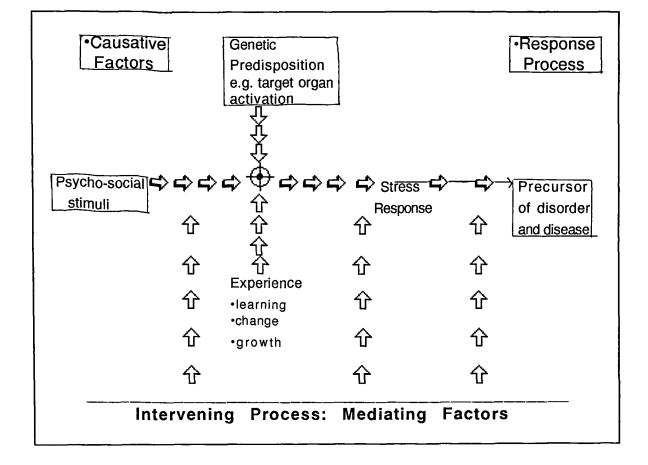
The theory had been scientifically and clinically established, however Selye failed to fully acknowledge the importance of individual mediation and response. Selye claimed the body had limited physical energy and when this energy supply was depleted or over-drawn, the body broke, but later work done by Levi and Kagan (1971) suggest the body's breakdown may also be a genetically predisposed process encompassing psycho-social stimuli and experience. Levi and Kagan point out that mediating factors can modify or expand the stimulus and intervene in the stimulus-response process.

2.4.4 Expansion of the stress research base: Psychological

Serious questions regarding the stimulus-response theory emerged. What appeared problematic was the exclusion of the role of psychological response to stressors, thereby ignoring the individual's psychological capacity. Later work suggested that much of the physiological response was not directly due to the actual presence of the stressor, but to the psychological impact on the individual, (Cox I988:7). The research of Levi and Kagan (as quoted here from Cox (1988) provided a theoretical model to describe the psychological factors. They accepted Selye's notion but indicated it was the psycho-social stimuli that generated response and resulting disease.

Two issues proposed by Levi and Kagan are of particular interest. First, they suggest that most life changes evoke a physiological stress response that they believe prepares the person for the physical activity of coping. This response, if prolonged, results in what Selye described as 'wear and tear' on the person and subsequently produces structural as well as functional damage. Interesting in this theory is the influence of not only psycho-social stimuli, but also the interaction with genetic factors and the influence of previous early environments. Levi and Kagan's thesis is that together the psycho-social stimuli and the psycho-biological programme determine the occurrence of the stress response, which in turn may precipitate precursors of disease and the disease itself. Secondly, the sequence of events can be promoted or counteracted by the mediation of variables. The mediators may be intrinsic or extrinsic, mental or physical, and can modify the effects of the psycho-social stimuli and the psycho-biological programme at any stage in the process. This approach may be over simplified, but it does reflect the important consideration of a continuous feedback between all of the components.

Box 2.8 presents a stress framework in view of discussion regarding developmental theory and how the individual's development emerges with experience, social stimuli and may be influenced by genetic predispositions ⁴.



Box 2.8. Aetiology of stress induced physical disorder (Levi and Kagan)

⁴ The reference to genetics is assumed to be one's predisposition to disease, but it may also predispose one to what has been identified in critical incident stress literature as 'target organ activation'. This means, one's biochemical stress response may be directed to 'weak' or predetermined targets, (upset stomach, racing heartbeat, etc.,(Everly, 1989).

2.4.5. The transaction and relational nature of stress response

Arguments regarding cause and effect of stress response continued to influence the knowledge base. Evidence of individual stress response variation appeared to be coming from differences in behavioural, physiological and individual subjectivity, (Cox, 1988:12). The Selye theory appears to be more of a mechanized response (stimulus-response) and does not fully allow for individual variation found in later work.

2.4.5.1. Psychological Coping: Lazarus

Lazarus (1966) proposes that stress cannot be defined exclusively by situations alone. He argues that the capacity of any situation to produce a stress response is dependent on the characteristics of the individual. He believes that stress is a function of the transaction between an individual and the situation, rather than or either one in isolation, (I966:5).

From this understanding emerges concepts of appraisal, threat and demand. Appraisal, in Lazarus's terms, is a coping process. Lazarus acknowledges the debate amongst his peers, principally Magna Arnold (1970), and agrees that emotions are created with appraisal of experiences and events, but concludes that emotions are best regarded as a consequence of intervening cognitive processing as part of the coping process, (1966:257). The premise that emotions are a causal factor is also noted by Everly, who reports that while the concept of emotion is arguable among authorities, it is agreed that the phenomena of emotion and stress arousal are authentic, (1989). For example, for some students entering a classroom realizing he or she is the oldest student may trigger an emotion of anxiety.

Threat, the anticipation of harm, Lazarus believes is more damaging than actual confrontation, (1966:38). Cox observes that the intensity of threat will depend on how well the person feels he or she can deal with the danger or potential harm. If the person feels helpless and completely unable to master the situation, then the threat can and will be severe, (1988:23). For example, a mature student may perceive that presenting a report to a class is threatening, while another student who has had great difficulty with spelling may perceive writing a thousandword essay is threatening.

A threat or demand is viewed as a request or a requirement for physical or mental action and usually implies some time constraint, (Cox: 1988: 24). In this discussion, we view the concept of demand and task interchangeably. A mature student may experience an essay or an exam as a demand or a task. The essay and the exam may occur simultaneously, requiring the student to allocate preparation time for both. If the student also experiences a family demand at the same time, the student now has a identified task/demand, a time constraint, and a conflict. (Lanzilotti,1982).

Box 2.9. Definitions of stress: Lazarus, Cox, and Arnold

 Stress - any demand that taxes the individual's psychological, social or physiological system and the resulting response of that system (Lazarus).

•The stress response - the result of conditions that disrupt or endanger well-established personal and social values of the people exposed to them...The stimulus conditions are therefore identified as situations of stress and require that we define stress in terms of transactions between the individuals and situations rather than or either one in isolation (Lazarus).

•Demand - a request or requirement for physical or mental action and implies some time constraint. The important feature of time in this context is perceived time (Cox).

•Appraisal - the cognitive process that intervenes between the stimulus and the emotional reaction. It is an evaluation by the individual of the significance of the stimulus (Arnold).

•Threat - anticipation of harm (Lazarus).

A mature student, entering education for the first time may perceive and experience registration procedures as intimidating or threatening to his or her self-esteem. A student who has experienced school related spelling difficulties, may feel threatened by essay writing. In Lazarus's view, this student's past experience, perception of demands and appraisal of ability, will determine his or her response.

In later work (1971) Lazarus broadens his definition, "Stress refers to a broad class of problems differentiated from other problem areas because it deals with any demands which tax the system, whatever it is, a physiological system, a social system or a psychological system and the response of that system. The reaction depends on how the person interprets or appraises consciously or unconsciously the significance of a harmful, threatening or challenging event," (Lazarus 1971:53).

2.4.6. A stress model for mature student research

The topic of student stress is complex and elusively disseminated amongst multiple disciplines and approaches. Given this complexity, we have chosen to cluster the stressors in Box 2.5. into the following categorical groups: the institution (Institutional), the student self (Dispositional) and, the managment of roles (Situational). These groupings are consistent with the work done by Cross (1981), NIACE (1982), and Larson, (1990). The identified categories are: (The area in italics is taken from the I982 ACACE report.)

Box 2.10. The sources of student stress and identified stressors

A. <u>• Institutional:</u> "...practices and procedures which discourage working adults from taking part in education, for example, inconvenient schedules or locations, high fee levels, and the lack of appropriate provision." *

•Students reported travel to college, instructor generated work loads, programme insecurity, and financal concerns as Institutional stressors *Italics taken from NIACE, 1982:60 B. <u>• Dispositional: The student self</u>"...related to attitudes and selfperception as an adult learner, for example, adults with poor educational background frequently feel they may not have the ability or interest in learning, and the elderly feel they are too old." *

• Students reported meeting new people, ambiguity about the future, low level of confidence, peer pressure, uncertainty in general, difficulty concentrating, lack of ability to learn, feelings of inadequacy, physical limitations, self-doubt, lack of trust, and feeling that this is a last chance as Dispositional stressors *Italics taken from NIACE, 1982:60

C. <u>•Situational: The management of roles</u>"...arising from the adult's situation in life at a given time, for example, lack of time due to job responsibilities,lack of money especially when young, and lack of child care arrangements for parents."

•Students reported reorganizing of one's life, role conflict, neglecting family, lack of study time, lack of family time, too much responsibility, neglecting household tasks, difficulty with children, lack of partner support as Situational stressors.

*Italics taken from NIACE, 1982:60

2.4.7. Stress response

In summary, we have defined some concepts about stress and sources of stress. Stress is the nonspecific response of the body to any demand that taxes the individual's psychological, social or physiological system, thereby creating a response. There are two types of stress, positive (eustress) and negative (distress). The demand that produces stress as perceived by the individual is a 'stressor.' These terms could be intermixed and referred to as a 'perceived stressor.' A 'perceived stressor' is a demand that is considered potentially harmful by an individual. The demand is appraised through the individual's cognitive process as challenging, threatening, meaningful or harmful. By processing the event, the individual initiates a stress response. The response may result in selection of either a adaptive coping response or a maladaptive coping response. An example of a eustress event: A mature student is informed that she is accepted into the graduate program following a probationary year of study. The student is married, employed, has two children, and has just been elected fund-raising chairperson of a civic club.

Box 2.11 Eustress response

Process: The student experiences a demand rightarrow... the response is interpreted as 'challenging' rightarrow...through cognitive processing the individual does an environmental appraisal for a) available social networks, b) the presence of conflicting demands from work or home, or c) previous or similar experience and rightarrow initiates adaptive coping strategies such as time management, spouse support, scheduled exercise to minimize the demand and rightarrow experiences the additional demand as eustress.

An example of a distress event is: A student has been informed that her employer will no longer cover her course fee and her work hours are being reduced to part-time. Her youngest child has been recently diagnosed with a chronic illness. The perceived financial demand is appraised as threatening.

Box 2.12 Distress response

Process: •The student experiences a demand \Rightarrow ... the response is interpreted as 'threatening' \Rightarrow ...through cognitive processing the individual does an environmental appraisal for a) available social networks, b) the presence of conflicting demands from work or home, or c) previous experience and perceives lack of support from family and employer \Rightarrow ...initiates maladaptive coping strategies such as experiencing anxiety, fear, doubt \Rightarrow ...biochemical changes such as difficulty sleeping occur \Rightarrow ...target organ activation such as migraines occur \Rightarrow ...experiences fatigue, loss of appetite \Rightarrow ...more maladaptive coping \Rightarrow ...experiences the demand as distress.

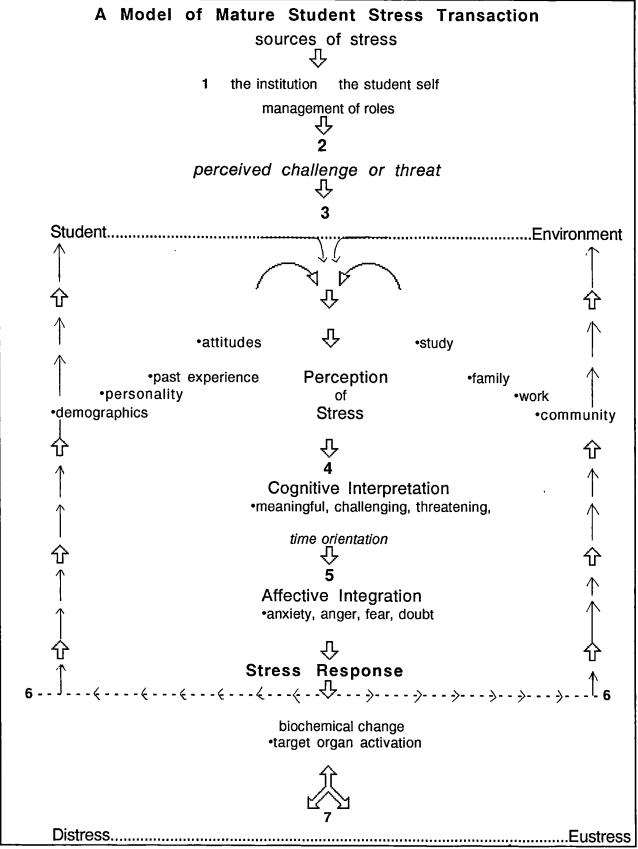
As described here stress response is the result of a integration process between the individual and his or her environment. In the assessment of the event, cognitive interpretation will encompass both time orientation and affective integration. The information that is used to process and integrate is drawn from one's environment and past experience. An important part of the transaction is the integration of

current information with the existing schema of past experience. As Cox points out, "This process is an essential part of establishing the person's perception of the world and of planning his activities. This planning can be viewed in terms of a decision-making process necessarily divided into problem identification, clarification and solution, and then response coordination and execution," (1988:44). A view of integration is presented in Box 2.13.

Box 2.13. Process steps in the integration of a stressor

In the process of integration these steps will occur:
One: The source of stress identified as: the institution the student self the management of roles
Two: The identified stressor is <i>initially</i> perceived as challenging or threatening
Three: The initial perception is appraised by searching one's environment, experience and previous ability or skills in similar situations
Four: The stressor is cognitively appraised as a meaningful, significant, challenging, harmful, or threatening event. A time orientation will also be considered.
Five: The affective integration of the stessor will evoke feelings of anxiety, anger, fear, doubt, guilt, or pressure, challenge, excitement, trust, love, caringetc.
Six: The perceived challenge and emotional response may move back into a second environmental appraisal for problem solving, support, skills, help, conflict resolution and then move through cognitive interpretation and affective integration again. (This is the transactional process whereby the individual negotiates the perceived demand with environmental capability.)
Seven: The stress response results in maladaptive or adaptive coping strategies on the stress continuum as distress or eustress.

To further describe this transactional process we have adapted a model from Cooper, Cooper, and Eaker, (1988) of mature student stress. •Box 2.14. A model of mature student stress transaction



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Summary: In the model, the student acknowledges the stress, perceives it as challenging or threatening, appraises the environment and self, moves through a cognitive processing of the information and at this point perhaps *names* the stressor, then affectively integrates the perception moves down through a second appraisal process of environment-self, cognitive and affective appraisal, and selects an adapative or maladaptive response resulting in a physiological response on the stress continuum of distress or eustress.

Perceived stress is a personal phenomenon. Scientific research has clinically observed and measured the effects of this 'nonspecific response' on the human body and although the response can be mediated by the individual's ability to adapt and adjust to the perceived demands, it cannot be predicted. In this case the student's past experience, personal make up and demographics contribute to his or her ability to adapt and adjust. The capacity for adaptation, adjustment and coping is environmentally influenced.

2.5. The impact of environment

Environments include living space, workplaces, and communities of people who coexist in those spaces. Therefore, environments differ as individuals differ. In this section we will discuss home, family and work situations that have the potential to influence coping responses to stress.

2.5.1. Stress in family - home

Concerning life event studies, Holmes and Rahe (1967) suggest that a net increase in life events may be associated with an increase in an individual's susceptibility to stress-related illness. Life events that involve change such as changes in health status, living conditions, family relationships, financial concerns, education, and social life will require individual adaptation. Change is not always dramatic. For example, holiday celebrations, traveling, and visits from extended family members can be prime sources of domestic strife. The Holmes and Rahe scale assigns a score or a value to these events. The respondent then 'scored' the events if he or she had experienced it during the past year. Holmes and Rahe found that individuals with high life-change event scores were more likely to have a stress-related illness during the following year. They also recommended that individuals with high scores consider some preventative counselling or support, (1967:217). Still there are serious questions about the generalizability of the scale across cultures and allowing for individual characteristics suggests that a high score may be an indicator of susceptibility to illness, not necessarily a predictor. Research by Kobasa (1987) with people at American Telephone and Telegraph, a large U.S. corporation, indicates that individuals, in spite of multiple life events, thrived on life change events, rather than being prone to illness.

Figley and McCubbin (1988) found that change and family stress, like individual stress, consisted of life events and transitions (e.g. death, purchase of a home, parenthood, marriage, entering college) and these events or transitions could impact upon or within the family unit producing or potentially producing change in the family social system. They proposed a model of family stress known as the ABCX model. This particular model was used in families who had experienced major change and often traumatic change, for example, the birth of a handicapped child or the long illness of a family member.

Box 2.15. Figley & McCubbin ABCX model of family stress

Figley and McCubbin: ABCX Model of Family Stress

- •A the stress event: hardship-demand on family unit
- •B the family resources in avoiding or dealing with the event
- •C the family's personal perception of the event

•X - the family's response (The X factor became the amount of disruption, disorganization and incapacity the family experienced).

The primary intent of the ABCX model is to demonstrate the family response to multiple stressors referred to as 'pile-up events'. As with individuals, family stress arises when a combination of life events and adaptive responses demands more resources or energy than the family

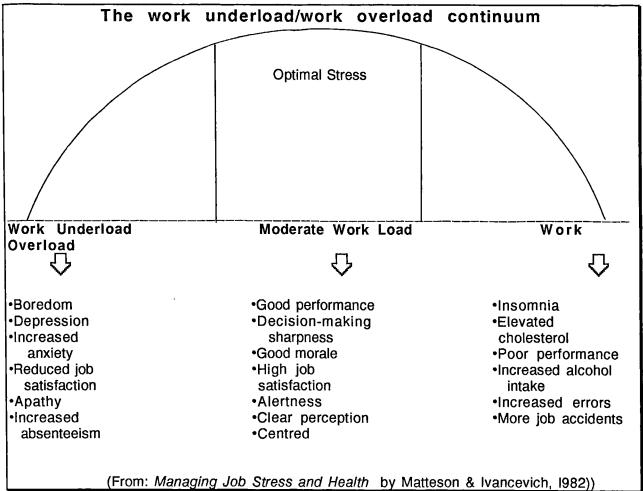
has available. The theory of pile-up of events seems important in understanding the mature student in the context of his or her education environment and family-home environment.

2.5.2. Stress at work

Work stress affects the individual, the family and student life. Matteson and Ivanevich (1982) write that if work stress is not interrupted, people burn out. Stress factors identified with work include: working conditions, work overload, work underload, role ambiguity, role conflict, responsibility, relationships and change. Change here includes promotion, retirement, and redundancy.

Work performance and demand models have been designed in relation to occupational health issues, (Cooper, Cooper & Eaker, 1988; Matteson & Ivancevich, 1982). It is beyond the realm of this study to examine this issue deeply but we can note that a student who is employed is going to be affected by stress issues in the workplace as well as at home and at college. Students may be in jobs that they enjoy, or they may be hoping to leave after completion of a degree, or they may have been promoted and the new responsibility has brought them back to college for advanced training. Students who have taken on new responsibilities often report high degrees of work related stress, which may be compounded by resentment from co-workers, (NIACE,1982; Lance, Lourie and Mayo,1979).

Work performance may be affected by multiple demands and increased levels of anxiety, particularly time oriented demands. The Yerkes-Dodson law suggests that an individual's performance may actually improve with increased levels of stress however, eventually the stress may result in reduced performance. This theory implies that both low and high levels of arousal may be associated with poor work performance and that moderate levels are optimal. This concept has been described by Matteson and Ivancevich (1982) as the 'the work underload-overload continuum model,' The model is presented in Box 2.16 because it identifies the potential 'stressors' of both distress and eustress.



Box 2.16. Work underload and work overload continuum

Within the student's environment, his or her workplace may affect the student role as well. The advanced education may be a result of job dissatisfaction, boredom, or new responsibility that entails work overload. Stress factors in the workplace, the home and family may result in continual adaptation in the student role, (Lanzilotti, 1982).

While the knowledge base of stress is considerable, it is only useful if we can apply it to day-to-day living, (Cox, 1988:174). To examine the student stress further, we will look at the literature specific to the categorical areas of institution, student self and management of roles, previously described as Institutional, Dispositional, and Situational.

2.6. Research on mature student stress

As mentioned earlier in this chapter, by the year 2000, the population of higher and further education may be dominated by persons in their middle years, (NICES, 1982). This increasing enrolment of older students will continue to challenge both institutions and individuals. This section will focus on some of the difficulties mature students may encounter when participating in further and higher education.

2.6.1. Stress factors and further and higher education institutions

Policies of institutional management and procedural practices have been found in the adult education literature, (Duke, 1988; NIACE, 1982; Cross, 1981; Apps, 1987). Issues about recruitment and response were questioned by Apps, "At the institutional level, colleges and universities often need to examine several fundamental questions concerning mature students. To what extent has the college or university actively recruited adult students but made few adjustments in regular operating procedures to accommodate them? Have they flexible registration opportunities for learning at a distance? Have they made a concerted effort to solve the unique problems faced by returning students?" (1987:137). Enthusiasm for mature student enrolment has been experienced on both sides of the Atlantic. Cross presents a cynical perspective of the 'game of demographics' being played in the U.S., observing, "... the goal was to get as many adults as possible on your side, and the strategy consists of figuring out what adults want and need and persuading them that your college has it. The 'game', if well played, would yield high numbers of mature students in sufficient numbers to provide for the lack of students of traditional college age," (1989:1). The British perspective has not been quite as cynical yet a similar theme is heard, "Universities' need for older students is thus well anchored in two forms of self interest; in short, both jobs and job satisfaction; lively challenging minds as well as bums on the seats. The mainstreaming continuing education in the form of post-experience adults taking regular degrees is certain to expand," (Duke, 1988).

The reasons for returning to learn vary amongst mature students. Houle (1961) viewed participation in learning from three perspectives: learning orientation, activity orientation and goal orientation. One U.S.A. study indicated that returning learners could be classified as, requirement meeters, knowledge seekers, specific information users, or non specific information users, (Richardson, et.al., 1983). The report indicated that the changing college population will continue to present dissimilar motivations and consequently different learning needs and strategies for learning may emerge. For example, they reported that some students desired actual job experience as part of their study even if this meant they had to extend their educational goals to achieve the experience; learners wanted clearly structured classes and were unhappy with vague class objectives, no text, and unclear learning outcomes; students wanted the institution to recognize life experience and individual abilities; they favoured group class assignments; and finally they identified their primary stress as not having enough time to work on class assignments. The study concluded that mature students who are goal-and time-oriented may require changes from traditional instruction practices. The older students may be more committed than younger students and respond more precisely to instruction and are uncomfortable with seemingly unrelated activities. They will be efficient in course completion and easily put off if coursework is not sequentially arranged to allow timely completion, (Richardson, et.al., 1983:220). Implied in Richardson's discussion then, is learner involvement and control over programmes and study. Bagnall (1989) argues that participation in adult education is more than being present in a course, it also involves learner involvement and control. Central to Bagnall's argument is that participation in an adult programme involves learner action, interaction, responsibility, control over learning and learning outcomes. He believes learner involvement comprises the substance of adult participation, (Bagnall, 1989:257).

Participation in learning and achievement of learning goals may also be influenced by gender differences. Mature student gender differences have been identified by Cleugh (1972); Belbin & Belbin(1972); McLaren-Tigar (1985); Warren (1985); and Jackson (1993). Warren reports that women may present different objectives and be more concerned with occupational training and integration of knowledge and skills toward their existing career base. Warren also notes that women age fifty and older appear to have distinct learning objectives, commitment to learn and fewer problems in balancing family responsibilities, (1985:201-205). Jackson observes that women returners are not a particularly homogeneous group, but they often share interrupted careers due to childbearing or caring for handicapped or elderly relatives,(1991:98). McLaren-Tigar indicated that men were more likely to be enroled fulltime and were much more likely to be supported financially by government, employers and trade unions, (1985:36). Given that gender differences are valuable in understanding adult learners, this research must still be prudently reviewed with the awareness that sterotypes are being challenged and changed as returning to learn becomes normalized in our society. "And with changing stereotypes, changes in the expressed difficulties of both men and women may be expected," (Lance, Lourie, and Mayo 1979:42). Enrolment changes reflect an expanding number of parttime students as well as older students, (Warren, 1985; Tight,1987).

In America, most of the part-time student growth has occurred at the community college level. Today the part-time student may be more concerned with occupational preparation and advancement than a degree or higher education qualification, (Warren, 1985). In England, Tight reports that the evidence of revealed demand over the last two decades indicates that part-time higher education is one of the principal growth areas of provision, (1987). Although the growth of part-time learning is evident in both England and the U.S., both countries are still linking primary financial allocations to full-time provision with financial allocations based on full-time equivalences (FTE's). In England, Tight observes that increased provision for part-time access in higher education would be a mutual investment in education and employment opportunities, (Tight, 1987:184). The changing demographics of the student in further and higher education also brings to account new perspectives of resources and support services on college campuses.

Mature student access to college resources and student support services must be flexible. For example, on registration one of the many questions ask relates to involvement in student acitivities. In the 1970's, a student fee was automatically included in the registration payment structure. Over time, this practice has been open to flexibility and choice for mature students because they have found that time and geographic considerations have prevented access to student activities. Mature students resented having to pay for something they did not use, and therefore most fees are collected by choice nowadays. However, there does appear to be a substantial need for some form of student support that acknowledges the part-time nature of the mature student, (Roach, 1976; McLaren-Tigar, 1985). Student support implies services such as counselling, advising on programme areas, information on resources and services, and student social activities. Institutions may have limited information about whether student services are meeting the needs of this expanding student body. Lanzilotti (1982) reports that the full- and parttime mature students continually present challenges regarding problem solving and conflict resolution such as arranging travel, short-term financial crises, child care arrangements, self-esteem issues, changing career options, and access to college resources. When resources are unavailable or unexpectedly rescheduled, for example when a note on the library door says, "Sorry the staff is away at a meeting," this generates a stress response in a student who has negotiated a specific time to be there. Part-time students may only come on campus one or two days a week and a Thursday or Friday student will not benefit from an 'early' posting of a note on Monday.

The increasing number of mature students has resulted in the establishment of some innovative programs for counselling adults. Counsellors without experience in working with mature students sometimes incorrectly assume that a lifetime of experience in coping and adapting prepares one for problem solving, (Vernon, 1989). However, while mature students need counselling, they may become critical of misinformation regarding needed coursework. They may have an expectation that staff will help them resolve some institutional barriers or problems particularly if the problems are internally based, (McLaren-Tigar, 1985; Richardson, et al., 1983). Mature students may be sensitive to attitudes and bias of college staff. The non-traditional student who perseveres to reach education goals may not move through the well known and established routes for a degree. Some of the changing assumptions about further and higher education include: a college education need no longer occur in a fixed period of years after leaving secondary education, movement in and out of college gives students an opportunity to mesh education activities with work and growth experience, and students twenty-five and older will enrol intermittently, (Richardson, et al. 1983).

Mature students entering higher and further education bring with them concepts of quality management and customer service gained in the workplace and from their role as consumers of goods and services. They present expectations regarding proper equipment, current technology, customer service orientation and appropriate return for investment of time and money spent. They will not accept classes being dropped or moved from one location to another. Many will expect an organizational management system that is responsive, timely and flexible. They will welcome what Knowles described as 'creature comforts,' proper lighting, access to reasonably comfortable chairs, quiet places to study, and sources of nourishment, particularly during evening classes, (1985).

While mature students present institutional challenges, they also present an opportunity for unique partnerships in learning, a source of 'state of the art' knowledge in technology and business and opportunity for maintaining economic stability. But, as the research implies, the challenges will have some trade-offs for the institution and the student.

2.6.2 Stress factors and the student self

The concept of the student-self is a complex integration of practical and theoretical knowledge that considers who the student-self is and what collective processes may have brought the student-self to further and higher education. We will explore concepts of the student-self here in relation to learning, self-direction, self-actualization and a capacity to perceive a world of change.

The emphasis on the adult 'self' is part of a large body of research in adult education and has received support from humanistic psychology and theoretical and empirical studies in the psychology of adult lifespan development, (Tennant,1988:10). A student's sense of self may have been influenced by role models and expectations, but is partially constructed from within, by the person. (Knox:1977). During childhood and adolesence, as a person is exposed to the social judgements of others and accumulates feelings of competence, this sense of 'self' emerges. The individual's perception and feelings about 'self' influence many functional aspects of the adult self. Knox observes that inherent in increased selfesteem is also a rational acceptance of self-limitation and reduction of aspiration, (Knox, 1977:330). The adult-self emerges as an individual knows more clearly what he or she wants, and likewise, accepts what it is he or she can achieve. When entering the learning environment he or she anticipates an expansion of this heightened capacity to choose and to interact. Tennant (1988) observes that adults may enter with an integrity or autonomous dynamic that may be perceived as independent and self-directed. The concept of the self-directed, autonomous learners has been well documented in adult education literature (Knowles,1978; Tough,1968) but the concept has also been subject to a wide range of interpretations, (Tennant,1991).

Some critics of the 'self-directed' notion argue it is an optimistic viewpoint. Hartree wrote, "Knowle's argument that the individual adult has a deep psychological need to be perceived by others as self-directing may well be true, but this does not necessarily mean that the learner either actually wants to be or is self-directing," (1984:206). Hartree indicates that the returner's past learning experiences may have left the mature student with both an expectation of and a felt need for dependency and tutor direction. And, Tennant (1991) writes that for a learner to be truly self-directed he or she must have mastered a set of techniques and procedures for self learning. The ability to master self learning may be the result of skill and overcoming previous internalized learning experiences. (Tennant:1991:195). The ability to incorporate the skills of self learning and overcome one's previous constraints is thought to be congruent within the notion of critical thinking, (Mezirow, 1991; Brookfield, 1987). Aware, critical thinkers have expanded capacity to identify and challenge assumptions about their lives, are more in touch with their needs, and therefore, more able to make commitments because they know and are able to explore their choices. (Tennant, 1991:194).

In returning to learn, adults must master the skill of self direction, become critical thinkers while overcoming dispositional barriers, (Cross, 1981; Merriam & Cafferella, 1991). "The dispositional barriers are those obstacles the adults have labeled as 'psycho-socialobstacles such as: beliefs, values, attitudes and perceptions about education or about oneself as a learner," (Merriam and Cafferella, 1991:89). This concept of 'perceptions about education and about oneself study proposed to examine the life stress experienced by adult learners and the degree of reported state anxiety, curosity and anger, and then to relate that information to the amount of interpersonal problem solving skills and reported self-efficacy of the adult learner. Lemoncilli used a volunteer sample of adult students, twenty-five years and older, enroled in a community college credit course for one semester. Respondents completed a series of instruments including; a demographic survey sheet to collect data on gender, employment and marital status; the Adult Student Life Experience Survey to determine levels of distress-eustress, (Lanzilotti, 1982); the Means-End Problem Solving which measured individuals' ability to orient themselves to and conceptualize means of moving toward a desired goal (MEPS: Platt Spivack, 1975); the Self Efficacy Scale which measured the ability to organize cognitive social and behavioural skills into a course of action implemented toward a goal, (SES: Keefer, 1982); and the State-Trait Personality Inventory which measured six subscales of state and trait anxiety, curiosity, and anger. (STPI: Spielberger, 1972). The results of the study indicate that there is a relationship between low problem solving skills, low self-efficacy and high distress, high state anxiety, and low state curiosity. Lemoncilli acknowledges that the study was 'exploratory' and placed significant reliance on the literature to explain the resulting phenomenon. The results and some of the conclusions follow in Box 2.17.

Box 2.17 Lemoncilli research on problem solving and stress •Relationship of problem solving and stress

Low Problem Solving SkillsHigh Distressand♀ ♀<</td>High State AnxietyLow Self EfficacyLow State Curosity

the relationship may be due to:

1. When an individual's anxiety increases they decrease their ability to remain curious about problem solving options.

2. Increased levels of stress and anxiety involve reduced performance and a tendency for self-withdrawal.

3. The individual who faces threat and increased arousal increases negative selftalk and memories of past failures.

(Adapted from Lemoncill: 1984)

Lemoncilli's other major finding is that demographic variables, gender, employment and marital status do not have a significant influence on the earlier proposed relationships. These indicators were included because Lanzilotti's previous research (1982) reported these variables were significant contributors to the adult student's life stress. However, the results of this present study did not support Lanzilotti's (1982) findings, (Lemoncilli:1984:131). Lemoncilli's third finding is that state anger does not appear to be a factor in the proposed relationships, perhaps, Lemoncilli postulates, because the population under investigation did not feel comfortable reporting anger.

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Lemoncilli contributed further speculations from this 1984 study that are applicable to this work. First, individuals, under stress, can and often do become immersed in the byproduct of the stress or anxiety. The individual then becomes preoccupied with the discomfort produced by the anxiety and attends only to the anxiety rather than to the stressful agent. Second, increased anxiety levels may influence cognitive components and inhibit the individual from perceiving solutions to presenting problems and then feel a sense of isolation and uniqueness.In Lemoncilli's appraisal, this may place the adult student in an 'at risk population' in need of strategic interventions, (I984:129). The individual, in this case the mature student, becomes both the perpetrator as well as the recipient of stress," (Lemoncilli,1984:4).

The study provides a broad theoretical and empirical base. Lemoncilli acknowledges a lack of specific research on mature student stress as has been noted in this study as well. The proposed relationships between one's perceived ability to solve problems and ranges of distress is not new to research, but the application to mature students is. The difficulty in conclusively establishing the lack of relationship between the variables raises questions such as: Would specifically identifying problems provide more information about relationships? For example, what would isolating an issue (e.g. travel) reveal about that student's ability to problem solve and deal with stress? The ability to generalize the findings is somewhat obscured by the lack of specificity to what adult learners perceive as problems. The sample may have produced inconclusive findings because it measured a group of individuals registered for 'a credit course' which creates ambiguity about the nature of demands. If the design had included students registered throughout a collegiate year, would it have provided comparatives and allowances for fluctuation in high stress anxiety periods? The study reflects only a 'snapshot' in time. Furthermore, Lemoncilli's conclusion that adult students are at risk and institutions should be responsible for intervention assumes a 'potential for risk' without concrete data, except for the diminished ability to solve problems. More compelling data is needed to classify students at risk for inability to effectively solve problems. However, the point is granted that there is potential for risk' and further studies may confirm this notion.

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2.6.2.1.2. Anxiety and past learning experiences

Many adults experience anxiety when embarking on educational activities and this in part may involve the re-emergence of old anxieties. The anxiety may have origins in past learning experiences as well as the current general anxiety and time constraints. Davies found that mature students in science subjects required systematic relearning to deal with perceived past learning barriers. (1981:37). Past learning barriers have been found in reentry women in maths with a relationship to negative talk. "For many, past experiences in maths were negative experiences. This reduced students' confidence and raised anxiety.......Many adults engaged in self-defeating self-talk through which failure is expected and attributed to lack of ability. Even success may not increase confidence, since adults attribute success to luck. Some adults believed that they missed a critical part of maths in the early years and would never be able to retrieve what they need. Yet most adults are good problem solvers. They have developed methods over the years to work solutions out, and often need to be convinced that these methods are acceptable and applicable when studying maths," (Hurley-Lawerence, 1988:3). Approaching problem solving by capitalizing on a learner's past ability to resolve conflict or understand a theory is consistent with adult learning literature, (Knowles, 1978). This approach also accounts for incorporating attitudinal awareness into the strategy. "Teachers of adults need to be aware of these attitudes and how this dualistic view is often very different from the adult's view of other areas...Once the incongruity is acknowledged, the adult student is often able to develop a different view of mathematics and problem solving." (Hurley-Lawrence, 1988:3). Hutchinson and Hutchinson observed similar

problems and strategies, "The mathematics course produced its problems....the same tutor... had to combat the mental blockages that all but a few students brought with them. ...the mathematics obligation did act as a test of serious intent and there was evidence that in tackling unfamiliar and what appeared to be uncongenial, aspects of learning, students did secure unexpected insights and satisfactions," (1978:91)

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Anxiety has also been associated with writing. Adult students described as "business types" doing letter writing and "academic types" doing study, entered programmes with "burgeoning" loads of writing anxiety. Thompson-O'Rourke submitted this conceptual approach to writing: "Words on paper are our creations - our babies. If as you were pushing your baby in a stroller at the shopping centre, a passerby said, "That baby is all wrong for the world - it's ugly - rub it out.", you would never show your baby in public again. And so it is with words. The word is revered in our culture. To create such revered objects and present writing for commentary is to create anxiety," (Thompson 1983:3).

Anxiety was found in adults' computer based programmes. The study found that men of all ages were more willing than women to experiment, but over sixty, both men and women were reluctant to participate, (Gerber, 1984)

2.6.2.1.3. The physiological response to anxiety

Mechanic's earlier mentioned study of a PhD student group provides an account of the physiological response of anxiety. He observed, "The weekend prior to examinations, severe psychosomatic symptoms appeared. A few students actually became sick, probably attributable in part to the increased vulnerability resulting from the physical and mental exhaustion that had accompanied study and from keeping late hours. Many students reported having stomach-aches, anxiety attacks, increased problems with asthma, and some rashes and allergies. Appetite and eating patterns also seemed affected, and a number of students reported difficulty sleeping. On the morning of the examinations, most students reported stomach pains; a number reported diarrhoea; and a few reported that they had been unable to hold their breakfast. As one student said,"I was real scared. I never was so scared in my life. Like, what am I going to do? I just won't be able to do it...I felt that I was going to fall apart," (1978:162) In, *Educating Older People*, Cleugh found similar physical manifestations of anxiety connected to exams. Exploring student attitudes and anxieties on completing exams within given time constraints, Cleugh notes that some mature students have difficulty "collecting their thoughts," and added time constraints in an examination only complicates the problem. Increased anxiety may have precipitated these physiological responses: "...three mentioned that they sat the examinations suffering from more or less severe illness; and a large number spoke of inconvenient physical conditions - excessive sleepiness and fatigue, stomach ache, cramp not only of the hand but of the whole body thorough maintaining the same positions for long periods....it must be remembered, that a digestive disorder can be 'minor' from a medical point of view and still be a considerable handicap at the time," (1962:96).

According to Belbin and Belbin (1972) learning new skills in an industry setting also precipitates physiological responses in older students. Their case study of four labourers selected for training as heading setters on screwmaking machines illustrates the role of anxiety, physiological response and the role of facilitation. "It was an uphill struggle, because the men were battling with themselves as much as with the content of the training." The first problem observed was "unexpected fatigue." Simple tasks became difficult. "They suffered from excessive tiredness, even the basic stages of learning to read an ordinary rule," The men reported sleepless nights and worrying over the work. (1972:26). The second series of problems involved fear of approaching the instructor for help, difficulty with notebook work because the worker couldn't spell, anxiety over the sense of failing when they felt they were doing their best, fear of fast moving machines, poor vision contributed to tiredness and clumsiness and uncertainty in handling small objects. The four labourers all over 50, passed the training, but they described the test as "....as a most harrowing time and felt their results might have been better had so much not depended on the outcome; their job and their future," (1972:26)

This sense of success or failure in relation to adult development tasks, was also reported by Havighurst, "...a task arises at or about a certain period... successful achievement of which leads to his happiness... failure leads to unhappiness in the individual, disapproval by

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the society and difficulty with later tasks," (1972:2). The ability to understand the problems and facilitate instruction and training while coping with high levels of student anxiety is a skill. Sappington states, "As a counsellor and an educator, I found myself often in the position of personal change agent. Personal change requires courage that arises from a condition of safety. We create therapeutic environments of unconditional positive regard so that individuals may have the opportunity to accept themselves and then reach for more satisfying goals." (1984:19)

2.6.2.1.4. Research on changing perceptions of ability

Impact of mature student change was reported by Hutchinson and Hutchinson in "The Fresh Horizon" programme started in the early 1970's. They wrote, "...students often joined a course because they saw in it a hope of meeting the challenge of a change in their personal circumstances or one dictated by social or economic factors," (1978:122) Students on both day and evening courses reported changes such as moving house, child starting school, close bereavement, separation or divorce, hospital treatment and job change.

