Creative Solutions: How Students With Occupational Overuse Syndrome (OOS) Conditions Manage Their Studies At Victoria University Of Wellington

by

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ABSTRACT

The barriers that prevent people with disabilities from accessing and succeeding in post-compulsory education are well documented, as are the accommodations that tertiary institutions provide for students with disabilities. However, there is little research about the aids and techniques that students with disabilities actually use to meet their course requirements. This thesis explores the way in which students with occupational overuse syndrome (OOS) conditions managed their studies at Victoria University of Wellington.

My methodology was influenced by the theoretical principles of emancipatory research, which emphasises a collaborative research process for the purpose of individual and social change.

I interviewed thirteen Victoria University students about their OOS condition, their study strategies, and the ways in which this University could make it easier for students with OOS to manage their studies.

Generally the participants used aids and techniques to enable themselves to demonstrate their ability to meet their course requirements. They also benefited from Victoria University’s efforts to provide an inclusive learning environment for students with disabilities. There were however, weaknesses in some of the support services that are available for students with OOS conditions at this University. Moreover, my findings suggested that attitudinal barriers might prevent some students with OOS conditions from seeking assistance with managing their studies.
My goal was to enable students with OOS conditions to demonstrate their abilities, by sharing information about the strategies that some of these students used to manage their studies without aggravating their OOS symptoms, and by recommending changes to Victoria University's policies and practices.
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CHAPTER ONE: INTRODUCTION

People with disabilities are almost as likely as people without disabilities to participate in post-compulsory education. 1996 estimates indicate that in Aotearoa New Zealand, 27.6% of adults\(^1\) with disabilities had attained a post-school qualification compared to 34.8% of adults without disabilities (Statistics New Zealand 1998).

The number of tertiary students with disabilities has been the focus of much discussion among students with disabilities, support services staff, academics and policy-makers. They have highlighted the attitudinal, pedagogical, physical and financial barriers that prevent people with disabilities from accessing and succeeding in post-compulsory education. They have also focussed on the ways in which tertiary institutions have accommodated students with disabilities’ learning characteristics and physical access needs. There has however, been little research about the strategies that students with disabilities *actually use* to complete their coursework.

As a student with an occupational overuse syndrome (OOS) condition, I was keen to learn about the aids and techniques that other students used to complete their course requirements without aggravating their OOS. These aids and techniques might have made studying easier for me. It was also in my own interests to contribute to the

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\(^1\) The term ‘adults’ refers to people aged 15 years and older who were living in households at the time of the 1996 Household Disability Survey.
development of a supportive environment for students with OOS conditions at Victoria University of Wellington.

I was aware that my interests might conflict with those of students who viewed their OOS condition as a personal "problem" for which they did not wish to receive any "special treatment" that would mark them out from their peers.

As a researcher, I wanted my research to be of use to students with OOS conditions, support services staff and policy-makers at Victoria University. I hoped that students with OOS conditions would find it reassuring to read about other students who have had similar experiences to them. Wallis (1997) felt validated by the anecdotal accounts that she read when researching the Aotearoa New Zealand RSI/OOS experience.

I also thought that students with OOS conditions might learn about new aids and techniques from my findings, that they could use to complete their coursework without exacerbating their OOS symptoms.

Other students and staff members will have the opportunity to become more informed about the way in which students with OOS conditions manage their studies, through reading my thesis and/or the article submitted for publication in *Salient* and *Vic News*.

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2 The term 'Repetitive Strain Injury (RSI)' has been replaced by the term 'Occupational Overuse Syndrome (OOS)' because muscle tension rather than repetition is thought to be a primary cause of these conditions, and neither strain nor injury occur in most of the pain syndromes (Occupational Safety and Health Service et al. 1997).

3 *Salient* and *Vic News* are newspapers that are published by and for students and staff at Victoria University.
In particular, my findings will allow the Student Learning Support Service (SLSS) and the Co-ordinators for Students with Disabilities to substantiate the needs that they think students with OOS conditions have, and to assess the advice that they give to these students.

Furthermore, I hoped that my findings would prompt staff members to work with students with OOS conditions to reduce or eliminate any barriers that prevented these students from accommodating their OOS symptoms.

The aim of my research was to explore the way in which students with OOS conditions managed their studies at Victoria University.

My objectives were:

- to identify the aids and techniques that students with OOS conditions used to manage their studies at Victoria University;
- to record the reasons why students with OOS conditions used these aids and techniques in particular;
- to discover whether students with OOS conditions had encountered any barriers at Victoria University, which had prevented them from managing their studies effectively;
- to recommend ways in which the barriers that had prevented students with OOS conditions from managing their studies effectively, might be overcome.
The second chapter in my thesis begins with a review of the literature concerning both the definition of ‘disability’ and students with disabilities in the tertiary education sector. This leads on to a description of the services that are available for students with disabilities at Victoria University. I then review the literature around defining 'occupational overuse syndrome (OOS)', explaining OOS conditions, managing these conditions and the impact of OOS on people’s lives.

Chapter Three begins with a theoretical framework for my methodology. I then provide a detailed description of the sampling procedure, information collection and information analysis. I conclude Chapter Three with a discussion of important ethical issues.

The findings from the current research are presented and discussed in Chapter Four. Each theme is illustrated by quotes taken from my interviews with the participants.

My thesis is concluded in Chapter Five with recommendations that will assist students with OOS conditions to manage their studies at Victoria University, without exacerbating their OOS symptoms.

Ultimately, I have sought to enable students with OOS conditions to demonstrate their abilities at Victoria University, by sharing information about the aids and techniques that some of these students used to successfully manage their studies and by recommending changes to existing policies and practices.
DEFINING ‘DISABILITY’

There are two approaches to defining ‘disability’. The first approach is based upon a ‘medical model’ within which ‘disability’ is defined as lacking the ability to perform a “normal” human activity. Disabilities are caused by functional, sensory, cognitive and/or learning impairments. Health professionals assist an individual to adjust to their disability, by prescribing surgical and/or pharmacological interventions, which will either ameliorate or cure the symptomatic features of that individual’s impairment (Beatson 1996; Cahill 1991; Munford and Sullivan 1997; N.Z. Disabled undated; Oliver 1990; Oliver 1996).

In contrast, the second approach is based upon a ‘social model’ within which ‘disability’ is defined as society’s failure to adequately meet the needs of people with functional, sensory, cognitive and/or learning impairments. Inadequate policies, inappropriate procedures, architectural barriers and negative attitudes towards people with impairments, disable these people (Beatson 1996; Cahill 1991; Munford and Sullivan 1997; Oliver 1990; Oliver 1996).

‘Social model’ theorists have shifted the focus from individuals with impairments, to the disabling features of the society within which these individuals live. In doing so,
they risk portraying people with disabilities as passive victims of a disablist society (Watson 1998).

Moreover, ‘social model’ theorists will continue to provide partial accounts of the experiences of people with disabilities, unless they analyse the position of people with learning difficulties (Chappell 1998) as well as the interaction between disability and other forms of oppression (Vernon 1998).

Morris (1992) and Munford and Sullivan (1997) argue that the ‘social model of disability’ ignores the impact that an impairment has upon a person’s life. However, Beatson (1996) believes that proponents of the ‘social model’ regard each person’s subjective experience of their impairment as a part (albeit small) of disability.

When applied to the tertiary education sector, the ‘medical model of disability’ fails to emphasise the provisions that would enable students with disabilities to achieve academic success. This model highlights an individual student’s impairment instead (Porter 1994).

The ‘social model of disability’ however, suggests that a student is disabled by a tertiary institution’s failure to accommodate the student’s learning characteristics within the institution’s teaching practices, assessment practices, physical environment and staff attitudes (ibid).
STUDENTS WITH DISABILITIES IN TERTIARY EDUCATION

Prospective Students

McKay et al. (1995) argue that students with disabilities will be excluded from the tertiary education sector in Aotearoa New Zealand, unless tertiary institutions accommodate the physical access needs and the learning characteristics of these students. Currently students with disabilities are under-represented in both Aotearoa New Zealand’s Universities and in the Australian tertiary education sector (Andrews 1995; Gallagher 1995; Lang 1993; Matijevic 1996).

Frazer and LaFontaine (1995) have found that many prospective students with disabilities fear that their course application will be denied because of their disability. One way of overcoming this fear is to make disability disclosure optional on enrolment forms (ibid).

Frazer and LaFontaine (ibid) have also found that service providers often present an edited account of the courses and support services that are available in tertiary institutions, to secondary school students with disabilities. In addition, older people with disabilities are often unaware of the courses and support services that are provided by tertiary institutions. Consequently, Frazer and LaFontaine (ibid) argue that tertiary institutions should actively promote their courses and support services among school leavers with disabilities and older people with disabilities.
Andrews (1995) and Hollenweger (1996) believe that many people with disabilities are not adequately prepared for tertiary education. They lack the general knowledge, language skills and social skills that are required to successfully participate in the tertiary education sector.

Charlton (1997) has identified three key factors that attract prospective students with disabilities to tertiary institutions. The first key factor is the physical location of a tertiary institution's campus. The second key factor is the institution's reputation in terms of the courses that are offered and the support that is available for students with disabilities. Physical accessibility is the final key factor (this includes ramps, suitable lighting and good acoustics).

Hollenweger argues that in order to facilitate the participation of people with disabilities in university education:

Their [students with disabilities'] expertise and experiences need to be made available to beginning students (1996:3).

**On Campus**

Students with disabilities tend to be older than students without disabilities (Benshoff et al. 1990). This means that students with disabilities are more likely than students without disabilities, to have to maintain a balance between study, paid employment, family commitments and organised leisure activities (Gibson 1998).
Students with disabilities also tend to be enrolled in a tertiary institution for a longer period of time than students without disabilities (Benshoff et al. 1990). Andrews (1995) suggests that students with disabilities are unable to study full-time, because their disability reduces the amount of time and energy that they are able to give to their studies. However, students with disabilities are not exempt from the five-year limit on receiving a student allowance in Aotearoa New Zealand (Ministry of Education 1998). Consequently, students with disabilities who take longer than five years to complete a degree will be penalised financially.

Many students with disabilities manage their workload in order to ensure that their disability does not have a negative impact upon their studies (McKay et al. 1995). Some students balance the amount of effort that they put into an assignment, against the importance of that assignment to their final grade. Students also balance the amount of effort that they put into a course, against the importance of that course to their major (Nelson et al. 1993).