McLaren-Tigar's extensive study on change focused primarily on women returners (1984). This research examined issues of childhood education, struggles to achieve, feelings involved in beginning, the ambiguities of being a student, family of origin influence, the realizations of dreams (successful completion), the realization of failure (dropping out or not finding the job desired), and the available job market. The unusual aspect of the study is in the design of indepth interviews of women during the programme and follow up interviews between 1974 and 1982. McLaren-Tigar speaks about the 'myths' of women returners _ the assumptions that women had had satisfying education experiences in their youth and that they must be ladies of leisure who have nothing better to do. In contrast she found that the childhoods of these women had not prepared them adequately for the changes of adult or academic life. The women's experiences seem to reflect an attitude that education was not important, especially young girls who were needed at home or encouraged to work. Women who did refer to encouragement regarding their childhood education, usually stressed the importance of their father's influence. This is validated by studies that examine the socialization of gifted or

highly ambitious women who describe the significance of fathers in their intellectual lives (McLaren,-Tigar 1985: 26-38)

Evident in McLaren-Tigar's work is the concept of 'last chance.' The women students felt they may not make it this time and this fear was deeply interwoven within their self-image, so that when and if they failed, the fault would confirm something inherently wrong with them. were failures and didn't consider the possibility that the failure Thev might in fact be a failure within a system, something guite separate from themselves. This sense of self-failure was in Teaching and Stress, "The problem of stress in individuals is halfway to blaming them for their malaise....based on a critique of popular analysis and images of stress which emphasize the personal and neglect the situational," (Cole and Walker, (eds), 1987:9). In the perseverance to learn McLaren-Tigar captures what she viewed as the student's extraordinary ability; "The hurdles and resultant anxiety they cause is noted. What research ignores is the extent of the struggle of mature students to stay with their studies. Only by analyzing the details of the experiences of mature students can one fully appreciate the extent to which they develop a strong sense of their own dignity, are highly motivated to achieve their objectives, and how much they are forced and how much they are willing to struggle," (1985).

Lanzilotti commented on the ability of mature students as well, "When adult students experience conflict with role demands that no longer fit their needs, successful adaptation includes re-negotiation and recreation of these roles. Development is not motivated by subjective or objective phenomena, but is a product of the tension that exists as a result of the pull between these opposing aspects of the individual's life. The single item that was reported as occurring most often was a major change in the mature student's self concept and self-awareness," (1982:182).

2.6.3 Stressors and role management

The literature on mature students' stress and or problems indicates that role conflict is a significant source of stress for the returning learner. In this section we will review studies with emphasis on role conflict, redefinition of roles, capacity for adjustment, gender differences, and the student's ability to persevere and develop.

2.6.3.1. Role confict and adult students: Lanzilotti

A major study on role conflict by Lanzilotti (1982) reports that the adult student role is significantly stressful because of the seemingly continuous social re-adjustment the individual is required to make. The intent of the investigation was to understand the changes experienced by adult students and the impact of these changes through the interaction of various social roles. Specifically, the study looks at the impact of negative (distress) life events and how the changes affected the 'related roles' in the student's life. The study involved full-time and part-time adult students (N=569) twenty-five and over. The primary instruments used were the Adult Student Life Experience Survey (ASLES), adapted with related sources (Marx, Garriety and Bowers, 1975); and two: Role Interaction Survey, (RIS),(Lanzilotti, 1982).

In the analysis of adult student change and role conflict, Lanzilotti was seeking to discover what change dimensions or progressions became asynchronic and potentiated stress for the student and what impact mediating variables would have in the role interaction. Lanzilotti reports that the adult students reported a high degree of change and appeared to be involved in a dynamic and precarious period in which contradictions were ever present either in obtaining a degree by successful completion or in dropping out due to inability to adjust due to excessive demands on adaptive energy. In terms of change, seventy-five percent of the students reported an average of 7.43 life event changes when returning to learn and 2.19 of these were viewed as negative change. The five role areas that were reported as most stressful were lifestyle, education, finance, family and inter-personal. Role interaction was found to exist between eight of the nine social roles on the RIS scale, and there were more negative role interactions than positive role interaction. "Adult students report their student role affecting their other social roles more than the other social roles affected the student role. This finding suggests that adding the role of student to other adult roles operates as an introduction of a stressor that becomes a major source of conflict in the lives of adult students by affecting other role responsibilities,"

(1982:188). Lanzilotti also found the most frequently occurring events/change in the lives of mature students involved self concept, responsibility and independence, community life, relationships with friends, changes in ability to pay bills, financial problems with institutions, problems with tutors/instructors, arguments with child and change of residence and work situations, (1982:183). These changes are consistent with changes noted by Hutchinson and Hutchinson, (1978:38).

The strong focus of the study is on the relationship of life change theory and stress with the specific adaptations to adult student Lanzilotti raises important questions about the impact on cognitive roles. ability and whether the related role conflicts, role changes, and increased stress reduce student's learning capacity. The weak point of the study is that the stress factor is primarily viewed in a stimulus-response construct with a strong literature focus on health-disease outcomes. While mediating variables are considered, there does not appear to be attempts to determine if any coping strategies were implemented. This would have been helpful in the context of the negative role conflict reported. "The findings suggest that the adult student role is a stressful one in which specific clusters of events, often unique to adults, are experienced by the adult students as undesirable stressors. The clustering of stressful events may lead to a condition in which the adult is in a state of discordance or conflict as different social role areas compete for the energy to adapt to the changing conditions." (1982:188)

2.6.3.2. Literature on mature student role conflict

Change and role redefinition could be more a matter of overload than incompatibility. Hall (1982) observes that adults have numerous sub-identities; wife, husband, employee, housewife, father, club member, church member, and the competitiveness of roles involves shifting energy as well as identity. Roles present perceptual and behavioural patterns, and changing sub-identities can create conflict due to the number of tasks within each identity. Hall says one way to ease conflict is to mutually agree upon revision of expectations or reallocate the tasks. For example, increasing a student's ability to manage and control some of the role expectations may decrease the amount of stress perceived. Therefore, the mature student can re-examine his or her role, work out his or her preferred definition of the role and agree upon revised role expectations, (Hall, 1972: 471-86).

Role redefinition and capacity for adjustment is also reported by Roach (1976). The study describes the impact of returning women on the family system. These returners, as described by Roach, discovered that the new found excitement in knowledge and self-awareness is often in direct conflict with family values. Reactions of partners and children ranged from open hostility to enthusiastic support, with the majority having to confront a somewhat hostile homefront. Students in the study report not only family hostility, but also barriers set up by friends. Isolation was a real problem for the returning student—isolation from familiar places of support. Roach's recommendation is, "The university must begin to recognize its obligation to this particular student who has suddenly become an answer to sagging enrollments and the gleam in the admissions recruiter's eye. (I976:96).

It is suggested that role management issues are confounded by gender, (Gilbert, Manning & Pander, 1980). This inquiry proposed that all students would report some degree of conflict between their student role and other major life roles, but because of the differential socialization of males and females in regard to appropriate role beliefs and behaviours, the sources of role conflict would differ for men and women. The hypothesis was supported. Proportionately more women than men described beliefs about role demands and familial demands as sources of their role conflict; proportionately more men than women described beliefs about self and interpersonal dissatisfaction as sources of their role conflict. The researchers observe that although the men in the study were parents, none of the men reported conflict with familial demands, instead men identified provider roles, self-esteem and primary-female relationships as the major sources of role conflict. The authors observe, "...males may have greater difficulty than females in assessing role conflicts concerning beliefs about the self because of the emphasis on achievement and efficacy in the socialization of males (1980: 26). Gilbert, Manning and Ponder, (1980) also report that women frequently placed family needs before student roles. This is supported by Smithers and Griffins (1986) report that women frequently had to dash off home to receive children from school, while men sometimes stayed at university

because it was difficult to get time for uninterrupted study at home. Women studied after families were settled for the evening, often staying up all night to meet an essay deadline.

Changing roles of women and family support was also investigated by Berkove, who looked at the positive and negative effects of women's return, (1976. Most of the women studied were undergraduates, mainly white, middle class and suburban housewives, which is not a cross section of all women returners. In viewing the three hundred and sixty-one women, the research proposed to identify the variables that would distinguish 'drop-outs' from 'successful' students. It anticipated that 'drop-outs' would one, experience more stress, two receive less support from their husbands, and three feel less positive about their marriages than would 'successful' students. The study confirmed the first hypothesis; those who left had significant stress related problems associated with family-related tasks. Hypothesis two and three were non-conclusive,(Berkove,1976:4).

It is important when evaluating any of the gender-based studies to look carefully at the research question, the purpose and the samples identified. It would also be helpful to see triangulation methods integrated into the design of gender studies to confirm representative perspectives. The bias of this author in reviewing the literature on mature student stress is that the majority of studies have focused on women returners, leaving the incorrect assumption that role conflict is gender-related and specifically weighted to females. While this may be true more conclusive findings are needed to support this assumption.

The management of roles is a source of stress for men and women returners. Lanzilotti's research (1982) confirms that role conflict is a source of significant stress for adult students. The literature on returning students has focused much attention on the role conflicts and role management of women returners, and less, it appears, on men's responses to role conflict. There does not appear to be any research reported incorporating a partner-mature student perspective on role conflict and stress, although there is evidence that effective helping relationships between partners successfully mediates stress and coping, (Burke, R. and Weir, T.,1977:911). However, there is a gap in the literature involving partner-mature student conflicts and resolution, a perspective that could be most valuable.

2.7. Mediating Factors

An important aspect of mature student stress concerns those factors that may be regarded as mediators to stressful situations because they alleviate stress or accentuate stress. The importance of stress mediation was identified by Rabkin and Struening, (1976). In their evaluation of change and life event literature, they emphasise the importance of mediating factors in understanding differences in perception and sensitivity to social stress; for example, an individual's social support system. Stress mediation may also be influenced by individual characteristics such as personality traits, past experience, perception of the event as eustress or distress, intelligence, verbal skills, and locus of control, (Smith, et.al.,1978).

Presentation of literature on mediating factors may result in some overlap. However, the intent is to present new information that enhances the understanding of stress mediation. The mediating factors to be presented here were conceptually framed from the preceding literature review. They include gender difference, change response, psychological support, health and energy levels, and coping strategies.

2.7.1. Gender difference

The difficulties of re-entry students were reported by Lance, Louie and Mayo,(1979). Data (N=583) were collected to assess the difficulties experienced and to determine if there were differences by gender and length of time since previous schooling. The problems identified by this group were time management, fear of dulled memory and fear of failing. Women, more than men expressed difficulty with children, guilt with using family money, fear of dulled memory, and guilt for pursuing one's own goal. Re-entry students with long interruptions in their schooling had more concern over academically related difficulties than those who had short interruptions. Some limitations of this study are; the mean age is not available and the reference material was slanted toward women re-entry. However, it must be noted that the study was done in an era when much of the published work on returners primarily addressed women's concerns.

A male-female comparison by Gilbert, Manning and Ponder (I980) investigated the sources of inter-role conflict of eighty-five reentry students and found that male-female conflicts were similar, but women reported higher levels of conflict and emotional distress,(:26-31). The 1982 survey completed by NIACE, the Advisory Council for Adult and Continuing Education, *Adults: Their Educational Experience and Needs*, surveyed attitudes of family and friends of returning learners and reports, "Families appear to be generally encouraging, women are approved slightly less, get more encouragement from friends than men. Employers are also generally encouraging of both sexes. Workmates are the least supportive and men receive less encouragement and more indifference or even occasional hostility from workmates....Despite the similarity in overall patterns between men and women, there is one important difference. Men attach more importance to the idea that education is a means of getting on in the world; women give rather less emphasis to it,"(1982:42).

Gender difference is one of the mediating factors studied in this research. For the returning student it will involve the experience of being a student, the reaction to returning to learn, the perception of the institution and the perception of balancing study, work and family,

2.7.2 Change response

Effectively dealing with life changes enhances one's ability to cope, to ground oneself and mediate stress. Keeping specific stressors in perspective, hardy individuals' basic sense of purpose in life allows them to ground events in an understandable and varied life course. Knowing that one has the resources with which to respond to stressors, 'hardy individuals' underlying sense of control allows them to appreciate a well-exercised coping repertoire. Seeing stressors as potential opportunities for change—to see even undesirable events in terms of possibility rather than threat, optimises growth and minimizes stress, (Kobasa, 1979). Change is a constant in our life and part of each day's movement, and as Nesbitt argues, opens new visions for the future. This may be the most important decade in the history of civilization, a period of ecological

innovation, unprecedented economic opportunity, surprising political reform and great cultural rebirth. It is a decade like none that has come before because it culminates in the millenium, AD 2000. The year 2000 is like a powerful magnet on humanity, intensifying the nineties. It is amplifying emotion, accelerating change, heightening awareness and compelling us to re-examine our values and institutions, (Nesbitt: 1990).

An example of value and behaviour change comes from an American provision of programming for AIDS education. In 1986, the U.S. Surgeon General's Office mailed an AIDS education booklet to every household in the country. The booklet was written at an accessible reading level and it was designed to be interesting and comprehensive. The 'education provision' was coordinated with media reports and specific programming to families, communities, business and industry. Still it was reported in a joint college conference on AIDS, that this mass information did not appear to change the sexual practices of college students in terms of behaviours and the use of 'safe-sex' methods, (Minnesota Department of Health, 1987). The lesson here is that information alone does not create change. "Change occurs when one arrives at the acceptance of responsibility or an obligation to oneself and the communities one lives within," (Kidd, 1973:118). Kidd studied families in Extension programs and identified these characteristics of effective change: one, people with the least academic experience require the most personal attention; two, resistance to change is often linked to the perception of the ethnic, religious, or social groups to which the individual belongs; three; placing equal emphasis on content learning and behaviour change may result in much more thorough exploration of how change is managed, (1973:99). Smithers and Griffin (1986) observed these changes in the mature students who were part of the matriculation program; "...the mature students perceived themselves as having been changed in a number of important ways. Increase in confidence was perhaps the most commonly reported gain. As graduates, they seemed to feel that they now could go out and tackle almost anything. Perhaps even more important were the widening of horizons, the acknowledgement that there are no easy answers, and the awareness of other points of view," (1986:147).

Change may be a process that continues beyond the educational experience. The ways adults develop and change in relation to continued learning was explored by Iwanchuh (1989). She observes that there is no single way mid-life change occurs; rather it may take two distinct paths, self-renewal or transformation. Self-renewal implies that when individuals faced internal or external challenges they are able to maintain self and relationships. Transformation occurrs when the individual moves beyond existing boundaries with new processes, relationships, demands and opportunities. A third path, described as 'threshold' occurs when individuals are in a state of flux and chaos with desire to change, but are at the same time resistant. This study found that the transformative change is profound and often linked to a particular experience and that the emerging self was more capable, content and willfully engaging, (lwanchuh, 1989).

Change response then is one of the critical mediating factors to be studied in this research. For returning students it involves their attitude about change and the types of changes they have experienced. When students return to higher or further education change involves reassessment of their roles, study habits, view of themselves, financial setting, past success and failures and their willingness to look toward the unknown future.

2.7.3. Psychological support

The majority of mid-life adults who return to learn need and require some form of support from others. Support may range from approval of the student role, help with managing roles, and encouragement in accomplishing goals. While it may not be possible to develop a mature student's ability to cope, it may be possible to help him or her cope more effectively by supporting his or her existing ability to cope, (Cox, I988:117)

Berkove (1976) found that a high level of spouse support is associated with reduced stress for women students. Berkove reports that family approval of the time spent studying while at home, time spent away from family, and the additional financial burdens of college was a significant predictor of satisfaction for returning learners. Lanzilotti's (1982) study found that adults returning to school may initially receive attitudinal support from their family and friends, but after the new role becomes activated and established, psychological support varies or becomes nonexistent. Gilbert, Manning and Ponder, (1980) relate that adult students require support and encouragement to counteract the negative self-talk that occurs in relation to on-going role conflicts, anxieties about ability to learn, and beliefs about self in relation to societal role expectations.

Smithers and Griffin (1986) describe how a supportive spouse and previous life experience of coping with a job and family make a substantial contribution to mature student success. They note that their academic staff pointed out that the economic and social roles of mature students often seem to take precedence over the role of student and could, at time, adversely affect their study. "Most of the mature students interviewed did not wish to be regarded as 'special cases', but at some time during their course many needed some recognition of, or allowance to be made for, their particular circumstances," (1986:111).

Tutor support was found significant in a study conducted with re-entry women when comparing support concepts of family, friends and teaching staff, (Kirk and Dorfman, 1983). The study also found that support from children is more strongly related to satisfaction in the student role than psychological support from spouse or friends. One possible explanation for this finding is that women in this study were older and had older children who were in school or college themselves and could appreciate and value what it meant to return. However, the most significant finding is associated with supportive attitudes and positive relationships with tutors.

These re-entry women rated from 0 to 100 the levels of perceived psychological support they received from family and friends and how much help in housework and child care they received from these individuals. Box 2.18 shows these ratings and highlights the fact that the attitudes of tutors and professors were very helpful, while counselling and availability of financial aid were less helpful.

	X*	SD	
SUPPORTS	(N=60—140) (a)	(N=60—140)	
•Rated level of psychological suppor	t		
from spouse	73.5	35.7	
from children	73.0	30.3	
from friends	74.0	31.3	
•Behavioural supports			
	rk		
by spouse	4.7	5.4	
- hours per week in housework			
by children	5.4	7.6	
 hours per week in child care by spouse (b) 	12.2	18.1	
—hours per week in child care by	12.2	10.1	
other family members (c)	1.6	4.5	
-hours perweek in child care			
by friends friends (c)	2.3	6.7	
•Rated helpfulness by institution	(scale of 100))	
 attitudes of professors 	65.3	32.0	
•flexible schedule	59.3	40.8	
·counselling	30.0	34.8	
•financial aid	27.1	41.1	
(a) numbers in parentheses indicate hours per week reentry women spent in the activity			
 (b) There were 60 married women with children under 16 years of age (c) There were 67 married and unmarried women with children under 16 years of age 			
*x=hours allocated	(Source: Kirk & Dorfman, 1983)		

Box 2.18 Level of Supports Available to Re-entry Women Students

In the I982 NIACE report on *Adults: Their Educational Experience and Needs,* a survey described family attitudes about a family member returning to learn. The findings indicated that three-quarters of the sample would provide encouragement and help. One fourth of those surveyed said they would not care, didn't know, or would make it difficult. While negative or lack of support may appear innocuous, the author submits if the student perceives lack of support from spouse, family, and others, the lack of support could be an added stressor when returning to learn.

•Table 6.13. <u>Family attitude towards</u>	the idea of	attendin	ig a course
	total		
	2160	1068	1092
The family would:	%	%	%
Encourage help	71	72	71
Make difficult	4	3	4
Neither;would not mind, not care	18	19	18
Do not know	5	5	5
Not stated	2	2	2
•Table 6.14: Whether the family helps	total		women
	289	129	160
The family's attitude was:	%	%	%
Encourage/help	74	80	69
Make difficulties	1	2	1
Neither: do not mind/do not care	11	8	14
Do not know	1	1	2
Does not apply - no home study	12	9	14
(Source NIACE, 1982, Ta	ble on The Atti	tude of Far	nily)

Box 2.19 Attitude toward attending a course

2.7.4. Health status and energy levels.

Daily living and working requires expenditure of finite physical, mental and emotional energy. Mature students have, in most cases, taken on an additional demand when returning to learn. Real or perceived demands, though challenging and exciting, or demands that appear threatening and harmful eventually deplete human energy sources. Depletion of physical, mental and emotional energy over a chronic period of time, may lead to disease,(Selye,1956). In spite of 'hardy personalities,' increased demand, transition and change will exact human energy and potentiate some human and physical cost,(Holmes and Rahe, 1967). As discussed in the transactional nature of stress (section 4.5) one cannot assume that significant life change automatically results in increased illness or disease onset because of the individual capacity to adapt,(Lazarus,1966). Therefore, it is reasonable to argue that while increased levels of stress have been correlated to increased illness, it will vary significantly from one individual to another because of adaptation, genetics, societal factors, health status, and ability to care for oneself.

While the student stress research is very limited, there is some documentation of the relationship between stress and illness amongst student populations. Sarason, Sarson and Johnson (1978) found a positive correlation of stress on academic achievement measured by the freshman student's grade point average (GPA) and the number of changes in the student's life. Johnson and Sarson (1979) report an association between life stress and anxiety and depression for college students who had an external locus of control, but not for those with an internal locus of control. Students with an internal locus of control believe that their own skill and resources determined what happens to them in life and are less likely to exhibit unwanted psychological symptoms than those who believed they were victims of external influences (external locus of control). Marx, Garrity and Bowers, (1975) studied stressors experienced by college students and found resulting complaints of physical illness proportional to the amount of stress reported. Berkove (1976) reports that students who dropped out of programmes reported experiencing fatigue and increased illness. Belbin and Belbin report extreme fatigue levels in their work with industrial trainees, (1972). Reports such as these are summarized by Hanson (1985) in The Joy of Stress. Hanson writes that increased change and demand potentiates physical harm and chronic physiological change creates organic damage. Damage may then be reported in varying stages of feeling tired to extreme fatigue to serious illness, (Hanson, 1985).

The research reports indicate that there is potential for decreased health status amongst mature students, but the information must be prudently applied. For instance, the studies do not tell us how a

student group experiencing stress compares to the general population in terms of being at risk. Stress response is difficult, if not possible, to predict because of its transactional nature and individual adaptation. However, an awareness of the health status of students and levels of perceived stress is an important consideration because of the financial, time, and personal investments students make in their efforts to complete educational goals. It is also a concern in terms of the individual's ability to learn, (Lanzilotti 1982). Awareness of one's energy level and ability to provide self care was found to be significantly related to one's successful ability to study and learn, (Davies, 1987). In a descriptive study with adult learners, students identified types of energy available for study. The conclusions reported are: one, individuals need self knowledge about their energy levels; two, individuals need to practise self-care because one cannot have high energy unless self-care is taken; three, individuals have a need to absorb themselves in tasks, group interaction and in different environments to access the energy sources of others; and four; health and energy levels will vary as work and study demands fluctuate.

The concept of health is difficult to measure, to accurately describe and may not be the same thing as the absence of disease. An individual may have a chronic illness but regard him- or herself as 'healthy.' Disease, writes Selye, is not simply defeat but it may also be a fight for health restoration. "Just because a man has lost a leg as a child, he is not ill for the rest of his life—or a child born handicapped. Why? Because there is no ponos, no toil; the fight was lost long ago and now there is peace in the body, although it is a scared body.. Humans do have the ability to continually adjust self-regulate, it is when this self regulating power fails, that there is disease or even death," (1956:11). Blaxter argues, "Some researchers have gone so far as to suggest that since health is essentially subjective, the only valid measure to accept is people's own assessment of whether they are healthy or not," (1990:11).

2.7.5 Coping strategies

The process of identifying coping strategies in the mature student stress literature is similar to identifying the student stressors. Student coping strategies are evidenced but concealed within topics of counselling, helpful attitudes of tutors, ability to listen and identify specific student problems, removing barriers to learning and providing resources and supportive services. However, at this time, there does not appear to be any specific research on effective-ineffective coping strategies, or any great amount of attention to the topic of coping. Cox indicates that a framework to bring together the multiple coping techniques used has not evolved and their common ground has not yet been made apparent. He envisions the transactional models being examined may be helpful in producing the necessary frameworks and a new understanding of the different ways of helping, (I988:112).

In The Progress of Mature Students, (Smithers and Griffin, 1986) the authors acknowledge the need for understanding and supporting the mature student coping strategies. "Mature students are notoriously lacking in self-confidence and universities can seem awe-inspiring places.....faced with the possibility of a series of interviews, and unseen and uncircumscribed examinations, many potential students withdraw," (1986:143). These authors suggest some forms of support such as, making information accessible to prospective students and providing informal guidance and counselling without commitment. They argue that students need information not only on aspects of university entrance and availability of grants but on the content and demands of courses and college life generally. Roach argues that whatever the mechanism provided, the college must begin to recognize its obligation to the mature student who has suddenly becomes an answer to "sagging enrollments", writing, "She (the mature student) brings with her to the campus not only admirable ability and motivation for learning but also a special set of needs related to a whole system of complex family relationships. When the university impacts her, it impacts the entire family system. It seems not only reasonable but ethical for universities to begin to provide resources designed to enable her to understand, predict, analyze, cope with and survive this phenomenon," (1976:89).

Stress authors, Cooper,Cooper and Eaker (1988) and Cox (1988) both indicate that success in coping must begin with selfknowledge. The rationale behind this current prescription for dealing with stress is that the chain of events that contribute to stress pathology must be broken. Cox says this happens through cognitive appraisal of demand and capability, altering the consequences of coping, changing perceptions, attitudes, or environments altering behaviours, and physiological manipulation, (drugs, nutrition, etc.),(1988:112). As noted earlier, it may not be possible to further develop a person's ability to cope, but efforts might be made to effectively support their existing ability to cope.

2.8. A mature student theoretical framework

The literature review substantiates the problems that mature students experience when returning to learn and establishes some information on stress theory. In recognition of the continued enrolment of mature students in further and higher education, and in regard for the quality of learning experience the institutions hope to continue to provide, it appears that further exploration into the phenomenon of mature student stress may benefit both learner and institution.

Box 2.20 presents the mature student theoretical framework based on the literature findings. This framework is designed to focus the issues and organize the further development of the research. The model perceives the sources of internal and external stress as coming from the institution, the management of roles and the student-self. The mediating factors to be investigated in the research are gender, change response, psychological support, health status and energy levels and coping strategies.

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•MATURE STUDENT THEORETCIAL FRAMEWORK: LITERATURE FINDINGS				
PERCEPTIONS OF STRESS				
SOURCES OF STRESS				
•ROLE CONFLICT (situational)	•INSTITUTIONAL (institutional)			
•INTRA PERSO (the student— (dispositiona	-self)			
•FACTORS THAT MAY IMPACT THE DEGREE OF PERCEIVED STRESS				
•FAMILY SUPPORT				
•GENDER	•CHANGE RESPONSE			
•HEALTH - ENERGY LEVELS	•COPING STRATEGIES			

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Chapter Three

Scope and Aim of the Inquiry

Mature Students' Perception of Stress on Returning to Learn

3.1. Purpose of the study

The purpose of this study is to gather data regarding mature students' perception of stress as they return to learn. In this study we define 'students' as individuals who are currently registered in a college course that leads to a degree or related qualification. We define 'mature' as a student who is between the ages of thirty to fifty-five. This study was conducted with mature student populations in England and the United States of America.

The goal of the study is to identify and broaden our understanding of the stress experienced when mid-life adults return to college. This inquiry will include the students' college, work and family environments. The inquiry will look specifically at the students' perceptions of stress and the ability to mediate stress in their environment.

The problem to be investigated is twofold. One is to understand the stress mature students encounter on return to learn, and the second is to understand stress as an individual phenomenon.

The current trend in part time study and the increasing age of full- and part-time students in higher and further education suggests that institutions will be transacting with students who will occasion the discernment of challenging dilemmas. It seems prudent to expand the knowledge base of adult education with clearer insights into the problems of mature students both from the institutional perspective and for the benefit of the learners themselves.

3.2. The research problem

Wherein the problem of mature student has not been extensively researched as, 'mature student stress', nonetheless, the problem had been envisaged by other educators. Cleugh describes mature students as,"...not young persons but older ones, not willing or unwilling prisoners but voluntary contractors; not green twigs, but sturdy and often unbending timber... in adults with a formed outlook on life, family responsibilities, a wealth short. of past experience, favourable or unfavourable and special interests, training or expertise," (1962:12). In The Uses of Literacy, Hoggart describes the inquiring and serious 'workstudents' as individuals"...who insist getting knowledge against the odds...people prepared to address themselves to study, usually after a days' work, and often in unpropitious conditions, inspired by a sense of power and virtue of knowledge," (1957:321). Other works noteably McLaren-Tigar (1984), Hutchinson and Hutchinson (1978), Cleugh (1962, 1972), Belbin and Belbin (1972), Smithers & Griffin (1986), isolated the problems or barriers experienced by mature students in their attempt to access education at a later time in life. Research specific to mature student stress was reported by Mechanic (1978), Lanzilotti (1982), and Lemoncilli (1984), which integrate the theoretical stress data with specific student behaviors. For example, Mechanic (1978) linked the PhD group with a combat group under stress. Lanzilotti (1982) linked life events and student role conflict, and Lemoncilli (1984) linked state anxiety and state curosity with self efficacy.

The study of stress was initially a scientific focus. The available studies can be placed in three groups, according to Cox (1988) representing the main approaches to the problem. The first approach treats stress as a dependent variable for study in relation to the person's response to disturbance. The second approach describes stress in terms of stimulus characteristics to disturbance and usually treats it as an independent variable for study. The third and possibly most adequate approach views stress as the mediation or 'lack of fit' between the individual and his or, her environment. Stress in this form is examined in terms of circumstance and effect and studies the intervening variables between stimulus and response. There is common ground between the three approaches, and they differ most in where they place the focus and in the meanings proposed and in the methods they adopt. Later Cox (1994) describes the three approaches as the stimulus base, the response base, and the interactional approach exemplified by appraisal theories of stress.

The stimulus response method reported by Selye (1956) had three basic ideas. One, the physiological stress response does not depend on the nature of the stressor. The nature of stress can be positive, 'eustress' events, or negative, 'distress' events. The source of stress does not matter, the response is the same. Two, the defence reaction moves through three stages; alarm, resistance, and exhaustion which is known as the General Adaptation Syndrome. Three, chronic distress periods cause energy depletion and finally organic maladjustment in the body.

In the appraisal process, Lazarus (1966) states the body's stress response is mitigated by the individual and the individual's ability to maintain a degree of control over events and experiences. He observes that stress responses, distress in nature, are the result of experiences or conditions that disrupt or endanger an individuals well-established personal and social values. The intensity of the human stress response, though quite personal, makes us aware of an individual's vulnerability and the capacity for range and depth in a eustress or distress experience. In contrast to Selve, Lazarus believes that it isn't simply the positive or negative nature of stress in and of itself, but is an interactive phenomena. He observes, "It soon becomes clear that stress cannot be defined exclusively by situations because the capacity of any situation to produce stress reactions depends on the characteristic of the individual....The important role of personality factors in producing stress reactions requires that we define stress in terms of transactions between individuals and situation rather than of either one in isolation," (Lazarus:5).

Cox observes, "The previous two approaches have been fused to provide a reasonably comprehensive account of the stress system," (I988:18). In his observation, the third approach expresses the perspective that stress occurs through the presence of a particular relationship between the person and the environment. The problem then is to define that relationship. This is a study of the relationship of the mature student within his or her environment. The environment is inclusive of college, work and family.

3.2.1. Some questions

The focus of the initial investigation came from this practitioner's experience in working with mature students and hearing the problems, fears and anxieties of women returning to nursing. The encounter engendered questions such as: Is this a common experience for mature students? If so, is this the common stress experience of mature students? Do the levels of perceived stress differ amongst individuals? What role does the environment_institution, families, employer—have in contributing or ameliorating the perceived stress? What are the supportive coping mechanisms mature students initiate? If stress is reported in the education environment, than what do administrators need to know to minimize the stress? What do mature students need to know to maximize their learning environment and minimize energy depletion? What is the most effective way to answer the questions? What has been reported in the past? Was student stress a researchable question? These emergent questions came from the practitioner's concern to effect a stable, efficient learning environment for adults.

3.2.2. The evolution of the inquiry

The author's concern and questioning originated from a primary career in family care nursing, health education and twenty years of experience in a technical college as an educator/administrator in the further and continuing education of adults. As indicated, it was in counseling and supporting mature students in a nurse refresher course that the problem was recognized. The returning nurse, a mature student, had been away from education anywhere from three to thirty years. In pre-course counseling and during course work, students often verbalized concerns about their ability to manage their homes and families, travel to course and clinical sites, learn. honour previous commitments, and in the end successfully complete the course. These mature student-former nurses, were frequently working in non-health employment because they lacked proper registration or lacked the confidence to re-enter an area of rapidly changing technology. The view of mature student stress did not come from a burst of insight, but rather through years of experience working with students and employers in the further and continuing education of a workforce.

In 1989 the researcher received a International Rotary Scholarship providing an opportunity to study in two countries. The Rotary funding was for one year of study. The researcher then entered a part time over seas Ph.D. program that allowed her to continue working in America while being a student in England.

3.3. The scope of the inquiry

As earlier stated, the goal of this research is to understand and learn about the mature student's perceptions of stress. The study would examine the student's relationship between college, work, and family. The question of mature student stress originated from an experiential base. The literature, though lacking in specific studies on mature student stress per se, provided indicators of student stress. Previous research with adult students relate substantive data on stress indicators. Cleugh (1972), Mechanic (1978), and Lanzilotti (1982), are more stress specific, yet lacked generalizability. Other reports, as will be noted, reflect gender bias, diverse age groupings, inconsistent classification of sources of stress and small sample sizes. McLaren-Tigar's indepth study is limited to women returners, (1985). Lanzilotti segmented one area, role conflict (1982). Cleugh's work, a text about adult learners (I962) and a small scale report of mature student stress (I972) was limited by sample size and methodology (see Chapter Two). Stress indicators for this research are extrapolated from other studies of mature student issues. However, the indicators may be improperly labeled because, with the exception of Cleugh (1972), no one had ask the student; What do you perceive as stress or as stressful on returning to learn?

The stress indicators from the literature review juxtaposed with the questions and notions that surfaced from the author's fieldwork formed the content of the semi-structured interview tool. The objective of the indepth interview strategy is to access the student's perception of returning to learn. The questions are focused on the primary sources of stress: the institution, the student self, and the management of roles. The sources of stress emerge from the list of indicators and the grouping of these indicators into three categories: institution, self, and roles. These 'groupings' appear consistent with the categories of barriers to learning as reported by Cross (1981). Cross identified the categories as situational, relating to a person's situation at a given time; institutional, barriers consisting of "all those practices and procedures that exclude or discourage working adults from participating in education activities"; and dispositional, barriers arising from a person's attitude toward self and learning, (1981:98).

The variability of student age is another problem in classifying student stress. One report indicates a questionnaire was mailed to 'olderthan average students' (Gilbert, Manning and Ponder,1980). Berkove's stress study is limited to women born before 1950, with the average age of the respondent being thirty-nine (1976). Lance's report indicates students twenty- four and older (1970). Mechanic's study, of students under stress, consisted of male Ph.D. students in their twenties (1978). Cleugh's 1972 report did not indicate age (1972). Hutchinson and Hutchinson's work indicated variable age groups, but were predominantly women (1978). The literature review yielded valuable insights and indicators of mature student stress. As the access opportunities for older learners increased in higher and further education, problems continually emerged and some were researched. Whilst one may criticize the lack of stress specific areas in the literature, this criticism is not intended to be viewed as diminishing the value of available literature. The issues of mature students are complicated and the focus of study has been diverse. Upon summary of the available literature, the author initiated an approach that focuses on identifying common sources of stress, controlling for age, and taking the research question directly to the mature student.

3.4. The research question and design

The design of a study and the resultant knowledge is a function of the questions the researcher asks and the methods used to answer those questions. Merriam observes that many research questions, as in this instance, come from practice, "...we observe something that puzzles us, we wonder about it, we want to know why it is the way it is, we ask whether something can be done to change it and so on," (1989:43). A literature search is one strategy to find the answers to questions, but it often raises additional questions. The research question in this study is, what are the stress perceptions of mature students returning to learn? The question provoked a method that could yield answers, but implied in those answers would be individual meanings. The meaning in returning to learn is embedded in the student experience. Merriam (1989) observes, that interpretive strategies are used to determine, how people make sense of their lives, what they experience, how they interpret these experiences, and how they structure their social world. The researcher assumed that meaning was embedded in the student's experience and could be mediated through the student's perception and the investigator's methods and study design. The methodology selected was interpretive.

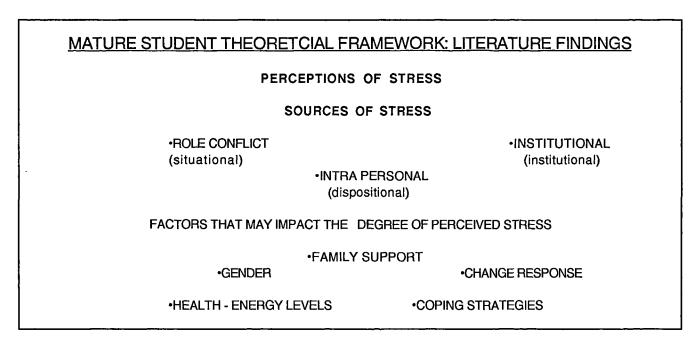
3.4.1. Refining a research question

Whilst there had been no previous studies on perceptions of mature student stress, there were reports on stress indicators. Some of the reports mentioned here describe the mature student experience with barriers to learn, anxiety about ability to learn, conflict with roles, and related problems. Cox encourages caution in quickly labeling situations as 'stressful' or 'not stressful', "Situations may be potentially stressful or may be stressful for a limited proportion of the population," (1988:25). Previous studies involving mature students were helpful in refining the research question.

Smithers and Griffin reviewed the 'university experience' on completion of mature student's programmes in 1983 and concluded significant meaning had been attached to ability to study, family difficulties, financial problems, and age sensitivity (1986). 'Students under stress' was specific to male graduate students doing doctoral exams (Mechanic, 1978). Cleugh (1972) and Roach (1976) described students in environments that augmented relational and lifestyle changes. Student stress, labeled 'strains' by Cleugh (1972), were identified as: financial. family, fear of inadequacy and physical responsibilities. Davies (1981), Hurley-Lawrence (1988), and Thompson-O'Rourke (1983) looked at anxiety in adult students in areas of science, maths, and writing. In the forementioned studies, Cleugh's study was the only report where students were asked to identify what they perceived as stressful. As previously noted, Mechanic (1978), Roach (1976), and Davies (1981) reported stress indicators, but these studies were gender specific.

Lanzolotti (1982) described how the mature student was able to acknowledge stress and role conflict and with an expanding sense of self developed skills in mitigating the stress experience and discord in his or her The criticism of this study is again the assumption of stress and the life. use of testing instruments to assess preconceived aspects of stress without asking the student what he or she perceived as stressful. McLaren-Tigar (1985) reported that mature women students developed a sense of dignity, heightened motivation to succeed, and the motivation to succeed was often in proportion to increased demands being placed upon them. McLaren-Tigar (1985) and Lanzolotti (1982) integrated the concept of mitigation, the relationship of student with environment, but did not report the mitigating factors as such. These two studies, together with Hutchinson and Hutchinson (1978) and Belbin and Belbin (1972) enhance understanding of the ability of student to mediate the relationship between stress and the environment.

From the literature review a theoretical framework was designed to identify the key concepts from the literature and support the organization of this study.



3.4.2. Refining the design

The literature review provides a conceptual and theoretical framework. What the review does not yield is any specificity on student perceptions of stressors. There were indicators, gender specific studies, some notion of mediation of stress, but at the time of the review, there are limited reports that clearly focus on the experience of being a mature student. Smithers and Griffin (1986) provide summary remarks in their report on The Progress of Mature Students. Literature does not answer all of the questions being raised. Therefore this study focuses on examining the relationship of the student in his or her environment and asking the question; What is it like to be a student at this point in your life? The question is framed to get at the student's perception of returning to learn and of being a student at this particular point in his or her life. It appears the question had not been asked before.

Research, Merriam argues is defined as a purposeful, systematic process by which we know more about something than we did before engaging in the process, (1991:43). Key to this assumption is 'purposeful, systematic process'. If one chooses to be mindful of the commentary of Cox in regards to understanding stress as a system and is careful about labeling something as 'stressful' for another, than the purposeful and systematic process in identifying mature student stress would involve a systematic staging of circumstances to extract the information. We have earlier noted that one, the question originated from practice; two, the literature was reviewed for data; three, a theoretical framework was established, and four, if one were to understand the meaning of mature student stress, then one needed to go to the student. The selected design allowed participation of the student in identifying the meaning of his or her experience and defining what within that experience was perceived as stressors.

3.5. The phases of the research design

The complexity of the problem encouraged a dual approach of two research phases. The first phase attempted to determine what the relationship was between the student experience and the student environment. This was done with indepth interviews. Following the completion of the interviewing, a decision was made to extend the study toward a larger sample. The second phase supported further understanding of the student experience and more appropriately indicated what student's perceived as stressors and to what degree.

3.5.1. Indepth interview process

The circuitous nature of stress and the mature student issue indicated that the interview tool should consider both the student sense of self and the environmental factors he or she interacted with during their course of study. Even with a well designed tool, there is a sense of entering an unknown arena that requires vigilance and caution (Cox, 1988). Recording another's perception of stress is not unlike shaving the image in a mirror; it may not look like it seems (Ford, 1975; Cox, 1988).

The interview tool was a means to focus. The process was a hierarchical ordering of data that appeared relevant to answering the research question: What are the perceived stressors of mature students? "Anyone who gives serious consideration to the nature and idiosyncrasy of human understanding and language and the ever existing possibility of social influence in the interview encounter, can hardly avoid a basic dilemma when contemplating the use of interviewing for research purposes," (Tomlinson, 1989:155). Interviews were conducted from volunteer samples in further and higher education. The students (N=60) interviewed were registered in programmes leading to qualification.

Interview tool for Mature Student Perception of Stress		
(Abbreviated version, see Appendix 2)		
1. WHAT IS IT LIKE TO BE A STUDENT NOW? What sorts of problems do you have?		
2. WHERE DO THE PROBLEMS COME FROM? How do you see the institution?		
How do you feel about yourself as a student?		
How do you manage all the areas of responsibility you have?		
3.AS YOU SEE IT, WHAT HELPS OR COMPLICATES YOUR ABILITY TO MANAGE? Can you describe the support or lack of support received from family?		
Have you experienced a lot of change recently (past year)?		
Do you see yourself as healthy and energetic?		
What sorts of things do you do to keep balance in your life?		

3.5.1.1. Controlling for age

This study determined an age category to control factors within common roles and responsibilities of the respondents. This notion was discussed (page eighty-nine) in terms of the variation in age groups in reports of mature student stress. The mature student in this study was thirty to fifty-five years of age. The first rationale for this selection was to ensure the population studied had common roles and responsibilities. For example, the mature student may be employed full-or part-time, living in a relationship, parenting children, participating in community or civic areas of responsibility, and so on. The second rationale was the observation that the age of the student entering college is close to thirty and has been steadily increasing (National Institute of Adult Continuing Education (NIACE), 1982 National Center for Education Statistic (NCES),1982). Finally, in the and author's opinion, it would benefit education to focus on an extended age group encompassing the trend in age to include the ages of adults who might remain in education and training while in the workforce. This age group selected was identified by Havighurst (1952) as having common developmental task. (see page thirty-nine, Chapter Two).

3.5.1.2. Interviewing and analysis

Interviews were conducted in England in the spring of 1990 and in the United States between 1991 and 1992. The time spread in the U.S. had to accommodate the researcher's full time work schedule and the identification and arrangement of interviews. The volunteer sample included sixty interviews between the two countries during 1990 and 1992. Data from the analyzed for perceptions of the student relationship with interviews were the college, student-self, and management of roles. These perceptions were coded or clustered into emergent themes and framed into questions using the organization of the mature student theoretical framework grounded in the literature review. It was determined at this point to measure the perceptions against a larger population group and continue the comparative nature of the mature student experience in England and the United States. The question to be answered at this phase of the study was; Were the perceptions identified in the interviews the common experience of mature students, and if so, to what degree?

3.5.2. The questionnaire

Interviewing mature students framed the first phase of the study. The interview data was analyzed and provided the foundation of the questionnaire. The questionnaire was piloted and implemented. Questions included demographic data to provide profile comparisons. The questionnaire phase of the study was completed in England and the U.S.A. between 1993 and 1994. The total sample was N=382. The questionnaire sample was volunteer. Students were accessed in both further and higher education institutions. The questionnaire used in the study is abbreviated here. The full questionnaire can be found in the Appendix.

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1

SURVEY OF RETURNING LEARNERS RESEARCH STUDY: PERCEPTIONS OF MATURE STUDENTS (A STUDY BETWEEN ENGLAND AND THE UNITED STATES)
Questions 1-23: Demographic data: gender, age, student status, length of program, reason for return, license requirement, course fee payment, employment status, annual income, personal status, number and ages of children, number and categories of roles, education background.
Question 24. What is it like being a student at this time in your life?
Question 25. What is your perception of institutional support?
Question 26. What is your reactions on returning to learn?
Question 27. How do you perceive balance of family, work and student roles?
Question 28. What is the most important source of stress?
Question 29. For me, the most stressful thing in my education environment is
Question 30. Have you experienced change in the past two years? Describe the change and your attitude about change
Question 31. What is your perception of psychological support in the workplace, and where is your primary and least source of support?
Question 32. What is your perception of your health status and energy levels?
Question 33. What impact has study had on your ability to relax exercise, and care for yourself?

3.5.3 Analysis and comparative aspects

The mature student stress research is not primarily intended to be a comparative study between countries, but because of the opportunity to work in two countries the comparative dimensions of mature student perceptions of stress was considered. The primary question in the comparative analysis is: What are the similarities and differences between countries and gender in the population studied?

3.6. Contribution

The information gathered from this study could be helpful to returning learners and to institutions and faculties that provide continuing and further education for mature students. The number of mature students will continue to expand in college programmes and courses and cause administrative and teaching bodies to continually examine fundamental questions concerning this group of learners. Questions raised by adult education researchers in both America and England (Apps, 1987; Duke, 1988; Smithers and Griffin , 1986) include:

•Has the institution recruited mature students but made few adjustments in regular operating procedures to accommodate them?

•Have the institutions considered flexible instruction, schedules, facilities, travel distance, and made an effort to understand the unique problems faced by returning students?

3.7. Limitations of the study

It has been earlier stated that entering into another's perception of stress is a difficult matter. The difficulty lies in being able to capture another's stress perceptions and the ethics involved in probing into another's personal thoughts. This is in the realm of human subjects research. Therefore, interview data could be subject to some misrepresentation both by the interviewer and the interviewee, as noted in more depth in Chapter Four. There are many methods to assess stress responses. For example, one might employ physiological testing, (for example, bio-feed back) which would provide more objective measurement. The cost, however, could be significant when assessing large mature student population. The sample is a convenience sample. Ideally it would be advisable to seek a statistically random sample of a percent of each institution and each course or programme. This would require both time and additional funding. Within the convenience sample, we relied on volunteers for the data collection, which may create a bias in the sample. Volunteers may have higher levels of perceived stress or may have other related reasons for participation in the study. Because of the very personal nature of the interviews it seemed appropriate to elicit information directly from mature students who volunteered to answer the questions despite the limitations of this approach.

The majority of mature students interviewed and surveyed were Caucasian. There were no restrictions imposed on the sample, but there was no effort to include a specific number of ethnic minority students. Some ethnic minority students participated, but the study was not controlled for ethnicity. Therefore, the results of this study are not generalizable to large ethnic populations of mature students. There was also a mix of graduate and undergraduate students. The age category, thirty to fifty-five was the basic parameter for inclusion or exclusion of subjects. At one point, including only students in a specific study area, for examle nursing programmes was considered but the final decision was to not be inclusive within a subject area. This was made on the basis that limited research had been done specifically on mature student stress perceptions that exclusion at this point would be limiting, and the results perhaps less useful.

Other limitations include: one, A researcher brings a bias to his or her own work. This researcher was a mature undergraduate and graduate student while employed, parenting teen-age children. Therefore, the potential for personal bias is considerable; two, Researching a phenomenon in two countries accentuates the possibility of error in the comprehension of two cultural groups and two education systems. The comparative aspects of this research included a grounding of education systems, and where possible, understanding the social systems that mature students were a part of.

The design of the study encompassed the research question and considered both the aims and limitations of the inquiry.

Methodology

Mature Students' Perception of Stress on Returning to Learn

Overview

This study seeks to understand mature student stress and the relationship stress may have with the students' environment. In raising this research question, one assumes the responsibility of determining if the topic is researchable, and if so, what implications there are in conducting an inquiry. This chapter focuses on the research question, the impediments in executing stress research, the concern in interpretation of another's perception and meaning, and the design and strategy of the study.

4.1 Focusing a research question

In Chapter Three we said the origins of the research question came from the solicitude of returning students in a nurse refresher programme. Questions, hunches and intuitive thoughts emerged from those experiences. Some of the presenting inquiries were: one, Is stress a common experience amongst mature students? two, If stress is a common experience, do the degrees of perceived stress differ amongst individuals? three, What role does the student's environment, college, family, and employer have in the perceived stress?

Initial hunches, however, must give way to serious questions, provocative probes, and a systematic inquiry. The systematic inquiry presupposes the implementation of methodologies that will allow for conscientiously constructed theories that will support and determine relationships between the phenomenon being investigated, (Cohen & Manion, 1989).

In exploring hunches, particularly from experiential bases, one may gravitate to certain questions and make erroneous assumptions. Borg counsels the long experienced educator not to value the tenure of his or her experience over the time consuming tasks in systematic measurable enquiry. "The educators' uncritical acceptance of authority opinions not validated by objective evidence together with an overdependence upon personal experience may have too long served us as a primary problem-solving technique," (Borg, I963) as quoted by Cohen & Manion, I989:5). Therefore, it was salient to position the professional, experiential questions into a research structure to analyze the significance of the problem. And to explore the subsequent implications for the body of knowledge in adult education.

The researcher then asks, is the phenomenon in question a reality, and if so, to what extent? Robson (1994) observes the selection of innovative research questions do not always come from a single act or decision. Rather the selection of a process conveys an attitude and a way of thinking about research. Realistically, it also requires a commitment to sustain the expenditure in both time and effort, (Robson, 1994:109). Research questions present supplementary concerns such as what strategies could be employed to access the desired data? and what are the dissimilar nuances implied in the question?. For example, one must consider the impediments in doing stress research, the validity of interpreting another's perception, the ethical concerns of probing a deeply personal and individual phenomenon, and a honest look and ownership of the bias one may bring to a study. Wolcott (1990) discerns that when we look at and listen to almost any aspect of social reality long enough and closely enough, we begin to see nuances of meaning and significance that were not there before. "Perhaps the ideal of looking for something is what is wrong. Perhaps we have become so intent in looking for that we no longer know how to look at it. Perhaps looking for constricts awareness; looking at expands it, (Wolcott, 1990:163). Implicit in the statement is the responsibility to ask and define a research guestion that is important to the researcher and to one's research community.

The initial research into the literature substantiated the mature student stress phenomenon and the environmental implications appeared to be contextualised within the same studies, (Cleugh,1972; Mechanic,1978; McLaren-Tigar,1985; Roach,1985; Lemoncilli,1984). The degree of perceived stress was more evident in Lanzilotti (1982) and Lemoncilli (1984), and to some extent reported as causal factors by Cleugh (1972) and Mechanic (1978). What appeared less well documented

was the involvement of the student in determining what was stress and the extent to which the named stress was stressful. The author concluded that the question was researchable. The literature review gave the author a sense of direction and the data for drafting the mature student theoretical framework to organize the research. The questions that persisted were: If asked, what would students determine as stress, and to what degree? Implied in the questions, in the author's opinion, were two problems: the problem in understanding and conducting stress research and the conscious awareness that interpreting another's meaning carries with it both privilege and responsibility.

4.2. Impediments in doing stress research

The dynamic nature of stress presents problems in conducting systematic inquiry and controlling 'real world' research, (Cox, 1984; Robson, 1993). The ability to categorize stress theories is compounded by the dynamic nature of stress transactions. Research thrives on tidy categories and the necessity of separating out mediating influences. Kyriacou (1989) comments that categorization and separation of mediating influences may shatter the very complex interactive reality of a subjectively experienced phenomenon like stress. The phenomenon itself is elusive. Elusivity lies in the multiplicity of definitions, exiguous definitions and diverse research focus, (Cox, 1988; Cooper, Cooper and Eaker, 1988; Neuberger 1981; Cole and Walker, 1989; Fisher, 1994; Lazarus, 1966). While the general context of stress is understood by many, very few understand the problematic nature of stress when a precise research orientated account is demanded (Cox, 1994). Research bias continues to threaten stress research; the compounding problem of bias lies with the potential for interjection of the researcher's own subjective perception and interpretation of another's stress experience, (Kyriacou, 1989).

Bias in research is routinely counterbalanced by the use of tight diagnostic-measurement. Such instrumentation is limited in stress research, (Cox,1994). Some of the difficulties in research methodologies are: one, self-report questionnaires and interviews lack validity and reliability because they are not standardized; two, the lack of reference to normative data results in greater difficulty generalizing the findings; and three, availability of standardized inventories and the cost of formally developed standardized scales may make accessibility of these instruments prohibitive, (Pithers,1995; Cox,1994; Lanzilotti,1982). While there have been contributory quasi-experimental and survey-based field studies done, these approaches have not been able to generate the detailed hypothesis necessary for experimental validation, (Cox,1994:356). The limited survey base found in student stress literature lacked appropriateness and focus on the social context of adult student environments thus providing limited applicability, (Lanzilotti 1982:49).

The investigation of mature student stress presents unique challenges. It might well be that our efforts to understand will be misunderstandings, misjudgements and over-simplifications. Yet all one can do is accept the reality and be as critical as possible with one's strategies (Jarvie,1977:190). Robson forewarns that sometimes the researcher is forced to go forward without maps, or very sketchy ones, because the firm theoretical base that is called for is just not there,(1993:20). One area that appears sketchy is the area of self-report, reliability and interpretation of another's meaning.

4.3. Interpretation of perceptions of mature student stress

To this point we have discussed the genesis of the research question and the problems anticipated in conducting stress research. In this section we continue the arduous passage into mature student stress by focusing on the intricacy of interpreting perceptions. Vested in research of another's perception are disparate nuances of the personal nature of stress and accessing another's perceptions. We submit here the salient statement (provided in Chapter Two) by Cox (1988) regarding the impossible task of interpreting another's meaning. We will argue that with careful attention and understanding of the problems, one is more able to design strategies to report the mature student's perception of stress.

4.3.1. The impossible task of interpreting another's meaning

Cox's statement on the very personal nature of stress (1988) was very influential in this study. This statement on stress, in the author's opinion, succinctly and critically addresses the stress research

issue. Cox observes that because of the personal nature of stress, it is improbable, if not impossible, to interpret another's response. For this reason, the commentary is quoted (again) in its entirety.

Box 4.1. The personal nature of stress, Cox (1989)

"It is the experience of stress which 'troubles' the individual but which by its very nature can only be shared indirectly. It is a private event. Along with all other experiences it is an intimate and protected phenomenon. Only we as individuals can experience stress, and its existence in others has to be inferred from their verbal or written report, or from their appearance or behaviour. It is something unavailable to direct public scrutiny, and only available to the person through its spontaneous occurrence and by deliberate introspection. Not surprisingly introspection linked to a verbal or written report has become one of the most popular methods of obtaining information on the experience of stress. It has, however, an inbuilt error, the recognition of which must caution the investigator. Because of the private nature of the experiences it is impossible to standardise the learning of their language labels" (1988:26).

4.3.2. Self-report in the literature on mature student stress

Previous studies on mature student stress demonstrate a variety of methodologies to interpret the meaning of the student experience. McLaren-Tigar (1985) used in-depth interviews and self-reports of woman returners. Her main focus was on the perceptions of individuals. "I place their interpretations within the content of social-historical forces which directly influence their lives. I have focused on the concerns of women and how they viewed their situations, how their ideas changed over time and how they assessed the significance of social, cultural, economic and political forces in their lives,"(1985:39). Lauzon used self-report in unstructured inter-active interview strategies and with this method conceptualized the inter-relationship of student and environment. This relationship revealed the impact of transitional change

on the student and the student's family, (1989:22). Self report was also used by Cleugh (1972) and Mechanic (1978).

A criticism of self-report is that it may predispose subjectivity and bias on the part of the researcher because the recall capacity in any individual interview or survey report will vary in terms of accuracy and comprehension, (Yinger, 1986). However, one might argue that the researcher's ability to provide clear and accurate interpretation and setting in an interview environment may prompt a more accurate self- report of another's prior actions and ability to recall (Yinger, 1986; Eysenck, 1994) Also, it may be that individuals who are self-focused have a greater capacity to search relevant information. The assumption underlying this possibility is that enhanced self-attention may prompt a more thorough search of memory (Eysenck, 1994). "Indeed it is arguable that this is why self reports of self conscious people are more valid than those of less self conscious people that is, having spent so much time thinking themselves, people in high self-consciousness have well developed and highly articulated schematic representations of themselves," (Eysenck, 1994: 319).

One might chance the argument that some adult learners, having been described as self-directed (Tough 1968) and self-actualized (Knowles 1978) are therefore self-focused. If so, they may present a heightened capacity for self-revelation. Tennant observed that to be selfactualized is to be psychologically healthy, to possess superior perception of reality and increased acceptance of self, however, the theoretical gaps in self-actualization create too much incongruity to establish sound logic in the argument (1988:15). Nonetheless, the proposition remains, though unanswered, do self-actualizers possess superior perceptions of reality?

The value of such controversy, in this author's opinion, may be in creating heightened awareness of the extensive complex interplay of stress response transactions. What one may not readily appreciate is the extent that individual perceptual systems accommodate and assimilate information about one's environment. "...an object may seem quite simple to our conscious awareness, but much detailed processing may have taken place unconsciously in order to identify it. In other words, conscious awareness is only the tip of the iceberg of perception" (Tomlinson, 1981:57). The depths to which a person goes to make sense of his or her world is perhaps poorly understood. The reality of human perception may be more important than objective reality, argues Kincheloe (1991), "...because people act on what they perceive - perceptions have consequences, they move events, they shape lives,"(:149). No two people can ascribe the same meaning to the same event because no two people can bring the same past experience to a task. Kelly observed, "For what is real to one person is of utmost importance to him or her. Each of us must have a feeling of reality, our sense of surety in order to have confidence to do anything (1947:35).

4.4. A method to extract meaning

The intent of this research effort is, one, identify the common stressors experienced by mature students, and two, to identify the stressors in relation to the student's environment, college, work and family. The theme of the study then moves the researcher into the conceptions of social reality. It has been acknowledged that one's particular view of social reality constitutes correspondingly different ways of interpreting it through the nature of being, the nature of knowledge and in the interrelationship between the two (Cohen & Manion, 1989:6). This acknowledgement appears to appraise the very heart of this research. The diverse ways of interpreting resonates with the earlier mentioned stress theorists Selve (1956) and Lazarus (1966). Sevie's scientific laboratory work on stress reported that the human would respond physiologically to any stimulant, positive or negative. Lazarus, on the other hand, acknowledges the stimulus, but argues that the human's response will be in context with his or her environment. The individual selects the response. Truth probably lies in between this debate but truth also resides in both approaches. It lies in the philosophical debate between the advocates of determinism on the one hand and voluntarism on the other, (Cohen & Manion, 1989:7).

In application, if one stresses the importance of the subjective experience of individuals (students) in the creation of their social world (college, work and family), then the search for understanding is directed toward strategies that expose the subjective experience in relationship to the individual's social environment. This approach is reflected in McLaren-Tigar's (1985) and Lanzilotti's (1982) work as students continually negotiated and adapted to the student role. On the other hand, the findings of Cleugh (1972), Mechanic (1978) and Lemoncilli, (1984) reported causal links to given circumstances, for example, student exams and gastrointestinal problems. This indicates there is an element of determinism and an element of empiricism in understanding mature student stress. It is the author's belief that the problem will be more fully understood in the context of the student's relationship to being a student within the prescribed environment of college, work and family. However, Cohen & Manion (1989) caution that causal factors will interplay with experiential realities generating individual differences in social realities. "The emphasis in extreme cases tends to be placed upon the explanation and understanding of what is unique and particular to the individual rather than of what is general and universal," (Burrell and Morgan, 1979, as cited by Cohen & Manion, 1989:13). Therefore, it is in the blending of theory and process that one can objectively explore a phenomenon in its natural setting acknowledging both approaches as not only valuable but naturally coexistent. It is no longer a debate of qualitative versus quantitative approaches, but a merging of approaches to extract meaning and truth between object and environment, between student and college, between stress and mediation. "The difference between interpretive and positivistic might be evaluated as technical rather than epistemological; allowing the researcher to combine methods in a manner that best suits the study." (Robson,1994:20).

The approach to this study then becomes an action research orientation with an interpretive and empirical approach. The empirical steps consist of, one, observing and collecting literature and student data; two, grouping categories and complexities; three, quantifying and analysing findings; four, exploring and identifying relationships; and five, approximating findings and presenting conclusions of fact and process.

4.5. The research design

The design of the study was phenomenological. It was an attempt to understand the meaning of experience and interactions of mature students as they returned to learn. The interpretation of human interactions assumes we do not know what things mean to the people we are studying. The inquiry may begin with listening. This listening is an

attempt to grasp what it is we are studying. "It is a means to gain entry into the conceptual world of the subjects being investigated in order to understand how and what meaning they construct around their experience," (Bogdan and Biklen, 1982:31). The strategies selected provide a general guide, because it is anticipated that decisions will be made as the process unfolds and initial data has been collected. Bogdan and Biklen call this a 'constant comparative method' (1982:68). Analysis and data collection occur in a pulsating fashion—first the interviews then the analysis—until the research is completed. The emerging themes guide data collection, but formal analysis and theory development does not occur until after the data collection is completed (Bogdan and Biklen, 1982).

Selecting a method is a short term decision. (Merriam, 1989). In the long term, anticipating the contribution of research findings forces one to consider a methodology that will meet the needs of his or her field of study. "Therefore, the method of inquiry ensures practical, reliable data collection, but more critically a process to lead one to the answers framed by the research questions." (Merriam 1989:161). Consideration will be given to the strategies of interview, questionnaire and data analysis. Procedural steps are outlined in Box 4.2 Box 4.2. The research design: Procedural steps

One: Literature review of previous mature student stress findings Construction of the mature student theoretical framework
Two: Design and testing of in-depth, semi-structured interview tool
Three: Interviewing mature students in England and the U.S.A. (Twenty-six in the U.S. and thirty-four in England)
Four: Transcription of taped recorded interviews and analysis for emergent themes
Five: Design and piloted questionnaire based on the interview themes and stress indicators found in interview data
Six: Design of 'Excel" data base to accommodate N=382 questionnaires completed in England and the U.S.A.
Seven: Analysis of data with specific focus on gender and country differences
Eight: Summary of findings
Nine: Provision for written report

4.5.1 The interview: Considerations and process

The literature review (see Chapter Two) provided the data to format the theoretical framework. This framework assisted in organizing he study and supporting the design of the interview tool. Specific objectives were written to guide pertinent data collection. The hierarchical focusing tool' (Tomlinson, 1989) was constructed to permit he subject's response to be spontaneous but guided in a semi-structured manner. The principal of hierarchical focusing involves the interviewer obtaining responses from the subject with a minimum of framing and predisposes a top-down agenda to raise topics. (see Appendix) The nterviewer initiates a general question, follows the guide by noting a spontaneous or prompted response and raises topics only in so far as needed to collect the data necessary, (Tomlinson, 1989). The interview tool was piloted with a group of mature students in England and adaptations were completed before implementation.

Interviewing requires time and organization. Taylor and Bogdan (1984) provide three perspectives on the interview strategy: one, choosing to interview is contingent on whether one's interests and objectives are clear and well defined; two, individual interviews may provide insight and detail into the subjective human experience; and three, indepth interviews are directed toward understanding informants (students) perspective on their lives, experiences, and situations. The process is modified after a conversation between equals, therefore the atmosphere must be conducive to building trust, open exchange and spontaneous reporting, (Taylor and Bogdan, 1984). Hull (1986) argues that meaningful interview data must contain the situational context of the Therefore, it is important to select an approach participants involved. that increases the likelihood of containing data that is both accurate, meaningful and embraces the situational context of the participant and the recorded interview.

4.5.1.1. The interview sample

The personal nature of the topic suggested the use of both volunteer and convenience samples. Convenience sampling, Robson argues, "...is probably the most widely used and the least satisfactory method of sampling", (1993:141). Cohen and Manion acknowledge it may be the least satisfactory method, but indicate that the sense of uncomfortableness in the method has more to do with accessing feelings than for the method itself, (1989:103). Getting at the 'feelings' for the issues generates concern for reliability. Convenience sampling of students also raises issues of representation and generalizability. Borg and Gall (1983) caution the researcher in using accessible population to understand the degree to which the results can be generalized. Sample control in this study may have a different connotation, but there were some measures that limited access to the study, e.g. limiting the study to thirty-to fifty-five year olds and only taking students registered in a programme of qualification versus registered for only one term which was the case in both Lanzilotti's(1982) and Lemoncilli's (1984) studies.

An option to random sample the volunteer-convenience sample may have given the study more reliability. There were two problems with this. First there was the age-old problem of time and in this case, time was critical because the researcher interviewed students in two countries so that making contacts out of the 'home country' presented time-bound problems. Secondly, the number of students thirty to fiftyfive was varied and scattered in any single college programme. Moreover students thirty to fifty-five were not always readily distinguishable by tutors or supervisors because age was confidential information. Often discussions with department heads revealed that there were small numbers of the 'age-eligible' students available and eliminating these students in a random sampling scheme would mean the selection and interviewing would have to be done over a longer time period. It was difficult to find the age group needed and the student available had limited schedules and often came to university only one day a week.

A third but somewhat separate problem is population validity. The sample obtained should have comparative information on as many critical variables as possible with the resources at the researcher's disposable. Borg and Gall (1983) argue it is possible to gather comparative data on a very large number of variables. "If the investigator can demonstrate that the accessible population is closely comparable to the target population on a few variables that appear most relevant to the study, she has done much to establish population validity,"(:252).

In this context, sixty students were interviewed. The sixty interviews provided quantifiable themes, and the cross-cultural focus allowed for chance repetitions that may not have been anticipated. For example, the person of 'least-support' was identified as 'same-sexparent' in interviews in both countries. This was a small percent but nonetheless, it was there.

The use of volunteer samples is a concern. Borg & Gall (1983) report that persons who agree to participate are likely to be different than those who do not. Volunteer subjects are likely to be a biased sample, tend to be more arousal-seeking than non-volunteers, especially when volunteering for studies on stress, sensory isolation and hypnosis. (:252). To counter-balance this effect, the investigator observed in piloting the interview when the word 'problem' or 'stress' was used, the

interviewee was inclined to identify just that a lot of problems. Therefore, a firm initiative was taken not to use words suggesting problem or stress themes when contacts were made for potential interviewees, and the terms were not used in the interviews unless the interviewee initiated it, and then only in the context of clarification. In formatting the interview questions, a psychologist and stress lecturer indicated it might be valuable to know how persons verbalized pressure or stress. In some interviews interviewees did initiate verbal descriptions on feeling 'pressured.' If they did so, students were asked to verbalize how they experienced 'pressure.' In summary, a conscious effort was made to obtain interviews from a large population with minimal bias. In some instances, tutors or supervisors suggested a student who they described as 'having many problems or appears highly stressed.' An explanation was made that it was not the intent of the study to seek out candidates with problems. No attempt was made to recruit this type of student, however, there was not an effort to screen this student if they had volunteered. Ethnic minority students were not solicited or excluded. There were some ethnic minorities students in the volunteer interview sample.

4.5.1.2. Question of self-report

The foundation of this research was based on the data collected during in-depth interviews. The research question was: What is it like to be a student at this time in your life? The responses were the 'perceptions' of the sample population examined. The acceptance of self reported data as reliable data becomes critical to the research. The validity of self-reported data must be critically considered. Some suggest that data generated during interviews may be at the best only tangentially related to actual thinking during the interview and at worst be entirely fabricated (Yinger, 1986: 723; Taylor & Bogdan, 1984: 81). However, in social inquiry one will continually confront divergent opinions and interpretations about what is happening (Silvey, 1975). Implicit then is the ever present need and ability to listen, to value what is being said, and simultaneously, withhold judgement. Research that is intent on an inter active dimension implies that there is some level of 'partnering' and trust-building inherent in the interview process. If one does not belive that the source has meaning, one would not go there.

Is it possible to study another's meaning? If it is possible, what are the inherent risks in making observations or presenting findings? It was indicated earlier that the responsibility for assigning meaning to another's experience is a near impossible task. When a researcher formulates a practical theory about an area of interest in his or her practice, it is implicitly or explicitly also a 'theory about theories', Altrichter cautions (1991:47). Therefore, one might listen carefully, analyze, interpret, but as Cox implies,—only *me/thee* can experience stress and its existence in others has to be inferred from their verbal or written report....Because of the private nature of the experiences it is impossible to standardise the learning of their language labels (I988:26).

Because of the forementioned discrepancies in stress research, Fisher (I994) argues that the better measure of stress impact would be done with use of quantitative self-reporting of problems. "This view is response-based rather than stimulus-based in that the classification of what is stressful is based on the person's self report,"(:6). She argues that different personal meanings and attitudes are implicitly accommodated in this quanitative approach. This author would submit that personal meaning and attitudes are difficult to interpret from numbers, even if it is quantitatively self-reported. It does not explain the phenomena behind the number.

Proceedurally, institutions were contacted through a network of adult education colleagues and direct telephone inquiry. Formal letters were mailed if requested. The author arranged meetings with principals, campus directors and department heads and subsequently spoke to a potential student group to briefly (five minutes) outline the request for interviewees. Scheduling was arranged directly with the student. The interview was tape recorded and took on an average of forty-five minutes. After completing the interview, the student was then informed of the specifics of the study. The interview was then transcribed and prepared for analysis.

4.5.1.3. Analysis of interviews

Transcribed interviews were analysed on a thematic ground. The perceptual essence of the study suggested a focus toward cognitive and affective linkages to reported data. The theoretical framework supported the categorical topics and a matrix for sorting the data. Data analysis, according to Hull (1986) becomes a matter of finding passages in the transcripts that accurately convey the interviewees' intended meaning at the time of recall. "The coprus of data is refined to extracts which are accorded the status of evidence, " (Hull,1986:29). Box 4.3. reviews an abbreviated interview analysis matrix The sample interview is appendix number ten.

Box 4.3. Interview analysis matrix (abbreviated format)

Cognitive statements	Category •relating fact/commentar	Affective statement
	What is it like to be a student at this	s time in your life
I wonder what sort of teacher I would be	its a long course its straight forward repetition	feel like I'm wasting my time, I get down at times
I think its important to enjoy it	the teaching practice is absolute mad	dness 1 enjoy studying
	How do you perceive the institution	
they seem supportive	its been very mixed in quality You don't keep the same tutor	l find that difficult
.No	t all teachers want you in their classroon	nthat puts pressure on me
I don't think overall they are concerned with things running smoo	I find the general administration of othly	the coursevery frustrating
	(see Appendix 10 for	full_analysis_format)

The interviews were transcribed by the author into printed scripts and attached to the biographical data sheet and the handwritten notes taken during the interview. Researchers indicate that exploration of a phenomenon within data requires the investigator to be conscious of many related factors (Silvey 1975). Cohen and Manion (1989) identify some of these: In transcription one should note not only the literal statements, but also remember the non-verbal and paralinguistic communication. The investigator should listen for a sense of the whole. This requires listening and reading the interview several times to provide a context for emergence of meanings and themes later on. One then looks for general meanings in the data that are relevant to the research question. Clustering units of relevant meaning helps to determine if there are some common themes or essence. The themes are then examined to determine if they are centralized or express more than one element, (Cohen and Manion, 1989:331). Each interview was subjected to the matrix, and data from each category was then clustered together to identify the common theme. Samples of the interviews were provided to independent assessors— one a university supervisor and the other a professional colleague in the college of employment. They were requested to read through a sample of interviews to verify if the investigator's observations were congruent with their own. The interview responses then framed the categories for the questionnaire design.

4.5.2 The Questionnaire: Considerations and process

The questionnaire was designed with four specific objectives: one, to gather demographic data for comparison of the two countries and profiling the mature student; two, to subject the emergent themes from the interviews to a larger population sample; three, to determine the significant, identifiable stressors of mature students; and four, to determine the level or degree of perceived stress. The content of the questionnaire was reliant on the identified stress indicators obtained from the interview analysis and was organized around the mature student theoretical framework. The initial draft was piloted with seventeen mature students at the University of Minnesota. The content was reviewed in consultation with supervisors in England and the U.S.A. A conscious effort was made to retain identical language-terminology on the questionnaire. The single discriminating factor on the questionnaire was an adjustment on the monetary total income question. (A conversion of pounds and dollars related to annual income)

Questionnaires and individual interviews are common instruments in survey research. There are problems in survey methods, including the fact that they may be subject to respondent distortion. Respondents may not have accurate recall or past attitudes or opinions may distort a present attitude. Respondents may show relationships between two or more variables, but may be limited in establishing causal relationships unless they are used in experimentally controlled situations (Borg & Gall, 1983:411). To counterblance the problematic nature of the survey one might design a two method approach. The use of two methods increases one's ability to identify themes and have contrasting data to interpret and explore meaning. Triangulation as defined by Cohen and Manion (1989) is the use of two or more methods of data collection in a study of some aspect of human behaviour (:269). By analogy, triangular techniques in the social sciences attempt to map out or explain more fully the richness and complexity of human behaviour by studying it from more than one standpoint and, in so doing, make use of both quantitative and qualitative data. Exclusive reliance on one method may bias or distort the researcher's picture of the particular slice of reality she is investigating. Triangulation has a special relevance where a complex phenomenon requires elucidation, (Cohen & Manion, 1989:276). In this study the investigator combined both interview and questionnaire stragegies.

4.5.2.1. The questionnaire sample

The population represents mature students who are enroled in further or higher education in England and the U.S.A. The questionnaire sample was three hundred and eight-two students (N=382). The mature students, as in the interview phase, were registered in a programme or course leading to qualification. A volunteer-convenience sample was used with a similar procedure in accessing students for interview. The problem of obtaining a larger sample was challenging, particularly in obtaining access to students in two countries. Multiple methods of contact were employed through education, community and personal networking. Once a contact was made, a brief introduction of the research was provided by a letter and sample of the questionnaire. If the institution agreed to support the questionnaire application, an appointment was made at the site. In addition, the researcher provided a brief presentation to mature students after completion of the Questionnaires were completed in eight institutions in questionnaire. England and three institutions in the United States. The number of questionnaires completed in each country was approximately the same, (188 in England, 194 in the U.S.). Department heads arranged meetings with students groups and the questionnaire was completed whilst at the site. All sites were visited with the exception of one site in England.

4.5.2.2. Analysis of the questionnaire

The questionnaire data was analyzed for biographic information related to the comparative nature of the study. There were thirty-three questions on the survey. Of these the first twenty-four were demographic in nature, the remaining questions were categorical as shown in Box 4.4

Box 4.4. Questionnaire categorical questions

Questionnaire categorical questions:
Q 24. What is it like being a student at this time in your life?
Q 25. Level of perceived institutional support
Q 26. Reaction to returning to learn
Q 27. Level of perceived difficulty balancing family, work and roles
Q 28. Identification of the most important source of stress: (college - self - roles)
Q 29. Open ended question: "For me, the most stressful single thing in my educational environment is........
Q 30. Major transitions and attitude toward change
Q 31. Level of perceived health and energy
Q 33. Ability to balance roles and self care

Each questionnaire was coded prior to entry into the Excel program. The demographic data was summarized and reported by country and gender. The gender and country groups were summarized for measures of central tendency and standard deviations. Means and standard deviations were subjected to "z " tests to determine statistical significance between the two groups. The measures of central tendency provided average scores by total population and within gender and countries to give description of the nature of the group being studied, and the "z " tests measured the differences between the samples and provided some inferences about the population drawn. (Borg & Gall:1983:375).

Research in education, irrespective of the nature of the data collected, is part of the ongoing work of contributing to and building a body of knowledge about educational processes. To this end, it is hoped that the methodology has effectively caputured the data here. Knowledge is subjective. Whatever indices we may use, in Silvey's terms, we may never reach ultimate "pure class classifications." "A research plan is, at best, a considered and calculated set of compromises based on the aims of research, the resources available, and the social realities of the field of investigation," (Silvey,1975:10).

Chapter Five

Findings

Mature Students' Perception of Stress on Returning to Learn

Statement: The research project involved two phases of data collection: interviews (N=60) and questionnaires (N=382). The author will discuss the primary themes emerging from the analysis of interviews and then report how these themes were evaluated by the larger questionnaire sample. The analysis will include the impact of gender as a mediating variable and integrate this into the questionnaire analysis. Comparative aspects of the research are incorporated within demographic data at the beginning of the "Questionnaire Phase" and correlated with gender analysis in some of the questionnaire responses as it appeared appropriate. Boxes will display the responses by total sample, break out appropriate samples by gender and country, and identify findings of significance as indicated.