Stage and Milne (1996) found that students with learning disabilities use study tactics such as underlining key words, constant revision and time management.

Tertiary institutions in Aotearoa New Zealand and Australia have developed alternative learning and assessment strategies, in order to accommodate the learning characteristics of students with disabilities. The types of strategies that are recommended for students with an overuse injury such as OOS, include adjustable desks and chairs, additional time for assignments and examinations, and oral
assignments and examinations (National Board of Employment, Education and Training 1994).

Andrews (1995) suggests that many of the difficulties that students with disabilities encounter on campus, are caused by the staffs’ lack of understanding with regard to the students’ need for alternative learning and assessment strategies. Students with disabilities believe that academic and administrative staff are inflexible (Hill 1994). McLennan (1996) has found however, that academic staff are confused about which alternative assessment strategies are most appropriate for which students. Academic staff are also unsure about how to implement alternative assessment strategies.

Moreover, academic staff are concerned that alternative learning and assessment strategies will lower academic standards and disadvantage students without disabilities (McDaniel et al. 1996; McKay et al. 1995; McLennan 1996; Nichols 1996). Derrick (1995) argues that the improved performance of students with disabilities who use alternative assessment strategies is a reflection of the students’ ability. In contrast, the poorer performance of students with disabilities who use standard assessment strategies is a reflection of the students’ disability.

The attitudes of staff members towards students with disabilities vary according to the individual staff member (Welch 1996). However, academic and administrative staff are generally thought to be more accommodating towards students with visible disabilities, than towards students with invisible disabilities such as OOS conditions (Hill 1994; McKay et al. 1995; Stage and Milne 1996). Students with invisible disabilities are more likely than students with visible disabilities, to experience
distrust, prejudice and contempt from their lecturers and other students (Reindal 1995). Indeed, one student has reported that many staff members doubted the existence of their OOS condition (McKay et al. 1995).

The positive attitude of “disability aware” tutors is one of the key factors in retaining students with disabilities at tertiary institutions (Charlton 1997). The other key factors are the receipt of practical assistance and the student’s own determination, planning skills, time management and energy management (ibid).

Fichten et al. (1990) believe that open and honest communication between students with disabilities and their professors, is the most effective way of resolving teaching and learning problems.

The lack of sufficient financial resources for students with disabilities in tertiary education is a barrier to academic success for these students. Williams (1996) argues that tertiary institutions are caught between the demand for educational equity and the demand for cost-efficiency. Consequently, tertiary institutions do not “deal well” with students who require alternative, high-cost teaching and assessment methods. Tertiary institutions are unable to provide students with disabilities with funding for necessary equipment and support services (Hill 1994; McKay et al. 1995). Tertiary institutions also lack funding for modifications that would enable students with disabilities to access buildings on campus (Hill 1994).
STUDENTS WITH DISABILITIES AT VICTORIA UNIVERSITY

The number of students with disabilities at Victoria University is growing. 339 students registered with the Co-ordinators for Students with Disabilities in 1997. In 1998, there were 470 registered students with disabilities. 70 of these 470 students indicated that they had an OOS condition (Gibson 1998).

Policies

Victoria University has developed policies that enable people with disabilities to participate in tertiary education. The University's policy statement on equal employment opportunities in staff recruitment is based upon a policy of equal educational opportunities (Victoria University of Wellington 1997). Victoria University appears to believe that if people with disabilities are under-represented in the student population, then it is likely that they will be under-represented in the staff population, because people with disabilities will not have the necessary qualifications to secure paid employment at the University.

The aim of Victoria University's Reasonable Accommodation Policy (1994) is "...to give students with disabilities an equal chance with all other students to demonstrate their abilities." (Co-ordinator for Students with Disabilities undated:39). Consequently, a course co-ordinator is required "wherever necessary and possible" (ibid) to consult with a student with a disability, in order to develop alternative
methods for teaching and assessment that will assist that student to meet the course requirements.

Generally, a student with a disability will ask the Co-ordinators for Students with Disabilities, the Student Health Service, or the Counselling Service to assess the student’s situation and recommend alternative methods for teaching and assessment (Gibson 1998).

Alternative methods for teaching students with OOS conditions include providing detailed lecture outlines, and scheduling regular breaks in which students are able to get up and stretch their bodies. Alternative assessment strategies include giving students with OOS conditions extra time for tests and exams, allowing these students to type their answers into computers, or arranging for these students to dictate their answers to writers (Co-ordinator for Students with Disabilities undated; Gibson 1998).

**Advocacy**

A number of groups offer advocacy for students with disabilities. The Student Services Sub-committee on Students with Disabilities promotes the welfare of these students at the Student Services Committee (ibid).

The student-run Campus Abilities and Disabilities Organisation (CAN-DO) advocates for the rights of students with disabilities, as well as providing these students with support and the opportunity to socialise with one another (Co-ordinator
for Students with Disabilities undated; Co-ordinators for Students with Disabilities 1997).

The Disability Action Research Group (DARG) and the Co-ordinators for Students with Disabilities, teach general and academic staff how to work in partnership with students with disabilities (Co-ordinators for Students with Disabilities 1997).

**Equipment**

The Co-ordinators for Students with Disabilities advise students with disabilities about equipment and train these students how to use equipment. In particular, cassette recorders and voice-activated software are available for students with OOS conditions. To date, ten students have been trained in the use of voice-activated software (Gibson 1998).

Two "resource rooms" have been built for students with disabilities. The Sutherland Room (located in the Library) contains equipment such as ergonomic furniture and a card-operated photocopier. It also contains a storage rack, four single beds, and tea and coffee making facilities. The Fairlie Terrace Room (located at the rear of 85 Fairlie Terrace) is equipped with ergonomic furniture and a bed (ibid).

Moreover, the Works and Services Department has spent approximately one million dollars on adjustable workstations and gas lift chairs. The purpose of this furniture is to prevent students and staff from developing OOS conditions (Hewitson 1998).
Support Services

Victoria University provides a variety of support services for students with disabilities. Some of these students carry “Equity in Action Cards” that save them from having to explain why they require non-academic assistance. Students might use their Equity in Action Cards to gain front-row seats in a lecture theatre, or to move to the front of a queue (Co-ordinator for Students with Disabilities undated; Co-ordinators for Students with Disabilities 1997).

Students with disabilities such as OOS are able to access trained note-takers through the “Vic Volunteers” scheme (ibid). At the beginning of each semester, a Co-ordinator for Students with Disabilities notifies the Vic Volunteer Co-ordinator that a student needs a note-taker for a particular course. The Vic Volunteer Co-ordinator contacts a Vic Volunteer who is already taking that course, and arranges for the Volunteer to photocopy and leave their own lecture notes in a pre-arranged place. The student is then advised of this arrangement and is required to collect the notes on a weekly basis (Gibson 1998).

If none of the Vic Volunteers are taking the course, the Vic Volunteer Co-ordinator asks the course co-ordinator to seek a volunteer at the beginning of the first lecture. The course co-ordinator directs the volunteer to the Vic Volunteer Co-ordinator, who arranges for the volunteer to receive training as a note-taker (ibid).

The staff in the Reference Department of the Library have a “special responsibility” to assist students with disabilities to access library resources (Victoria University of
Wellington 1996). In addition, a number of lockers in the Library are reserved for these students (Co-ordinators for Students with Disabilities 1997).

The Student Learning Support Service (SLSS) runs a weekly Drop-in for students with OOS conditions. The Co-ordinator of the Drop-in provides emotional support for these students, and assists them to develop their paid work and study skills (Scott 1998). The SLSS has produced information sheets for people with OOS that list aids and techniques for taking notes, writing essays and preparing for exams respectively (Appendix A). The Co-ordinators for Students with Disabilities also have a “library” of information on OOS conditions (Gibson 1998).

Students with OOS conditions are able to receive low-cost physiotherapy treatment through the Student Health Service’s Physiotherapy Clinic (Co-ordinator for Students with Disabilities undated). Fourth-year physiotherapy students assist Marie Powell (Occupational Health Nurse) to run a weekly exercise programme called OOS Busters (Powell 1998).

Financial Assistance

From 1998 to 2000, the Aotearoa New Zealand Ministry of Education is going to provide tertiary institutions with $9.9 million of supplementary funding for those students with disabilities who have “high cost” learning needs (Cassie 1997; Gibson 1998). Tertiary institutions are expected to maintain the level of financial assistance that they currently provide for students with disabilities, and to spend the
supplementary funding on operating costs and labour intensive support services, rather than on capital outlay (Gibson 1998).

Victoria University’s Co-ordinators for Students with Disabilities also have a small fund that can be used to help students with disabilities to meet the cost of inexpensive services (ibid). Students who are experiencing “exceptional hardship” are able to apply to the Student Assistance Scheme that is administered by the Student Finance Advisors (Co-ordinators for Students with Disabilities 1997).

The Co-ordinators for Students with Disabilities assist students with disabilities to apply for external grants from organisations such as Workbridge (a Government-funded employment agency for people with disabilities) (Gibson 1998).

Students with OOS conditions related to paid employment are eligible for compensation under the 1992 Accident Rehabilitation and Compensation Insurance Corporation (ARCI) Act. However, students with OOS conditions related to study are ineligible for financial support from the Accident Compensation and Insurance Corporation (ACC). These students are unable to claim for the loss of actual or potential earnings, or for treatment costs (Wellington Press Association 1996).

**Previous Research**

Students with disabilities at Victoria University have participated in two research projects to date. Lang (1994) found that the majority of students had difficulty writing in lectures, tutorials, and examinations, because it was too painful for them to
write at length, or at speed. She also found that students with disabilities are often unable to meet assignment deadlines because of pain or illness.

Neale and Hayward (1997) found that the greatest difficulty experienced by first year students with disabilities, was maintaining a balance between their study, paid employment and family commitments.

Both research reports indicate that despite widespread advertising, students with disabilities are often unaware of the services that exist for them at Victoria University (Lang 1994; Neale and Hayward 1997).

**DEFINING ‘OCCUPATIONAL OVERUSE SYNDROME’**

‘Occupational overuse syndrome (OOS)’ is an umbrella term. It refers to a range of conditions that are characterised by sensations such as aching, tingling and numbness in the muscles, tendons, nerves, soft tissues and joints (Macfie 1995; Occupational Safety and Health Service et al. 1997; Slappendel 1996; Turner 1994a).

Pain, tenderness, weakness, inflammation, stiffness and fatigue are some of the symptoms of OOS conditions (Bammer and Martin 1988; Browne et al. 1984; Kuorinka et al. 1995; Occupational Safety and Health Service et al. 1997; Pascarelli and Quilter 1994; Slappendel 1996; Wigley undated).

OOS conditions are thought to develop through three stages. In stage one, the symptoms subside with rest. In stage two, the symptoms persist even after rest.
Finally, in stage three, the symptoms prevent people from functioning as usual (Browne et al. 1984; Guidotti 1992; Pascarelli and Quilter 1994; Turner 1994a).

**SPECIFIC TYPES OF OOS CONDITIONS**

The Occupational Safety and Health Service and the Accident Rehabilitation and Compensation Insurance Corporation (1997) have classified OOS conditions as localised inflammations, or compression syndromes, or pain syndromes.

**Localised Inflammations**

Tenosynovitis, De Quervain's tenosynovitis and epicondylitis are three of the more common types of localised inflammation.

A tendon attaches a muscle to a bone or fascia. A tendon sheath “...protects the tendon against mechanical friction when passing over bony structure.” (Kuorinka et al. 1995:24). Tenosynovitis occurs when a repetitive hand or wrist action exceeds the lubricating capacity of a tendon sheath, causing friction between the tendon and the sheath. This friction causes the tendon sheath to become inflamed and then thicken (Occupational Safety and Health Service et al. 1997).

De Quervain's tenosynovitis is the inflammation of the tendon sheath that protects the long abductor and short extensor tendons of the thumb (Occupational Safety and Health Service et al. 1997; Guidotti 1992).
Epicondylitis results from muscle or tendon damage at a tendon bone junction. Shock-loading of this junction through repeated and forceful movements causes muscle pain or inflammation of the tendon. Lateral epicondylitis (or tennis elbow) is the inflammation of the finger extensor muscle (Kuorinka et al. 1995; Occupational Safety and Health Service et al. 1997; Guidotti 1992).

**Compression Syndromes**

Carpal tunnel syndrome is a form of compression syndrome. This syndrome occurs when the median nerve is trapped in the carpal tunnel at the wrist. Carpal tunnel syndrome is associated with repeated hand movements, forceful hand movements, repeated vibration of the hand and constrained posture. It is characterised by pain, numbness and tingling in the hand (ibid).

**Pain Syndromes**

Chronic pain syndrome presents as persistent muscle pain. This pain is associated with activity (Occupational Safety and Health Service et al. 1997).

Myofascial pain syndrome is a skeletal muscle condition that is diagnosed by the presence of tender muscle trigger points that twitch when touched. Poor workplace design, constrained posture and stress are some of the factors that contribute to the development of myofascial pain syndrome (Kuorinka et al. 1995; Occupational Safety and Health Service et al. 1997).
Tension neck syndrome is characterised by pain, stiffness and tenderness in the neck and shoulder muscles. This condition is associated with constrained head and arm postures, as well as with repetitive arm movements (Kuorinka et al. 1995; Guidotti 1992).

**EXPLAINING OOS CONDITIONS**

A variety of explanations are given for OOS conditions. The main difference between these explanations is that some describe OOS conditions as physiological disorders, while others depict OOS conditions as originating “in the mind”.

**Physiological Disorders**

**Standard Medical Theory**

The standard medical theory is that OOS conditions are musculotendinous injuries to the neck, shoulders and/or upper limbs. These injuries are caused by repetitive movement, forceful movements and static postures. Psychosocial factors such as mental stress, interpersonal conflict and job dissatisfaction are also thought to contribute to the development of OOS conditions (Bammer and Martin 1988; Browne et al. 1984; Guidotti 1992; Hopkins 1989; Pascarelli and Quilter 1994; Stephens 1993; Turner 1994a).

Proponents of the standard medical theory generally regard employees with OOS conditions as conscientious hard workers (Bammer and Martin 1988).
Muscle Tension

Muscle tension theorists believe that OOS conditions are caused when a tense muscle squeezes down on the capillaries that pass between the muscle fibres, stopping the flow of blood to the muscle and tendons. This causes the muscle to change to anaerobic metabolism, which in turn, leads to a build up of lactic acid in the muscle. Lactic acid stimulates pain receptors. This muscle pain causes the surrounding muscles to tense up, thereby creating a self-sustaining pain cycle (Occupational Safety and Health Service et al. 1997; Ring 1997; Wigley undated).

A number of factors increase the risk of muscle tension. These include poor workstation design, static posture, repeated movements, forceful movements, poor blood circulation, stress, over-conscientiousness, perfectionism and the inability to relax (Occupational Safety and Health Service et al. 1997; van Stolk in Macfie 1995; Wigley undated).

Rowe et al. (1987) found that poor workstation layout and high workloads cause muscle and tendon fatigue. Such fatigue causes muscle pain.

Ergonomic Model and Posture Model

While bad or constrained posture is identified as a risk factor for developing OOS conditions, the proponents of the ergonomic model primarily regard these conditions
as physical work-related injuries caused by poorly designed work equipment and furniture (Wallis 1997).

In contrast, proponents of the posture model believe that poor posture is the most significant causal factor for developing OOS conditions. Other significant causal factors include poor workstation layout, inadequate workstation equipment, fluctuating workloads, increased workloads, deadlines and perfectionism (Chalmers 1998; Grimes 1993).

**Compensation Neurosis**

Compensation neurosis theorists think that OOS conditions are physical injuries from which employees delay their recovery, because unconsciously they want to retain their status as invalids, they want to remain “on holiday” and they want to continue to receive compensation (Bammer and Martin 1988).

**“All In The Mind”**

**Conversion Disorder**

The conversion disorder model depicts people with OOS conditions as having unconsciously converted an unresolved psychological conflict into imaginary pain. This pain gives people with OOS conditions a socially acceptable outlet for their distress, without forcing them to address their psychological conflict (Bammer and Martin 1988; Hopkins 1989).
Malingering

Proponents of the malingering theory believe that employees with OOS conditions have faked their symptoms so that they can perform lighter work tasks, take paid leave, and receive compensation (Bammer and Martin 1988). Willis (1994) argues that the malingering theory has emerged due to the absence of a detectable injury that matches the symptoms of OOS conditions. Davey and Seale (1996) note that it is relatively common for people with "undetectable" chronic conditions to be labelled malingerers.

Greening and Lynn (in Reuter 1998) have found that people with OOS conditions show reduced sensitivity to vibration in the hand, and an over-reaction to stimulation that is usually innocuous. This suggests that a vibrometer could be used to detect the early warning signs of OOS conditions.

All of the aforementioned explanations are controversial. Hopkins (1989) suggests that the Australian workers' health movement and the feminist movement support the standard medical theory, because it places the responsibility for OOS conditions onto employers. In contrast, employers and insurance companies have a vested material interest in the conversion disorder model.

Bammer and Martin (1988) argue that both the proponents and the opponents of the standard medical theory need to clarify their diagnostic criteria and gather evidence from people with OOS conditions.
MANAGING OOS CONDITIONS

The approach that is taken to the management of OOS conditions depends largely on whether these conditions are viewed as physiological disorders, or as originating “in the mind”.

Standard medical theorists and muscle tension theorists take a multifaceted approach to the management of OOS conditions. A stage one OOS condition is managed by modifying the person’s workplace design, changing their working technique, varying their work tasks and by introducing micropauses and rest breaks (Bammer and Martin 1988; Browne et al. 1984; Dryson 1993; Occupational Safety and Health Service et al. 1997).

Stage two and stage three OOS conditions are managed by rest, relaxation techniques, stress management, massage, stretching, exercise, physiotherapy, occupational therapy, splints, transcutaneous electrical stimulation, medication and surgery (ibid).

Proponents of the ergonomic model believe that ergonomic furniture and equipment is the key to eliminating OOS conditions. Posture theorists think that OOS conditions can be managed through correct posture. Some argue that furniture must allow people to maintain a correct posture. Others believe that people are responsible for educating themselves about good posture (Wallis 1997).
Brennan (in Chalmers 1998) teaches people with OOS conditions how to use yoga and martial arts to restore muscle balance and improve their posture. Alexander Technique practitioners also teach people with OOS conditions how to use their bodies properly. In addition, Alexander Technique practitioners seek to restore freedom of movement in the head, neck and back by lengthening the spine (Heath in Harsant 1998).

Conversion disorder theorists are divided over the management of OOS conditions. Some believe that people with OOS conditions require psychiatric therapy. Others think that people with OOS conditions should “pull themselves together” and take control of their pain (Bammer and Martin 1988).

**EMOTIONS**

Pascarelli and Quilter (1994) believe that people with OOS conditions tend to progress through five emotional stages. The first stage is denial, as people do not acknowledge that they are experiencing OOS symptoms until those symptoms become severe. The second stage is panic, with people fearing that they will become physically impaired and/or that they will lose their paid work because of their OOS condition. The third stage is anger, which people might direct at themselves, at their equipment, at their employer, at their doctor, or at the organisation that administers their compensation scheme. The fourth stage is depression, which stems from losing the ability to perform tasks as usual. The final stage is control, whereby people develop techniques that allow them to cope with their OOS condition.
IMPACT OF OOS CONDITIONS ON PEOPLE’S LIVES

The impact that OOS conditions have on people’s lives has received little attention in the academic literature. Thus, Bammer and Blignault’s (1988) review of the consequences of developing OOS conditions is based primarily on published anecdotal evidence. They found that a variety of negative consequences are associated with developing an OOS condition. These consequences include chronic pain, depression, social withdrawal and becoming involved in a protracted legal claim for compensation.

Ewan et al. (1991) have also found that people experience a series of negative life changes as a consequence of developing an OOS condition. Included in these life changes were the loss of paid work, the reduced ability to perform unpaid housework tasks and social withdrawal. These negative life changes led people with OOS conditions to lose their sense of self-identity and their self-esteem.

The authors (ibid) argue that three factors amplify the distressing nature of OOS conditions. The first factor is the ambiguity and chronicity of OOS symptoms. The second factor is the uncertain prognosis for OOS conditions. The last factor is the doubt and disbelief that has been attached to OOS conditions.