A brief overview of the project

The research project was meant to further understanding and gain insight into mature student perceptions of stress or demands as they return to learn. The literature review reported in Chapter Two formatted key aspects of student perceptions regarding problems or stressors. From this review, a theoretical framework (Box 5.1) was designed to guide data collection from the mature student population. This was the embryonic tool that guided the project investigating stress research and mature students returning to learn.

MATURE STUDENT THEORETCIAL FRAMEWORK: LITERATURE FINDINGS							
PERCEPTIONS OF STRESS							
SOURCES	OF DEMANDS						
FACTORS THAT MAY IMPACT THE	DEGREE OF PERCEIVED DEMANDS						
•FAMILY SUPPORT							
•GENDER	•CHANGE RESPONSE						
•HEALTH - ENERGY LEVELS	•COPING STRATEGIES						

Box 5.1. Mature Student Theoretical Framework: Literature Findings

The student population sampled was defined as mature students who were between thirty and fifty-five years of age and currently registered in a college with the intent of completing a qualification, diploma, degree or certificate. The interviews in England were conducted in Leeds, Bradford, and Sheffield. Interviews in the United States were conducted in rural and suburban areas of Minneapolis and St. Paul, Minnesota.

The interviews were meant to be informative, guided and student focused. It was important to create an atmosphere where students felt comfortable to discuss personal feelings, some of which were distressful. A focused interview methodology was used (Tomlinson, 1989). This process allowed views and feelings to emerge and still allow the researcher to influence collection of the necessary information.

5.1. Analysis of the interview data

A sample of the interview data is included in Box 5.2. to reveal how content and data was categorized following the transcript readings. The transcribed data became individualized student scripts. The student interview data (N=60) were analyzed for emerging themes related to the sources of stress as identified in the literature review. The sources were: the institution, the student-self and the management of multiple roles. Key indicators, identified as potential mediating factors, were analyzed for: differences between males and females, the student's perception of psychological support, his or her attitude about change, his or her perception of health and energy levels, and what personal coping strategies were being implemented.

Interview data were analyzed on a thematic ground for emergent themes in the student response and classified into three interpretive categories of responses; cognitive, affective, and factual statements. The data were then analyzed for groupings of themes or responses. The themes were organised by categorical topics defined by the theoretical framework. Some of the interviews were provided to objective observers for validation of these themes as discussed in Chapter Four (see page 114).

The conceptualization of the coding was based on the ability to access and classify a person's perceptual meaning through the interview. Another way to approach this is to parallel perceptions with attitudes. Attitudes, Oppenheim observes, are reinforced by beliefs (the cognitive component) and often attract strong feelings (the emotional or affective components),(1966). Like perceptions, attitudes are abstractions,"... though real enough to the individual who holds them", (Oppenheim:1966:107). The students' responses were subjected to a coding system retaining certain words, phrases, subjects' ways of thinking and repetitive events or comments. The coded categories provided a means to sort the data and merge topical themes, (Bogdan and Bilken, 1982:156).

An example of broad coding of the interview transcript is included in Box 5.2. A 'single case' abbreviation was provided in chapter four and a 'single case' sample is in the appendix. The following sample contains the responses from several student interviews. Box 5.2: Example of broad coding of interview transcript

	SAMPLE - INTERVIEW sample of responses from m	
Cognitive statements	Reported Facts.	Affective statements
•(Question:)	What is it like to be a student	at this time in your life?)
it altered my world	I wanted to study	I feel I have to be perfect
it's a mixture of things enjoyment and pressure	I'd been unemployed after lo my husband last year	usingI had given upon life
responsibilities. I tak	the balancing of thingsfamily te work home. I am employed the course work sometimes h	40 hours, there
it is a disorganized way of doing things	personal demands come up, I have to disappear for th get the essay written	
was beginning to think. I would never get it done	this has given my life some	kind of bonus
-one -my h	last year I had problems of my children had a breakdow husband and I needed profession of my childrens' marriage brok	nal help
•(Question: W	That is your perception of lear	ming and of the institution?)
it was hard to memorize learning to criticize is hard	I cheated at spelling at scho	my feelings in class
_	k that feels good now, what pe	
it's difficult to do homewo	rkI hav	ve the feeling if you are going to the field you have to have the degree
being a part-time student as much fun as being a ful	is nowhere near	
	on is very difficult for part tin se at all. Students want to below	
In school I don't think I did	well	Felt all the time I wasn't up to it
• I don't think I do	(Question: How do you manage	e all your roles?)
	e are too many commitments	felt I wanted to drop everything
	of stress because my father was berson in the family who people	

5.2. Interview Findings

The theoretical framework formed the categories within the interview tool. The interview questions are presented here with a quantitative summary of the topic, student commentary as appears appropriate, emerging themes, and a written summary. The interview sample was comprised of thirty-nine females and twenty-one males. (Please note that student statements will be italicized.)

5.2.1. What is it like to be a student?

In response to the research question: "What is it like to be a student at this time in your life?", students generally indicated that it was a positive experience. They described the experience as "..quite enjoyable... ...invigorating, ...opened new lines of thinking, ...It lets me question the workplace. It's an all consuming task, but I wouldn't give it up." Within these responses they spoke of the difficulty of being a student. Comments were; "I feel overwhelmed,... I feel that I haven't a minute and I'm absolutely exhausted. ... I knew I wanted to study. I had worked mainly in factories and had never been in higher education before....I feel comfortable and I enjoy it." The narrations were summarised in the analysis according to what appeared to be the common experience of the students.

Box 5.3. Interview summary	by	percentage:	Being	a student
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•What is it like to be a	student at this time in your life?
	(percent of total response)
Exciting - enjoyable	55
Difficult	43
Neutral - 'like a job'	1
Frightening - strange	1

Summary: Students reported the experience as both difficult and enjoyable. In some interviews students said it was like being on holiday or the best thing I've even done. However, some students expressed not only having difficulty, but felt it was frightening, strange and created a sense of panic. They described feeling overwhelmed. As the students described returning to learn, they remembered previous learning encounters at school. For some, the memories were painful and inter-meshed with a sense of failure. Others were inspired with the prospect of learning again, this time in a more focused manner. In our dialogues they integrated family and related roles into their thought process. They spoke about the need to talk about being a student, and expressed that at times it seemed no one really understood what they were trying to do. (This surfaces again in the area of psychological support.) One student commented that it wasn't much different than having a job, "It was just a matter of balancing things; life, home, family, study, partners, and other events going on in life." The emerging themes in the interview are summarized in Box 5.4.

Box 5.4. Themes: Being a Student

<u>Themes:</u>	Being	а	Student	at	this	time	in	my_	life	is:

- · Being a student now is a positive experience
- It is difficult for me to be a student at this time in my life
- I feel overwhelmed as a student at this time in my life
- It is easier for me to learn <u>now</u> than in previous education
- I enjoy being a student/learner
- I am confident in my ability as a learner

5.2.2. How do you perceive the institution?

Students personally experienced the institution through the dayto-day contact with tutors and instructors. They generally found the institution supportive. Their comments included: "The tutors and everything were fine. I know the rules of the game and I need to complete my work on time. ...I found the college very helpful and felt there was a lot of support...There are some wonderful tutors. My personal tutor was a great help when I went though my problems. There was no one else in the college I could turn to. It would have been nice to have someone there who was not connected Students verbalized felt support by describing the to my study." tutors/instructors as very friendly, approachable and helpful. One commented on being helped to process forms quickly and gain access to a beginning course. Another indicated she had returned to learning because of a very positive experience in an inservice course and found the content highly relevant to her job. One student failed mid-exams and commented that even in the failure, "I always felt I was being supported." Students spoke about a concept of 'shared authority'. They felt equal with tutors and instructors and reported being "given a sense of importance". Students felt their life and

work experiences were valued. This value was perceived through tutors and instructors who seemed interested in strategies that incorporated the student's knowledge and expertise into disucussion. Contrarily, some students experienced negative aspects of the institution through what they perceived were chaotic workloads and end of term confusion and disorganization.

Box 5.5. Interview analysis by percentage: Perception of institution

Perception of the institution (by percent of total resp	onse)*
	%
Found tutors supportive, and the study self-enhancing	36
Found institution disorganized and had specific criticism	34
Experience a sense of intimidation by institution/tutors	14
Expressed a sense that tutors were too busy, rushed	12
Found the experience neutral, meeting their needs	7
*(percent is more than 100 because respondents indicated more than one issue)	

Student criticism was focused on coursework organization, a perception of staff being rushed or too busy, or provoking a sense of intimidation which was related to the student's reluctance to ask for help. However, it must be noted that this same reluctance appeared to originate from memories of previous learning experiences when it was not considered appropriate to ask for help. "I remember being yelled at in school," or, "I was afraid to make a fool of myself if I ask for help", or," A forty-year-old woman doesn't ask for help." There was dissatisfaction with counsellors as interviewees indicated a perception of suspicion that they had been misdirected or mislead. (This was more apparent in the U.S. interviews.) In England the criticism was directed more at the organization and the perception that staff didn't have time, did not understand mature student needs, rushed too much material into a term, or didn't understand family issues that complicated the mature student's life at times. Students reported they had expected a higher standard or that the institution was disconnected from the real world. Students felt it was difficult to be part of the college. There was criticism about the college being stuffy, traditional, esoteric, or relating to something vague, abstract, and disconnected from the real world. One student voiced strong concerns about "socialist bias" and felt under pressure in a course where she saw herself as "from another generation."

Reports appeared polarized into two camps: those who felt support and those who did not. Students said, "I didn't get any information about courses. Starting a class at seven a.m. and a clinical at six a.m. is difficult, but nobody asked me how difficult this might be for me...General administration of the course is lacking, it is extremely frustrating. They don't seem concerned whether things run smoothly or not. It is frustrating. I expected more." While the majority of students found the staff supportive, one case revealed how a crisis event was compounded by the college staff. "My mother died quite unexpectedly the day I came on the course and the tutor still wondered what time I was going to be in on the day of the funeral. I thought if this was any indication of the kind of support I would never make it through."

There were contrasting opinions on college support for mature students. Some interviewees perceived the college as being more interested and primarily geared to full-time students and less understanding of mature student needs, "... by overloading us with work assignments during term periods and forgetting we have families too." Interviewees expressed concern that critical policies and decisions were made without consultation of the impact of those decisions. This pivoted around issues of early morning class time or clinical arrangements and or late afternoon sessions that interfered with arrangments for school children at the beginning or the end of the day. They reported high levels of stress with the convergence of multiple course work deadlines. This was salient because they were frustrated with the inability to learn the material well and acheiving good marks and doing well was very important in returning to learn. One student noted, "The end of term is consistently disorganized and creates ineffective learning because lecturers are frantically giving us too much information."

The combination of young and older students was a mixed issue amongst mature students. Some were frustrated with what they perceived as lack of concern amongst younger students and disregard for missing report deadlines. Initially some of the mature students felt out of place, however once they were into the course, age seemed to be less significant. Students discussed new friendships and finding other students a source of support, "...even if I was old enough to be their mother". As indicated, age was an issue for some students and within this was a concern with student dress codes. A woman student described how at forty she would "... look a bit daft taking on the student-uniform of jeans, tee shirt, earrings and strange hair." She described compromise by getting a back pack, dressing inconspicuously, and not carrying a purse. She said, "At forty, I knew there was no way I could blend in, so I didn't even try".

Most students found the college services met their needs. However, counselling services appeared to be one area, in the mature student's opinion, that was lacking or quite inaccessible. Whilst students described positive tutor/instructor's counselling, they hoped or wished there was a service that would be more confidential. They commented on having to use "...valuable, instructional-tutoring time for counselling." Students questioned the proper use of tutor-student time and felt it unfair to the tutor and themselves. Generally, mature students reported that college resources such as library and personnel were marginally adequate. A recurrent theme in the interviews concerned limited or difficult access to libraries. Library access appeared critical to students who had limited time to check out material often to discover the material wasn't there or they couldn't get in. At times, small children accompanied them because they were doing errands and there was no place for the child to go while the parent went into the library because",... children were not allowed.." Students wanted to be more involved at college, commented on the lack of social activities for mature students, but admitted finding time to participate was difficult. Some mature students articulated a desire to feel a part of the college: "It is very difficult for part-time students to internalize the insitution as a university...to feel that you are part of it...Each university does have a particular identity to help them with, but I think that students long to belong to something, to an institution, but it is dificult being part-time, so they relate to something that is rather vague.""

Box 5.6 Themes: What is your perception of the institution?

Themes: What is your perception of the institution?

- The college is supportive of my needs as a mature student
- Instructors/tutors/supervisors generally understand the needs of mature students.
- With life and work experience, I am treated as if I have something to offer this programme/course
- •The combination of young and mature students benefits learning •Services are accessible to mature students (e.g. counselling, advising, support) •College resources are accessible to mature students (e.g. library, personnel)

5.2.3. Reactions to returning to learn

Reactions to the present learning experiences were mixed. As mentioned earlier, the role of student was frequently overshadowed by previous learning. However, many reported feeling they were more able to learn because of gained life experience. "I am more confident, I want to study now...I can learn quicker....I realized I can do it". Study habits varied:"I didn't know how to study... I learned I was visual...After school I learned I was dyslexic...Understanding my learning style helped a lot...I learned how to ask for help. Before, I saw this as a weakness. It was something inside of me leftover from childhood ".

Some of the students interviewed were in courses limited to mature student enrolments. These students were surprised to find other students a valued and unexpected source of support. When ask about their source of support, mature students often said. "...it was the other students on the course." They enjoyed group assignments and shared reports. As mentioned earlier, it was important for the student to do well and to achieve good grades."I ask myself, are you going to be comfortable if you don't have an 'A 'at the end of every term, because I'm struggling trying to schedule a history course that I have to have as a pre-requisite. I keep thinking, I'll probably blow my whole grade point average. When you start out you think about the grades and tell yourself that's not the thing that counts. The thing that counts is finishing and getting the diploma. And, yet there's a certain amount of prestige or a certain amount of self-identity that goes into those grade. For me it's proving to myself that I can do very well. It's part of being a perfectionist. I just have to keep studying and learn as much as I can."

Box 5.7 Interview summary by percentages: Reaction to returning to learn

•Reaction to Return to learn (by percent of tota	l response)* %
Cited specific learning difficulties	33
Expressed desire and excitement about learning	33
Expressed self doubt in ability to learn	25
Expressed this opportunity as a second or last chance	11
Recalled other school experiences	4
percent is more than 100 because respondents indicated more than one issu	e)

Self-doubt was found amongst twenty-five percent of the interviewees. A student recalled doing poorly in maths in high school and was now struggling to maintain his study in a fluid-power program. Another had great fear of essay writing and found herself relying on extra tutor support. A woman returning after a brief career in nursing was entering a printing programme and found herself easily intimidated by 'machinery' and the fear she might blow up something. Students questioned their ability to learn, they cited difficulty concentrating, and retaining material. They verbalised the sense of doubt as"...feeling lost...afraid of being a fool, or expressed concern that "others knew far more than me." A woman described, "I use to get quite uptight at school...I think all those things have stayed with me and when I started the course, it all came back." Many students reported they were keenly aware of their self-doubt, but were motivated to overcome and get beyond the negative thoughts. One student related how she forced herself into uncomfortable circumstances to learn and grow. Some voiced the concern that this was a second chance at education and for some, it seemed a last chance." If I don't do it now, I'm never going to do it." It appeared they wanted to learn, felt they were more able to learn because of work and life experience and found learning, "very interesting, exciting."

As mentioned before, being a student was intermingled with being chronologically older than other students in his or her course. Forty percent of the students surveyed were over forty years of age (see Box 5.14). Some students appeared to be sensitive to age issues. A small number of women in the interviews (six) commented on being 'the oldest' in the group. One student noted,"*I was the oldest in my group, it was the first thing I noticed.*" Males did not report this experience. Women reported being the oldest and how younger students looked to them as wisdom or mother figures. Two women straight off said they would not take on the role. "*I very quickly learned that I was not going to be put in the role as somebody's mother or the source of wisdom.* Other women commented that they enjoyed friendships with younger students "who could be my own children". While age difference was not necessarily negative, the older student was aware that he or she, in fact, was the oldest student in a group.

Summary: There was equal representation of self-doubt and enthusiasm about learning. Students frequently related previous learning and life experience with a sense of confidence and achievement. They perceived themselves as on an equal ground with tutors and instructors and unexpectedly experienced other mature students as a benefical wellspring of knowledge and expertise. They wanted to be successful, gain good marks and maintain their self- esteem. Some mature students were sensitive about being the oldest student, and in reality they often were. Women were more likely to report this concern than men. Box 5.8: Themes: What is your reaction to returning to learn?

Themes: What is your reaction to returning to learn?

Varying levels of ability to concentrate
Getting good grades/evaluation was extremely important
Varying levels of confidence but generally there was confidence about their ability to complete the course
Other students in the course were a source of support

5.2.4. Balancing family, work and student roles

The majority of students reported difficulty in balancing their multiple roles. When asked how he managed multiple roles, one male student said," It completely alters the world around you. Returning changes everything about your life. It's not the degree of difficulty with the work, it's just finding the time to do it all... It was the first time I've understood how someone could crack up." Students gave examples of the organization of households, children being involved in sharing work, spouses taking on more responsibility and problems with extended family members who seemed to expect that nothing would change. For example, "My mother expected I would continue to invite her to tea every Wednesday, and I couldn't do that any Students described role reversal scenarios at home. One male longer." student commented, "I told my wife that even if I seemed to have more time at home I was not going to take on the expectation that I would do decorating." Another described how evening meals had changed,"Now who ever gets home first has the responsibility to start the dinner, it isn't just Mom's responsibility."

Women and men reported feeling bad about less time with family. If they had a essay or a project to complete they felt they had to withdraw from the family. On male student said, "When I have an essay to do, I feel I have to hide from my family for weeks at a time. My son has just started school, and I'd have liked to have been there more for him." Younger children had difficulty understanding their parents' student roles. Guilt and sadness became new aspects to parenthood at this juncture of their life. For example, "I feel I should be reading books to the boys, not writing a paper on some esoteric topic that occurred three hundred years ago." However, some reported that children enjoyed shared time doing homework, encouraged them, and inquired about essay and exam requirements. Women reported spouses or partners taking over some of the child care responsibilities. However, women perceived themselves in the primary role of home management, child care, and general family organizing.

Box 5.9. Interview summary by percentages: Balance of roles

•Balance of roles (by percent of	of total response)*
	%
Experience difficulty with balancing	65
Became more efficient to facilitate management	3 3
Received support and or role reversal occurred	12
Neutral, no greater or lesser problem	4
*(percent is more than 100 because respondents indicated more	than one issue)

Lack of perceived support from one's workplace or employer was significant for some. Even when release time was available, there was a feeling they had to work that much harder when they were at work. Students perceived resentment amongst co-workers or supervisors who did not fully understand the study. Some had received promotions and the burden of new responsibilities and time pressured-study created distress.

There were significant problems with finances. Students reported the need to reconfigure family budgets to include the expense of tuition, books, supplies and travel. These added expenses and change of lifestyle created worry and guilt. Many students had received grants, but had to leave paid employment. The grant funding was significantly less than previous income levels. Loss of income created problems for the entire household including spouse and children. For example, a part-time student reported not having enough money to buy basics. "I found it hard on the course with it being a part-time course you couldn't get a grant...so I am on my own. I went to the unemployment benefit...but you needed paper, pens, notebooks, and you want to get a book, but it was four pounds fifty.." A male student verbalized the perceived guilt in seeing his wife return to full-time employment to enable him to study. (see Appendix no.10).

Summary: The balance of family, work and study was complex. It was about relationships, time management, personal guilt, financial problems, lifestyle changes, social limitations, workplace adjustments, parenting changes, and continually being faced with not having enough time to do it all. There was perceived support, but lack of understanding of what being a student meant. Box 5.10. Balancing family, work and study

Themes: Balancing family, work and study

Balancing my responsibilities is a significant problem
Taking time from family activities for study makes me feel bad
I feel uncomfortable using family funds to finance my education
Balancing workplace and study is difficult
Managing and prioritizing my time is difficult
The number of commitments in my life makes balancing difficult

5.2.5. Factors that mediate stress perceptions

An important aspect of this research was the opportunity to increase the knowledge base on how mediating factors may impact the degree of perceived distress. In Chapter Two, we discussed the transactional nature of stress and the impact of mediation. It is speculated that stress perceptions could vary due to ability to mediate demands. Therefore, in this study it was important to look at specific mediators that influenced the transactional nature of stress and stress response. The mediators studied were: change, psychological support, health and energy, and coping strategies.

5.2.5.1. Change as a mediating factor

The literature indicated that transitions and major life changes were a part of the returning student's life. The majority of students interviewed in the sample had experienced major life changes. Among these were: lifestyle changes because of death or divorce, loss of a job, change of careers, moving house, illness in the family, or a sense of achieving a personal goal before it was 'too late.'

Stress theorists, Kobaska (1979) and Veninga (1985) reported how stress perceptions were affected by a individual's attitude about change. Students were asked three questions about change in the interview: one, had they had experienced a lot of change? two, what type of change? and three, how do you feel about change? The changes students reported were predominantly about adult mid-life tasks. These external life events were; job changes or job loss and family changes including birth, death, illness, and geographic relocations. The students reported internal changes as well including greater self esteem, more confidence, a sense of being settled, feeling he or she was a more interesting person, and had gained a broader appreciation; for example,"I have changed a lot. I can reason more logically. I used to be very impatient, now I have become patient with my work...I see things I've never seen before...it has made me feel good to be looking after myself after all the many years of taking care of others...When my father died two months ago, I think his death made me more aware of change. I felt this might be my last chance."

Box 5.11. Interview summary by percentage: Change

•Change	(by percent of total response)
	%
Reported major change	50
Expressed change as challenging	g/good 37*
Expressed change as frightenin	g/scarey 13
*Of those who found change challengin it was okay, as long as they had 'cont gradually and not in big chunks."	• •

Other students revealed a more stoic perspective and said they hadn't changed significantly; they had always struggled to survive and this was nothing new for them. For example one student said,"*The totality of life is change you know. If it comes in large chunks of change, I can be very down and take it personally. If it comes in terms of health, family crisis, I seem to be able to live with it and work with it.*" A male returner acknowledged he felt he needed to do the degree to keep pace with his career, but didn't find college disruptive to his life. "I've tended to live an ordinary life. I lead a *boring life really. I'm not very good at change. I see it as negative, feel like I want to have some control though I don't see change as particularly frightening....I don't see the need or desire to change...change is what you perceive.*"

Some students had experienced traumatic change and life was far from routine. They had lost a spouse or encountered a serious illness. Some reported the death of a parent and how the death affected their own place in life with a sense that if they wanted to do something, they must do it now. One woman who enroled in an Access course said, "When I lost my husband I lost everything. We had a car and I had to give it up. We had a house, it went with his job. When he was dead, they wanted me out...I had to struggle, I had to survive. I say why me. I hope I have no more knocks. I mean you apply for a job and your age is against you. All the jobs for women today are part-time."

Summary: Students reported diverse changes in their lives as they returned to learn. Their reports reflect a wide spectrum of attitudes regarding change. Change was dramatic and life changing for some, but it was simply part of life for others. It appeared from the interviews that students who had not previously attended college experienced greater degrees of change than those who had returned as part of career expansion.

Box 5.12: Themes: Have you experienced change? What is your perception of change?

Themes: Have you experienced change in the past two years?
Students experienced major and minor transitions in their lives before returning and while being a student
Change was both external and internal
Students experienced change as good and felt challenged by it. The change response seemed dependent on how significant the change had been and how they had coped with it.

5.2.5.2. Psychological support

The literature indicates that support is a critical mediating factor in the success of a mature student's experience. Students interviewed experienced varying levels of psychological support. The literature indicated that mature students who experienced support from family, friends, or their workplace were more successful in the student role, (Lanzilotti,1982; Belbin and Belbin1972; Hutchinson and Hutchinson,1978; and McLaren-Tigar,1985). The early studies on women returners reflected correlations with support and student attrition (Berkove, 1976). If support was a critical indicator in the student experience, than perhaps the lack of support would be a source of distress for mature students. Therefore, both aspects of support, most and least, were probed in the interview. The questions were: Where do you receive support? and Is there any place or person that is least supportive?

Key aspects to emerge from the interview was the variation in who was perceived as most supportive, and least supportive. The literature indicated that males perceived lack of workplace support, (Lance,Lourie and Mayo, 1979; NIACE, 1982). This was also found in the student interviews. Another interesting phenomenon to emerge was the same sex parent being identified as least supportive, in both countries.

Box	5.13.	Interview	summary	by	numbers	reported.	Source	of	support
-----	-------	-----------	---------	----	---------	-----------	--------	----	---------

	(by number reported)
<u>Most supportive</u>	
Spouse or partner	33*
Family	12
Friends	10
Others	5
*of those who indicated the spouse that while their spouse or partner	was supported, women N=9 reported supported their returning, they did not y involved or the problems therein
that while their spouse or partner understand what the course of stuc <u>Least supportive</u>	supported their returning, they did not y involved or the problems therein
of those who indicated the spouse that while their spouse or partner understand what the course of stud	supported their returning, they did not y involved or the problems therein 10 ather or female's mother) 8
of those who indicated the spouse that while their spouse or partner understand what the course of stuc <u>Least supportive</u> Workplace Same sex parent (male's fa	supported their returning, they did not by involved or the problems therein 10 ather or female's mother) 8 extended family members
of those who indicated the spouse that while their spouse or partner understand what the course of stuc <u>Least supportive</u> Workplace Same sex parent (male's fa 'Others' ('reported as close	supported their returning, they did not by involved or the problems therein 10 ather or female's mother) 8 extended family members

1. Perception of 'most' support

Students spoke openly of the support of families and spouses. They also responded "I am my best support, really." Many students said they perceived support from spouses but it was not necessarily verbalized. For example,"My husband is supportive but he doesn't show it a lot. A mutual friend says that all he talks about at work is my going back to school. He is a quiet person. He buys a card and says I love you, but we don't talk about it." Mature students with children spoke about children's reactions. "My children say I'm glad we don't have a boring mother". A male student said, "My wife has done a lot of my typing, she listens to me a lot, however my major source support is my director of training." Another strong source of support, as noted earlier, was other students. "The most support I get right now is all my classmates. We support each other." The range of support was wide. If parents of the mature student lived close by, students often found support and help. Support came by verbal encouragement, helping out with minding children on days when schedules became complex and parents providing monetary support or an offer to do so. Some students felt support had to come from within, they were their own best support. They said, "I think when you need help you just have to go through it yourself. I think it has to come from yourself... I was my own encouragement...I found I was intelligent and quick to learn, I realized I could do it".

As indicated in the section on balancing work, family and study, (page 130) students reported variation in workplace support. One man commented,"Though the employer gives time, the senior manager doesn't remember I'm on a course. It's awkward at times, but I don't think it is a intentional lack of support." Literature reported that men were more likely to experience negative responses from co-workers, (NIACE, 1982). Separate from the support issue was a sense of pressure if the employer was funding the programme. "When your employer finances your studies, you have the added stress that you must achieve because it's not just yourself your letting down, but it's your employer your letting down... They allow you a day of So, they are certainly within their rights to ask for and receive release. information on how it is working. I have found it distressing that if I haven't done well, that someone other than myself and my tutor will know about this. That is daunting at times, that is an added stress."

2. Perceptions of 'least' support

The sources of most support were parallel to those of least support. This was most evident in spouse and children's support. Some reported spouses were unsupportive and expected that nothing at home would change. Children were asked to take on more home responsibility and resented the parents' time being away or studying. A contradictory adult-child parent issue appeared in interviews. Students reported comparable scenarios regarding, what the author calls 'the same-sex parent phenomenon,' Female students made these statements: "My mother says hurting things like; "Oh, you don't know anything except books"...The least supportive is my mother,...she doesn't really understand why I'm doing this." Male students said, "My father doesn't seem interested, he thinks this is just something I'm doing to occupy my time...My father keeps asking me when I'm going to get a real job." In a student presentation <u>after</u> students had done the questionnaire one student remarked,"I felt guilty checking it was my mother. I hesitated for a long time before marking it. I am relieved to know it isn't just me." In some interviews, women reported feeling that their husband's parents were not supportive. "My husband and his father think this is just a hobby for me."

Support influences the success of the mature student Summary: experience. Students reported themselves and other students as being a reliable source of support. The sources of most and least support were the same. One student reported co-workers as being least supportive, another found them as most. Close friends provided support to some students but others perceived support being withdrawn because the student/friend was not always available. The family, spouse, children, and parents of mature students were identified as being most supportive or being least supportive. Even with 'felt' support, twenty seven percent of mature students who reported spouse/partner support, indicated that their partner/spouse didn't really understand what they were doing. The workplace was often perceived to be ambivalent or resentful to the college student-employee-co-worker. Of interest was the emergence of a 'same-sex parent phenomenon' where students reported their same sex parent expressed negative comments about their return to learning.

Box 5.14. Themes: Source of <u>most</u> and <u>least</u> support(Note: the listing includes those reported as most and least. All nine categories were identified, none were excluded from identification)

Themes:	Psychological	support	source	of	most	and	least	support
•my	workers mother er students	•emplo •my fa •childr	ather		•m	ouse yself her(s		

5.2.5.3 Health and Energy

Perceptions of the mature student's health and energy were part of the interview process because of the reported connection between stress and illness. Literature on stress and related disease report positive correlations between increase in the number of life event change and increased illness, (Selye,1956; Holmes and Rahe,1967). With this perspective, we discussed the students' perception of their health and energy levels. The

questions asked were: Have you had minor or major illness in the last year? How would you rate your health status? How would you rate your energy level? The majority of students saw themselves as healthy. This perception was held by students who also described specific health problems. In spite of the problem, the individual perceived they were healthy. This is not an unusual phenomenon and has been cited by others, (VanderJee, Bram and Samderman, 1995; Blaxter, 1990). Thirty-two percent of the mature students interviewed reported illness. The primary complaints were frequent colds, flu, chest infections and gastrointestinal problems Students reported physical limitations due to injuries, back problems and muscle damage. There was evidence of chronic disease among the mature students interviewed including: diabetes, epilepsy, celiac disease, manic depression, irritable bowel disease, migraines, alcoholism, and stomach ulcers. Poor health, fatigue and a sense of feeling stressed was verbalized. "Life is real piecemeal. I don't think I have balance in my life...It's a huge adrenalin call. You come down from being so busy, you don't know how to handle life any more. ... I'm not in as good of shape as I should be... I would say my health is poor. I'm overweight and I smoke and have had stomach problems since I came back to college. My energy level is up and down. I see a tremendous difference in my health, since I started college."

•Health Status (by	percent of total response)* %'
Stated 'I am healthy'	65
Reported illness	32
Stated "I am tired"	25
Stated concern about weight/eating	15
Stated "I am healthier-more energy	11
*percent is more than 100 as students indicated more th	an one choice

Box 5.15. Interview summary by percentage: Health status

Twenty-five percent of the students reported being tired or experiencing fatigue. Eleven percent reported having more energy and feeling healthier since they returned. Some students described feeling tired, but they did not report an increase in illness."*I am very rarely sick...I think of myself as healthy...I've been more healthy than any other year.*" They also described feeling 'under pressure' and when ask what that was about they said,"*I get twitchy legs and know it's stress.... feel like I want to break something...I jump up and down and scream...it's the pressure of the work, not pressure of management...I grind my teeth...I fall down steps and I yell at the* children...Primarily it starts with the family. I have a tendency to jump down someone's throat...I find myself smoking...I find myself being completely confused...I think the pressure comes from within. I think we put pressure on ourselves...I just get to a point where I can't function, I can't make a decision. My rational thinking and logic go out the door. I go from one thing to another and shuffle papers and I feel very tired."

Students self-assessment about health issues revealed an ability to do critical self-analysis. Fifteen percent of the students interviewed reported concern about eating well, unexpected weight gain, and needing more exercise. They were conscientious about caring for themselves and held expectations that their health would and could be better."I'm hard on myself and hard on other people...I'm not as physically fit as I should be but my health is reasonably good except for the few colds everyone gets ... "I've put on a stone since returning..."I know I should get out and exercise, but I'm too tired to do it...There just isn't enough time...I try to stay rested and get my sleep." Knowing one's personal limit was described by a student who had experienced a divorce during her programme years."It takes all my energy to study and care for the children. I am extremely tired all the time. I wasn't medicated. 1 must have just said, its enough. I could have come out the divorce viewing it negatively. It wasn't a happy time. There was no money. On reflection, I should have had some help."

Summary: Students acknowledged changes in their life. They identified the demands and stressors and reported being healthy and in some cases having more energy than they had experienced in some time. Some students reported health and stress concerns. Common concerns identifed by students were, fatigue, lack of exercise and weight gain. When asked, they were able to describe how they took 'care of themselves' and this included such things as taking vitamins, being conscious of good nutrition, taking exercise, and trying to get adequate sleep.

> Box 5.16: Themes: The student's perception of health and energy Themes: Perception of health and energy levels •Generally speaking, I feel I am a healthy person •Generally speaking, I feel fatigued •I have more energy since I have returned to college •I have not experienced significant illness

The ability to cope and maintain balance in complex work, family and study life reflected the mature students' creativity and acceptance of Students tried to continue life as normal as possible. limited boundaries. They appeared to be aware of the stress and strain and understood that time was limited and some expectations had to be put aside. For instance, it was difficult to allocate time for an regular exercise program or scheduled family time. The reality of life was apparent in the student's blunt response to, "How do you take care of yourself? with "I don't, there isn't time." In the interviews, coping and balancing were most often associated with getting away or engaging in some specific activity followed by exercise and nutrition. Walking was the primary exercise mentioned. Scheduled walks occurred on weekend with family or it was consciously part of the student's day at college. They appeared to be aware that they may not be eating properly all the time but were conscious of trying to eat the right foods and avoidance of fast foods, fat, sugar and caffeine. Many reported taking vitamins.

Box 5.17 Interview analysis summary by percentage: Coping strategies

(by percent	t of total response)* %'s
Cited a specific activity; music, gardening, paint	
movies, television, socialising, time away	33
"Let go", ability to put off worrying, etc	12
Expressed they didn't cope well	11
Exercised on regular basis	10
Effort to eat well, conscientious diet, vitamins	7

In the category of 'letting things go', household standards and expectations were common points of discussion. The lowering of standards and expectations about cleaning, laundry, meal preparation, and so on was commonly reported by female students. Male students did not mention this concept. Some had a greater tolerance for an untidy home and let the dishes pile up or the dusting go."*I exercise, swim get the endorphines up while the house gets filthy. I have to leave the work behind and walk and I take my vitamins...I feel brilliant after that*". Some reported consciously planning time with friends and family. Others were concerned they may not have any friends when they were done because they had to cut back on social activities. Individual creative coping strategies seemed quite specific to relieving inordinate amounts of stress periodically. Included in these reports were; going for a long drive alone, (some sang, some swore, or listened to loud music on this solitary journey), locking oneself into his or her room for solitude, spending a Saturday in pajamas and lounging robe, setting aside a grandkids day, Friday night ritual of pizza and a video, playing video games on the computer. More common coping strategies included reading novels, cooking, gardening, woodcraft, building things, music, painting, social time and going fishing.

Summary: Students were conscious of change. Leisure time was limited if nonexistent. Self-care include such things as walking to and from car parks on the college, attempting to improve daily nutritional intake, lowering housekeeping standards to provide some measure of control, eliminating or reducing social activities to gain time for study, and identifying 'pressure-cooker' techniques when they were over-stressed. Their reality was that time was limited when one managed a job, a family, and a course of study.

Box 5.18: Themes: Mature Student's coping and balance strategies

Themes: Mature student's coping and balance strategies
I routinely commit time for relaxation; exercise, socializing, reading,
My time is limited. The ability to relax has suffered since I returned to learn
I find creative ways to relax and put balance in my life.

5.2.6. Summary of the interview data

Box 5.19 Summary of interview data

1. The paradoxical nature of the mature student was consistent; a difficult, an enjoyable experience. A significant number reported learning as difficult and intimidating as new learning intermeshed with old memories.

2. The majority of students found tutors and instructors supportive. Students reported 'feeling equal' with tutors, a sense of shared authority. Some students perceived the institution as disorganized, of too much information at a given time, of classes being canceled without notice, lack of counselling support, and of an aurora of aloofness, 'stuffy.'

3. Students' reactions to returning was equally divided between being excited about new learning, and expressing doubt about their ability to learn. Many students saw it as a second chance. Some expressed difficulty concentrating, taking longer to absorb learning.

4. The majority of students reported difficulty balancing roles. Their commitment, workplace demands, family needs and personal relationships were often overwhelming. The student relied upon a status quo in each of these roles. If a distressful incident occurred, it could generate chaos and force continual re-prioritizing of resources. Lack of time was significant.

5. Students were readily able to identify sources of most and least support. Support was perceived, but at the same time they questioned if others really understood. The lack of support of the same-sex parent was an interesting emerging phenomenon reported in both countries.

6. The majority of students reported major change had occurred in their lives. They saw change positively if they had some control over it.

7. The majority of students perceived themselves as healthy. Some students reported illness and chronic health problems. Fatigue was common with mature students. They reported they had not experienced more illness.

8. Coping strategies commonly reported included special activities, family time, gardening, reading, socializing, music, and so on. Efforts were made to eat well and exercise, though they reported less satisfactory results due to lack of time. Short term and varied unique coping strategies were identified to relieve stress or a sense of overload when they felt under pressure.

5.2.7. Conclusion of interview phase

Interviews were conducted in two countries. England and the U.S.A. On conclusion of the interview phase in the two countries, the researcher suspected the mature student experience was somewhat generic. Students in the two countries appeared to report the same issues and the emerging themes were not significantly different between the countries. These themes or perceptions framed the second phase of the study. Major themes identified in the interviews would be evaluated by a larger sample of mature students.

On completion of individual interviews, a significant number of students initiated comment on how helpful the interview process was. They said, "*It helped to think about some of these issues and organize my own thinking.*" While students reported support from a variety of sources and motivation to complete the task at hand, students acknowledged that returning to learn was a lonely and often isolated experience. They said,"*My (spouse, friend, co-worker,parent, son, daughter, etc) hasn't the foggiest notion what I'm doing, and it's almost impossible to describe what I'm going through or thinking about.*"

There appeared to be a sense of vision, that what he or she was doing or going through would somehow, in the end, be worthwhile. On the basis of the interview data this author would speculate that the motivation to return was more intrinsic than extrinsic. This finding would be consistent with Knowles (I978, 1984). This internal challenge or motivation was difficult, if not impossible, to verbalize and perhaps became even more difficult to rationalize against all the challenges that came forward in completing a course of study.

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QUESTIONNAIRE FINDINGS

Second Phase of the Research

An overview of the questionnaire phase

The questionnaire was administered to three hundred and eighty-two students (N=382) in the two countries(N=188 in England and N=194 in U.S.A.) The questionnaire phase had four objectives: one, to obtain demographic data that profiled mature students; two, to subject the emergent interview themes to a larger sample size; three, to determine the degree of agreement and four, to compare gender and country similarities and differences.