Shadbolt (1988) found that the levels of psychological strain, psychosocial stress and psychological distress experienced by people with OOS conditions, depended upon their level of disability. As an individual’s level of disability increased, so did their
levels of psychological strain, psychosocial stress and psychological distress. However, people who were on sick leave or receiving compensation for their OOS condition reported the most persistent levels of pain, regardless of their level of disability. Shadbolt suggests that these people felt the need to justify why they were not in paid work.

Shadbolt also found that people who had been redeployed because of their OOS condition, had higher levels of psychological distress than people without OOS conditions. He concludes that the higher levels of distress in the former group, might be due to the perceived lack of support from their colleagues, to their inability to perform their previous work tasks, or to the enforced change in their career path.

According to Shadbolt, some of the factors that might cause psychological strain for people with high levels of disability are personality characteristics, the family environment, the paid work environment, financial hardship and the lack of information about strategies for living with OOS conditions. He argues that treatment and rehabilitation programmes should teach people with OOS how to control their respective conditions.

AIDS AND TECHNIQUES

Nettleton (1995) believes that people with chronic conditions develop strategies in an attempt to conceal their increasing dependency upon others. Ewan et al. (1991) found that people with OOS conditions develop strategies in an attempt to “normalise” their behaviour and retain their independence. This finding supports
Davey and Seale's (1996) argument that people often conceal stigmatised conditions in an attempt to pass as "normal".

A number of aids and techniques have been developed that make it easier for people with OOS conditions to perform daily living tasks, to drive and to participate in recreational activities. Strategies for living with OOS conditions include using lid unscrewers, using spring-loaded scissors and putting lever handles on doors and taps. People with OOS conditions are encouraged to use a lumbar roll when driving, to have a padded steering wheel cover, and to stop driving and stretch every 30 to 45 minutes. Aids that assist people with OOS conditions to participate in recreational activities include foam tubes for pens, bookstands and ergonomic bicycle handlebars (Occupational Safety and Health Service et al. 1997; Palmer 1992; Pascarelli and Quilter 1994).
CHAPTER THREE: METHODOLOGY

THEORETICAL FRAMEWORK

Qualitative Research

‘Qualitative research’ is an umbrella term that is used to describe a number of research methods. These methods include participant observation, case studies, focus groups and individual in-depth interviews.

The aim of qualitative research is to identify the meaning that a research participant themselves has attached to their own experience of a particular event. Consequently, qualitative research methods are used to record the participant’s own experience of the event, in the participant’s own words and/or actions. This information is then analysed in order to identify the commonalities, as well as the differences and the contradictions within a group of research participants. Thus, qualitative research methods are often used to explore topics about which very little is known.

The lack of information about university students with OOS conditions led me to believe that the current research was exploratory. Hence my decision that a qualitative research method was appropriate.
Emancipatory Research

The term ‘emancipatory research’ refers to research that seeks to further the interests of the population that is being studied (Morris 1992).

According to Ward and Flynn:

It [emancipatory research] must share knowledge, experiences and ideas with other people with disabilities, raising their consciousness, increasing solidarity and broadening the base of the disability movement.

It must try to influence policy makers and practitioners to make changes in policy and practice that will work towards the empowerment of people with disabilities (1994:41).

Proponents of emancipatory research have criticised qualitative research into disability issues for two reasons. The first reason is that qualitative research involves relatively powerful “experts” conducting research on relatively powerless participants (Felske 1994; Oliver 1992; Ward and Flynn 1994). The second reason is that qualitative research has failed to improve both the lives of people with disabilities and the services that exist for them (Boyles 1997; Oliver 1992).

In order to overcome the situation whereby an “expert” imposes their own research agenda upon the participants, emancipatory research aims to have people with
disabilities researching disability issues themselves (French 1992). Ward and Flynn (1994) argue that a researcher with a disability is more likely to be sensitive to the issues that people with disabilities face, than a researcher without a disability.

My research topic was derived initially, from my own experiential knowledge of studying with an OOS condition at Victoria University. I then discussed my topic with Andrea Scott (former Co-ordinator of the OOS Drop-in) with Ava Gibson (a Co-ordinator for Students with Disabilities) and with members of the Campus Abilities and Disabilities Organisation (CAN-DO). Thus, staff members and students with disabilities were given the opportunity to criticise my research, and thereby influence the direction of that research.

Ultimately however, I retained control over the research topic and the research methodology. I assumed that students with OOS conditions actually did have aids and techniques that they used to manage their studies. Discovering that students with OOS conditions did not in fact use such aids and techniques would still have been of interest to me (especially the reasons that the students gave for this). For instance, I might have found that students with OOS conditions did not need to develop strategies for managing their studies, because their course work did not aggravate their OOS symptoms. Alternatively, I might have discovered that students with OOS conditions were unaware of the aids and techniques that they could be using to manage their studies.

Emancipatory research aims to improve the lives of people with disabilities and the services that exist for them, through individual and social change (Boyles 1997).
Opie (1992) argues that qualitative research also tends to provide the participants with an opportunity to improve their lives through individual change. She believes that some participants might change their current situation as a result of reflecting upon their own experiences during qualitative research. In contrast, other participants might become distressed as a consequence of having reflected upon their own experience of a particular event.

It was possible that some of the participants in the current research would become distressed whilst talking about their OOS condition, because of the debilitating nature of OOS and the uncertainty about the prognosis. I decided to offer any participant who became distressed, Ava Gibson’s telephone number, the telephone number of the Counselling Service at Victoria University and/or the telephone number of an OOS support group that meets in Wellington City.

In actuality, only two of the thirteen participants appeared visibly upset during their respective interviews. They both feared that potential employers would discriminate against them because of their OOS condition. I told the participants that I too was concerned about workplace discrimination. I then emphasised that all of the strategies that the participants had used to successfully manage their studies were transferable to the workplace. I also informed the participants about the OOS support group in Wellington City.
METHOD

Focus Groups

The term 'focus group' refers to a qualitative research method that involves the assembling of six to twelve individuals to discuss a particular topic, under the direction of a moderator. The moderator promotes interaction between the group members and ensures that their discussion moves in useful directions (Morgan 1988; Stewart and Shamdasani 1990).

Using focus groups as my research method would have been advantageous for a number of reasons. Firstly, I would have been able to collect a large amount of information within a reasonably short amount of time. Secondly, I would have been able to ask the participants to comment on a verbal summary of their discussion, which I would have provided once they had finished discussing a particular question in the interview guide. Consequently, I would have been able to check with the participants, that I had in fact gathered all of the information that they considered to be relevant to the research topic.

Thirdly, some of the participants might have experienced a real sense of affinity with others in their focus group (Lang 1994). Finally, some of the participants might have learnt about new aids and techniques for managing their studies from listening to the other participants in their focus group. Thus, the current research would have provided the participants with an opportunity to achieve individual change.
Using focus groups as my research method would also have been disadvantageous for a number of reasons. Firstly, I would have needed to take into account the time involved in gathering a multiple number of responses to each question when deciding on how many questions to include in the interview guide. Time constraints might also have prevented me from probing the participants' answers fully. Secondly, some of the participants might have been conscious of the fact that after the focus group had finished, seven to thirteen other people (including myself) could have easily attributed what they had said, to them. Consequently, these participants might have felt uncomfortable about talking honestly within a focus group.

Thirdly, while some participants might have found the group atmosphere supportive, others might have felt pressured to conform to what appeared to be the "group response" to the interview questions. Finally, some participants might have found it rather tedious to have to sit and listen while five to eleven other people, each talked about their own personal experience of being a student with an OOS condition at Victoria University. Hence my decision that in-depth individual interviews were a more effective way of collecting information that was specific to each participant, than focus group interviews.

**In-depth Individual Interviews**

An ‘in-depth individual interview’ occurs when a participant meets with an interviewer in a private and confidential setting, to share their own understanding of a particular topic with the interviewer. The interviewer ensures that they gather all of
the information that they require, while allowing the participant to take the interview in other useful directions (Ely et al. 1993; Gorden 1980).

In-depth individual interviewing allows an interviewer to access a participant’s “thoughts, perceptions and feelings” (Minichiello et al. 1990:6). In addition, the interviewer is able to discover how these factors have influenced the participant’s behaviour. In-depth individual interviews appeared therefore, to be the most appropriate method for the current research, given that I was interested in the subjective experiences of individual students with OOS conditions at Victoria University.

Ely et al. suggest that:

At their most useful,…interviews are *interwoven* dances of questions and answers in which the researcher *follows* as well as leads (1993:59, my emphasis).

These authors go on to argue that an interviewer should answer a participant’s questions openly and honestly. In doing so, I think that the interviewer would convey a sense of empathic understanding to the participant. In turn, this sense of empathic understanding would assist the flow of relevant information during the interview.

However, an interviewer might encounter a situation where a participant has expressed a personal opinion, which is opposite to the interviewer’s own opinion.
The participant might then ask the interviewer for their opinion. The interviewer could express their "true" opinion and thereby alienate the participant. Alternatively, the interviewer could provide an evasive answer and thereby undermine the sense of empathic understanding that they had built with the participant.

I had intended to employ two "strategies" in my interviews with the participants. Firstly, in situations where I thought that I would assist the flow of relevant information by sharing my own opinion with a participant, I had planned to express my "true" opinion to that participant. Then I would have explained why I held that opinion and stressed that my opinion was neither better than nor worse than the participant's opinion, just different. Secondly, in situations where I thought that I would disrupt or end the flow of relevant information by sharing my own opinion with a participant, I had intended to provide a non-committal answer to the participant's question. Such an answer would have involved my acknowledging the participant's opinion, whilst stating that other people might hold different opinions.

In reality, I answered each of the participant's questions openly and honestly. At no time did I feel that I would compromise the flow of information by expressing my "true" opinions.

Ely et al. (1993) also argue that, in order to assist the flow of information during an interview, an interviewer should share personal information about themselves with a participant. Indeed, Oliver (1992) implies that an interviewer should reveal as much about themselves as they expect to be revealed by the participants in their studies. Yet, Letherby (in Cotterill and Letherby 1993) has found that the extent to which she
shares her own experiences with a participant, is determined by the participant's desire to learn about Letherby's personal history during the interview.