An Excel program was designed to accommodate and analyze the student information. The demographic information was collected in questions one through twenty-three. Categorical topics were covered by questions twenty-four to thirty-three. A six-point Likert scale was used for some of the questions. The coding frame for questions was:

1.	definitely	disagree	4.	inclined	to	agr
----	------------	----------	----	----------	----	-----

- 2. strongly disagree
- ree
- 5. strongly agree
- 3. inclined to disagree 6. definitely agree

Each questionnaire was coded prior to entry into the Excel program. The gender and country groups were summarized for measures of central tendency and standard deviations. Means and standard deviations were subjected to paired grouped means comparison. "z" tests were done to determine if there was statistical significance between some of the groups. The measures of central tendency provided mean ratings by total population and between gender and countries.

5.3. Comparative aspects of the research

The two country demographics indicated some similarities such as: occupational areas, years away from previous education and personal status of the sample population. The differences included: full-and part-time status, employment status, program length, and funding. The demographic summary is presented in Box 5.20.

Box 5.20 Demographic comparison of mature student groups in England and the U.S.A. From 1993-1994 survey

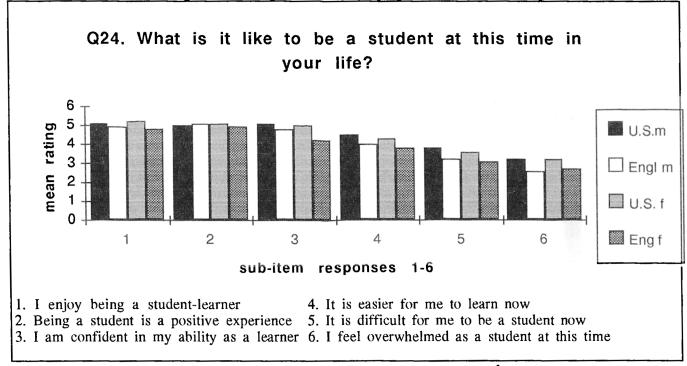
Perceptions of Matur	e Student Stress
	N=382: 219 females and 163 males. Please note 82 due to incomplete responses in some categories
•Age range of total s	40% 40-55
England	United States
•Full time students: 102 •Part time students: 81	•Full time students: 62 •Part time students: 124
•Employed - 46% @ 22 hrs/week	
Primary Occupation: Business Service Education	Primary Occupation: Business Service Manufacturing
Health •Employee release time 429	Health •Employee release time
•car •fuli	Returning to College eer change filling personal goal grading in present career
•Program Length 20.9 months •Fees paid by: government 64% self 18% employer 13%	•Fees paid by government 22% self 36% employer 37%
•Years away from previous education @13.	2 •Years away from previous education @ 13
•Income level median= £ 18,185 (combined annual income)	 Income level median = \$45,000 (combined annual income)
Personal stat marri singl divor	(totals) ied 62% e 17%
• married 62% • single 12% • divorced 18% • widowed 2%	•married 62% •single 21% •divorced 12% •widowed 3%

5.4. Perceptions of being a student: Question 24

Mature students reported that they enjoyed being a student, found it a positive experience and were confident in their ability to learn. They also indicated it was easier to learn now than in their previous experience. The responses corresponded with the interview sample with the exception that interviewees reported it as enjoyable and overwhelming. Questionnaire respondents did <u>not</u> report a sense of being overwhelmed to the degree it was perceived in the interviews. Box 5.21 details the gender-country analysis.

Box 5.21. Means ratings of the student experience	
•Q.24: What is it like to be a student at this time in	your life?
	(mean rating)
1) enjoy being a student	5.0
2) being a student is a positive experience	5.0
3) I am confident in my ability to learn	4.7
4) It is easier to learn now than in previous experience	4.1
5) It is difficult for me at this time of my life	3.4
6) I feel overwhelmed as a student at this time of my life	2.9

Note: The results of categorical questions twenty-four to thirty-three will be displayed in the following pages. You will note that the questions have been re-ordered from the original survey tool and are gradiated to facilitate discussion and ease of interpretation.



Box 5.22: Mean ratings on being a student by gender and country

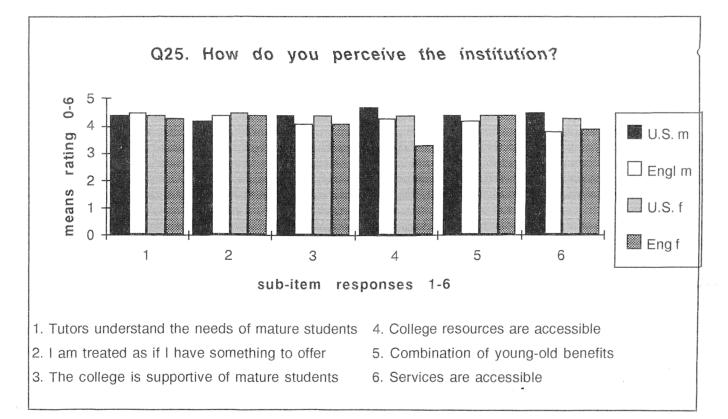
•Findings of significance: Question 24 •Q. 24. Perception of being a student: (3) "I am confident in my ability as a learner" The English males and U.S. females reported a higher level of confidence than the English females and the U.S. male z test=4.045 (p< .001) Mean rating: England male 4.8 England female 4.2 5.0 U.S. female England female 4.2 z test=6.139 (p< .001) 5.1 U.S. male (4) "It is easier for me to learn now than in previous education experiences" U.S. males and females reported it easier to learn now than England males and females. Mean rating: U.S. male 4.5 England male 4.0 z test=3.731 (p< .001) England female U.S. female 4.3 3.8 z test=6.756 (p< .001) (5) "It is difficult for me to be a student at this time in my life" U.S. males reported it was more difficult to be a student now than England males Mean rating: U.S. male 3.8 England male 3.2 z test=3.208 (p< .01)(6) "I feel overwhelmed as a student at this time in my life." U.S. males and U.S. females reported a greater degree of 'feeling overwhelmed' than England males and England females. Mean rating: U.S. male 3.2. England male 2.6 z test=3.525 (p< .001) 2.7 U.S. female 3.2 England female z test=3.227 (p< .01)

5.5. Perception of institutional support: Question 25

Perceptions of institutional support were consistent with the interview responses in finding the college generally supportive. Most students reported the college understood their needs as mature students and treated them as if they had something to offer the programme/course. In the interview phase, 'being treated as if they had something to offer' was viewed as shared authority with tutors/instructors. The lowest assigned value was the accessibility of services, (counselling, advising, support). This was reported in the interview sample. "The combination of young and mature students benefits learning" was consistent with responses, however there were outliers with this question and the written responses on the questionnaire reflected some degree of frustration with student mix. The discrepancy was also found in the interview data. One U.S.A. college with a high number of mature students employed in the business sector indicated frustration with the presence of younger students. For example, on the question regarding 'least support', this group identified 'other students' as 'least supportive'.

Box 5.24. Means ratings of institutional support

•Q25	Institutional Support by total sample and in ran	ık order
		(means rating)
1	. Tutors understand the needs of mature students	4.4
2	. I am treated as if I have something to offer	4.3
3	. The college is supportive of mature students	4.2
4	. College resources are readily accessible	4.2
5	. The combination of young & old students benefits	4.3
6	. Services are readily accessible	4.1



Box 5.25: Means ratings of institutional support by gender and country

Box 5.26. Findings of significance: Institutional support

•Findings of Significance
Q.25. Perception of institutional support
(4) "College resources are readily accessible to mature students (library, personnel)."
England females indicated less agreement with accessibility of college resources than England males and U.S males and U.S. females
Mean rating: England female 3.3 England male 4.3 z test=6.086 (p< .001) U. S. male 4.7 U. S. females 4.4
6) "Services are readily accessible to mature students (counselling, advising, support)."
U.S. male reported more agreement regarding accessible services than England males
Mean rating: U.S. male 4.5 England male 3.8 z test=3.977 (p< .001)

Open ended items were included under questions 25, 26, 29, 30, 31 and 33. This provided students with an opportunity for self-response. Bell,et.al. indicates that open-ended questions also serve as a 'safety valve' for respondents to provide data that may have been omitted or unavailable on the questionnaire, (Bell, J., et.al.,1984:160). The investigator's concern was to elicit anything that may have been missed in the interview data that might come forth in the questionnaire.

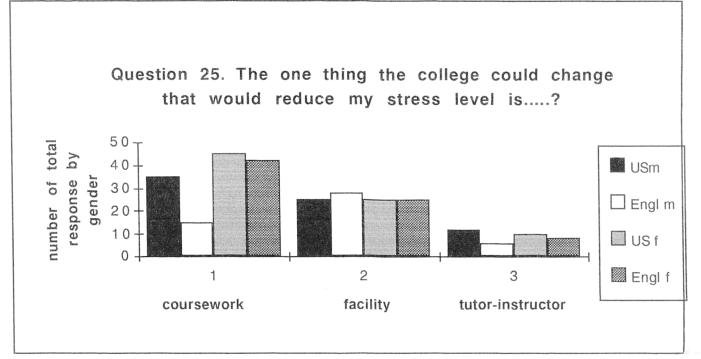
•Question 25. (7). The one thing the college could change that would reduce my stress level is.....?

Box 5.27. Students response to how the college could reduce stress levels: Top three responses

Topic	
	(total number of responses)
Management of course work	137
Facility improvement	103
Tutor-instructor issues	36

Management of course work was a primary student concern for student groups in both countries This finding appears consistent with the interview data in the verbal criticism of perceived disorganization, and instructor generated workloads. The students reported a sense of overload when reports, projects and exams were due at the same time. Students questioned how they could effectively learn multiple topics in short concentrated time periods. Students questioned the scheduling of courses in terms of the time (hour) the course started and ended. They commented on disorganized, irrelevant and, in their opinion, incompetent instruction. One student wrote a commentary that if the tutor did not have an education degree, they should be required to take courses to become more effective in delivery of material. Tutor and instructor issues focused on availability of the tutor for consultation and the degree of helpfulness perceived. Within the category 'facility improvement' the concern focused on parking accommodations, adequate outside lighting on footpaths and car parks, the desire for designated 'quiet' places to study for short periods of time, and provision for food. There were related equipment concerns about the availability, operational issues and staff present who understood and could facilitate equipment operations and usage. In most cases this was in reference to computer access. In the gender response it is noted that English males reported more difficulty with facilities than with management of coursework and less difficulties with tutors than U.S. males, England females and U.S. females.





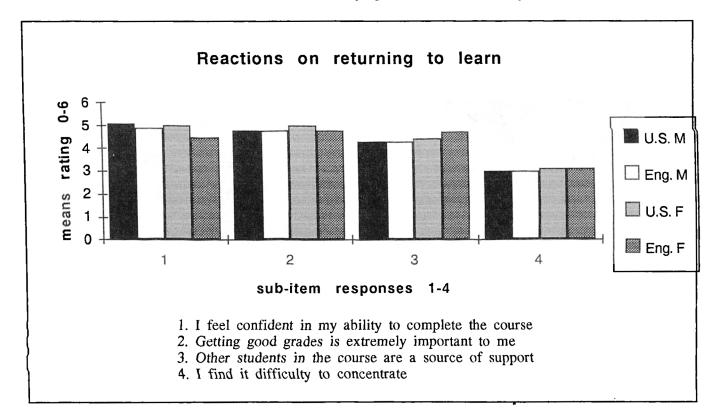
5.6. Reaction to returning to learn: Question 26

The questionnaire responses on reactions to returning to learn were somewhat at variance with the interview data. The interview data reported concerns about learning difficulties intermixed with being eager and excited about new opportunities. Without the interview data one might infer that the mature student had only minor concerns in returning to learn. For example, the concept of self-doubt seemed more evident in the interview data than the questionnaire responses. However, there was consistency between interviews and questionnaires in response to grades.

Box 5.29 Means ratings of returning to learn

Г

•What is your reaction to returning to	learn?
•	(mean ratings)
•feel confident in my ability to complete the course	4.8
•getting good grades is extremely important to me	4.7
•other students in the course are a source of support	4.4
•I find it difficult to concentrate	3.2



Box 5.30. Reaction to return to learn by gender and country

Box 5.31 Findings of significance: Reaction on returning to learn

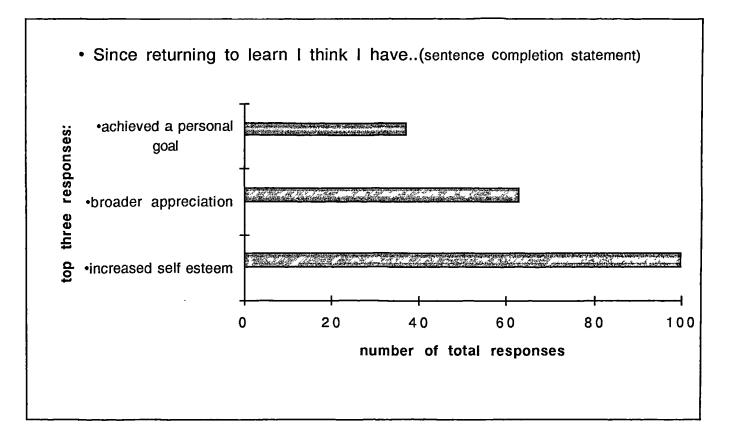
•Findings of significance Reactions to returning to learn •Q.26. (1) " I feel confident in my ability to complete the course." England females reported less confidence in their ability to complete the course than U.S. females and England males and U.S.males Mean rating: England female 4.5 U.S. female 5.0 z test=3.846 (p< .001) England males 4.9 z test=2.702 (p< .05) (3) "Other students are a source of support for me" England females reported receiving more support from other students than England males and U.S. males and females Mean rating: England females 4.7 England male 4.3 z test=2.70 p< .01)

To access the respondents' reflection on returning to learn we placed two open-ended questions here. As stated on page 148 this served as a 'safety valve' and in this instance, allowed access to cognitive and affective components from the mature students attitudinal response, (Oppenheim, 1966). Again, this author was concerned with whether anything had been missed on the questionnaire that may emerge with open-ended responses. The questionnaire findings were consistent with interview data. Students reported they had more confidence. They expressed they did better than they previously thought they could and they were exhilerated about learning again. These responses were consistent with other findings on mature students, (Lanzilotti, 1982; McLaren-Tigar, 1985; Lauzon, 1989). The top three responses are reported in Boxe 6.28.

Question 26 (5.) •Since returning to learn I think I have...

Box 5.32. Since returning to learn I think I have...(Q26#5) (top three responses)

Торіс	Number of reported responses
Increased self-esteem	100
Broader appreciation	63
Achieved a personal goal	37
	•

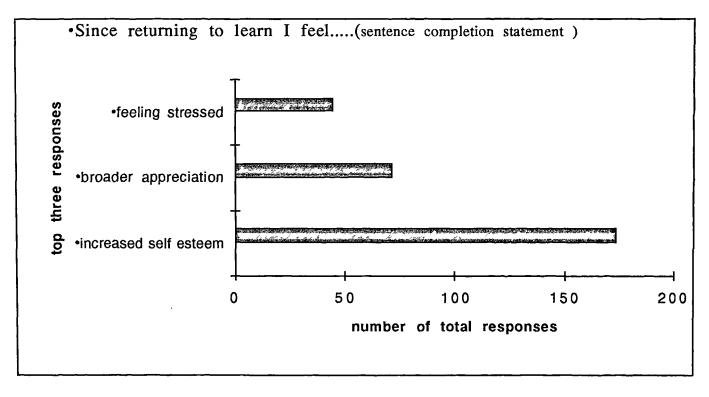


Box 5.33. Since returning to learn I think I have...(by graphic illustration)

Question 26 (6.) •Since returning to learn I feel.....

Box 5.34. Since returning to learn I feel I have.....(Q25. 6) (top three responses)

Number of reported responses
174
72
4 5



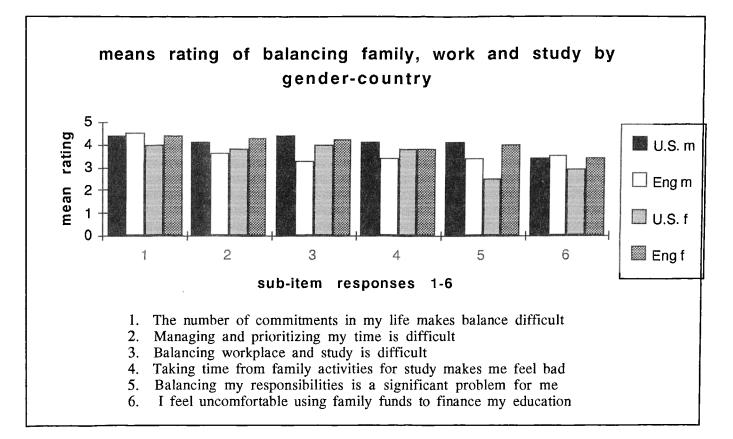
Box 5.35. Since returning to learn I feel....(by graphic illustration)

5.7 Balancing work, family and student roles: Question 27

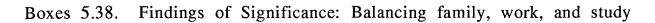
The primary issues in balancing work, family and study were the number of commitments in the student's life, managing and prioritizing time, and balancing workplace demands and study. However, the questionnaire data did not convey the intensity of what students said in the interviews. Of interest in the findings is the break out between male and female students. One of the objectives of the research was to determine gender differences and similarities in respect to balancing work and family issues. The previous literature citings appeared to have more data on female issues than male issues. The findings indicate that males report similar concerns and may experience greater degrees of concern on some issues.

Box 5.36. Balance of family, work and student by total sample

•Please describe your experience balancing family, work and student roles	
	(mean average)
 The number of commitments in my life makes balance difficult Managing and prioritizing my time is difficult Balancing workplace and study is difficult 	4.3 3.9 3.9
 Taking time from family activities for study makes me feel bad Balancing my responsibilities is a significant problem for me 	3.7
• I feel uncomfortable using family funds to finance my education	3.3



Box 5.37. Balancing family, work, and student roles by gender and country



•Findings of significance

•Q.27 Balancing family, work, and student roles can be a problem

Q.27. (1) "The number of commitments in my life makes balancing difficult"

(a) England females reported more difficulty balancing the number of commitments than U.S. females.

Mean rating: England females 4.4 U.S. females 4.0 z test=2.702 (p< .01)

Q.27. (2) "Managing and prioritizing my time is difficult"

(a) England females reported more difficulty managing and prioritizing time than England males and U.S. females

Mean rating: England females4.3England males3.6ztest=3.715(p< .001)</th>U.S. females3.8ztest=3.227(p< .01)</td>

b) U.S. males reported more difficult managing and prioritizing time than England males.

Mean rating:	U.S. males	4.1	England males	3.6	z	test=2.604	(p< .	01)
(Box 5.38.	continued)							
Q.27.	(3) "Balancing workpl	ace and	l study is difficult"					
· ·	es report more difficult inglish females.	y balan	cing workplace and s	study thar	ı En	glish males a	and U.	S.
Mean rating:	U.S.males	4.4	England males 3. U.S. females 4			.470 (p< .0 272 (p< .0	•	
(b) English fe	males reported more d	lifficulty	v balancing workplac	e and stu	ıdy	than Englis	h male	S
Mean rating:	England females	4.2	England males	3.3	z	test=4.891	(p< .	001)
Q.27.	(4) "Taking time from	family	activities for study i	nakes me	fee	l bad"		
	es reported more diffic England females repor					gland males,	and to	a
Mean ratings:	U.S. males	4.1	England males	3.4	z	test=3.867	(p< .0	01)
	England females	3.8	England males	3.4	z	test=2.247	(p< .0	5)
Q.27 ((5) "Balancing my res	ponsibil	ities is a significant	problem	for	<i>me</i> ."		
(a). U.S. male males and U.S.	es and England female 6. females.	s report	ed more difficulty b	alancing	respo	onsibility tha	n Engl	and
Mean rating:	U.S. males	4.1	England males U.S. females	3.4 2.5	Z Z	test=3.977 test=10.596		
	England females	4.0	England males U.S. females	3.4 2.5	z z	test=3.468 test=10.135		
Q. 27	(6) "I feel uncomforta	ıble usir	ng family funds to fir	ıance my	edu	cation"		
	s reported more discor ales reported less diffic			their edu	icati	on than U.S.	femal	es
	U.S. males England females	3.4 3.4	U.S. females U.S. females	2.9 2.9	z z	test=2.717 test=2.941	-	

To appreciate the significance of these findings, one needs to return to the interview data (page 129-30) that were rich in detail in regards to perceived difficulty in balancing roles. Students reported working out schedules, being disciplined, accepting being tired, letting things go, lowering housekeeping standards, feeling unappreciated for all the roles they had.

Students reported that coursework had to be put second or third when a family member was ill, or a relevant work deadline surfaced, or a relationship became endangered. There were reports of guilt because they could not spend proper time with family, or significant others in their life. They felt bad about not being able to provide financially as before. Yet intermixed here was equal voice to the emergence of another person and a change of roles. A male student said, 'My wife had to go off to work so I could do the course"...A female student said, "Nobody expects me to come home now and make a meal...I don't see myself as 'mom'...I see myself as Gwen".

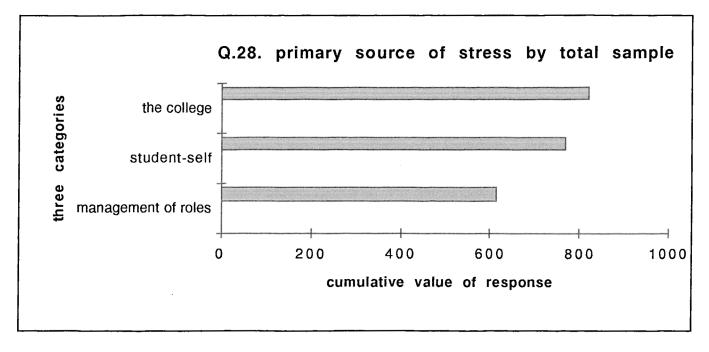
5.8 Primary source of stress: Questions 28 and 29

Returning to college and the student role creates additional demands. Students were ask to rate the first, second, and third most important source of their stress. The sources had been identified in previous literature, (Cross,1981, 1984; Larson, 1990). Respondents indicated that management of roles was first, student-self was second, and the college was third.

Box 5.39. Primary source of stress: total sample response

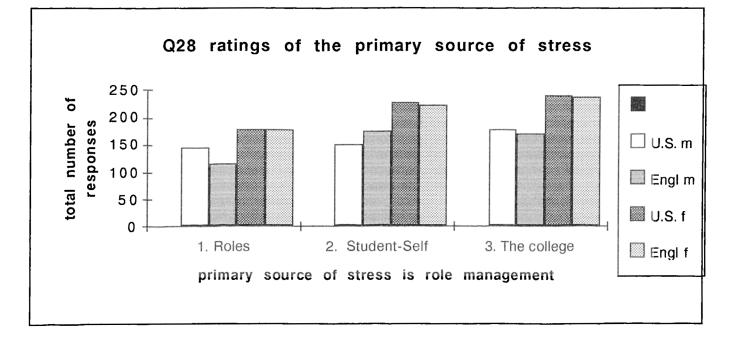
Горіс	Response by total sample
College	822
Self	771
Roles	616*

In Box 5.40 the graphic illustration denotes the source of stress with the lowest number #616 as the *primary* source as respondents would have marked the questionnaire with a number one, therefore the lowest number is the highest source of stress. This is also seen in Box 6.41.



Box 5.40 Primary source of stress by graphic illustration

Box 5.41 Primary source student stress by gender and country



The primary source of stress was management of roles. This is consistent with other studies, (Lanzilotti, 1982; Lance, Lourie, and Mayo 1979; Lauzon, 1989). The gender breakdown indicates that role management was more significant for English males and U.S. males and equally distributed for the female groups. In the second category, U.S. males indicated self more often followed by English males and again the female group. The college as a source of stress was equally distributed for males and likewise for females. Of interest is the manner in which female responses remain relatively consistent in all three categories.

Mature students were then ask to identify the single most stressful thing in their education environment, (Question 29). Five categories were identified. Again, the responses are consistent with the interview data and the significance of time management was cited by other research on mature students, (Lanzilotti, 1982; Kirk & Dorfman, 1983; Berkove,1976; Cleugh, 1972).

Box 5.42. Primary source of stress in the education environment - Q29

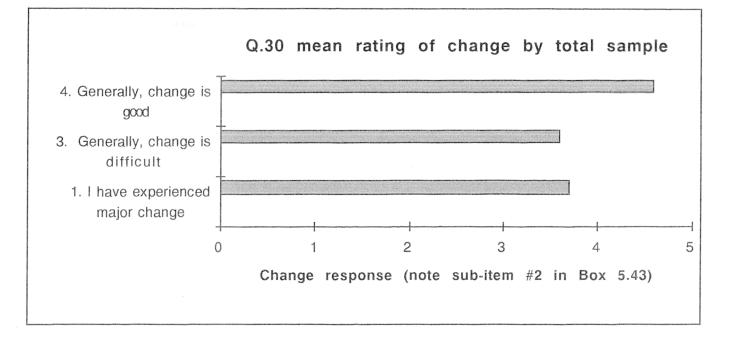
Торіс	Number of responses		
time management	151		
learning related conce	erns 122*		
college facilities, fac	ulty management 48		
managing multiple rol	les 36		
travel to and from co	llege 12		

5.9 Major transition in the lives of mature students: Question 30

Change was common for mature students. When asked "Apart from college, in the past two years have you experienced major changes in your personal and family life?", students reported a moderate amount of change. The interview findings showed students had experienced significant change. There was agreement between interview and questionnaires in that change was perceived as good and they were inclined to disagree that change was difficult. There were only moderate differences between males and females in their attitude regarding change.

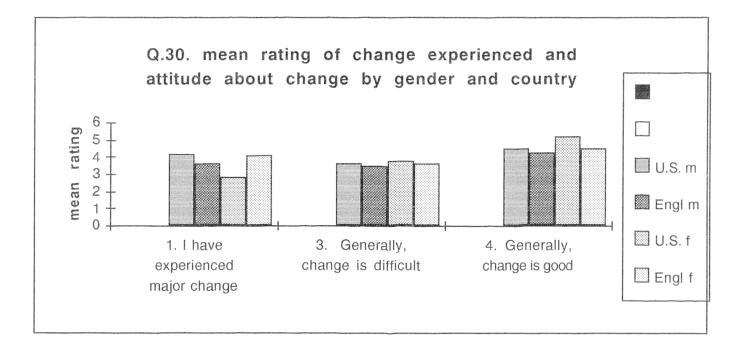
Box 5.43. Types of change experienced by mature students (note: students indicated <u>two</u> significant changes experienced)

Topic	(by number of total responses)
•Family changes, birth, death, moved, illness	238
•Lifestyle, divorce, financial	185
•Employment,career changes, personal goal	174



Box 5.44 Means rating of mature student change by total sample

Box 5.45. Question 30. Means ratings of change by gender and country



Box 5.46 Findings of significance: Amount of change experienced

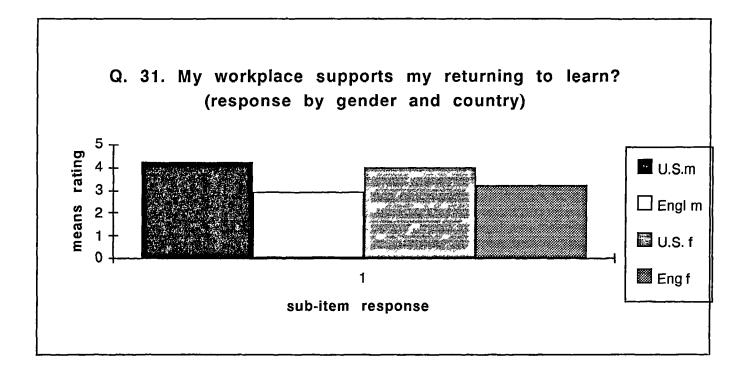
•Findings of significance									
۰Q	•Q 30. Reports of major transitions in student lives as they return to learn								
(1) "I have e	"I have experienced major change in my personal and family life"							
	(a) U.S.	(a) U.S. males reported more change than U.S. females and English males							
Mean rati	ng: U.S. male	e 4.2	U.S. female 2.8 English males 3.0		test=7.486 (p< .001) test=3.092 (p< .01)				
	(b) Engli	(b) English females reported more change than English males and U.S. females							
Mean rati	ng English f	emale 4.1	England male 3.6 U.S. female 2.8		test=2.808 (p< .01) test=7.647 (p< .001)				
(2	l) "Generall	"Generally speaking I think change is good"							
	(a) U.S. females indicated they found change was good to a greater degree than U.S. males and English females (and English males)								
	U.S. fema	ales 5.2	U.S. males England females		test= 7.092(p< .001) test=5.384 (p< .001)				

5.10 Psychological support: Question 31.

With the demands of being a mature student and the role changes that resulted, it was important to determine what the student's support base was. We asked students about the role of support, where it came from and if there was a source of least support.

Box 5.47. Means rating of workplace support

 Students have indicated varying levels of psychological support from others in returning to learn. How would you rate the level of psychological support? (mean average)
 1) My workplace supports my returning to learn 3.6



Box 5.48 Means ratings of workplace support by gender and country

Box 5.49. Findings of significance: Workplace support

Findings of significance							
Q. 31. Level of perceived psychological support: in the workplace							
(1) " My workplace supports my returning to learn"							
(a) English males report less support from the workplace than U.S. males and U.S. females							
Mean rating: England males 2.9 U.S. male 4.2 z test=6.435 (p< .001) U.S. females 4.0 z test=5.445 (p< .001)							

Box 5.50 Sources of <u>most</u> support by country (by number of total responses)

United States	N=194	<u>England</u> I	V=188
myself	89	 myself 	64
spouse	55	•spouse	63
others	18	•other students	16
my mother	10	•others	13
employer	9	 co-workers 	10
children	7	•my mother	5
co-workers	4	•children	4
other students	4	 employer 	4
my father	3	•my father	2

Box 5.51 Source of <u>least</u> support by country (by number of total responses)

United States		England	
•employer	33	•others	28
•others	32	•employer	26
•other students	25	•children	21
•children	14	•spouse	18
•co-workers	13	•co-workers	16
•my mother	9	•my mother	10
•spouse	9	•myself	7
•myself	8	 other students 	4
•my father	7	•my father	4

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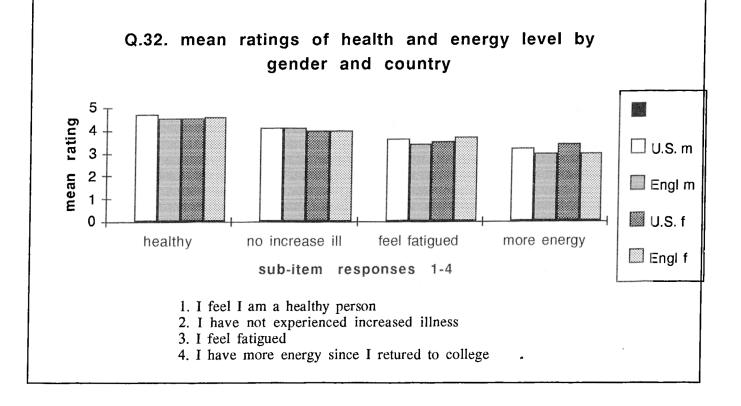
5.11 Reported health and energy levels: Question 32

In the interview students were ask how they perceived their health. The objective was to determine if students had experienced more illness since returning and to find out how they perceived their health status and energy levels. Questionnaire respondents did <u>not</u> report increased illness on returning. The findings were consistent with the interview data. They held a perception of being a healthy person, but acknowledged some fatigue and lack of energy since returning to college. Fatigue was also reported in the interviews.

Box 5.52. Means ratings of perceived health and energy levels

 Perceived health and energy levels 	
(me	ean average)
1.) I feel I am a healthy person	4.6
2.) I have not experienced increased illness	4.0
3.) I feel fatigued	3.5
4.) I have more energy since I returned to college	3.2

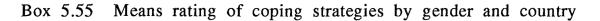
Box 5.53. Mean ratings of health and energy level by gender and country

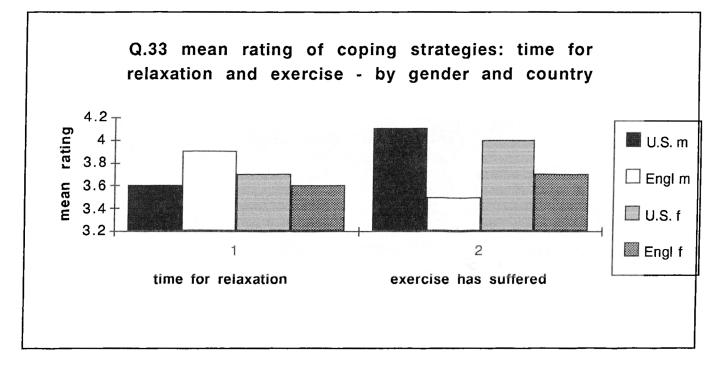


5.12 Coping strategies and balance of roles: Question 33

At the end of the interview students were asked how they put balance into their lives. Responses were varied and reflected students' insight into the value of balance, but they generally agreed their lives were out of balance much of the time. The questionnaire responses reinforced the interview data. Students reported they did not routinely commit time for relaxation and if they had a exercise program, they did not have time for it.

Box 5.54 Means ratings of coping strategies	by total sample
•Balancing of roles/coping strategies	
1. I routinely commit time for relaxation	3.7
2. My exercise has suffered since I returned	3.8





Box 5.56. Findings of significance: coping strategies

Q. 33. Methods of balancing roles:
(2) " My exercise e.g. walking, swimming, has suffered since I returned to learn"
(a) England males and females reported less change of exercise routines than U.S. males and females
Meaning rating: England male 3.5 U.S. males 4.1 z test=3.314 (p< .001)
U.S. females 4.0

Students identified multiple methods of self-care and relaxation by completing open ended questions. Responses were coded by broad categories. The categories were purposely kept broad to record the wide range of coping strategies that mature students used.

•Q.33 Coping Strategies identified by mature students: open-ended questions

- (3) I take care of myself by....
- (4) My primary relaxation method is...

Box 5.57 Coping Strategies identified by mature students

•personal time	•eating well
•reading	•exercise
sleeping	watching television
music and art	socializing/drinking
taking a hot bath	meditation/prayer
family time	sports
doing nothing	movies

An interesting category called 'nothing' emerged on the questionnaire. The students reported they did 'nothing' to take care of themselves because there was not time. "*I don't take care of myself, there is not time.*" And they reported nothing as unstructed relaxation,"...nothing."

5.13. Conclusion of the questionnaire phase: Summary of questionnaire

1. The student experience

The paradoxical nature of the student experience found in the interviews was not as apparent in the questionnaire findings. Students indicated being a student was a positive experience. They were confident in their ability to learn and found it easier to learn than in their previous school experience. They did not report feeling overwhelmed as a student at this time in their life. There were variations in the data when analyzed by gender and country.

•Gender and country differences

• U.S. males and females reported a greater degree of feeling overwhelmed than English males and females.

•U.S. males and females reported it was easier to learn now than English males and females

•U.S. males reported it was more difficult to be a student at this time than English males

•English males and U.S. females reported a higher level of confidence in their ability to learn than English females

2. Institutional support

Students completing the questionnaire were consistent with students who were interviewed and reported they felt the institution was supportive of mature student needs and recognised the expertise and life experience they brought to study. Resources and services for the most part were acceptable The expansion of the questionnaire with an open-ended question on what the college could do to reduce stress levels provided insight into the primary sources of distress the students were experiencing. The primary areas cited were management of coursework, facility improvement, and tutors and instructors issues. •Gender and country: The management of coursework issue was more strongly identified by females. The mature male student in England took greater issue with the concept of 'facility improvement' than course management and reported less agreement on perceived support from the college. The three areas identified—management of coursework, facility improvement, and instructor-tutor issues—maintained equal value across the two samples of mature students in England and the U.S.A.

3. Reaction to returning to learn

The questionnaire reflected consistent positive responses to returning to learn. There was strong agreement that getting good grades was very important and some disagreement that students found it difficult to concentrate. They were confident in their ability to successfully complete their work. The use of open-ended questions in this section indicates students experienced increased self esteem, a broader appreciation of life, a sense of satisfaction in achieving a personal goal, and that they felt stressed.

•Gender and country: Female students in England reported less confidence in their ability to complete the course than U.S. females and England males. England females reported other students as a source of support more often than England males and U.S. males and females.

4. Balance of family, work and study

Questionnaire responses on balancing family, work and study at initial glance did not reveal difficulty or 'distress'. Students were 'inclined to agree' that balance was difficult. This data was less conclusive than the interview. In the interviews, students described thoughts and feelings about the balance of multiple roles. Some students indicated that there was no balance. As students, their family's needs came second. Problems arose when workplace and study deadlines conflicted with available time and value priorities. Students reported they relied heavily on a status quo. When and if one element slipped, for example a sick child or death of a parent, it created an inordinate amount of distress for them. •Gender and country: England females reported more difficulty with balancing commitments, time management, and balancing workplace and study than English males and U.S. females. U.S. males reported more difficulty with time management, balancing work and study and taking family time to study than England males. U.S. females and English males reported less difficulty in balancing and managing roles than England females and U.S. males.

5. Sources of stress

When ask for the single most significant source of stress in their lives, students indicated managing of roles. When ask for the single most stressful thing in their education environment; students indicated not having enough time to complete assignments, manage a job, and meet family needs. The most frequently cited issues in this response were, time, learning, self doubt and balance of roles, in that order.

•Gender and country. The responses here were consistent between gender and country. The English students had a closer gap between 'college' and the 'student-self' than the U.S. students.

6. Mediating factors.

1. Change: Students reported having experienced change and found change to be positive. The primary changes experienced were lifestyle changes, employment and moving house. By gender and country, U.S. females reported less transitional change than others, and England females reported that change was somewhat difficult.

2. Support: Primary sources of support for students was 'myself,' followed by spouse. The source of least support was 'others'; classified as co-workers, friends, and extended family members. Second citing for 'least supportive' was the workplace. The workplace was perceived as least supportive for England males compared to English females and U.S. males and females.

3. Health and Energy: Students reported themselves as being healthy and they did reported and increase in illness since returning to college. They acknowledged some fatigue and agreed that energy levels were lower. The gender and country ratios showed marked consistency in the data. Students were healthy, had not been sick, felt some fatigue and noted decreased energy levels

4. Coping Strategies: Time for relaxation and scheduled exercise regimes had declined for all students. Most did not commit time for relaxation and what exercise programs they may have had were not adhered to. England males and females appeared to be more sustaining in exercise than U.S. counterparts. Important coping strategies included having personal time, eating well, reading, and exercise.

Summary of total sample; England and U.S.A. data

The student experience was positive. Mature students said they were confident in their ability to learn and successfully complete their programme/course. Students reported the institutions as supportive. However, they reported criticism of the management of coursework. There was ambiguity about the mix of younger and mature students. When ask what was the one thing colleges could do to reduce student stress, the mature student said; improve the management of coursework, give us a quiet place to study when we come to the college and provide some nourishment there.

Achieving good grades was important to mature students. While students acknowledged stress as part of their present life, they also said they experienced, increased self esteem, broader appreciation of life, and the realization of achieving a personal goal. The balance of family, work and study was more significant in the interview data than the questionnaire. Males students reported more difficulty in role management in some areas than females. The primary sources of stress came from the balance of roles. The single most stressful thing in the student's environment was time. The students reported a positive change response. England males and females reported less workplace support and the total sample indicated that they preceived themselves as the primary source of support. They identified 'others' as least supportive,(younger students, friends, coworkers, extended family).

Students saw themselves as healthy and did not report increased illness since returning to learn. They acknowledge fatigue and lower energy levels. While they all believed exercise was a prime coping strategies, most said they did not have time to relax or exercise. Primary coping strategies were; taking personal time, eating well, exercise and reading.

Discussion

Mature Students' Perception of Stress on Returning to Learn

Overview and restatement of the problem

Mature students' perception of stress on returning to learn is a study about the problems and stressors experienced by adults who return to college while balancing multiple roles, meeting institutional demands and confronting their self-doubt as a learner. An important part of the literature examination was the origination of a theoretical framework. The framework organized the primary sources of mature student stress that had been identified as the institution, the student-self and role management (Cross, 1981). The framework integrated potential mitigating factors including psychological support, attitudes about change, gender, health status and energy levels, and coping strategies. The problems of returning to college and the mediating factors have been referenced by multiple sources (Mechanic, 1978; Cleugh, 1972; McLaren-Tigar, 1985; Belbin and Belbin, 1972; Hutchinson and Hutchinson, 1978; Lemoncilli, 1984; Lanzilotti, 1982; Berkove, 1976; Kirk & Dorfman, 1983, and others). These studies reported the mature student experience in terms of problems and barriers. This inquiry asked the students to identify the problems or stress from their perception and then measured to what degree the stress was experienced as stressful. The degrees of perceived stress were evaluated by mediating factors to determine if there were gender and country differences. With the exception of Cleugh (1972), the previous studies have not indicated student involvement in identifying stress from his or her perspective. Degrees of perceived stress was more evident in Lanzilotti (1982) and Lemoncilli (1984), and to some extent by Mechanic (1978). What appeared to be less evident in the literature was the involvement of the mature student in determining what was stress and to what degree the identified stress was stressful.

Two methods were used to collect the data on students' perception of stress, first, an indepth interview process and then a questionnaire designed from the data collected in the interview. The population samples were drawn from two countries, England and the U.S.A.. The sample was limited to thirty to fifty-five year old mature students enroled in a further or higher education institution in a programme providing a qualification. The majority of the mid-life student sample identified roles as parents, spouses and employees. As in most work, there are methodological problems. Some of these concerns include the use of self- reported data, accessing a volunteer and a convenience sample, interpreting of another's meaning, potential bias, and conducting the study in two countries. Most research bears the burden of potential error. In this study we acknowledge the potential for error as well as the challenge in investigating a phenomenon involving interpretation of another's perception. As noted in Chapter Four, no two people can ascribe the same meaning to the same event because no two people can bring the same experience to the task (Kelly, 1947).

As indicated earlier, the goal of this study was to identify what mature students perceived as stress, to what degree it was stressful, and how mediating factors may influence the stress response. In this chapter, we will discuss some comparative aspects of doing a study in two countries. We will then overview the findings of the inquiry and describe the emergence of a model of mature student stress. We shall propose some thoughts on the implication of the findings for education, specifically for the mature students who return to learn. We will intermix methodology criticism and in conclusion, summarise the criticism and final commentary on methodology problems. Finally, we will identify themes that appear inconclusive at this time but may have relevance for the future.

6.1 Comparison of two countries

The perceptions of mature student stress was a study conducted in two countries, but it was not a comparative study as such. At the onset of the inquiry thought and discussion was given to doing a cross-cultural comparative study. A cross-cultural comparative research project is a speciality in and of itself. That type of work requires firm boundary definitions, extensive research and analysis in terminology, historical, cultural and societal meanings and definitions (Titmus, 1989; Hake and Marriott,1992). The over-riding practical implications of doing that work, (eg. as a part-time overseas student who was full-time employed), did not allow the time or financial commitment. There was an effort, however, to gain understanding and position certain historical and societal elements into a reference framework. (A historical framework briefly reviews the history of adult education in Britain and the United States is included in the Appendix 8a &8b) The author's intent in studying the historical perspective was to appreciate the different educational systems from which the respondents had emerged. A brief outline of the two systems is in the appendix. A similar process, reviewed socioenvironmental aspects with emphasis on family and workplace issues. We will begin with a review of the some historical and socio-environmental aspects.

England and the U.S.A. have some similarities in their collective history of the education of mature students. The early education of adults in both countries involved religious studies. Later movements in adult education extended into the towns and villages in direct response to civic and economic societal needs, (Kelly, 1962; Titmus, Knoll and Wittpoth, 1993; Knowles, 1978). Some of the common threads that were woven through our collective history, even to the present, were the influences of expanding populations, the displacement of people to industrial locations, the urgency of appropriate vocationaltechnical skills, and the recent conceptual emergence of the 'right' to education access (Kidd, 1973; Charters and Hilton, 1989; Duke, 1988). In this decade, it appears that one of the most significant developments of higher and further education has been the provisions for access. Access provision appear to have been led by the polytechnics, particularly in the expansion of 'Access' course provision, (Titmus, Knoll & Wittpoth, 1993). These initiatives, as well as the concept of open universities and continuing professional education embody some of the principals of lifelong learning, (Bagnall, 1989; Blaxter & Tight, 1994).

6.1.1. Lifelong learning implications: England and the U.S.A.

The concept of lifelong learning is revealed in the growing numbers of mature student enrolments and the implied need for continued technological advancement of our joint workforces. The 'ideal' of lifelong education was developed during the 1960's by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in response to perceived inadequacies in the educational provision for adults. Cross (1989) suggests that the concept of a lifelong learning society could be interpreted two ways. One refers to the fact that we live in a society that is increasingly becoming dependent on knowledge and technology; the other, is the pervasiveness of learning into the workplace and the communities of people of all ages and from all walks of life. She argues that the pressure for change has come largely from external forces, for example, the aging of the population and the emergence of the learning society. "Gradually, higher education in the U.S.A. has been shifting from a privilege to a right. Most students today are not especially grateful for the opportunity to attend college; they feel that it is their right," (Cross, 1989:2). Blaxter and Tight observe that a gap remains between the perceived 'right to learn' and the reality of enrolment particularly in higher levels of education and the conscientious development of lifelong education practices, (1994:162). Titmus, Knoll and Wittpoth (1993) and Cross (1989) acknowledge the lack of further and higher education focus in a education-employment enterprise and argue that this is more apparent in the market-driven approach to the provision of lifelong learning. Cross writes that higher education today provides only a third of the organised learning opportunities for adults; "the remaining two-thirds is provided by varied schools and non-collegiate providers who appear to offer everything colleges do and more," (Cross, 1989:7). Limited participation in further and higher education may be due to market consumption or it may be the result of lack of funding to access. Most adult students enroling in degree courses must bear a considerable financial burden and struggle to balance work and study, (Titmus, Knoll and Wittpoth: 1993:146). By profiling the mature students in this study it seems easier to potentiate the problems mature students may encounter; problems such as, access, finance, and role management.

6.1.2 Mature student participation

Mature student profiles are dynamic and changing. Smithers and Griffin observed, "There can be no simple or general picture of a mature student," (1986:22). Therefore, as we attempt to compile a 'picture' of the mature student here, we do so with the understanding that there are thousands of snapshots of who the mature student is. In viewing students in two countries, it does seem helpful to create a profile of who the student *was in this study*. This profile emerged from 'averaging' the information on 'demographic comparisons of mature students in England and the U.S.A.(see Chapter Five, Box 5. 20). In Box 6.1 we present the 'collected average' of a male or female mature student as portrayed by *this sample*. This reflects a middle class sample enroled in further and higher education to earn a qualification through a programme of study.

Box 6.1. Profile of the 'average' student for comparison in this study

PROFILE OF 'AVERAGE' MATURE STUDENT IN THIS STUDY

•The profile of a returning student in this study is composited from the data of England and the U.S.A. It assumes the 'averages' from the data collected. The student is middle class, mean age is thirty-five, married, making a career change, has been away from previous education for thirteen years, is employed part-time and works twenty-seven hours a week, enroled in a twenty-four month programme/course, no release time from the employer, financing education through government grants, annual family income average \pounds 's 23,000, (\$39,000), has two children under the age of fifteen, identifies three major roles of parent, employee, spouse, and is seeking a qualification.

This profile appears to be representative of England and U.S.A. 'middle class' participation, (McGiveny1993:12; Warren,1985:203). Most British and North American surveys report that the majority of adult learners are middle class and return to learn because of external pressures, e.g. career upgrades or career changes (Mc Giveny,1993:23). Blaxter and Tight observe in their study on time management and mature students that while much attention has been given to access and lifelong learning, less attention has been accorded in education and employment to changes in education provision. "While employers have often been reluctant to provide support or work release, many educational providers seem to have assumed that new clienteles can be fitted into their existing programmes with only marginal adaptation. Studies of the impact upon the students themselves have been thin on the ground,"(I994:162). It may be worth noting here that this sample is not representative of adult education students in general, rather it is a sample of mature students enroled in further and higher education. (see Chapter Two page twenty-seven)

6.1.3.Workplace and employment issues

Mature students in this study were more likely to be employed while returning to study. The students did not perceive the return to learning as a job requirement, but they reported varying degrees of workplace support. Of significance in this sample was the finding that the English student perceived less workplace support than the U.S.A. student. However, it must be noted that in this sample the England male was less likely to be employed whilst studying. Box 6.2. provides data on the England and the United States workplace as it pertains to this study.

Workplace issues	a a			
	In Englar	nd	In United	States
<pre>•presently employed</pre>	males females	19% 29%	males females	76% 76%
•employer paid fee	male females	13% 20%	males females	43% 31%
•release time	(໓ 42%		@36%
•no. of hours worked /week	male female	19 hrs. 30 hrs.	male female	39.5 hrs. 39.5 hrs.
 perceived workplace support by mean rating- Likert scale: 1 to 6 	male female	2.9 3.2		4.2 4.0

Box 6.2. Workplace comparison in this study: England and U.S.A.

Workplace support was perceived in three ways release time, perceived or 'felt' support and financial allocation to defray tuition expenses. In Britain, NIACE (1982) indicates that paid release from work is almost exclusively available for vocational purposes at the discretion of employers. There is a small statutory provision for training involved with trade union representative, and the release is commonly more available to young male, supervisory, technical, professional and managerial staff. In 1980 the *British National Training Survey* reported that over sixty percent of survey respondents had undertaken some form of training during their working life and reported that men were more likely to obtain paid release (NIACE,1982) In the U.S.A., Merriam and Cafferella (1991) indicate that financial cost is of more concern to women than men. However, the cost and income variables are less important than other personal concerns in determining the probability of enrolment. The differentiation between men and women was consistent with 1982 NCES (National Center Education Statistics) data indicating that fifty-three percent of women versus thirty-nine percent of men indicated their source of payment was 'self.' Other sources included government funding, employers and other sources (Merriam and Caffarella,1991:88). Respondents in this inquiry indicate a similar mix of funding sources with an interesting country and gender distribution.

• <u>S</u>	•Sources of funding for education costs of mature students in this study							
Per	cent of course fees paid	•United female by:	States male	•England female	male			
•by	government	22%	21%	60%	66%			
•by	self	41 %	31%	20%	12%			
•by	employer	31%	43%	20%	15%			
•by	foundation(s)	3%	9%	-	-			
1								

Box 6.3. Sources of funding: England and the U.S.A.

6.1.4.Social and Cultural influences: England and the U.S.

The impact of returning to learning on family and community has been reported by researchers in both countries (Cleugh,1972; McLaren-Tigar,1985; Lauzon,1989; Lanzilotti,1982; Roach,1976; Lance,et al, 1979). The emergent themes are similar_returning to learn creates family and individual distress. In England, the social roles of women are slowly emerging from the restricted traditional view of women's place in society, (NIACE,1982). This was confirmed by McLaren-Tigar (1985) who reported that women in her study returned to education because their life

circumstances differed significantly from what they were brought up to believe. They understood that now they must obtain training and qualifications that would allow them work at a more responsible level. "Most reached a point in their career at which they began to realize that their work was limited in scope or even value.....not socially useful, personally meaningful....and didn't promise any future in terms of promotions or increase responsibility or better pay. Despite their commitment to family roles, they had not been content to remain in poorly rewarded positions"(McLaren-Tigar, 1985:63). Smithers & Griffin (1986) reported that mature students in the JBM project¹ about one in five reported having severe problems caused by family commitments. For example, family commitments often meant women had to leave college early to receive children from school and maintain household schedules. Men with families reportedly stayed at university after classes to obtain uninterrupted study time. The study reported that nearly a quarter of the men enroled reported 'severe' concerns about family commitments, (Smithers & Griffins, 1986:111).

6.1.4.1 Some social-cultural comparisons

The two country demographic data reflects middle class, midlife population groups involved in family, relationships, parenting and community. They identified three primary roles; spouse, parent, and employee. Chapter Five, (page 145) provided a demographic comparison of the two countries noting the similarities in primary occupations, program length, years since previous education, reason for returning to college, and personal status. The differences included: variation in full-and part-time study, hours worked per week, sources of financial support, employment status and income levels. It appears the primary differences were centred around employment, source of funding and student status. The study describes the respondents as middle class, having three primary roles, involved in community life and providing for their educational cost through multiple funding sources.

This sub-section on comparative aspects could have been situated in the findings report. However, it seemed prudent to integrate

 $^{^1}$ Joint Matriculation Board entry scheme for mature students: Manchester, Liverpool, Leeds, Sheffield, and Birmingham Universities

the discussion of education and social concerns with the analysis and discussion of the findings.

6.2. Findings regarding mature student stress

Box 6.4. List of significant findings for discussion

•Significant findings: Perceptions of mature student stress

1. The mature students perception of stress when returning to learning is a eustress' experience and is paradoxical in nature.

2. The management of roles is the primary source of mature student stress, but the stress response varies amongst gender groups.

3. Mature students report that the management of coursework is a primary stressor.

4. Mature students are confident about their ability to learn and successfully complete, but obtaining good marks is critically important to their self-esteem.

5. Mature students report the single most stressful thing in their education environment is managing their time.

6. Mature students in England reported less workplace support than students in the U.S.A.

7. Mature students have varied responses to the intermix of young and mature students.

8. Mature students have a perception of 'good health,' do not report increased illness and do not commit time for relaxation and exercise.

9. The mature students in England and the U.S.A. were more similar than different.

In this discussion we will propose an explanation of the eustress-paradoxical experience and show how the theoretical framework was adapated to understand the transactional stress conversion process. In doing so we will present additional stress theories in light of the present findings.

6.2.1. Review of the findings within the theoretical framework

Mature students experience three primary sources of external and internal demands. Cross (1981) identified these as institutional (institution), dispositional (the student-self) and situational (the management of roles). Full description of the sources of stress are in Chapter Two. For purpose of continuity, the framework and the sources will be briefly reviewed.

Box 6.5. Mature Student Theoretical Framework: Literature Findings

MATURE STUDENT THEORETCIAL FRAMEWORK						
PERCEPTIONS	GOF STRESS					
SOURCES OF DEMANDS						
	•INSTITUTIONAL (institutional) RA PERSONAL ispositional)					
FACTORS THAT MAY IMPACT THE •FAMILY S •GENDER •HEALTH - ENERGY LEVELS						

A mid-life return to college involves interaction and personal commitment to an institution. For some students it is their first experience in higher or further education. Identified pressures cited were; accessibility of courses to mature students, the willingness of institutions to create flexible schedules, availability of grants and financial support for part time students, the recognition of the body of knowledge adults have acquired through experience, and the availability of resources and services for mature students. The student-self is a composite of present and past learning experience. Students re-enter education with life experience, and for most, a sense of urgency and a desire for content relevancy. The student may experience anxiety and fear of failure. When students perceive that certain demands are conflicting or difficult, they may perceive the demand as a threat to success and impose internalized stress (Lanzilotti,1982; Kyriacou, 1989). The ability to mitigate perceptions and response may be impacted by the students sense of self-esteem and past learning experiences. Past experiences may include hidden fears, anxieties, and self-doubt , (Cleugh, 1972; Mechanic, 1978; Belbin and Belbin, 1972 and Hutchinson and Hutchinson, 1978).

Conflict and tension may arise when managing multiple roles. Role conflict and role ambiguity appear to be a significant source of stress for students, (Lanzilotti,1982; Lauzon, 1989). Adult roles may include parent, spouse, employee, son or daughter, community volunteer and student. Each of these specific roles may contain a set of subidentities that include self and others' expectations. Conflict and tension that results from internal and external demands may be appraised and mediated through internal and external factors. Some of the mediating factors considered in this inquiry were: gender differences, psychological support, change responses, health and energy levels and the availability of coping strategies.

6.3 Finding one: Mature student experience is a eustress event

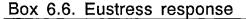
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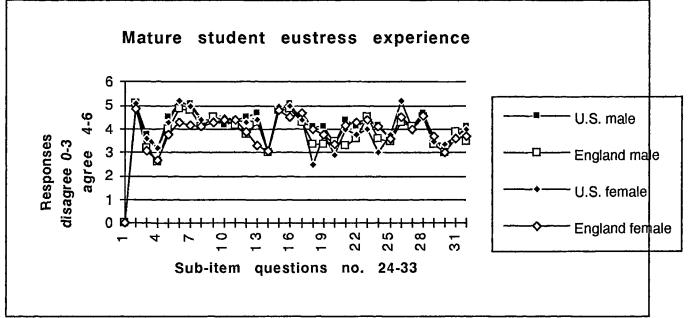
•Significant Findings: Perception of mature student stress

1. The mature student experience on returning to learn is a eustress rather than a distress experience

Returning to learn during mid-life creates multiple demands on mature students. The students in this study identified stress in their college, work and family life, but appear to view these demands as a 'eustress' experience. Eustress is demanding and challenging. Selye (1956) observes that this type of stress motivates, disciplines and challenges individuals. "The fact that eustress causes much less damage than distress demonstrates it is how you choose to take it on which ultimately determines whether one successfully adapts to demand and change", (:74). However, one should be cautious in assuming that eustress is not demanding: for it is. "Simply encountering a significant degree of change, even positive change, in a relatively short period of time, is believed to raise stress levels. It is important to realise that the amount of change that is taking place in one's life may cause irreparable harm". (Cooper, Cooper and Eaker, 1988:62).

The interviews and the questionnaires indicate that whilst students experienced stress, they viewed it positively. Box 6.6 represents the calculations of respondent's degrees of agreement and disagreement. The responses above four ('agree') indicate positive student response and responses below four indicate negative responses ('disagree'). However, since questions were negatively stated a negative response is in effect a positive indicator. For example for the sub-item, "I feel overwhelmed," a mean rating of 3.2 indicates they were <u>not</u> overwhelmed. Calculating the total of categorical sub-items where students reported the degree of stress perceived it indicates that students, in this sample, perceive the stress of returning as a eustress event.





Sub-item responses were coded for the total number of 'agree' and 'disagree' responses. There were a total of 128 possible sub-item responses combining males and females in England and the U.S.A. The total indicates that seventy-five percent of the questionnaire respondents viewed returning to learn as a eustress experience. This finding would be consistent with Lanzilotti (1982), Berkove (1976) and Mechanic (1978) whose respondents report a sense of heightened self-esteem and a feeling of accomplishment when returning to learn. The student interviews of this study support this finding as some students said that whilst returning to learn was one of the most difficult things they had ever done, it was also one of the best decisions they had made

Box 6.7. Sub-item percentage totals (Questions24-33)

Questions 24-33 (total # sub-item responses N=128)	+ positive response 96	- negative response 32
•Percent of total response	75%	25%

The eustress experience of returning to learn contains within it a paradoxical phenomenon. Returning to learn as a mature student is a paradox, an important concept since it incorporates the transactional theory of stress mitigation as a critical part of the mature student experience. Mature student stress mitigation is embodied in the work of McLaren-Tigar (1985) and Lanzilotti (1982). In this study on mature student perception of stress, the paradox emerged when comparing the interview data and the questionnaire responses. Disparity was experienced in what students said in interview and how they responded on the questionnaire. The interview data provided more details of student problems than what was evidenced in accumulative questionnaire responses. In rating degrees and in comparing gender and country groups, this study reveals variations that seem more evident in the verbal data collected in the interviews. The variation may have been a result of the Pithers (1995) argues that questionnaires rarely mediating factors. attempt to examine or measure the extent or affect of mediating personal variable and conclusions may be made on the basis of the group responses to scales, and so questionnaire data must be treated cautiously because the process will not be generalizable. The problem is that there is no reference to any type of normative data or any control group. Pithers points out, "It is understood that many of the self-report stress inventories are in the early developmental stage and such data is lacking; the problem is that this deficiency may neither be recognized nor pointed out by some researchers," (1995:8). The instruments used in this study could be judged as such. Therefore the significant findings are cautiously brought forward for introspection and criticism with the recognition that

the instruments lack standardization and the results may not be very generalizable.

One might argue that all student experiences are paradoxical. However, the mature student experience *is* different because, one, the multiple roles of mature students consign unequivocal identities and subidentities not commonly assigned to school leavers entering college (Blaxter & Tight,I994:167); and two; the age of mature students dimensionalizes the knowledge and experience base the adult student brings to learning and the evaluation of that learning, (Knox, I977). Mature students may consciously create stress situations by choice. They may make decisions that seem highly out of the routine order of their 'place in life' at that particular time. They may have voluntarily reduced or left employment and therefore create financial difficulties and uncertainty. Further, in returning to learn they relinquish some of the control of their lives to an institution, a tutor, or a programme of study. These decisions may not appear to be a time-ordered, reasonable decisions for mid-life adults, (Neugarten, 1976, Handy,1989).

The mature student, it appears, encounters stress when returning to learn, but through the transactional process of appraisal converts potential distress to a eustress experience. This process was speculated by Lazarus (1966) who observed that the outcomes of stressful transactions may be mediated by appraisal and coping. Cox indicates that two steps occur in the appraisal process: one, primary appraisal is associated with the emotional content of stressful transaction; and two, secondary appraisal is concerned with the question "What, if anything, can be done to alleviate or avoid harm?" (1994:355). Mediation ability was found in other student stress studies, (Lanzilotti, 1982; McLaren-Tigar, 1985; and Fisher (1994). Understanding the paradoxical nature of returning to learn raises awareness of mediation factors (e.g. gender, support, attitudes, health levels and coping stratgies) because it is in this transactional process that distress is continually converted from distress to tolerable levels of eustress. Lanzilotti summarises this as a "product of tension" that exists as a result of the pull between opposing aspects of the student's life, (1982:196). In her work with student stress Fisher argues that this transaction response may create difficulty in

demonstrating cause and effect. "The failure to obtain powerful prediction of the risk of ill health from measures of cumulative life events may reflect the different meanings that life events have for people." (Fisher, 1994:6). Berkove (1976) and Lauzon (1989) observe that women and men returners report heightened feelings of self-worth, but corresponding inter-personal strain. While other studies report the paradox, the student's ability to mitigate was not emphasized. Inclusion of mitigation appears important in understanding stress research. Pithers argues that if the individual's ability to transact is not considered, it may presume an inability to impact response outcomes or allow for the continuum of response, (1995:8).

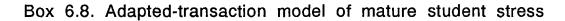
In conclusion, the mature student's ability to perceive returning to learn as a eustress event appears to embody the paradoxical nature of the student response. Returning to learn was described by this sample as being very difficult and very rewarding. It is believed the paradoxical phenomenon might be contained within the context of the transactional nature of stress appraisal and stress response. To further explain this process we will discuss additional stress theories and transactional models that appear applicable to the finding and as a result, propose a mature student stress integration model.

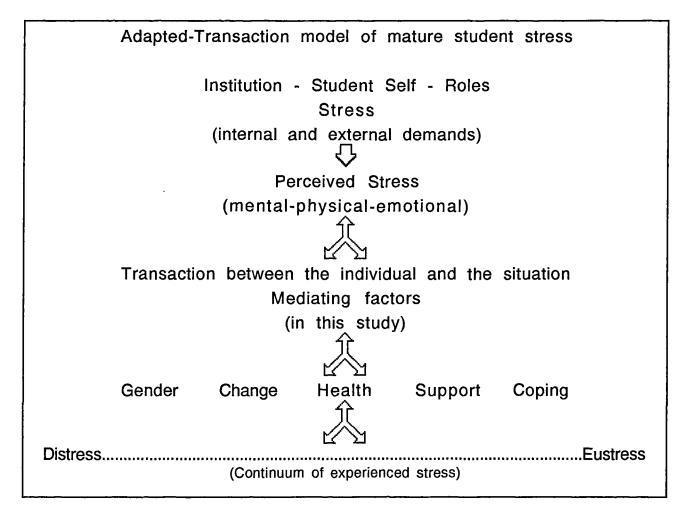
6.3.1. Integrating a framework of mature student stress

The internal and external sources of mature student stress described in the theoretical framework support the design of the study. Chapter Two presents theoretical models of Selye (1956) and Lazarus (1966) and described the process steps in the integration of a stressor. It then proposed a model of mature student stress transaction (see page 50). There have been three generally accepted approaches to the study of stress and stress response: one, the stimulus based approach; two, the response based on physiology and medicine; and three, the interactional approach demonstrated by appraisal theories of stress as outlined in Chapter Two.

This study merges the stimulus base approach of Selye and the interactional environmental approach of Lazarus into a transaction model of mature student stress. Adapting the early model reflects the dynamic process and inclusion of variability in experience along the stress

continuum. The transactional steps in the early identification of stress include the perception of a demand as threatening. The threat causes the level of anxiety to rise. The student may mediate the demand and interpret the demand as distress or eustress.





The four steps in the adapted transaction model include: First, an external or internal demand is perceived as threat or harm. Second, the perceived stress impacts the student's physical, mental or emotional sense of well being. The level of anxiety is raised. Third, the student mediates the stress against factors that may mitigate the level of anxiety: gender, change, health, support, and coping strategies. And fourth, the perceived demand is experienced on a distress-eustress continuum.

Selve argues that stress responses exist on a positive and negative continuum from distress to eustress. In his view the body does not organically discriminate between the distress or eustress because the dissipated energy loss was equal regardless of the source of the demand. As stated earlier in Chapter Two, the flaw in Selye's theory is that it does not allow for individual mitigation. Lazarus argues that stress is determined by the transaction between the individual and the situtation rather than from either one in isolation. And, here we will argue that the continuum is a part of mature student life and experienced demands. It is evidenced in the adult's ability to mitigate psychological life crisis and life events with adaptation skills, (Lanzilotti, 1982:33). This is also reported by Berkove (1976) and Lauzon (1989). As a result of this inquiry, this author believes the ability to name the stressor and mediate it may in fact be critical to the physical, mental and emotional well being of the student. Ability to name the stress is also reported by Curran (1985) in her work with stress and healthy families.

6.3.2. Intergration of multimodal transactions

In counseling clients on stress management, Palmer and Dryden (1995), further adapted a transactional model to allow for the complexity of response within interactional modes."This model provides a simple but realistic explanation of the complicated nature of stress as it addresses the inter-relationship between the internal and external world of the individuals. We have modified the transactional models of stress proposed by Cox (1978) and Cox and Mackay (1981) to incorporate Lazarus' seven modalities", (1995:4).

The psychological processes are important in this model. For example, how a mature student responds to an event is due more to the student's perception of the event and his or her appraisal to manage and cope. The event may serve as a potential trigger to activate a stress response but not necessarily be the primary stimulus. (e.g. math anxiety and self doubt of one's ability). This approach explains why a stress response disturbs more than one area of the individual's thinking. It futher explains the interconnectedness of event, response and outcomes. For instance, after an event or threat has passed, the student may experience residual disturbance due to the action taken or interaction of the different modalities. ² The model supports a higher degree of individuality in the

²Multi-response modes may trigger confusion with the student and reaction heard in interviews such as; "I don't know where that came from.." - or - "I just have a good cry", - or "I swear a lot and feel better."

stress response. "This model provides a simple but realistic explanation of the complicated nature of stress as it addresses the inter-relationship between the internal and external world of individuals," (Palmer and Dryden,1995:4).

The stages are simplified in this adaptation and moulded to integrate the mature student stress concept. The process is broken down into five stages as they were identified by Lazarus(1966), Cox,(1988:18) and Palmer and Dryden, (1995:4-8). Palmer and Dryden point out that individuals who have managed to cope with difficult life-events may perceive themselves as possessing coping skills that they can apply in other experiences. "This is known as 'self-efficacy' and is a major cognitive component in the appraisal of future events as nonthreatening. They may perceive that: "I am in control"..."I know I can do it."..."This will not be a problem"...."The situtation will be challenging and perhaps stressful". These beliefs often prevent the person from going beyond Stage Two of our multimodal transactional model," (1995:6).

Box. 6.9. Five stage multimodal transactional model

•Five stage multimodal transactional model

One: An external or internal demand is perceived as a possible threat to one's ability to successfully cope.

Two: The perceived stressor impacts the students physical, mental, or emotional sense of well-being. The level of anxiety is activated.

Three: The student mediates the named stressor via factors that may mitigate the level of anxiety perceived: gender³, change, health, support, and coping.

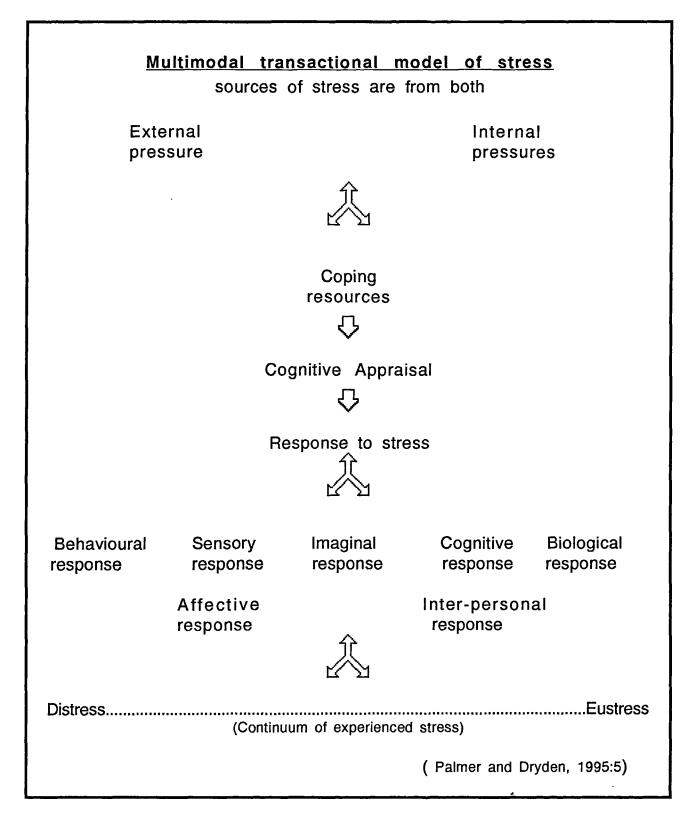
Four: The perceived demand is experienced on the continuum as a distress or eustress experience.

Five: Interventions may be made by the student to reduce or alter the internal and external pressures. If this occurs, then the student may return to a neutral state of equilibrium. If the interventions are ineffective, the student may experience prolonged stress.

³The term gender is used to connotate social role expectation

In the multimodal model, the psychological processes are of fundamental importance. How a person reacts to an event is due more to his or her perceptions of it and his or her perceived abilities to deal with it than to the event or situation itself.

Box 6.10. Multimodal transactional model: Mature student application



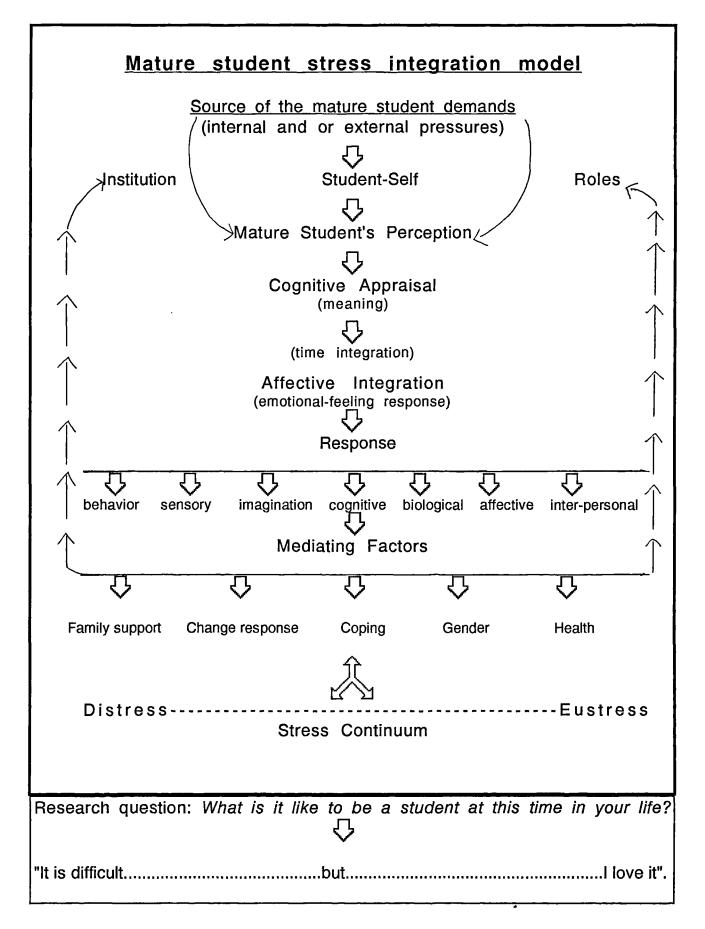
6.3.3. Stages of multimodal model

Box 6.11 Stages of the multimodal model of mature student stress

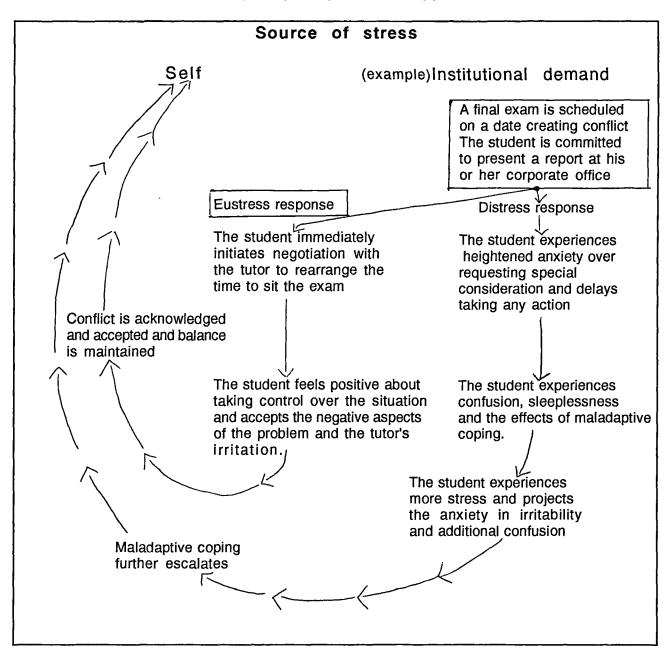
Stage one: A pressure is usually perceived by the individual/mature
student to be emanating from an external source in his or her
environment: workplace, home, family, college, or society/community. Or
the pressure may be internal (student-self) as the student perceives his
or her ability to learn and or succeed. This perception (student-self) may
be based on past or present experiences.
\Box
Stage two: The student's perception of the pressure/demand activates his
or her appraisal of his or her ability to deal with it. Here the student
determines if this is a threat and considers coping strategies avilable.
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Stage three: Psychophysiological changes, known as the 'stress response,'
usually emotions or a set of emotional reactions (such as fear, anxiety,
anger, and guilt occur). Following the above model, these emotions may
have behavioural, sensory, imaginal, cognitive, inter- personal and
biological/physiological componments. There may be behavioural and
cognitive attempts to change the environment or escape the experience
and thereby reduce the pressure.
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Stage four: Implemented cognitive appraisal begins. The student considers
the consequences of the application of coping strategies or responses. Of
importance here is the student's perception of the coping strategies
applied. He or she may imagine failing which, of itself, becomes an
additional strain on the event. If he or she carries perfectionist-overly
conscientuous characteristics, it adds to the demand.
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Stage five: The feedback system or intervention at this stage may
minimize the physiological response as well as give a sense of control. If
this happens then the student may return to a neutral state of equilibrium.
If the interventions are not effective, the student may experience
prolonged stress. The consequences are psychophysiological and may
result in mental or physical disability. The extreme may even be death due
to prolonged exposure of the stress hormones adrenaline, noradrenaline
and cortisol on the body,
(1995: 4-8)
(adapted from Palmer and Dryden, 1995)

The mature student stress model supports the concept of a continuum of distress-eustress by describing the variability of response in what are called 'modalities.'

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A practical application of the model is presented in Box 6.13. This desribes the appraisal process or the continuous feedback loop of perception and appraisal mediated by support as the mitigating factor. This example could compromise primary and or secondary appraisal as the individual works toward resolution within the student-self



Box 6.13 The feedback loop of perception and appraisal

The models incorporate the modalities into specific mediating factors of gender, support, health, coping and change response. We have noted the critical nature and value of the transactional experience in the stress-response outcomes and confirmed evidence in the literature on student stress (Berkove, 1976, Lanzilotti,1982; Lauzon,I989; Fisher,I994).

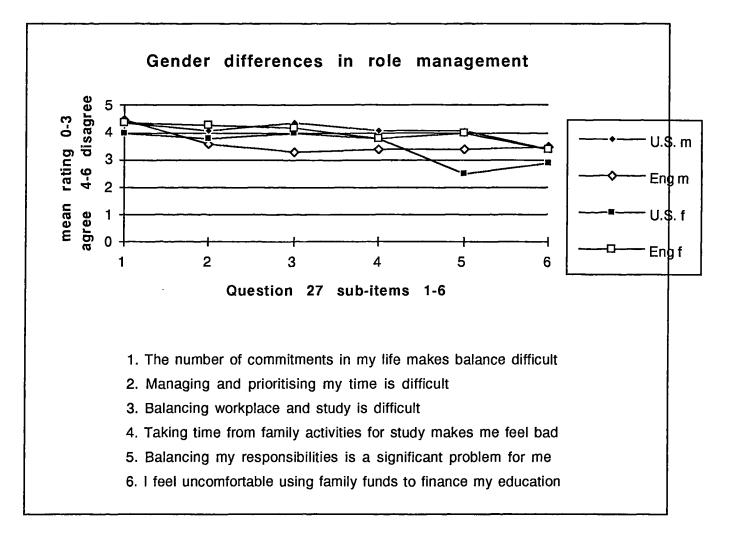
The author submits two salient points of the discussion: one, the mature student's ability to name the stressor may be of value to the student; and two, the variation of individual response will be dependent on how the student interacts within his or her environment and the integration of individual mediating variables.