I talked about my experiences of having an OOS condition with the participants who expressed a desire to learn about those experiences. I did not however, share particularly sensitive information about myself with any of the participants because whilst the participants were protected by my own resolve to keep their information confidential, I was unable to guarantee that the participants would keep my personal information confidential.

Another reason why I decided to be aware of my own boundaries with regard to self-disclosure, was that I did not wish to project my own thoughts and feelings onto a participant. I also did not wish to remove the focus of an interview away from a participant and onto myself. Moreover, I did not want to find myself in the position where a participant was using the information that I had disclosed, in a manipulative manner during an interview.

One way in which I monitored my interaction with a participant, was to maintain a critical inner dialogue during the interview (Minichiello et al. 1990). I was aware that I had to balance this dialogue with listening to the participant properly, otherwise I would have missed the opportunity to “follow-up” on important pieces of information that the participant had shared with me.

Another way in which I monitored my interaction with the participants was to keep a personal log. I recorded the effect that both my verbal and non-verbal feedback had
upon a participant's responses to my interview questions. I then evaluated my
behaviour during the interview. This process of self-evaluation prevented me from
manipulating the research findings because I became aware of circumstances where I
had directed part of a participant's response to a question (Boyles 1997).

Whilst I was able to monitor the amount of personal information that I disclosed to a
participant, I was unable to detect whether a participant was only providing me with
a limited amount of relevant information. Indeed, one of the weaknesses of in-depth
individual interviews is that the interviewees might only disclose some of their
thoughts, feelings and actions.

The participants in the current research might have wanted to model "good" OOS
behaviour, and so they might have only talked about the aids and techniques that
health professionals had recommended to them. Alternatively, the participants might
have incorrectly recalled the aids and techniques that they did use to manage their
studies. Furthermore, the participants might have forgotten about some of these aids
and techniques.

I encouraged the participants to talk openly with me by stating in my information
sheet (Appendix B) that the purpose of my research was to contribute to the
development of a supportive environment for students with OOS conditions at
Victoria University, and not to provide an assessment of these students.

Moreover, the flexibility of a semi-structured interview allowed me to ask a
particular question in different ways and at different times during an interview.
Thus, I was able to check the validity of a participant’s initial response. I was also able to probe a participant’s response when I needed to clarify the meaning of that response, or when I wanted to gain a fuller understanding of it. On some occasions however, I had to balance the amount of time that I spent probing a participant’s response, against my need to complete the entire interview within the time that had been allotted by a participant.

I could have minimised the effect that incorrect recall and forgetfulness might have had upon the current research, by asking each participant to keep a diary during the period between my initial contact with them and their interview (Nachmias and Nachmias 1992). This diary would have contained details of their OOS symptoms and the aids and techniques that they had used (as well as those that they had discarded) to manage their studies.

After careful consideration, I decided not to ask each participant to keep a diary because firstly, I might have had difficulty getting some of the participants to do so (De Nisi et al. 1989). Secondly, those participants who did keep a diary might have consciously or unconsciously kept an inaccurate record of their experiences (Nachmias and Nachmias 1992). Finally, some of the participants might already have been struggling with the amount of course-related writing that was required of them, and I did not want to add to their written workload.

The literature suggested that the participants would feel more comfortable about talking honestly with me, after I had disclosed that I myself was a student with an OOS condition at Victoria University. Both Finch (1984) and French (1993) found
that having a shared identity with their participants minimised the social distance between themselves and their participants, thereby encouraging open communication. I was aware however, that my experience as a student with an OOS condition was unique to me. Consequently, I might have discovered that none of the participants used the same aids and techniques to manage their studies as I used for mine. I was also wary of assuming that I “knew” what a participant was talking about. Hence the importance of being able to probe a participant’s response in order to clarify the meaning of that response.

A disadvantage of using in-depth individual interviews was that the wording of my interview questions and probes determined the type of information that I gathered from the participants. Oliver (1990) argues that researchers of disability issues have tended to construct their interview questions in accordance with the medical model of disability. These questions have implied that the ultimate cause of disability is located within each participant’s functional limitation. In contrast, I worded the questions in my interview guide (Appendix C) in accordance with the social model of disability. This meant that the ultimate cause of each participant’s disability was located within the disabling features of the university environment.

I did not want to impose the social model of disability onto the participants however. Fortunately, one of the advantages of using in-depth individual interviews was that I could gather information from the participants in their own words. I believed that the expression that a participant used when describing themselves in relation to their OOS condition, would help me to understand where that participant located the ultimate cause of disability. It was possible that a participant would speak about
themselves as an “OOS sufferer”, or as a “victim of OOS”. The labels ‘sufferer’ and ‘victim’ imply that OOS conditions are tragic events that occur randomly to individuals. Hence, these labels appear to stem from the medical model of disability. In reality, the participants generally described themselves as “having OOS”. This implied that their OOS condition was one of a number of characteristics that could be used to describe the individual participants.

Boyles (1997) suggests that the terminology that is used in a study should be acceptable to the group that is most affected by the research. Hence, the terminology that I have used in my thesis reflects the way in which the participants referred to themselves and to the aids and techniques that they used to manage their studies.

SAMPLE

Originally, I thought that my sample would be comprised of ten internal, part-time or full-time Victoria University students, each of whom had been diagnosed by a doctor as having an OOS condition.

I chose this particular sample for a number of reasons. Firstly, I felt that a sample size of ten would be manageable in terms of both my time and the cost of the current research. It was also possible that I would reach saturation point⁴ by the ninth and

⁴ The term ‘saturation point’ is used to describe the point at which new information is no longer being gathered in the interviews (Maykut and Morehouse 1994).
tenth interviews. Secondly, I assumed that internal part-time or full-time students would spend more time on Victoria University's campus than students who learn by distance. Thus, internal part-time or full-time students were more likely to possess the experiential knowledge that I required to answer my research question. Finally, whilst it was not my intention to discredit self-diagnosis, I thought that I would add to the “credibility” of the current research by including only those students whose OOS condition had been diagnosed by a doctor. This was of particular importance to me, given the aforementioned debate that surrounds the very existence of OOS conditions.

I actually decided to increase the sample size from ten to thirteen. I thought that it would be worth my while interviewing the three additional students who had volunteered to take part in the current research, because I had gathered new information during my ninth and tenth interviews. Moreover, I was able to afford the time and money that it cost to increase my sample size by three.

I thought that students who openly acknowledged that they had an OOS condition would be more likely to volunteer as participants in the current research, than students who did not wish to disclose that they had OOS. Indeed, Hurst (1996) found that many students with disabilities do not participate in research projects because they wish to “play down” their disabilities. Andrews (1995) argues that students with disabilities want to avoid being “labelled”. They want to retain their independence and demonstrate their ability to succeed without “special assistance” instead. He also believes that low response rates reflect the students’ doubt that they
will benefit from informing tertiary institutions of the difficulties that they are having.

Furthermore, I thought that the students who volunteered to take part in the current research would be more likely to use aids and techniques to manage their studies, than the students who did not volunteer. It was possible therefore, that my research findings would indicate that students with OOS conditions did not require assistance to successfully manage their studies at Victoria University.

I had planned to use snowball sampling to recruit the participants for the current research. This would have meant that I had to rely upon each participant, giving me the name of another student with an OOS condition whom they had spoken to about participating in the current research. I decided that it was simpler and quicker to advertise for volunteers.

My advertisement for volunteers (Appendix D) was published in three issues of Salient and in one issue of Vic News. I also put up posters (Appendix E) in the Office for Students with Disabilities, the Sutherland Room, the Student Learning Support Service (SLSS), the Counselling Service, the Student Health Service and the Physiotherapy Clinic. Andrea Scott sent copies of my poster to the students with OOS conditions who had visited her at the Student Learning Support Service (SLSS). Ava Gibson mailed out copies of my poster to the students with disabilities who were registered with the Office for Students with Disabilities. I also asked Marie Powell if
she would give copies of my poster to the students who attended her OOS Busters class⁵.

I recruited seven participants through my advertisement in Salient, one participant through my advertisement in Vic News and one participant from the Office for Students with Disabilities’ mail-out. The remaining four participants were recruited through my social networks.

Two of the participants were acquaintances of mine. I was concerned that either one or both of these participants might refrain from disclosing as much information to me as they would to an interviewer whom they thought they would never see again. It was also likely that, if my interview with either of my acquaintances went badly, then subsequent conversations between that person and myself would have been awkward. Another possibility was that the transition between the informal catch-up session and the formal interview would be difficult and embarrassing (Cotterill 1992).

However, I decided that both of my acquaintances were prepared to talk openly with me as they had volunteered to take part in the current research. I also thought that the likelihood of collecting valuable information during these interviews outweighed the likelihood that the interviews would go badly. Moreover, I felt that since both of these participants had experiential knowledge of research practice they would categorise me as an interviewer rather than as an acquaintance. It seemed unlikely

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⁵ I was unable to attend OOS Busters because the class clashed with one of my lectures.
therefore, that the transition to formal interview would be either difficult or embarrassing. In actuality, I found both interviews informative and enjoyable.

GATHERING THE INFORMATION

My initial contact with the participants occurred when they approached me about taking part in the current research. I followed a “guide” (Appendix F) to ensure that I checked with each student that a doctor had diagnosed their OOS condition, and that they were enrolled internally in either a part-time or a full-time course at Victoria University. Next, I explained the purpose of the research and how the research findings would be used. I then indicated how long the interview should take and that it would be taped (with their permission). Finally, I reassured the student that all of their information would be treated as strictly confidential and that they would not be identifiable in the aggregated results. Some of the students asked for additional information, while others commented that they were happy to turn up to their interview “cold”.

I arranged to interview each participant at their convenience. On some occasions I handed an information sheet and a consent form (Appendix B and Appendix G respectively) to the participant at the beginning of their interview. On other occasions, there was enough time between the initial contact and the interview to mail these documents to the participant. I talked with the participants about the research and collected the signed consent forms before I began the formal interviews.
I tape recorded twelve of the interviews (with the participants' permission). I also wrote down key words during each of these interviews which I referred back to when I probed a participant's response. The remaining participant did not want to be taped "whining" about her OOS condition, so I took detailed notes during the interview instead. I found that the note-taking process restricted my ability to interact with this participant, because I was unable to maintain eye contact with her and there were silences while I finished writing down her comments.

In addition, the remaining participant decided that she wanted to be interviewed in a café rather than in a group discussion room at Victoria University's Library (as arranged). I was worried that the public setting would prevent this participant from disclosing as much information to me as she would in a private setting. In reality, I think that the café's relaxed atmosphere made the participant feel more comfortable about sharing her experiences with me. Generally, I interviewed participants in their home or in one of the Library's group discussion rooms.

The interviews took between 45 and 90 minutes to complete. At the end of each interview I gave the participant a box of Guylian chocolates as a token of my appreciation for their time and information. Some of the participants revealed relevant information after the formal interview had been completed. On these occasions, I asked the participant whether or not I could include this information in the current research. If the participant agreed, I made detailed notes about the information in front of the participant.
The first two interviews that I conducted were used as pilots for my interview guide (Appendix C). Both of the participants commented that I had asked "good" questions and neither of them suggested additional questions. I too felt that the open-ended questions in my interview guide had allowed each participant to talk about issues salient to them, while the sub-topics enabled me to check that I had gathered the information that was required to answer my research question. Consequently, no changes were made to my interview guide.

I generally asked the questions in my interview guide in the same order and in the same way during each interview. This helped to ensure that the research was reliable. Detailed descriptions of both the conceptual framework and the methodological procedures that were used in the research enhanced the possibility that the same findings would be reached in a replication (Creswell 1994). Moreover, it is likely that some of the concepts that I have developed from the participants' information, will apply to other students with OOS conditions at Victoria University as well as to students with OOS conditions at other Universities (Coffey and Atkinson 1996).

**ANALYSING THE INFORMATION**

Originally, I thought that I would transcribe the interview tapes myself. On reflection, I decided that transcribing would aggravate my OOS symptoms. Consequently, I employed a transcriber to transcribe my interview tapes verbatim. I was concerned that employing a transcriber would prevent me from becoming immersed in the information that I had gathered from the participants. I found
however, that I became familiar with this information while I was checking the interview transcripts against the interview tapes.

I organised the information that I had gathered in the interviews by grouping together the responses from different participants to common questions. In practice, I created an electronic file for each of the sub-topics in my interview guide. I copied segments of text from the interview transcripts and pasted them in the relevant file. I then printed a hard copy of each file and colour coded the segments of text according to the patterns around the sub-topic. For example, I used yellow to highlight the segments of text that referred to the standard medical theory of OOS under the ‘explanation for OOS condition’ sub-topic. I used pink to highlight the segments of text that referred to the muscle tension theory, and green for the segment of text that referred to the ergonomic model of OOS conditions.

I then created another set of electronic files for the sub-topics and, within each, I recorded the commonalities, differences and contradictions between the relevant segments of text. I illustrated my summary of each sub-topic with quotes from the interview transcripts. Rather than presenting the findings of the current research in the same order as the sub-topics in my interview guide, I decided to discuss related sub-topics under broader themes such as ‘the impact of OOS on the participants’ studies’.

I sent a copy of my draft research findings to the participants for their consideration and comment. This gave them the opportunity to check my interpretation of their
responses. The participants’ review of my findings should have helped to ensure the internal validity of the current research (Creswell 1994).

Four of the participants contacted me about my draft research findings. One of these participants corrected a spelling mistake, while another participant asked me to classify the Alexander Technique as an exercise rather than as a treatment. The third participant provided me with additional information about the OOS-related difficulties that she had experienced at Victoria University. The final participant asked me to delete two comments that could have been used to identify her. I honoured all of the modifications and deletions that the participants made to their own information. None of the participants remarked on my interpretations.

ETHICAL CONSIDERATIONS

Victoria University’s Human Ethics Committee gave ethical approval for the current research, which was conducted in accordance with the Association of Social Science Researchers’ code of ethics.

In terms of being seen as a relatively powerful “expert” conducting research on relatively powerless participants, five of the students who had volunteered to participate in the current research had experiential knowledge of research practice. I did not believe therefore, that I was a powerful research “expert” in comparison to these participants. I also thought that the participants generally would regard me as a peer who was training to become a researcher.
Barnes (1992) suggests that each participant should be given a copy of the interview guide well in advance of their interview, so that they have time to fully consider the issues on which they are being asked to comment. It seems likely that this procedure would enable each participant to feel powerful and in control of the interview process. However, the interviewer might find that a participant has pre-prepared their answers to the interview questions. The spontaneity of in-depth individual interviewing would be lost, thereby minimising the interviewer's ability to explore the participant's understanding of a particular issue. Hence my decision not to give each participant a copy of my interview guide prior to their interview.

Cotterill (1992) argues that power, control and vulnerability shift between the participant and the interviewer during an interview. Ultimately however, the balance of power shifts to the researcher because they analyse and interpret the participants' information according to the researcher's own perceptions of that information. I sought to avoid misrepresenting the participants, by giving them the opportunity to comment on my draft research findings (as discussed above). However, I did specify in my consent form (Appendix G) that I retained the right to use the information that I gathered from each participant without consulting them further (unless I considered it necessary to do so). The participants were of course made aware of their right to withdraw their information from the current research, before the information collection and analysis stages were complete. None of the participants did so.

I thought that it would be unethical of me to purposefully convey a sense of empathic understanding to a participant, in order to obtain particularly sensitive personal information from that participant. It was possible however, that a participant would
choose to share such information with me. Therefore, I had planned to contact each participant during the information analysis stage of the current research, in order to talk with them about including their sensitive personal information in my research findings. I felt that it would be unethical for me to either include or exclude the participant’s information, without having conferred with them first. In reality, the few participants who shared sensitive personal information with me did so on the condition that the tape recorder was switched off and that this information would be excluded from my findings.

I was aware that I could use the information that I had gathered from a participant to harm that person either personally or academically. Hence my resolve to treat all of the information that I collected as strictly confidential. The participants’ names only appeared on their respective information sheets and consent forms. Each participant was entitled to have access (through me) to the write-up of their own interview and to their own interview tape. Otherwise, this material was stored in a locked storage box to which only I had a key. The information that I stored electronically was password protected. The only people who listened to the interview tapes were myself and the transcriber.

The participants’ identities were protected during the analysis stage of the research because, rather than using the participants’ names, I asked the transcriber to type each transcript in a different font so that I could identify which interview each segment of text came from. The participants’ identities were also protected in my thesis, as the findings from my research were grouped together and I did not attribute the participants’ quotes.
At the conclusion of the research, I shredded all of the paper copies of the information that I had collected (unless a participant had indicated on their consent form that they would like the write-up of their interview to be returned to them). I also deleted all of the electronic files in which this information had been stored. Furthermore, I destroyed all of the interview tapes (unless a participant had indicated on their consent form that they would like their interview tape to be returned to them).

Finally, I was aware that the findings from my research could be used to undermine the interests of those who had participated in the current research (Finch 1984). It was possible for instance, that Victoria University would cease to offer a particular service for students with OOS conditions, if I found that none of the participants in the current research used that service. Yet, I felt that it would be unethical for me to remove all of the findings that I thought could be used to undermine the interests of students with OOS conditions.
CHAPTER FOUR: FINDINGS

THE SAMPLE

I interviewed thirteen internal Victoria University students, each of whom had been diagnosed by a doctor as having an OOS condition. Nine of the participants were studying full-time. Two were studying part-time because they had full-time paid employment, and the other two were part-time because they were only able to cope physically with one paper per semester.

The large number of full-time students in my sample is surprising, given that disability or health-related problems prevent many students with disabilities from studying full-time (Charlton 1997; Lang 1993; McKay et al. 1995). There are a variety of possible explanations for the high proportion of full-time students. Firstly, it is likely that more full-time students saw my posters and advertisements for volunteers than part-time students, because full-time students spend more time on campus than part-time students. Secondly, part-time students might have felt that they had limited experiential knowledge of studying at Victoria University and were unwilling therefore, to participate in the research. Finally, many students with OOS conditions might have learnt how to manage their symptoms so that those symptoms did not prevent them from studying full-time.

Most of the participants were studying at the post-graduate level for an arts degree.
Table One: Type of Degree

<table>
<thead>
<tr>
<th>Degree</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDERGRADUATE</td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td>4</td>
</tr>
<tr>
<td>Commerce</td>
<td>1</td>
</tr>
<tr>
<td>Law</td>
<td>1</td>
</tr>
<tr>
<td>Science</td>
<td>0</td>
</tr>
<tr>
<td>POSTGRADUATE</td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td>6</td>
</tr>
<tr>
<td>Commerce</td>
<td>0</td>
</tr>
<tr>
<td>Law</td>
<td>1</td>
</tr>
<tr>
<td>Science</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Four of the participants had developed their OOS condition while studying at Victoria University. Five of the nine participants who had developed their OOS condition prior to enrolling at Victoria University, were retraining as a consequence of developing OOS.

"...I wouldn't be here doing what I'm doing if I hadn't developed OOS. It was a very conscious choice to retrain in [name of degree] so I can get back into paid employment..."
"...I don't want any job where I'm having to do a lot of typing, a lot of writing, or any lifting, that sort of thing, so that's why I've enrolled here, as I said, it's sort of like trying to retrain for something else..."

Being involved in study was not related to developing an OOS condition for the other four participants who had developed OOS prior to enrolling at Victoria University. One of these participants thought that people who retrained in order to "get away" from their OOS condition were "barking up the wrong tree", because OOS symptoms would simply reappear in the weakened parts of their body.

"...I mean what say you've got a job and you change completely from working in an office and you become I don't know...drive up in a car and go and visit old people or something, become a district nurse, you get OOS in the arms then because you'll be driving...I mean they're already weak and you'll be driving up to Paraparaumu or something or driving around and you'll still get it [OOS]..."

SPECIFIC TYPES OF OOS CONDITIONS

In 1997, the Accident Rehabilitation and Compensation Insurance Corporation (ACC) redefined 'OOS' as an umbrella term rather than as a clinical entity.
Thereafter, general practitioners were required to specify a subtype of OOS on all ACC forms (Occupational Safety and Health Service et al. 1997).

Three of the participants were diagnosed as having specific OOS conditions related to their paid employment. These conditions were De Quervain’s tenosynovitis, chronic pain syndrome and tension neck syndrome.