6.4. Finding Two: The management of roles

•Significant findings: Perceptions of mature student stress

2. The management of roles is the primary source of stress but the stress response varies amongst gender groups.

The management of roles is a significant source of mature student stress. Role conflict and management of multiple demands appears to be the most persistent source of tension in the current student-stress literature, (Berkove, 1976; Kirk, 1983; Cleugh, 1972; Lanzilotti, 1982; Lemoncilli, 1984; Lauzon, 1989;). Lanzilotti states that integration of social roles during change results in heightened conflict and distress for adult students when they returned to learn. He reports more negative role interaction, such as family responsibilities, financial adjustment and lifestyle change, than positive role interactions, (1982:68-71). Argyle (1967) indicates that role identity is reinforced through day-to-day activity and successfully distancing oneself from other roles allows smoother role transitions. However, Lauzon (1989) found that distancing creates other tensions. In his study he observed that distance and role changes resulted in heightened family conflict as the students encountered a change of values and beliefs that were different than those they previously held. Of interest in these findings on role conflict is the perceptual differences and variability in responses between genders and Initially, this study's interview data indicated that sixty-five countries. percent of the interviewees reported the management of roles was a primary source of stress. In Box 5.9. the responses to question 27, balancing college, work and family, indicates the variability of response. In this particular question, the management of roles appears to be significantly stressful for U.S. males and England females. Box 6.14 presents the gender and country differences in role management.



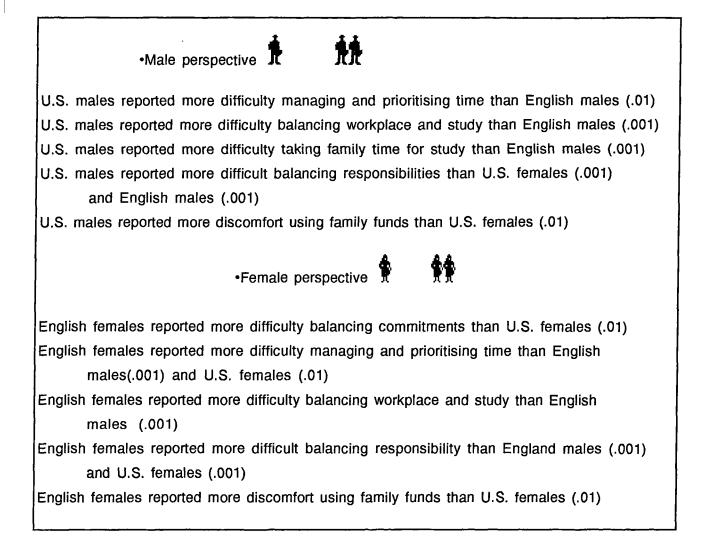
Box 6.14. Gender differences in role management

Sub-item questions in this section were all negative questions based on the interview data. Oppenhim observes that negatively formed questions may enlist the opposite response, however, he suggests there is a place for disapproving attitude types of questions to acknowledge respondent ranges and to counteract the tendency to conceal. "However, when used great care has to be taken in interpreting the results," (I966:62). While the sub-items were single negative statements, respondents were given opportunities to agree or disagree at six levels. Given the caveat on interpretation, we continue to discuss the significance of the findings by gender and country (U.S. male and England female).

Of interest is the amount of 'stress' or level of difficulty reported by males in balancing college, work and family. One of the themes of this inquiry was whether there were gender differences in levels of stress and if so, what was the male perspective, which is of particular interest since there is limited evidence in previous studies of comparative gender differences in terms of role management. Therefore, as in Pither's (1995) earlier analogy about lack of data suggesting 'inability,' an erroneous assumption might have been made that males did not have problems balancing college, work and study because there had been only limited gender comparisons.

6.4.1. Gender differences in role management

Box 6.15. Gender difference: U.S.A. males and England females (Note: 'significance' here will be considered at (.01) or (.001))



We noted earlier that it seemed prudent to contain research references within the gender's corresponding country. For example, references in England regarding male roles are not necessarily applicable to understanding the U.S. male, (unless the author indicates that exception in the presentation). Because of the limited amount of available comparative research and specific research on mature student stress one can only infer conclusions.

6.4.2. Male perspective

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•Male perspective	<u> </u>	RR	 	

An example of a U.S. male's perspective when returning to learn was found in the writings of Jerome Apps, (1987). He described his own experience in returning to learn and being questioned by his uncle. "Why are you going back to school, are you trying to get out of work?" When he applied for funding as a mature student he was asked "Why aren't your parents supporting you?" To which he responded, "Because they are retired" (Apps:1987). In his study on student barriers, Apps indicated role management was a primary stressor. In a sample of ninety-one males and females (gender was not broken out), the prime role stressors are; balancing family and school time, spending time with immediate family, and balancing the job and study. Insight into why role management varied by gender is reported in several studies. Gilbert, Manning and Ponder reported "...male role conflict may result from difficulties in combining work and student roles or from feelings of inadequacy in regard to career uncertainty at mid-life. It appears likely...the sources of role conflict for male and female students should differ markedly,"(1980:27). Lance, Lourie and Mayo indicated, "According to the traditional stereotypes, being masculine means being able to stand back and analyze any problem and come up with a solution...this stereotype means men's sense of self-worth depends on meeting new expectations in the larger world with confidence...men are supposed to find more easily their place in the world" (1979:42). Finding one's place in the world as a male student was heard in the writings of this male, "I had to discover new skills within myself; reflecting, testing, and accepting learning from other students who would provide support and challenge me. It was a struggle; I was faced with a long standing sense of unease about self worth, competence, identity, life commitments and with my inability to address them...The loneliness was enormous...There was pre-occupation with self and low self-esteem in these times of confusion and emotional turmoil," (Keane, 1987:88).

In the interview responses of this study men reported similar insightfulness about their experience. "Maybe I'm cheating my family of my time"..."My father wonders when I'm going to get a real job." Two male interviewees describe the difficulties in returning. The first man, J.P., was fifty years old and the second, J.R., was in his late thirties.

J.P was a male student entering a nursing programme after twenty five years as an inventory control manager in industry. "Men are judged by their job. I think that's the way we generally perceive it. In making this career change I lost my identity and now I'm establishing a new one...I'm good at working with people, I learned that thirty years ago in the service ...Recently my company relocated and I couldn't decide if I should stay in the industry, start my own business or retire...I went to career counselling and took the tests. When I went back they said, is there something you really want to do in your life? I say, Yes, I was in the Medics, and when I got out of the service that's what I really wanted to do"...The man says, "It sure shows that you should have... So I went home and thought about it. I thought maybe its not that stupid, it's what I want to do with my life." (male student interview,U.S.A.)

J.B. described a different struggle: "I have a lot of difficulty right now...my wife and my mother think this is not the right thing to do and so its been difficult. But I'm the one who has been working the jobs and I'm the one who has been 'laid-off'....My family probably thinks I should be working with a firm, hoping on a plane and flying around the country. That isn't good for my family either. I'm kinda between a rock and a hard place...All my jobs were travelling jobs and that was hard on me as far as being away from my family. It hurts to be away. We had a baby who was born, our middle child, who is nine years old right now. We accumulated \$80,000 in hospital bills and had to file bankruptcy....The old days when my mother worked with good benefits and good pension, that's gone. Its not there any more for people. I have no way of knowing how I'm going to put my kids through college, plus no retirement...This course is so difficult...I feel like I am on a race with time...I guess I don't care what people think," (male student interview U.S.A.)

In returning to learn these men faced the challenge of reestablishing an identity or reshaping one. They knew success and they knew failure. The issues of managing and prioritizing time and balancing the number of commitments in ones life may indicate that time for work and family was already limited. Taking on a programme of study adds responsibility, time consumption, and with it an sense of unbalance and self-questioning.



•Female perspective

As women return to learn much of their personal struggle is also concerned with identity and redefinition of relationships as individuals against public prescriptions on how women should behave, (McLaren-Tigar, 1985). In summary statements from her chapter on mobility McLaren-Tigar writes, "Women's jobs had never been, or no longer were adequate and a return to education was necessary to find more rewarding work. Most of these women had been raised to expect a life to be fulfilled by marriage and children. They had come to suspect that such expectations were unrealistic," (1985:63-87).

In a report on the problems facing women returners, Jackson indicates that women returners are not a particularly homogeneous group. What they often have in common is that their careers were interrupted as a result of having children or caring for handicapped or elderly family members,"More women are now thought to be caring for elderly relatives than are caring for young children and this trend will persist with demographic changes,"(1993:98). Women's work, whether inside the home or outside in the world of paid employment, has traditionally involved service and caring for others, (Osborne, 1993).

In a study on managing time, most of the women interviewed by Blaxter and Tight related family, personal or work commitments, "Their studies had to be focused around these commitments, to the loss of most of the wider social aspects of the student life. They often felt under pressure to maintain their overall performance in all of their roles," (1994:167). Of interest in this study, particularly in the interviews, is that women reported the 'management of homes and family' as a source of conflict. Males did not report this. This statement was also found in Gilbert, Manning and Ponder, who write, "...women more than men described beliefs about role demands and familial demands as sources of their role conflict,"(1980:28). The pressure of multiple roles and the complexity of trying to persevere is heard in the interview of an English female.

When asked what is it like to be a student now at this point in your life an interviewee responded,"I suppose at first it was quite exciting. I had not been in formal education for quite some time, it was quite a change, but a change that I wanted. It was an opportunity as I saw it. ...I had discussions at home...it seemed the right time to do it. My son was leaving home so at the time it seemed right. But as it happened it work out because my older son decided to take a year out so he was at home all the time and my youngest son didn't do as well as he had expected in his final exams at high school, so he stayed on for the sixth form, so in actual fact he was home as well...it wasn't a good start... I felt as if I was drawn between work, home, and college which I found very difficult at times...Then I had a brother who lived abroad who was experiencing some intense difficulties with his life....eventually I had to work on negotiations to get him home and his wife...they had lost everything and I had to try to find how I'd get them back, how to pay for it....so it was quite a difficult time. Then probably when all this was happening one of my last essays in college didn't come up to the standard and there was all this feeling. I think when starting college you refer back to your school days and I always had a feeling that I was second in the A form, which was the top form. But in those days if you didn't get to the A form you were really looked down on, there was a stigma...and I wanted to do so well. I think all those feelings that you had come up. I use to get quite up tight at school. Because of course the teachers, if you didn't do what was right in those days, you really got shouted at... you weren't treated like you are now. And so I think all those things stuck with me ... I use to go in with this dread feeling, petrified, afraid I'd make a fool of myself You know, whatever I was doing wasn't good enough...And then my husband told me he was emotionally involved with someone...you say what in the heck am I doing on this course and which is the most important. I couldn't concentrate... I was doing the college work and working besides...when I go home, I just don't go home, when I go home its additional and I think you tend to think, well you have to be strong, you carry all the things and really all you want to do is sit down and say; I need to sit down and do something for me...I have looked at myself a great deal and realized that although the course is very important to me, that its not worth getting so upset about. (How did you

manage?)...Well I think when I actually started, I didn't go to the tutors, because a woman of forty years of age doesn't go seeking help...you have to sort it out, you'll look thick doing that...... I know I've experienced more stress in the last two years than I have in my whole lifetime...

Women as well as men learn role negotiation and struggle with issues of identity. This interview reflects the influence of caring that women traditionally extend to others while attempting to manage other commitments. Reasons English females report more difficulty in management of roles than U.S. females at this point would be only conjecture. Perhaps the English female, within her society, still maintains a traditional view of family and society. However, it would be too extreme to state that U.S. females are more liberated, some are, some are not. There are too many variables influencing such conclusions. The problem must be defined more specifically, relevant societal differentiations investigated and the data subjected to other measurements before factual conclusions can be reliably drawn.

6.5. Findings Three, Four, and Five; The student experience

•Management of course work, achieving good grades, and the managing and prioritising of time

- 3. Mature students report that the management of coursework is a primary stressor.
- 4. Mature students report that obtaining good marks is critically important as they return to learn.
- 5. Mature students report the single most stressful thing in their education environment is managing their time.

Managing of coursework, obtaining good grades, and time management are inter-related topics. Therefore we will discuss them as issues on a continuum. When asked what single thing the college could change to reduce their stress level, students responded, "Improve the management of coursework. " When asked what was the most stressful single thing in their educational environment students responded, "Not enough time".

The mature student's concern with improved management of coursework appears to focus on issues of time, workload and quality. Quality here is interpreted as achieving good grades and doing well. The data indicates (Questions 24 and 26) that mature student are confident in their ability as learners and in the ability to complete the course. They are not only confident, but they want to do well. "Getting good grades is extremely important to me," (Question 26) received a total sample mean rating of 4.85. Perhaps student expectations are such that learning this time will somehow be easier and more interesting as the interview data suggests. The literature and the students indicate they take personal risks in returning to learn. They risk loss of self-esteem, incur financial obligations, and risk social alienation. When the realities of deadlines occur and exams are perceived as threatening, the risks and the benefits may not appear to balance out. Tennant observes that in this role as learners, adults are seen as continually trying to understand and make sense of their experiences. "In effect, learners reconstruct their experiences to match more closely their existing rules and categories for understanding the world," (1991:198). When learner's expectations are not met, the inevitable disappointment will find expression in some way usually as a transference of hostility and other feelings toward the teacher the institution, (Tennant, 1991). This issue of unease with managing coursework could be further complicated by the benevolent approach projected within the theories of lifelong learning that ascribe a philosophy of self-directed learning, recognition of life experience and environments conducive to the learner's needs. There may be a false sense of having control or being in charge of one's learning when in fact, the tutor and or the institution are in control. This distortion was observed by Bagnall (1989) in reference to participation in adult learning, "Participation as control identifies the extent to which a student acts to control the education environment. Elements of control (e.g. content, goals or outcomes) embrace not only the concept of self direction but also the direction of other persons education. Not uncommonly education events are partly if not substantially controlled by players who are outside the event, persons other than students enroled in a course,"(1989:255).

In interviews, mature students experienced the tutor-student relationship as being equal; a concept we called, 'shared authority.' In the questionnaire data, respondents indicated positive statements regarding a supportive college, tutors understood the needs of mature students, and mature students were treated as if they have something to offer (Question 25). However, the majority of students said institutions could reduce their stress levels by better management of coursework. If the returning student felt more on an equal with tutors, where is the discrepancy in the relationship? Tennant (1988) indicates that a common view of the partnership between teachers and adults learners is that it should be equal, open and democratic. However, he adds, this view holds political, philosophical and psychological implications regarding power, mission and relationships. The benevolent or humanistic approach to adult learning will not guarantee a smooth relationship with learners. "For example, a discrepancy will almost certainly exist between the teacher's conception of his or her role and the expectations of learners," (1989:203). In presenting these discrepancies one does not want to rationalize or bandaid the problem with philosophy and psychology. The mature students perceived that coursework could be better managed. While acknowledging there are political, philosophical and psychological implications, we should not ignore the question of whether coursework can be better managed.

One indicator may be the lack of time management skill. Time may create imbalance, disappointment, and a sense of feeling conflicts overwhelmed. If, in one's perception, there is not proper time to prepare or complete; and, there is too much information to handle; and, achieving good grades is very important; than a sense of failure may be part of the experience. Blaxter and Tight indicate that time management is a critical skill for all students, particularly those studying for part---time degrees; "For all of our interviewees, the time available for study was always relative: both to their other responsibilities, and to their perception of the situation of full-time students, (1994:167). Another dimension and or problem solving approach is to consider a consumer perspective. Mature students today may be viewing enroling in a programme from the consumer perspective of purchasing a service or a product in addition to experiencing learning. Welcomed or not, consumer themes have penetrated further and higher education. Therefore, on purchasing the 'services or products' value will be examined by the student and his or her employer who may be paying the student's tuition. Tight (1987) in a discussion about 'consumer value' in higher education challenges the practitioners ability to examine with any thoroughness the 'value' of their work; "It appears to be assumed by most academics that educational opportunities

are of great but immeasurable worth, and that this assumption is widely shared by those outside academic life," (1987:169).

6.6. Findings Six and Seven: Issues of psychological support

We will discuss three issues under this grouping: same-sex parent phenomenon, workplace support, and the mix of young and mature In Chapter Five, (page 134) we discussed an interesting issue students. that emerged in interview when interviewees reported that their same sex-parent, the female student's mother and the male student's father were a source of negative support. The phenomena was reported in both countries. This was a small reporting however, it did represent a significant number of reports within the category of 'least support.' There are some inferences one might make regarding this. If the mature student is a first generation college student, there may be lack of understanding on the part of the parent and confusion about taking on a commitment amidst the traditional roles of mother and father; there may even be resentment or jealousy that his son or her daughter is able to do something which he or she did not. Because it was reported in similar terms by both genders in two countries, it seems noteworthy and may suggest follow up research.

6.6.1. Workplace support

6. Mature students in England report less workplace support than students in the U.S.A.

Workplace support was perceived through paid education leave or release time, financial support for tuition, and 'felt' support' by the enroled employee. In this study, U.S.A. students reported more 'felt' support and financial support, but less release time than English students. Interviewees in England indicated that even with release time available they experienced additional strains such as: one, having to work that much harder to make up for time lost; two, experiencing perceived resentment of co-workers who were taking on some of their duties; three, taking on new responsibilities as a result of promotions (which may have necessitated further education); and four, needing to report grades and progress reports to the employer. The literature indicates that men are more likely to perceive lack of co-worker support on returning to learn than women, (NIACE, 1982; Gilbert, Manning and Ponder, 1980; Lance, 1979). However, other data indicates that men are more likely to be funded than women, (NCES, 1984; and Merriam and Cafferella, 1991). Bengtsson (1989) observes that the concept of funding, or paid education leave was promoted, (however never formally adopted) at the same time the concept of lifelong learning and recurrent education ideas were developed. Some writers have investigated business-education-partnerships and concluded: one, students will continue to pay their own fees in the absence of a national policy to support paid education leave, (Davies, 1995); two, it is the employer-employee attitude to education and academic gualification that appear as the major factors in determining demand for higher education and employer support, (Bengtsson, 1989; and three, employers attribute their low level of involvement not to their own unwillingness or inability to provide release, but the employees lack of interest in further study, (Titmus, Knoll and Wittpoth, 1993). "The PICKUP News ... implies a passive attitude towards training rather than one where employers see training as fundamental in meeting their operational needs and objectives. They are uncertain as to what training might benefit them," (:154).

In reviewing the reasons for return students in England were more likely to be returning because of a career change, and males were more likely to be unemployed. Women often returned for advancement within the occupational area they were already in, (McLaren-Tigar,I985). But employment advancement for some women is limited. Jackson (1991) identifies problems facing qualified women returners who have interrupted careers to care for families. She indicates that employers see part-time employees as people who are not seriously committed to their careers. Jackson observes that age is another discriminating factor in who receives training. In technical areas males under thirty are more likely to be funded. (:98). The perceived lack of workplace support for males in this study of thirty to fifty-five year old students may confirm an age preference for training by some employers.

In summary, returning learners, particularly English males, perceive a lack of workplace support. English males in this study were least likely to be employed, and were seeking a career change. English females in the study were more likely to be upgrading and more likely to receive funding support than English males. In the U.S.A., the funding sources were more equally distributed. One might speculate that given the historical funding sources available to U.S. students, there may not be an expectation that workplaces would provide support, however, nearly one-third to one-half of the students in the U.S. sample received tuition support from their employer.

6.6.2. Intermix of young and mature students

7. Mature students have varied responses to the intermix of young and mature students.

Theories in adult learning support the concept of interdependent learning in the education of adults. The concept emerged from the belief that adults enter learning experiences with a 'body of knowledge' and that this collective 'body of knowledge' is a resource for the larger community of learners, (Knowles, 1978). Group learning is said to promote self-understanding through mutual shared support and generate the experiential base for learning, encourage interaction and trust, (Tennant,1988:126). While the concept of interdependent learning and group process is one strategy for adult learning, the antagonism in student groups must be acknowledged. In this study respondents were 'inclined to agree' that mixing young and mature students benefitted learning (Question 25) and other students were a source of support (Question26), however, the agreement was marginal. Under 'least supportive,' the U.S. sample placed other students third, after employer and others. Males were less likely to find other students supportive.

Other research on mature students indicates similar findings. On the whole, mature students appeared to find being with younger students stimulating and rejuvenating, however, the groups' age and sex differences influence relational factors, (Smithers and Griffin, 1986:105). Challis (1976) found some hostility to mature students among about forty-five percent of the college students who were school leavers. Younger students said they had expected to be treated like grownups and resented being referred to as "the youngsters" by mature students. Others perceived mature students were "out of place" in the young college world. In another report, Roderick, Bell, Turner and Welling (1981) observed that mature students who they perceive to be unwilling to participate in discussion. In this study, mature students reported disappointment in the younger students unwillingness to meet course deadlines which was perceived by mature students as being irresponsible and immature. The issue was particularly noted in the U.S. population under the category of 'least supportive' where respondents wrote additional commentary on the topic. It must be noted however, that the negative responders were highest amongst students who identified their occupation as 'business or service sector.'

In summary, the mix of younger and older students has advantages and disadvantages. Women were more likely to report other students as source of support, while men reported 'spouse' as primary support. In terms of mixed groups, Merriam and Caffarella reported that both younger and older adults respond more effectively in learning situations when confronted with problems their own age group would normally face, (1991:197). Knox observes that during stressful periods in college, mid-life transition, and traumatic change, adults are more likely to turn to close friends, however, men have fewer confidant relationships than women and men will seek out their spouse as confidants, (Knox,1977:540).

6.7. Finding Eight: Health and energy levels

8. Mature students have a perception of 'good health,' do not report increased illness, and do not commit time for relaxation and exercise

Information on stress and health indicated that individuals who experience multiple life change events will experience more illness. This is not reflected in this sample population. Students reported they perceived themselves as healthy and had not experienced increased illness when returning to learn. They did report fatigue and a decrease in their energy levels. There are several perspectives of this finding. One, it is possible for individuals to hold misconceptions regarding their health., (Blaxter, 1991); Second, it may be that mature students are 'hardy individuals' and will report less illness than non-hardy individuals when exposed to high levels of stress, (Kobasa, 1979; Cox, 1988). Finally, the lack of research, in particular longitudinal studies on student stress, may impede drawing conclusive findings and causal determinants until more is known and measured on the long-term effects of stress and study.

Individual differences will continue to present the greatest difficulty in adequately measuring stress impacts. This exploratory study on perceptions of mature student stress indicates the variation between levels of stress as perceived by gender groups in two countries. Statements about stressful environments made in this context should rely on normative data to substantiate the findings, (Cox, 1988; Fisher, 1994). However, normative data on mature student stress is unavailable.

Stress research of an occupational nature has focused on the health, safety and financial cost implied in resulting stress-related illness. Similar emphasis has been placed on student stress in relation to attrition, academic achievement, change factors, and self-efficacy, (Berkove, 1976; Lanzilotti, 1982, Lemoncilli, 1984; and Fisher, 1994). To date, there does not appear to be any research on the correlation of stress and increased illness amongst mature students. The stress studies have been limited, multi-focused, and reliant upon existing inventories which are minimally adapted to the mature student population (Lanzilotti, 1982). What is needed is one, a measure that is sufficiently comprehensive to incorporate study, work, personality and family levels; two, the use of more objective outcome measures in conjunction with a student specific stress questionnaire which means collecting data on illness, attrition, and psychophysiological data over an extended period of time during and after the student's return to learn; and three, more comprehensive data on mitigation and coping measures.

In conclusion, this investigation explored the connection between increased demand and increased illness. Student did not report increased illness, although the interview data reflect that mature students identified health problems. Some of these problems were chronic, and some were transitory. Students did experience fatigue and lack of energy which could be an earlier indicator in disease. These students indicated they had experienced change and reported that they perceived change as good. This indicates they may be hardy individuals' described by Kobasa (1979), who suggests that hardiness leads to a type of coping. "Keeping specific stressors in perspective, hardy individuals basic sense of purpose in life allows them to ground events in an understandable and varied life course. Knowing that one has the resources with which to respond to stressors, hardy individuals' underlying sense of control allows them to appreciate a well-exercised coping repertoire. Seeing stressors as potential opportunities for change, challenge enables hardy individuals to see even undesirable events in terms of possibility rather than threat,"(Kobasa, 1979). When asked about change, respondents in this study indicated that change was good "If I have control over it." This may indicate that mature students manage the stress because they have a perception of an internal locus of control. Though this question was not asked specifically, the evidence volunteered in interviews and in the questionnaire responses supports this conclusion.

Students also indicated an awareness of 'good health' concepts. When asked how they coped with the stress, they responded they were conscious of eating well, trying to get exercise, taking vitamins, getting adequate sleep and finding personal time. They also reflected on facility improvements and indicated they would have appreciated easier access to food and quiet places of study and reflection when coming onto the In interviews, they self-reported health short comings; of weight campus. problems, poor eating, lack of exercise, and lack of sleep. Those who had experienced inordinate amounts of stress did report having to take time out from study, yet they had returned and persevered. However, it must be noted that this study did not include those who left study. That dimension could add another perspective on health status as well as contributing factors. Follow-up research on hardiness factors and or causal determinants could determine if there is a correlation in health, energy and increased illness on returning to learn.

6.8. Finding Nine: Similarity between England and the U.S.A.

9. The mature students in England and the U.S.A. were more similar than different.

While there are findings in the study which indicate statistical differences between population groups, for the most part, the two populations appear to have many similarities. Some assumptions are: one, English students received more release time for study; two, English students appeared to cope through physical exercise more consistently than U.S.A. students; and three; the total student sample did not report an increase in illness as a result of returning. Students in both countries indicate the balance of roles and time management was a primary source of stress. Both samples reported increased self-esteem, broader appreciation of learning, and felt they had achieved a personal goal. Support was experienced primarily through self and spouses/partners and students in both countries acknowledged that while they felt supported, they also felt others did not understand what they were trying to do.

England males differed in two areas; one, they perceived facility improvement would reduce their stress level in preference of management of coursework, and they were more likely to have continued an exercise program upon returning. Some of the gender-country differences discovered were

•U.S. males and females reported a greater sense of feeling overwhelmed than English males and females
•England males and females reported it was easier to learn than U.S. males and females
•U.S. males and females reported more workplace support than English males and females

In the selection of the Findings for Discussion we did not provide analysis on the gender country differences with the exception of role management and workplace support. These areas appeared to have more dual-country data in regards to role conflict and paid education leave and policies governing the issue of employer support. Other areas, while of interest, would require extensive socio-cultural research into the two populations such as would be done with a cross-culture comparative education study. Which is beyond the intended scope of this work. The two-country sample allows some comparative aspects that illuminate the response, but don't necessarily explain why.

6.9. Implications of this research for education

This study of the perceptions of mature student stress on returning to learn conducted in England and the U.S.A. is not a comparative study. The data on gender comparison appears to be original. However, the phenomenon of returning to learn is a known reality in both England and the U.S.A. and because of this, the findings could be applicable in both countries. The implications presented here will be those of a researchpractitioner and focus on issues that are believed will improve or at least question the existing standards and policies regarding mature students.

6.9.1. The return to learn is a eustress-paradoxical experience

Mature students experience returning to learn as a eustress event and describe the experience as both wonderful and overwhelming. Critical to understanding this concept is the transactional nature of stress mitigation. Students appear to perceive demands as distress or threat, but through primary and secondary appraisal, convert the distress to eustress. This is not to say the experience is not distressful for some or all in their programmes.

There are several points to be acknowledged and built upon here. First, human energy is limited. Whether a stress experience is eustress or distress, it extracts physical energy. Chronic periods of energy loss may cause irreparable physical and organic harm. It is not possible at this time to predict cause and effect, but there is substantial literature that supports this. Therefore, tutors, counsellors, advisers, supervisors who are in a position to counsel and guide mature students should acknowledge energy expenditure and provide mature students with resources that inform students about stress management.

Second, the transactional nature of stress appears to be the key factor in converting distress to eustress. Most individuals have within them the ability to manage this conversion. Those close to the student's work, study and family life, can encourage the development of coping strategies and skills to enhance and enable conversion of distress. Students should be encouraged to develop multiple internal and external coping options.

Third, some students will experience distress and this may be through no fault of their own. Life events may occur during the course of study that will generate chaos. For example, parents may die, spouses may be made redundant, marriages may be broken, children may potentiate crisis, work situations may change from supportive to threatening, and these extraordinary demands will extract energy and potentiate harm. At this time, students should be encouraged to take time off from study. Institutions and managers can create a safe environment for this transition to take place without faulting the student. Punitive management has no place in this kind of situation. The student may ultimately decide to leave the course, and as an adult, that is his or her right. Whatever decision is made, the mature student must be supported.

Fourth, students should be encouraged to take time to make thoughtful decisions. Decisions are best postponed when one is in the midst of traumatic change and transition. A waiting period should be encouraged. Students who are experiencing a crisis event in their life will be very sensitive to what is and isn't said. Students will remember thoughtless remarks because of a heightened sensory capacity during times of crisis. Thoughtful listening and support is prudent here.

6.9.2. Value-added mature student experiences

Mature student stress cannot not be eliminated. Institutions may be responsive in how they acknowledge the reality of stress in student lives, and manage programmes and coursework respectively. A list of suggested practical steps to better manage programmes includes:

1. Students need to know what is expected of them in clear, specific terms that specify time frames. For example, what competencies they are expected to bring and what skills they are expected to develop by what date.

2. Heads of departments must take responsibility for reducing end-of-term chaos when tutors overload students with information in completing syllabus requirements. Information must be presented in a orderly, sequential manner and in appropriate amounts for good learning to occur. This may require communication between tutors, departments and evaluation processes to measure progress.

3. Mature students might be provided with short courses in time management, value clarification, stress management, nutrition management, alternative exercise options, and availability of support resources.

4. Mature students have indicated they would value quiet places of study and reflection when they come on the campus. They have

requested access to nutritional food and beverages in these areas. They requested safe, well lighted car parks and input on the times day classes are scheduled so as to accommodate work and family demands.

5. Research on the impact of student stress needs to have focus on longitudinal studies and follow-ups upon completion of a programme of study for a twelve to twenty-four month period.

6. Business-education partnerships might be built to enhance the concept of workplace support and the business-industry understanding of the benefits of employees returning to learn and the services available within the education community.

6.10. Methodology issues and concerns

Some of the design problems were discussed in Chapter Five and these concerns are reviewed here illuminated by the reality of the data collection and subsequent findings of the inquiry. This is done in an attempt to objectively criticize one's own work and point out the potential for error in the findings. Robson indicates that anyone moving away from studies based on quantitative data is likely to endure critcism that one's work is suspect and not worthy of admission into the 'magic circle.' He argues that there is virtue in multi-method approaches, however, one's approach in analysis needs to be rigorous and systematic, (1993:402). We will discuss some of the concerns here in a manner that acknowledges the problems and error potential, but does not invalidate the comprehensiveness nor the commitment to understand a poorly understood phenomenon of mature student stress.

This inquiry was conducted in two countries with a systematic process of dual country literature review, interviews with sixty individuals, and the collection of three hundred and eighty two questionnaires obtained from England and the U.S.A.. As was noted earlier, Chapter three, page 97, this was not intended to be a comparative analysis between countries. The comparative aspects, however, do lend many justified criticisims of the data because of the obvious socio-cultural differences. We have attempted to show similarities in the education systems, but these similarities are from a simplistic, 'organizational and or institutional base and do not in any way account for the philosphoical and political differences within the education systems. In reference to adult education, Brookfield (1988) observes that Britain and the U.S.A. have vastly differing education traditions because of our divergent political cultures. This demonstrates that whilst one may view similar findings, when one looks deeper into the subject, the differences began to emerge. The study lacks in-depth sociological and culture perspectives about the sample population therefore, one must be sceptical in presenting answers or findings.

In previous discussion we have acknowledged potential methodology considerations and or flaws. The use of self-reported interview and questionnaire data suggests validity and reliability concerns. Emergent themes might have been confirmed through follow-up interviews using the transcript data for validation of interview content. One could have used a systematic, peer debriefing process, or computer technology to scan word and or phrase frequency. In this study the author may have placed more emphasis on mediation in the stress transaction by placing emphasis on causal factors. One could have linked one or more mediating factors to the degrees of perceived stress to more determine causal influence. Due to the lack of specific information on mature student stress mediation, the researcher was biased by an exploratory nature and may have overlooked the greater potential for causal relationships. There is an assumption of distress-eustress conversion, but more conclusive evidence would be needed to determine why this occurs and to what degree.

The generalizability or transferability of the findings to the mature student population was validated somewhat by establishing consistency with other reports on student stress. However, the use of a volunteer and or convenience sample may impair generalizability to other population groups. This was a middle class, Euro-American sample of mature students enroled in further and higher education for a qualification. Therefore the findings may lack applicability to some ethnic groups, mature students enroled in short-term avocational courses, and low income groups. The theoretical framework and the hierarchial focused interview tool might be adapated to other groups and thereby generate necessary adaptations in the questionnaire. The questionnaire design, on completion of the inquiry and results, might be improved upon.

For example, open ended questions might have category topics to be checked off, some questions might be eliminated, and or, the order of question sub-items might be reconsidered.

6.11. Themes for future investigation

Many themes for further exploration have emerged here. This was an inquiry about perceptions of stress. It was an interpretive study exploring a complex phenomenon. The fact that the study involved two countries provides unusual vistas in which to view the problems mature students face on returning to learn.

There are some consistent emergent themes in this study that were found in other studies on mature student stress. The two most consistent interrelated issues are managing of roles, and managing time. The issue and the problem will remain with us as mid-adults continue to return to college. "Adults are increasingly expected, and often required, to engage in serious study if they are to maintain or improve their employment positions and make the best of their life chances. But this reality is coming about without much planning, and it is being achieved by placing a disproportionate element of the responsibility and burden upon the individual adults themselves," (Blaxter & Tight,1994:178). Individuals would benefit from further research to determine what skills are needed to manage time and balance roles. Some colleges provide short-term courses on time management. The impact of such coursework might be measured to learn about skill achievement, improved efficiency, and stress reduction.

Returning to learn potentially increases-distress and eustress. There is minimal evidence available about the impact on health. This study indicated that students did not report an increase in illness on returning to learn. Further research into the long term impact of chronic stress may provide a more realistic view of the effects of stress of returning to learn. Students, both full-and part-time, might be observed during the study time and followed up for a period of one to two years after completion. This would provide a more accurate view of the phenomenon. Lemoncilli (1984) and Roach (1976) reported some students appeared to be compromised mentally, emotionally and physically by returning to learn. However, as in this study, the students were observed as a 'snapshot' in time. A longitudinal study could improve our understanding while quantifying the extent of the problem.

The issue of physchological support engendered two issues of interest. One was the lack of support from the returning students' samesex parent. The other was the ambiguity amongst mixed aged students, mature students and school leavers. Understanding the lack of support from one's parent might enable educators to better understand attitudinal barriers mature students face. Questions prompted by this are: How often does this problem occur?; Did the mature students' parent attend college?; How does the lack of support affect the student's self-esteem?; and What information could students receive to mitigate this issue?

The workplace support issues raises many questions and as reported here, has been the subject of other inquiries, (Tight, I987; Bengtsson,1989; NIACE, I982). This report indicates a perceived lack of support primarily amongst English males. Questions that arise from this finding are: What expectations do employees have of their employer?; How is support perceived?; Is there an sense of priority ranking such as, financial support, release time, or co-worker/peer support?; Why do mature students in the U.S.A. perceive more workplace support than mature students in England?

General Conclusions

Mature Students' Perception of Stress on Returning to Learn

Overview:

This study on student stress involved a total of four hundred and fifty-five mature students in England and the U.S.A.. The study was initiated at the University of Leeds in 1989 and concluded in 1995. Access to the mature student was facilitated by faculty and staff in further and higher education institutions. The aim of the study was to gain understanding of the stress mature students encounter as they return to learn. In that effort, we interviewed sixty students and completed three hundred and eighty-two questionnaires. This chapter will summarize the research, the research experience, the research objectives, and offer suggestions for future work. At this point the researcher expresses some opinions, concerns and self-critique of the research journey.

7.1. Research commentary

The study confirmed other findings about mature student stress primarily that role management and time management are sources of significant stress for mature students. This study identified some specifics about balancing roles such as taking time away from family to study and balancing multiple commitments. What was of particular interest to the investigator was the significant difficulty men encountered in balancing roles. These findings are not conclusive nor can they determine causality. What the inquiry does provide is direction for future work in student role and time management. The gender and country comparison indicated some differences between male and female groups as well as male-male and female-female groups across countries. More research is needed to determine causal factors and the impact of mediation.

The reaction to returning to learn and the student's identification of specific stress, (e.g. management of coursework, time management, anxiety regarding grades, and the intermix of young and mature students) is data that could be useful in student management. It

would have been more valuable to have specifics regarding management of coursework. This data was gathered from open-ended questions and therefore is subject to coding error. In retrospect of the results, this investigator would have piloted the questionnaire more extensively before undertaking the general survey.

The theoretical framework appears to have captured some essential elements of mature student stress. This framework may help focus other research on student stress. The questionnaire was designed from the framework as well as the interview data, and additional work on the questionnaire may provide a more comprehensive measurement tool, particularly in view of some of the findings. One of the researcher's goals is to improve the guestionnaire and data collection with student groups. Continued work might be undertaken with a cross disciplinary team, for example, education, medicine, and social science. Fisher's (1994) indicates a need for self-report questionnaires to access causality of stress and student illness. It would be of value to work up a instrument that might than be further enhanced by psycho-physiological data and continued indepth interviews of mature students. The concern registered by Lemoncilli (1984) that mature students may be at risk was perhaps premature, however, his concern for long-term follow-up of students is justified. То indicate, as we have here, that mature students did not report increased illness, could be indicative of a snapshot in time. Follow-up studies with mature students would be valuable.

7.2. An observer's view

A research team to collectively analyze and categorize the interview data and the questionnaire development would have been invaluable in this journey. Isolation was a problem for the researcher. Most Ph.D. projects comprise a single lonely journey. However, the aspects of doing research in two countries and working full time compounded this. If the researcher were to begin the task again, she would, first establish a research team, particularly for the interview phase. It would have been of interest and value to have taken the time to return the interview analysis to the interviewee and ascertain congruency with interpretation. This procedure is recommended in any studies that duplicate this one. The researcher would also establish extensive piloting of the questionnaire and implement testing for reliability into that process. (This might be more easily done within one country than experienced in this work.); Third, the researcher would explore other mediation factors such as age groups and or income levels for comparison of stress and degrees of perceived stress. While age groups were considered in this work, the sample size wasn't sufficient to indicate meaningful results. One would need a larger sample size so that the smaller break-out groups would retain some significance. Comparative analysis may continue to be of interest and value as education is extended into a global network. This study could be further extended with detailed comparative research to more fully expose the reasons for the similarities and differences found.