The other five participants who had developed OOS conditions related to their paid employment were diagnosed prior to 1997. Consequently, their general practitioner was not required by ACC to specify a subtype of OOS.

The remaining five participants had developed their OOS condition while studying. Therefore, they are ineligible for compensation under the Accident Rehabilitation and Compensation Insurance (ARCI) Act 1992. This is inequitable given that the effects of OOS conditions related to study, are the same as the effects of OOS conditions related to paid employment.

**SYMPTOMS**

The participants experienced a variety of OOS symptoms including sharp pains, “pins and needles”, stiffness, tenderness and swelling. Aching however, was the most commonly reported sensation. These symptoms were located in the participants’ hands, arms, shoulders, neck and/or jaw.

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6 One of these participants developed an OOS condition while studying at a secondary school. The other four participants developed OOS while studying at Victoria University.
The length of time that the participants had had OOS symptoms ranged from two months to twenty years. Most of the participants had developed their OOS condition between three and seven years ago.

Table Two: Length of Time that the Participants had had OOS Symptoms

<table>
<thead>
<tr>
<th>Length of Time</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one year</td>
<td>1</td>
</tr>
<tr>
<td>One year up to two years</td>
<td>1</td>
</tr>
<tr>
<td>Two years up to three years</td>
<td>1</td>
</tr>
<tr>
<td>Three years up to four years</td>
<td>2</td>
</tr>
<tr>
<td>Four years up to five years</td>
<td>2</td>
</tr>
<tr>
<td>Five years up to six years</td>
<td>2</td>
</tr>
<tr>
<td>Six years up to seven years</td>
<td>2</td>
</tr>
<tr>
<td>Seven years up to eight years</td>
<td>1</td>
</tr>
<tr>
<td>Eight years up to nine years</td>
<td>0</td>
</tr>
<tr>
<td>Nine years up to ten years</td>
<td>0</td>
</tr>
<tr>
<td>Ten years or more</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Six of the participants thought that their current symptoms were less severe than their initial symptoms. In contrast, one participant had started to experience OOS symptoms in her right wrist and neck. This participant had been “super careful”
about managing her OOS condition and was therefore, unable to explain why her symptoms had “spread” from her right forearm to her wrist and neck.

The remaining six participants indicated that the severity of their symptoms was determined by both the amount and the type of activity that they performed on a particular day. This finding contradicts the current system of classifying the severity of OOS conditions according to the persistence of the symptoms. The participants’ experiences suggest that OOS conditions do not develop through three discrete stages. Instead, the severity of OOS symptoms varies according to levels of activity and types of activity.

“...it really depends what I’ve been doing...if I’ve had an active day, I’ve had to do some writing or lifting and things that can exacerbate it [OOS condition]...some days are wonderful and virtually pain-free and that’s a real joy and a gift...other days you just struggle to get through...so in terms of severity it’s really hard to judge.”

“...I’ve always believed in mind over matter, now I’ve discovered that actual matter has a mind of its own...”

Interestingly, three of the participants felt “complacent” about their OOS because their symptoms had either become intermittent, or they no longer prevented them from performing their usual activities. Moreover, two of the participants referred to

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7 As outlined on page 18 of my background and literature review.
themselves as having “had OOS”. It is possible that they no longer saw themselves as having “real OOS” (defined by the participants as lack of muscle control). In contrast, four of the participants referred to their OOS as a permanent condition that they had to manage constantly.

EXPLAINING OOS CONDITIONS

All of the participants referred to OOS conditions as physiological disorders.

The standard medical theory was the most commonly described explanation for OOS conditions. Ten of the participants spoke about their OOS condition as an injury that had been caused by a combination of stress, using an inappropriate workstation, performing repetitive hand movements and “working too fast and too hard” in order to meet deadlines.

One participant attributed her OOS condition solely to poor workstation design. Her explanation supports the ergonomic model of OOS conditions.

The other two participants thought that OOS conditions were caused by muscle tension, which in turn was caused by awkward static postures or by mental stress. This explanation is in accordance with the muscle tension theory of OOS conditions.

In addition, six of the participants thought that their personality had made them more “susceptible” to developing an OOS condition. They cited characteristics such as
hard working, perfectionism, driving themselves to complete a task and the inability to relax.

Grimes (1993) found that personality traits such as being a perfectionist and a high achiever, were significant causative factors in the development of OOS conditions. Ietje van Stolk (in Macfie 1995) also believes that personality factors such as diligence, over-conscientiousness, and being a poor relaxer, predispose some people to developing OOS conditions. However, there is still very little research to either support or refute the existence of an “OOS personality” (Occupational Safety and Health Service et al. 1997).

As one participant commented

“...I think that, yeah that there are those predispositions to it [OOS] but that what actually triggers it off is your like working conditions, work practices...huge workload...”

MANAGING OOS CONDITIONS

All of the participants took a multifaceted approach to managing their OOS condition. They combined self-care strategies with exercise, medication and treatment. The participants’ holistic approach is similar to that suggested by standard medical theorists and muscle tension theorists.
The participants' experiences indicate however, that neither ergonomic furniture nor correct posture are the “keys” to alleviating OOS symptoms (as has been suggested by ergonomic theorists and posture theorists respectively).

Table Three: Strategies the Participants Used to Manage their OOS Condition

<table>
<thead>
<tr>
<th>Self-care</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ice</td>
</tr>
<tr>
<td>• Rest</td>
</tr>
<tr>
<td>• Relaxation</td>
</tr>
<tr>
<td>• Getting “enough” sleep</td>
</tr>
<tr>
<td>• Using an ergonomic workstation</td>
</tr>
<tr>
<td>• Micropausung and taking rest breaks</td>
</tr>
<tr>
<td>• Balancing an increase in one activity with a decrease in another activity</td>
</tr>
<tr>
<td>• Avoiding certain activities in order to “save” hands and arms for “more important” tasks</td>
</tr>
<tr>
<td>• Running hot water, then cold water, then hot water, then cold water on the upper body to improve circulation</td>
</tr>
</tbody>
</table>
### Exercise

- Aerobics
- Ballet
- Running
- Tai Chi
- Alexander Technique
- Gym
- Stretching
- Walking

### Medication

- Anti-inflammatories
- Muscle relaxant
- Pain-killers

### Treatment

- Accupressure
- Acupuncture
- Chiropractor
- Massage
- Osteopathy
- Physiotherapy

In addition, three of the participants had trained themselves to recognise and counteract warning signs such as pain, tension, tiredness and irritability.

"...I've really sort of had to retrain my mind to sort of recognise pain and not ignore it and keep going..."
“...the first symptom now for me is that I feel really tired...and irritable.”

IMPACT OF OOS ON THE PARTICIPANTS’ LIVES

OOS had had a negative impact on the participants’ careers, unpaid work, leisure activities and social life. The participants’ experiences are similar to those recorded by Ewan et al. (1991) in their study of the effects that OOS conditions had on people’s paid work, home lives and self-identity.

“...since I left work I haven’t been doing any writing and certainly no typing and I stopped driving my car and I have my housework done....”

“...so because you’ve got such weak muscles you can’t do a lot of things that you would normally do, like vacuuming or holding a drink.”

It is not surprising that twelve participants felt “incredibly negative” about their OOS condition initially, given that it had prevented them from performing their usual activities and therefore “ruined” their lives. People who have been diagnosed with a chronic condition often feel at first, as though their life has ended (Royer 1995).
In contrast, the remaining participant was pleased to be diagnosed as having an OOS condition, because she had originally been diagnosed as having rheumatoid arthritis which she considered to be more debilitating than OOS.

The participants became more accepting of their OOS condition once they learnt how to manage their symptoms. Often the participants modified the way in which they performed an activity, or they replaced an activity that aggravated their symptoms with an activity that did not exacerbate those symptoms. I believe that these changes enabled the participants to regain a sense of their "usual selves".

"...I used to play the guitar, I used to play all the time and not have a problem but the minute I got this problem [OOS], all of a sudden I could only play for a very short time and then my hands would start getting sore and cramping up...[so] I took up singing lessons because I thought, well that's something I can do musically."

People tend to re-evaluate their lives after they have been diagnosed with a chronic condition (ibid). Three of the participants indicated that OOS had had a positive impact on their lives, because it had led them to prioritise self-care above paid employment and study.

"...I've found that I value myself a lot more since I've had OOS and since I've become more aware...before I just used to use
myself up doing work...and now I've sort of decided to say, well bugger it, it's not worth it...”

“I mean there are people who don't get OOS you know...and they're more balanced about their lives and they get enough exercise, they get enough sleep, they don't work too hard, so I guess that's a lesson I had to learn...”

Ten of the participants had met people who doubted the existence of OOS conditions. Most of these participants thought that the invisibility of OOS led to such scepticism.

“... the people around you who don't have...who haven't had something like this are actually really sceptical...because they can't see it...and you look perfectly okay to them and you sort of get the impression although they might not actually say it, that they sort of wonder if you're a bit of a hypochondriac and just imagining it and...a wee bit soft or something you know...and so you're having to deal with that sort of attitude as well...”

People with chronic conditions are often discredited because they fail to meet other people’s expectations of them (ibid). Some of the participants found that people reacted in disbelief when the participants stated that they were no longer physically
able to perform a task themselves. Other participants were made to feel guilty for developing an OOS condition.

“...they just think that you're sort of over reacting and...when you say, no I don't want to lift and carry that because my arms are sore...you know you sort of see them, the expression like, oh yeah [doubting tone of voice]...”

“I know my mother didn't really understand and she kind of, I think somewhere in her mind she thought I was just trying to get out of things...”

“...they [former employers] had all this power over me and they were...you kind of believe it when they say it's your fault you know. You kind of think, well maybe it is, maybe they're right.”

“...I felt really guilty because I'd never heard of it [OOS] before, I thought people were thinking, oh I'm just sort of faking it to get out of my [secondary school] exams...nobody knew what it was.”

Six of the participants thought that people had become more understanding of OOS conditions, because OOS had become more prevalent in Aotearoa New Zealand society.
"...I think by the time I got it [OOS] there was more of an awareness of it, so I wasn't sort of breaking down too many barriers..."

In contrast, one participant commented that the Aotearoa New Zealand Government has portrayed OOS as a disorder that affects emotionally unstable or physiologically flawed women. Such a portrayal would make it easier for the Government to dismiss OOS conditions as "all in the mind" or as a pre-existing disorder. Wallis (1997) found that whilst much of the literature does depict OOS as a "women keyboard users' problem", it also validates women's experiences of OOS conditions.