To research and study in another country is a challenge and an opportunity. Whilst the education systems have many similarities, the differences are greater at the level of detail. Were the researcher to began again, she would do a comparative study with a more tightly focused and less complex topic such as stress. For example, one might do a comparative study on the workplace and employment issue alone. Or research the area of role management and sub-identities with a crosscultural perspective. Cross-cultural comparative work will become more accessible as INTERNET networks are more commonplace, inter-continental travel is affordable, and international conferences involve a broader spectrum of researchers and practitioners. It is one thing to conduct cross cultural research from mutual journals and libraries, however, it is a challenge to be able to go out amongst the sample population and interact with real world research.

7.3. Retrospect objectives

In Chapter One we identified the research objectives. There we submitted current literature on mature student stress. A continued problem in this research area is identifying stress' as a topic amongst mature student research. At the time of this writing the author was not able to locate any other research specific to this work or to determine related comparative research on England and U.S.A. mature students. The interviews and questionnaires were successfully completed in two countries with the support of cooperative staff in both countries. The primary goal was to determine what mature students perceived as stress and the significance of that stress. The students reported institutional, dispositional and situational stress. However, they further reported that while returning to learn was stressful it did not appear to be distressful. Males and females both experienced significant stress in role management. Students appeared to have a positive attitude about change, a sense of being healthy, sought support from multiple sources, and utilised short term coping strategies to maintain balance in their lifes. The sample collected in two countries revealed more similarity than difference.

7.4. Recommendations

1. Returning to learn appears to be a eustress-paradoxical experience. Students experienced fatigue and the majority were not able to continue exercise and relaxation programmes. Students should be encouraged to focus their energy and not take on additional responsibilities whilst returning to learn.

2. The transactional nature of stress appears to be a key factor in converting distress to eustress. Students should be encouraged to develop multiple coping strategies and support networks. Institutions may enhance this by offering short courses on time and organisation management.

3. Institutions might consider involving students in an advisory capacity on management of coursework, facility improvement, and tutor-instructor relationships. Mature students reported concern with overload at end of term and during holiday breaks and expressed this in terms of quality of learning. Teacher and learning effectivenesss is based on well spaced meaningful learning experiences.

4. In terms of 'creature comforts,' institutions might consider providing quiet places of study, accessible low fat food and beverages, and some form of student support group, even if only three or four times a year.

5. Related studies involving comparative mature student populations might contribute to broader understanding of the problems experienced by mature students. The continued access to cross-cultural groups is but one step in respecting the human experience of returning to learn.

The knowledge gained in this research on the mature student experience, the sources of stress, the self-doubting learner, the value of past learning experiences and the necessity to learn about the whole person in his or her environment all have a role in management of efficient learning. Keane writes, "Many of these learners experience low selfesteem. They struggle with their sense of worthiness and competence, they feel inadequate and abnormal, and they use a great deal of energy in trying to hide the seriousness of this inner struggle..."(1989:98). Significant learning about oneself in relation to his or her environment is an ongoing energy expenditure. The goal it would seem would be to channel the energy into a eustress experience. Brookfield (1989) observes that personal learning in relationships to one's world includes: one, a selfconscious perception that learning is of critical significance in re-shaping his or her life. Two, learning is frequently triggered by a major life crisis and the self-scrutiny that accompanies the crisis. Thirdly, learning involves some re-definition of the self in terms of identities. Fourth, during the process of learning he or she will become more reflective about such things as appropriate roles, stereotypes, past assumptions, expectations and views of the world. In conclusion, Brookfield writes; "One of the most difficult tasks to accomplish when attempting to learn from our experiences within relationships, is to be able to cultivate a genuine detachment from our own emotions and self-interest to be able objectively to understand another's criticism, reservations and doubts," (1989:67).

Providing returning learners with an environment that communicates the value of life experience, supportive criticism, acceptance of self-doubt, and encouragement in developing the ability to cope with demands is to give the learner space to grow and to change. Hayes observes that the real paradox of our times lies in the fact that there is no effective recognition of the need for integrating our environments, internally and externally. "It seems as though a human hand lashes about in the raging sea of life experience grasping at anything suggestive of life, heedless of the fact that the clue to life's meaning lies in the very byoyancy of the ocean itself. Anxious and ambitious, it reaches out, struggling to achieve but it has not the courage to let go and trust to the flow of the tide and the power that lies both within and beyond itself..."(1995:29). It might well be that stress management is truly inside out managment. As Victor Frankl observered, the last of human freedoms is to choose one's own attitude....to choose one's own way.

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Appendix Materials

- 1.(a-f). Survey of returning learners
- 2.(a-b). Interview biographical data and interview questions
- 3.(a) Information flyer: Are you a student age 30 to 55?

(b-bb). Sample letter to participating colleges in England

- 4. (a-b) Interview analysis matrix
- 5. Inter-college recruitment memo in Minnesota
- 6. Havighurst's Stages of Adult Development (age 18-55)

7. Responses to open-ended question on, "The one single thing the college could do to reduce my stress level is....."

- 8. (a) Historical Frameworks of Adult Education: America(b) Historical Frameworks of Adult Education: England
- 9. (a-e) Comparatiave Analysis: England and America

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SURVEY OF RETURNING LEARNERS

RESEARCH STUDY: PERCEPTIONS OF MATURE STUDENTS (COMPARATIVE STUDY BETWEEN BRITAIN* AND THE UNITED STATES)

2) FE (to be completed by researcher) 1. IDENTIFICATION CODE: 1) HE 1.) FEMALE____ 2.) MALE ____ 2. GENDER 3. AGE 1.)30-34____ 2.) 35-39____ 3.) 40-44____ 4.)45-49____ 5.) 50-55____ 1.) _____part time student or 2.) ____full time student 4. Indicate if you are 5. The length of my present programme/course is 6. In my perception, the primary reason I am taking this programme/course is: (Please tick the one response that most accurately describes your situation.)

 1.)_____ making a career change
 3.)_____ upgrading in present career

 2.)____fulfilling personal goal
 4.)_____lost my job

 5.)____other

 7. On completing this programme/course, is there a separate or further license or registration exam you must take before you could be employed? 1.)____yes 2.) ____no 8. What percent of your course fees are paid by the following: (tick response nearest to the % that applies below 25% 50% 75% 100% 1) ____ paying my own fees 6) my employer is paying my fees 11)_fees paid by government grant 16)__fees paid by private foundation grant (Percentages should add to 100%) 9. I am currently employed. 1.) _yes 2.) _no (if "no" go to question 15) 10. I am employed as_____ 11. I work approximately _____ hours per week 12. Do you perceive this programme/course to be a requirement for your job? 1.) Yes 2) No 13. Does your employer provide release time for you to participate? 1.) _Yes 2.) _No 15. My approximate family income is.. 1) ___under £5,0004) __£20,000 to 30,0002) __£5,000 to 10,0005) __£30,000 to 40,000 3) $_$ £10,000 to 20,000 6) $_$ £40,000 to 50,000 7) _______to _____to _____

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Appendix material #1a

	1.) 2.) 3.) 4.)	Marrie Widow	ed/living wit or Widower ced/separated	-	r	
17. I have children 1.)	yes 2	.)No (if	"no" go to c	question 2	0.)	
18. Number of dependent children	in my fan	nily				
19. Ages of children in my family Please indicate the number of children in each age category	1 2 3	.)0-5 .)5-10 .)15-2	4.) 5.) 0 6.)	15-2 20-2 25+	20 25	
20. Please tick all the roles below v	which you	fulfill. I am	a			
	1.)pa 2.)er 3.)s	rent nployee pouse/partn	4.) gra 5.) o ler	andparent ther		
21. I provide direct care to my par	ents 1.	.)Yes	2.)No			
22. I do volunteer work in my com	munity 1.)	Yes	2.) <u>No</u>	0	00000	
23. EDUCATION BACKGROUND (Beginning with <u>completion</u> of your						time.
beginning with <u>completion</u> of your	secondary	education. G	ive date starte	ed and con	mpleted)	
Name of Institution	-				Dates	
Name of Institution					Dates	
Name of Institution	now, ho	w strongly		ree or d	Dates	 vith the
Name of Institution	now, ho he circle	w strongly with a pe	do you agi encil in the	ree or d	Dates	 vith the
Name of Institution	now, ho he circle	w strongly with a pe	do you agi encil in the	ree or d	Dates	 vith the
Name of Institution	now, ho he circle tudent at Definitely	w strongly with a pe this time Strongly	do you agi encil in the is your life	respons ? Inclined	Dates Dates	vith the best
Name of Institution Name of Institution Reflecting on being a student following statements. Fill in t describes your perception. 24. What is it like being a s 1.) Being a student now is a	now, ho he circle tudent at Definitely disagree	w strongly with a pe this time Strongly disagree	do you age encil in the is your life Inclined to disagree	ree or d responses	Dates Dates	vith the best Definitely agree

2 *

	Definitely disagree	Strongly disagree	Inclined to disagree	Inclined to agree	Strongly agree	Definitely agree
3.) I feel overwhelmed as a student at this time in my life	0	0	0	0	0	0
4.) It is easier for me to learn <u>now</u> than in previous education experien		0	0	0	0	0
5.) I enjoy being a student/learner	0	0	0	0	0	0
6.) I am confident in my ability as a learner	0	0	0	0	0	0

25. Students returning to college may find varying levels of institutional support. Students who were interviewed about institutional support identified the following issues. How much do you agree or disagree with the statements (Fill in the circle that best fits your response)

	Definitely disagree	Strongly disagree	Inclined to disagree	Inclined to agree	Strongly agree	Definitely agree	
1.)The college is supportive of	0	0	0	0	0	0	
of my needs as a mature student							
2.)Instructors/Tutors/Supervisor generally understand the needs of mature students	s0	0	0	0	0	0	
3.) With life and work experience, I am treated as if I have somethin to offer this programme/course		0	0	0	0	0	
4.) The combination of young and mature students benefits learning	0 g	0	0	0	0	0	
5.) Services are readily accessible to mature students (e.g. counse		0 g, support)	0	0	0	0	
6.) College resources are readily accessible to mature students (e	0 e.g. library,	0 personnel)	0	0	0	0	
7)The one thing the college could change that would reduce my stress level is							

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Appendix material #1b

26 .Students have reported varying types of reactions when returning to learn. To what extent do you agree or disagree with the following statements.(Fill in the circle)

	Definitely disagree	Strongly disagree	Inclined to disagree	Inclined to agree	Strongly agree	Definitely agree		
1.) I find it difficult to concentrate	0	0	0	0	0	0		
2.) Getting good grades/evaluation 0 0 0 0 0 0 0 0 0 0 is extremely important to me								
3.) I feel confident in my ability 0 0 0 0 0 0 0 0 0 0 0 0 0								
4.) Other students in the courses 0 0 0 0 0 0 0 0 0 are a source of support for me								
(**complete the following sentences) 5.) Since returning to learn I think I have								
6.) Since returning to learn I feel I have								

27. Research and student interviews indicate that balancing family, work, and student roles can be a problem. Please describe your experience by responding to the following items. (fill in the circle)

1.) Balancing my responsibilities is a significant problem for me	Definitely disagree ()	Strongly disagree 0	Inclined to disagree O	Inclined to agree O	Strongly agree O	Definitely agree ()
2.) Taking time from family activities for study makes me feel b	0 ad	0	0	0	0	0
3.) I feel uncomfortable using family funds to finance my education	0 n	0	0	0	0	0
4.)Balancing workplace and study is difficult	0	0	0	0	0	0
5.) Managing and prioitizing my	0	0	0	0	0	0

Appendix material #1d Inclined Definitely Strongly Inclined to Strongly Definitely agree disagree disagree to agree agree disagree 0 0 0 0 0 6.) The number of commitments 0 in in my life makes balancing difficult creates additional demands. Students have said 28. Returning to college/study there are 3 significant sources of stress. In general, how would you rate these demands. (Please rank order below by an "x" in the box. 1)the college, 2)pressure I put on myself, c)trying to balance roles COLLEGE SELF ROLES 1.) First most important source of stress is 2.) Second most important source of stress is 3.) Third most important source of stress is 29. For me, the most stressful single thing in my educational environment is _____ 30. Students report being in major transitions in their lives as they return to learn. How much do you agree or disagree with this statement Definitely Strongly Inclined to Inclined Strongly Definitely to agree disagree disagree disagree agree agree 0 0 0 0 0 0 1.) Apart from college/study, in the past two years I have experienced major change in my personal and and family life. 2.) Describe two significant changes you have experienced (1)_____ (2)_____ Definitely Definitely Strongly Inclined to Inclined Strongly disagree disagree disagree to agree agree agree 0 0 0 0 0 0 3.) Generally speaking I think change is difficult 0 0 0 0 0 0 4.) Generally speaking I think change is good

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31. Students have indicated varying levels of psychological support from others in returning to learn. How would you rate the level of psychological support

1.) My workplace supports my my returning to learn	Definitely disagree ()	Strongly disagree 0	Inclined to disagree O		Strongly agree O	Definitely agree O
2.) My primary source of support	for returnin	g to learn	is: (circle c	one)		
1) co-workers	2) emplo	oyer	3) spouse	4) m	y mother	
5) my father	6) myself	,	7) other st	udents	8) chil	dren
9) other (please	identify)					
3.) The source of least support for	my returni	ng to learn	is: (circle o	one)		
1) co-workers	2) emplo	yer	3) spouse	4) m	other	

5) father	6) myself	7) other students	8) children

9) other (please identify)_____

32. During interviews, students made the following comments. To what degree do you agree or disagree with the statements. (fill in circle)

	Definitely disagree	Strongly disagree	Inclined to disagree	Inclined to agree	Strongly agree	Definitely agree
1.) Since I returned to college, I have <u>not</u> experienced increased illness (e.g. colds, flu, etc.)	. 0	0	0	0	0	0
2.) Generally speaking, I feel I am a healthy person	0	0	0	0	0	0
3.) Generally speaking, I feel fatigued.	0	0	0	0	0	0
4.) I have more energy since I have returned to college	0	0	0	0	0	0

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33. Students have reported methods of balancing their many roles. How much do you agree or disagree with the following.

	Definitely disagree	Strongly disagree	Inclined to disagree	Inclined to agree	Strongly agree	Definitely agree			
1.) I routinely commit time for relative (e.g. exercise, socializing, reading)	•	0	0	0	0	0			
2.)My exercise e.g. walking, swimming, 0 0 0 0 0 0									
has suffered since I returned to learn									
3.) (Complete this sentence) I take care of myself by:									
4.) (Complete this sentence) My	4.) (Complete this sentence) My primary relaxation method is:								

Thank you very much. Completing surveys is often a tedious task. This survey represents some 70 mature student interviews. Your response will be gathered with their information to represent the needs of mature students in higher education. Please add any additional comments regarding your own experience or comments on the questions or the process. Good luck in your continuing education efforts.

If you are interested in receiving a copy of the survey results; please include your name and mailing address. You may also contact the researcher directly if you do not choose to put your name on the survey: Send your request in U.S.A. to Ellen Leger, 5050 Quam Circle, Rogers, Minnesota 55374 in England, to Ellen Leger, Doctoral Student, Study of Continuting Education Unit, School

Appendix #2a

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INTERVIEW DIOURALIIICAL DAI	INTERVIEW	BIOGRAP	PHICAL	DATA
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NAM	Е		- - -				
SEX ACE	FEMALE 30-34	MALE 35-39	40-44	45-49	50-55		
COUI	On completi C P	on I will ertificate of ass a regist degree	obtain (pleas program com ation exam in	e tick <u>thos</u> pletion	<u>e</u> that apply)		
	long has it l	been since	you complete	ed your last	formal educa	ation?	
	ently study				What ar	rea are	you
	 K STATUS Employed	°Occuj as (identi	ontion fy position	currently	held)		
FINAN		rked per seleducatio seleducatio ives work		quirement? I choice? to attend?	Yes Yes Yes		
		Single		rried-living	with partn seperated		
(if y	LY STATUS (es complete)	Number	of children	in our f	amily		
YOUR	ROLES:	Moth Grai °Involved	erFat dparent in the care	herS Other e of paren	tudent rYes t(s)Yes mmunityY	Worker No	
to 	CATION BACK the present	GROUND (time)	List all the so	chool/educatio	on you have co	ompleted 	
							

Ph.D. Dissertation: Ellen Leger, Research Student, University of Leeds Copy: April 1990

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PERCEIVED STRESSORS OF THE MATURE STUDENT INTERVIEW QUESTIONS

1. WHAT IS IT LIKE TO BE A STUDENT NOW? What sorts of problems do you have? How do you handle these problems,	Р	
How do they affect you?	P	S
2. WHERE DO THE PROBLEMS COME FROM?	_P	_S
How do you see the institution?	_P_	_s
How do you feel about yourself as a student?	_P_	S
How do you manage all the areas of responsibility you have?	_P_	S.
3.AS YOU SEE IT, WHAT HELPS OR COMPLICATES YOUR ABILITY TO MANAGE?	P_	_S
Can you describe the support or lack of support received from family?_	P_	_S
Who is your most supportive family member?	P	S
Who is your least supportive family member?	P	S
Have you experienced alot of change recently (past year)?	P	_s
Could you list those changes?	P	S
How do you feel/view change?	_P_	_S
Do you see yourself as healthy and energetic?	_P_	S
Have you had minor or major illness recently (past year)?	P_	_s
How would you rate your health status?	P_	S
How do you take care of yourself?	_P_	S
What sorts of things do you do to keep balance in your life?	P_	_s
Name ways that your relax	P_	S

Appendix #3a



ARE YOU A STUDENT - AGE 30 TO 55?

if yes

WOULD YOU BE WILLING TO PARTICIPATE IN A RESEARCH STUDY ON PROBLEMS OF RETURNING STUDENTS?

if yes

WHO:
1. Must be between the age of 30 and 55
2. Men and women enrolled in a course/program that results in a qualification, e.g. certificate or diploma,

<u>WHAT:</u>

Survey requires approximately 25-30 minutes to complete The survey will be placed in a sealed envelope and the content is the confidental material of the researcher only.



PLEASE NOTE: Participants in the research will be part of a comparative study of mature students enrolled in Higher and Further Education in colleges in England. The research is part of a doctoral thesis at The University of Leeds, Leeds, England. The research is conducted by Ellen Leger, Hennepin Technical College

Questions: Contact Ellen Leger: xxxxxxx

Appendix 3b



The University of Leeds

Switchboard (0532) 431751 Enquiries (0532) 333211 Direct line (0532) 333210 Fax (0532) 332032

Director: Professor J. S. Marriott, MA, MEd, PhD Study of Continuing Education Unit

School of Education The University Leeds LS2 9JT

1st November 1993



Dear

You were contacted in September regarding the possibility of offering assistance in the completion of the final phase of my PhD research study entitled "Mature Student Perception of Stress... A Comparative Analysis of British and United States Students".

I thought it wise to contact individuals once again. As a departmental supervisor in a Vocational Technical College in Minnesota, I am more than aware of how papers cross my desk, and how very little time there is to meet all the demands.

The primary goal of this research is to provide information back to mature students that supports their successful completion of learning experiences. It is also intended to inform staff of higher education institutions of mature student's perceptions of themselves as students with multiple societal, work and family roles and the student's interaction with the higher education institution.

To access these students, they must be 30-55 years of age, enrolled in a certificate, qualification, or diploma/degree course. Once again, I would be most grateful if you would allow me to submit these options for collecting data at your college. I could:

- 1. Address a class of students who are willing to complete the survey <u>at that time</u>. The time commitment to complete the questionnaire is 15 to 30 minutes. (Time period: sometime after 23 November to 10 December.)
- 2. Address a class of students who are willing to complete the survey. On completion of the survey, I would provide a seminar and share the preliminary findings of interviewed students with a specific focus on issues related to: Effective Coping and Minimising Stress While Returning To Learn. Time commitment 45-50 minutes. (Time period: sometime after 23 November to 10 December.)
- 3. Address interested staff/tutors on application of the survey, asking staff to conduct the survey with appropriate students. I would provide a brief seminar for staff on the interview findings with relevancy to the higher education institutions. The surveys could be returned to University of Leeds when students had completed. (Time period sometime after 23 November to 10 December.)
- 4. Finally, printed materials, including instructions and surveys could be mailed to your University/College and surveys distributed to those 30-55 year old students and on completion, returned to University of Leeds. (Time period early November, to 10 December.)

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I appreciate your consideration in coordinating this project. It is a challenge to organize a study between two countries. In my absence, you may contact Mrs S Trotter at (0532) 333211 to schedule an appointment to access students or staff within the timetable identified, and/or to receive the materials in option 4 if that is more convenient.

I will arrive at the University of Leeds on 23 November for a two week period to finalize the field work. May I also add that I will be most happy to share the findings of this study and make myself available to you and your institution if that is of value to you.

Thanking you once again for your consideration.

Yours sincerely

Ellen Jeger

Ellen Leger, R.N., B.S., M.S., M.Ed., PhD. Candidate University of Leeds, Study of Continuing Education Unit in the School of Education. (Hennepin Technical College. Supervisor, Department of Customised Training)

copy: Professor Stuart Marriott

Intervie	w analysis matrix Appendix #4a	
Cognitive	Category	Affective
statements	•relating fact/commentary	statements
What	is it like to be a student at this time in you Student-self perceptions	nr life
•I wondered what sort of teacher I would be I think it's from repetition	there are periods	essures and then s where nothing to happen.
There are down times of certain things	•its a long course, alot of other students have said the same thing, its straight You get forward repetition repetit	t a feeling of ion.
I think they should shorten it up	•The teaching practice is absolutely madness if you could spread it out, you'd get more out of it	
I think it's important to enjoy it	•^wanted to teach for a long time It was something	•I've enjoyed studying
	I had always fancied beinga teacher • Overall	I've enjoyed it
	in this job for ten years, I was finding it ely difficult, it was stressful businessI was abso	
•We thought we could live with it for 4 years	•One of the decisions that helped me leave the job was my wifeshe agreed to go back to work so I coul on a degree course, at the time, I was supporting my	d go
•I thought teaching was something I wanted to do	•If I didn't go for it now, I probably wouldn't go.	,
•they seem to be supportive	 Where do the problems come from? Institutional perceptions My other experience in school was quite brief. Wh school you plan to do the best of your ability, you prore and there are times you need to talk to someon you build up relationships with teaching practice have their own ideas, then you get another oneI fill 	probably worry e. tutors. They
•you wonder what's the next teaching assignment will be like		lothat puts pressure on you.
•I think the overall •I find atmosphere within academics a sweeping generalisation is that they are not concerned with things running smoothly	•I would much prefer if you were allocated a tutor thoroughout the course. Generally I find them supp the general administration of the courseextrem You don't know what is coming, overall communicat is poor. But its just part an parcel of academic life. •This is canceled and we don't know, didn't a notice When you worked in afor ten years you know i it that way, it would go to pieces Lecturers not being there, and you've made arrange children.	nely frustrating ion go up? f you ran
• you wonder why you're doin	ng it for	

	How do you manage your responsibilities?	? (Appendix 4b)
1	Roles	_
'm not sure I manage	•My son is six, in primary school. I'd like to spend more time with him, to look at his work	•I feel as a parent my role as support is cut.
		feel guilty not having time with the children
	How do you manage your responsibilities? Role Perceptions	
	•I come home from school, have a quick bite to ea and thats it. For five or six weeks I have virtually time with my family •I find cope wi	no that extremely difficult to
	•My wife is tired, she's got tidying up to d at the end of the day, you just go to bed and another day just like it	-
	Support Perceptions	
•I realized I had to con up with £70's	over-estimation on my budget and with m time salaryshe had to say; I'm sorry I do •Its a very reversed role. I see her as a w •I feel as the time	y wife's part on't have it
	•She's been wonderful	u mai causes me griei.
•I knew before the course that she was illit was always a track in the back mind	time for me because my mother died red been seriously ill for three years. I was q but we could talk it through and I got through	uite involved
•I think most of those when I have great strue	moments essis taking a drop in living standards. But the most intense time•I fe I had a qualification, I had left a job•I It was purely selfish that I wanted another career. I wanted to teach. •I couldn't c	el, when my mom died felt with all this I could have been working
	Health and Energy Perceptions	
reasona	football once a week, it's all I do as far as ble activity. I've put on weight I don't know why myself eating alot, I'm hungry I'm sitting alot more. I fi	•I don't enjoy that nd myself very tired ite well with illness at infection the last
	ose an essay. I can't get the words out Ils out •I tend to get agitated it's silly bu	t I swear its theraneutic

То:	Hennepin Technical College Instructional Staff
From:	Ellen Leger Customized Training Services District Service Center
Re:	Assistance in surveying students
Date,	February 1, 1994

Attached is an information sheet on the survey being done with mature students. The survey is part of a research project being completed at the University of Leeds, Leeds, England. The study is an investigation of the perceptions of mature student stress on returning to learn.

I am requesting help in identifying these students. Mature students make up a percent of each program and therefore it is difficult to access them as a full group. In November I collected survey data in England. The survey takes approximately 30 minutes to complete.

I would like to be able to collect 50 surveys from each campus and would appreciate any help you may be able to provide. Please call me at extension 7164 if you have any questions.

Appendix 6

Havighurst's Stages of Adult Development (age 18-55)

•Early Adulthood (Ages 18-30)

-selecting a mate -learning to live with a marriage partner -starting a family -rearing children -managing a home -getting started in an occupation -taking on civic responsibility -finding a congenial social group

> Middle Age (Ages 30-55) -achieving adult civic and social responsibility -establishing and maintaining an economic standard of living -assisting teenage children to become responsible, happy adults -developing adult leisure-time activities -relating to one's spouse as a person -accepting and adjusting to the physiological changes of middle age -adjusting to aging parents

•Later Maturity (Ages 55 and over)

-adjusting to decreasing physical strength and health
-adjusting to retirement and reduced income
-adjusting to the death of a spouse
-establishing an affiliation with one's age group
-meeting social and civic obligation
-establishing satisfactory physical living arrangements

.

Ways to improve the education environment

•Responses to open-ended question on, "The one single thing the college could do to reduce my stress level is......"

1. Management of coursework: The detail students provided was: ·less essays all due at the same time •early morning lectures created problems with providing for children at home •requesting that essay titles be given out earlier in the course •requesting that workload for assignments be spread out..... spacing out assignments throughout the course instead of all the work in a three week block •that essays and assignments be marked and returned earlier •the start and stop time (hours) of lectures/courses were difficult: to early in morning, not enough time to get to course from workplace in late afternoon, and going too late in the evening provision of courses during weekend and summer •improved preparation for lectures, improved teaching skills and consistent competency and expertise in subject manner areas better programme administration with more flexibility •fewer exams and more equivalency credit

2. Facility improvement

more facilities for students to study when arriving at college
provide more photocopiers in convenient access areas for student use in late afternoon and evening
adequate lighting in car parks and footpaths
quiet places for nourishment; juice, fruit, tea, sandwiches
cleaner lecture areas with proper lighting
providing courses in convenient outlying locations
computer access, operational equipment and expertise available for support
library access; both time and easier access in and out

3. Instructor/tutor issues

•improved communication of course changes or other required information in a timely basis

•tutors who speak in aggressive tones with frequent swearing •being told what is expected in regard to how much work the course will require

•feedback on student progress and assurance that the student's direction is on the right track

•spacing assignments; particularly at holiday time so as not to generate more stress with overloading of work.

•providing a flexible, relaxed atmosphere when meeting with tutors so as not to convey a "I'm too busy" attitude •improved organization of lecture materials

Historical Frameworks of Adult Education: 15th to 21st Century America

Education Development and Discovery

1538 First University Santo Damingo

1607 Jamestown Landing Community Survival

1636 Massachusets Harvard established

1642 Massachusets Law Townspeople & parents obliged to teach young to read and write, by law.

1727 Junto established Benjamin Franklin and others establish a self directed learning movement.

".....the forces unleashed by independence, westward expansion, the industrial revolution, and the European Enlightenment conspired to produce a compulsion for knowledge never before noted in the annals of history. The first task of the new nation was to transform an entire people from subjects to citizens, from a people use to being governed by an aristocracy to a people able to govern themselves. No undertaking of any society every staked more on the ability of adults to learn than did the founding of the Republic. (Knowles, 1960:9)

1820 Mechanic Institutes Boston: Workforce prep. and vocational education 1862 Land Grant Colleges 30,00 acres of public land granted-each state-higher educ.

<u>1861-65 Civil War</u> some interruption in progress, country at war

1918 Compulsory Education

The population increased from 30 million in 1860 to over one hundred million by 1920. The integration of new people into a new culture became one of the great adult education challenges of all time. With that was the expansion of the economy from an agrarian society to predominate industrial and urban society.

1894 University Extension established in 28 states

1867-1919 Agriculture Education Grange, Farmers Union, American Farm Bureau

1881 Labor Movement Workers education estab.

1914 Coop. Extension Servicethe largest single adult education organization ever created

all students attend 1-8 form in all states of U.S.

1920 Carniege Foundation endowment of libraries across the entire United States

1919 Smith Hughes Act Federal funds to match state funds for vocational education

1960 Academic Education for Adults

"Universities are seeking ways of liberating themselves from those aspects of the tradition which bind them. What we see as of now is but a small step. With experimentation in method and media, with increased understanding of the sociology and psychology of adulthood, with greater attention to learning theory, perhaps a new pedagogy of adulthood will emerge. But we have seen only the beginnings. If the universities are to succeed in effecting a rapprochement between the demands of the academic tradition and the special needs of adults, there is much work ahead) (Peter E. Siegle, Research Associate Center for the Study of Liberal Education for Adults, U.S.) from: Handbook of Adult Education in the United States, (1960:402)

Historic	al Frameworks 15th to 21st	of Adult Educa Century Britain	
	<u>15til to 215t</u>	Century Dritain	
Adu	t Education Develo	pment and Histor	у
The Middle Ages Education for salvation 'teach them who rarely hear the word of God' schools)	1568 Reformation Printing of 'Great B of religious instruction legal for profession	ible" and beginning on of adults.Only	<u>1608 Libraries</u> Norwich: first independent librar (from church
	First to attempt at w of place of adult	Education of	<u>Adult Sunday School*</u> the illiterate opening up first adult school system
In 1700, England, Wales a 1801 the population was areas of the North and M urgent need for education	over ten million. There lidlands. The unskilled la	was a shift of populat	ion to industrial
<u>1756 Public museum</u> 1753 foundation of British museum, London	<u>1840 Mechanic Ins</u> 300 institutes: Lyce ment - unskilled we	eum move- Caml orker educ. estab	<u>University</u> <u>Extension</u> bridge and 1878 Oxford lished committee for hsion lecturers
<u>1902 Education A</u> Provision of local ec authority, all adult ec in the community was th of each individual comm	lucation lucation ne responsibility	1903 Workers Educ alliance with Oxf its object specific v	· · · · —
<u>1919 Report of the Adult Educat</u> provision of liberal education f should be regarded by universifie necessary part of their function	for adult students as a normal and	Full and part time	education for persons y age of schooling:5-15.
of opportunity or full-ti industrial middle classes	the last century. Initiall me university study from as part of an attempt to he establishment of the	y, in the 1840's, this to the landed aristocrac refurbish Oxford and to redbrick institutions	erm denoted the extension
•1970 Sc •19 •1982 Mar a. b.	nifesto: Advisory Council Continuing education for Open University concept Access courses	sed to sixteen stigative account of A incil for Adult Continu- for Adult Continuing adults after initial ed developed	dult Education ing Education Education ucation

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COMPARATIVE ANALYSIS

BUILDING A FOUNDATION FOR

ADULT EDUCATION ANALYSIS IN ENGLAND AND AMERICA¹

A. England: A Review of Primary, Secondary, Higher Education

Primary and Secondary

Public_		_Private
3 to 5 yea	ars	3 to 5 years
some nurs	ery	various private
provision		nurseries and
(inconsist	ent)	play groups
2 Tier S	ystem3 Tier Syst (*determined by	em* L.E.A.)
(i.e. York)	(i.e. Leeds)	5-11 junior
5 - 11 primary 5-7 infant	5-9 primary	
7-11 junior	9-13 middle	
11-16/18 secondary	13-16/18 highschool	11-16/18 highschool
(Definition of terms) 11 plus = exams to	determine who receives	grammer education
O-levels = 16 year ex	xams, i.e. about nine su	bjects; <u>need</u> five 'O'levels
A-levels =18 year exams to qualify for entrance to University; <u>need</u> three 'A' levels		
GCSE = (new)gener	GCSE = (new)general certificate for secondary education	
6th form = past 16 -	could be 6th form colle	eges

¹This organisational framework was constructed the first year of the study to identify similarities and differences in systems. It is included in the appendix to provide a description of the system in

2. Education options...after secondary school

a) Further Education:	Occupational and skill training available in Polytechnics ^{*2} and Community Colleges [*] . wide range of courses available: entry requirements are variable.
b) Higher Education:	Private schools: i.e. skill oriented;typing on completion: certificate, degree Oriented to academic study in the Polytechnics, Community Colleges Universities, Private Colleges entry requirements: 3- A Levels
	on completion: degree awarded

3. Funding: Grant available from LEA, covers tuition and residential costs

A.A. United States: Review of Primary, Secondary, Higher Education

1. The Minnesota Model

PUBLIC

PRIVATE

Early Childhood-Special Education*	Nursery Schools and Day Care Centers
0-5 years	0-5 years
Kindergarten	Kindergarten
5 years (discretionary)	5 years (discretionary)
Primary School	Primary School
6-8 years	6-8 years
Intermediate or Middle School	Intermediate or Middle School
9-11 years	9-11 years
Junior and Senior Highschool	Junior and Senior Highschool
12-18 years	12-18 years

*Special Education available through 18 years of age, mandated in 19____

2. Education options...after highschool

a) Trade School Occupational and skill training available in private "trade" schools or "business" schools. Length=one to two years --on completion: certificate

² In England the Polytechnical Institutions and the Community Colleges were incorporated into structure and name of 'University' during the course of this study, 1990-95. In Minnesota, the Technical Colleges and Community Colleges changed organizational structure to become part of one Department of Education. All state universities, technical colleges, and community colleges are one

Appendix #9c

b) Higher Education Oriented to academic study in the Technical Colleges*, Community Colleges* State Universities, University of Minnesota, Private Colleges --entry requirements: (G.P.A. grade point average) --entrance exams; i.e. TAPE, Millers --on completion: diploma or degree awarded

3. Funding available: Pell Grants, G.I.Bill*, Special jobs/training grants

B. Types of and History of: Adult Education in Britian

1. History of Adult Education in Britian

Reference: Lecture notes: Professor Stuart Marriott: University of Leeds Text reference: Adult Education in Crisis; Mcllroy & Spencer

1."The roots of the modern university's contribution to the education of adults lie in the *university extension* movement of the last century. Initially, in the 1840's, this term denoted the extension of opportunity for full-time university study from the <u>landed aristocracy</u> to the newly rising <u>industrial middle classes</u> as part of an attempt to refurbish Oxford and Cambridge. Reform of the ancient universities and the establishment of the *redbrick institutions* was accompanied by small shoots of the kind of adult education familiar to us today." (p3)

2. Extramural Education:

A)"The majority of universities in England and Wales organised a group of lecturers specialising in different subject disciplines in a department of adult education or extramural studies. Whilst a variety of courses were mounted in business schools and departments of engineering, medicine or architecture, the extramural department was viewed as the university's main contribution to the education of adults.

B) The extramural tutors were selected for their academic excellence and to one degree or another, for their established or potential proficiency in the education of adults - a field which was seen as a specialist area requiring specialist techniques. This was related to a perceived if limited obligation to working-class students who might often be expected to lack and initial university education. University adult education was seen as having a strong social purpose.

3. Some Terminology

1. Extramural = University adult education. Courses for the general public, traditionally with non-vocational 'liberal' or 'social purpose' orientation. An obsolescent term?

2. Adult Education = A traditional and still a widely used term for all nonvocational provision by public sector agencies, including recreational and academic courses, as well as work with minority and disadvantaged groups

3. Adult Basic = Provision (usually by local education authorities) for literacy and numeracy

4. Access = "Second-chance" provision by public agencies specifically designed to ease entry into conventional further or higher education

5. Community Education = A term with several different meanings; taking adult education into deprived neighbourhoods; making it more socially activist; making schools more accessible to their host populations; integrating school, youth and adult provision into a new kind of service.

6. Continuing Education = a generic term increasingly used for all education following on from initial full-time education (NB that in universities it is still sometimes used in its older narrower sense of professional updating work)

7.PEVE and PICKUP = 1) 'Post-experience vocational education' - a term used in higher education

2) "Professional, industrial and commercial updating' a term and a programme introduced by the DES, though one often confusingly applied to the whole range of such work and not exclusively to schemes funded or sponsored through the DES* scheme (*definition of....)

8. Further Education = The legal/administrative term for 16+ education which is neither 'higher' nor conducted in school

9. Tertiary Education = A recent term emphasising a comprehensive, nonschool approach to post-16 education, often with a built-in 'continuing education' emphasis

Appendix #9e

10. Higher Education = The legal/administrative term for the regular work of universities, polytechnics, and higher-level institutes which have developed out of further education and the former teacher-training colleges

11. ACACE = Advisory Council for Adult and Continuing Education

12. CAB = Citizens' Advice Bureau - local centres providing and advice service to individuals CNAA = Council for National Academic Awards - a nationally appointed body that awards degrees and validates courses provided by non-university institutions of higher education e.g. polytechnics

13. CSE = Certificate of Secondary Education - awarded to pupils aged sixteen in England and Wales as a record of school performance by examination in individual subjects

14. DES = Department of Education and Science 15. Dip HE = A two year course diploma intended to serve as a qualification in itself or as a stepping stone to a degree

16. Eleven plus = An examination at primary school leaving age that, though largely discarded, still determines, in some areas whether children shall enter a 'grammar' (i.e. academic or a modern secondary school)

17. GCE = General Certificate of Education - awarded to pupils in England and Wales on examination in individuals subjects that provide the basic qualifications for admission to higher educationa and professional life. It is conducted at two levels, "O" (Ordinary) taken normally at sixteen and "A" (Advanced) at eighteen. The examinations may also be taken voluntarily, post-school.

18. HNC = Higher National Certificate - an advanced technical or commercial qualification

19. MSC = Manpower Services Commission - a governments appointed body with responsibility for securing training opportunities.

20 ONC = Ordinary National Certificate - a qualification for technicians and others, awarded after at least two years of part-time study

21.TOPS = Training Opportunities Scheme of the MSC - provides training courses for adults