Two other participants felt that all people with OOS conditions have been labelled "useless". These participants spoke about two types of people with OOS conditions. The first type deny that they are experiencing OOS symptoms, until those symptoms become so severe that the people "completely fall over" and "become cripples". The second type acknowledge their OOS symptoms and take active steps to manage their condition. The first type of people have however, overshadowed the efforts that the second type of people have made to control their OOS. Consequently,

"...if you have OOS I feel like you're like a pariah anyway...I mean it concerns me because I think when I leave this job that I'm in, they'll [prospective employers] somehow find out I bet that I've got OOS and they won't want to hire me...that's unfair really...because I mean what has happened is your whole blanket idea of what OOS is, like I was talking about that
woman who's gone home for three weeks because she's got OOS, well that annoys me because she just falls into the trap where everyone can say, oh there they are, look at them, they've gone home, they're useless, no can't do anything any more and that's really wrong because I've had this condition as I say I think about four years and I have never taken a day off work for it…"

IMPACT OF OOS ON THE PARTICIPANTS’ STUDIES

The participants had experienced a variety of OOS-related difficulties while studying at Victoria University.

Disability-related Difficulties

Pain, tiredness and stress were the most commonly reported disability-related difficulties. Lang (1993) and McKay et al. (1995) had similar results in their respective surveys of students with disabilities.

“...the pain, I mean it really does hurt and it's not just that, it's really frustrating and it's like, I think it's like a cycle as well because if you like it's really sore and you've got, okay I've got this assignment to do so you get really frustrated and stressed because you know it's going to take me more time to do it and you don't know how you're going to do it and so then you get
more tightening of things and then you get more sore and you
know...”

In addition, the participants emphasised the extra time and effort that is required to
move around campus, use the library, organise lecture notes and write an essay.

“But when I come up onto campus I really have to think, okay, where do you want to go...work out your route, I’m always having to think three or four steps ahead...I find that quite tiring...”

“I used to go to the library and would get out six books and a few magazines. Now you have to go back on a daily basis and get out one book, yeah...go back six times and get out one book on each day. That’s sort of how it gets because I can’t carry that much...”

“...yesterday I came to the library and I did a whole list of all these books you know on the computer that I needed to go and sort out and get and I had...still had a couple of hours that I was going to spend at the library trying to get them and photocopying them and...so all I’d written down was the number and the name of the book...and by the end of that, I spent an hour doing that and then I...my arm was too sore, like I couldn’t even write the last ones...”
"Everything takes more time and there's more stress and it's more mucky because you can't do the things yourself..." [such as taking notes and typing essays]

Physical Environment

Some students with OOS conditions find that the seating arrangement and the writing surfaces in lecture theatres increase their level of pain (McKay et al. 1995). One participant thought that the bench tops were too far away from the seats, making the lecture theatres "incredibly uncomfortable". The height of the bench tops prevented two other participants from taking notes during lectures.

"...I was put in Kirk 303 and the tables are quite high...so I had my arm hanging up and every ten, five or ten minutes or so I'd have to drop my hand and shake it out because the blood wasn't coming up...to my hand..."

Two of the participants suggested that ergonomic workstations and adjustable chairs should be made available in the lecture theatres and in the Adam Concert Room at Victoria University. One participant commented that the electronic music studios were poorly designed.

"...the ergonomics in the studios are also really bad...because there's a big mixing desk in the front which is probably too high
or the chair too low and you have to swivel around to ninety degrees to see the computer, well almost ninety degrees, it's on an angle, you have to swivel around quite a lot to use the computer screen and then even more to use the keyboard and that's all very squashed..."

Three of the participants thought that Victoria University had an obligation to ensure that the computer laboratories and postgraduate students' workstations were set-up correctly. One of these participants also thought that the University should contract a representative from the Occupational Safety and Health Service (OSH) to set-up students' workstations in their homes.

McKay et al. (1995) found that a number of students with disabilities who were studying at Otago University, felt that that institution needed to acknowledge that the pressure to use computer laboratories and type assignments had contributed to the development of OOS conditions amongst students.

A participant in the current research believed that increasing students' access to computer laboratories would help to prevent OOS conditions, because students would avoid getting “onto the computers under huge stress”.

In terms of physical access, the doors around campus were too heavy for some participants to push open by hand. They had to use their upper body instead. Another participant remarked on the limited number of buildings with ground floor toilets. She also mentioned that it would be easier if her department was moved to a
single-storey building, or to one that had a lift. This participant had difficulty accessing higher floors, especially in buildings without lifts.

**Attitudes**

**Lecturers**

Hill (1994), McKay et al. (1995) and Stage and Milne (1996) all found that lecturers were more willing to accommodate students with visible disabilities than students with invisible disabilities. This was not the case in the current research.

Furthermore, while McKay et al. (1995), Reindal (1995) and Stage and Milne (1996) reported instances where students with invisible disabilities found that lecturers treated them with scepticism, this was not the experience of the participants in the current research. Rather, the participants who had spoken to their lecturers about their OOS condition felt that these lecturers were generally sympathetic.

There are a number of possible explanations for the differences in the lecturers’ attitudes. Firstly, the participants in the current research might have only disclosed their OOS condition to lecturers whom they thought had a sympathetic disposition. Secondly, the lecturers might have reacted sympathetically because they had an OOS condition themselves, knew someone who had OOS and/or had read about the debilitating nature of OOS conditions. Finally, Victoria University’s efforts to increase disability awareness amongst its staff might have encouraged lecturers to accommodate the learning characteristics of *all* students with disabilities.
However, one participant received the comment “what a messy paper” even though she had written on her test that she had OOS.

Another participant thought that she was given insufficient time to complete her assignments, despite asking a lecturer for “…heaps of notice about each assignment question so I could start working on the assignments way before and do a little bit each week…”. The stress of meeting assignment deadlines “caused a bout of OOS”.

Students with disabilities believe that tertiary institutions should ensure that academic staff are aware that these students often need additional time to complete their assignments (Penn and Dudley 1980). Moreover, students with OOS conditions believe that they would be able to manage their studies more effectively if they were given photocopies of lecture notes and overheads at the beginning of lectures (McKay et al. 1995). This sentiment was echoed by one of the participants in the current research.

Another participant thought that lecturers should firstly, be informed about which alternative learning and assessment strategies are appropriate for students with OOS conditions, and secondly, be taught how to implement these strategies.

At present, the Disability Action Research Group (DARG) and the Co-ordinators for Students with Disabilities, hold seminars for staff on how to work in partnership with students with disabilities. In addition, the Co-ordinators produce a handbook that includes strategies to help staff accommodate the learning needs of students with
disabilities. Yet, I believe that only those staff members who are already committed to providing an inclusive learning environment are likely to attend the seminar and/or read the handbook. Academic staff members should be informed at their induction, about the reasons why Victoria University has developed policies to accommodate students with disabilities. They should also be told that the positive attitude of “disability aware” tutors is a key factor in retaining students with disabilities at tertiary institutions (Charlton 1997).

Two out of the seven post-graduate participants had developed their OOS condition while studying at the undergraduate level. One of these participants found that studying at the post-graduate level was easier than studying at the under-graduate level, because being one of only a few students made her feel as though the lecturers were “actually going to listen” to any requests for assistance.

The other participant felt that she was unable to approach her lecturers on OOS-related matters, because they had begun to treat her like a colleague and as such expected her to manage her OOS condition on her own. In actuality, the lecturers have shirked their obligation under the Reasonable Accommodation Policy (1994), to make themselves available to talk with the student about her learning characteristics and the alternative methods for teaching and assessment that would assist her to meet the course requirements. Students with OOS conditions need to be made aware that they can ask the Co-ordinators for Students with Disabilities to investigate such situations, to ensure that the students are not being disadvantaged.
Students with OOS conditions also need to be made aware that lecturers are obliged to give all students with disabilities an "equal chance" to demonstrate their abilities. This means that a student with OOS is entitled to approach their lecturers for assistance. Moreover, either the Co-ordinators for Students with Disabilities, the Student Health Service, or the Counselling Service, can assess the student's situation and recommend alternative teaching and assessment strategies.

**Fellow Students**

The participants received mixed reactions when they disclosed their OOS conditions to fellow students. These students were "friendly and supportive" towards one participant. Another participant found that some students were openly sceptical about OOS conditions. This participant's experience is similar to that recorded by students with invisible disabilities in the studies conducted by Reindal (1995) and Stage and Milne (1996) respectively.

"...I had a colleague of mine...said he just thought it [OOS] was rubbish...like it was all in my head...I think eventually he got OOS pain because he was a type A personality so I think that changed his view."

Still other students failed to appreciate the difficulties that students with OOS conditions experience at university. One student told a participant that she was "lucky" to have OOS because it meant that she could have a note-taker. Another
student joked that a participant’s OOS condition was just a “sham” in order to get “extra thinking time” for exams.

**Health Professionals**

Six of the participants had visited Student Health Services in order to obtain treatment and/or a medical certificate for their OOS condition. Two of these participants described Student Health Services as “very good”. The other four participants had had a negative experience.

One of the participants thought that the doctor she saw at Student Health Services was unhelpful for a number of reasons. Firstly, the doctor neither discussed the participant’s symptoms with her, nor explained the possible causes of her OOS condition. Secondly, the doctor failed to identify ways in which the participant could manage her condition. Thirdly, the doctor neglected to identify activities that could aggravate the participant’s OOS symptoms. Finally, the doctor failed to advise the participant to contact the Co-ordinators for Students with Disabilities. This participant felt that the doctors at Student Health Services should allocate time for talking with students about their OOS condition.

This participant also reported that the doctors at Student Health Services were inconsistent in their treatment of students with OOS conditions.

“...I went to Student Health and said, look I have this pain, I can hardly stand it, can you give me something for it and she said...
basically, no I can’t…I had another friend, another student friend who had OOS and she did get some Voltarin. She went to a different Doctor at Student Health and they gave her some Voltarin tablets…and she gave me a whole sheet of them, like you know a sheet of ten or something…and if she hadn’t ‘ve done that I think I would have gone to the other Doctor, I would have tried a different Doctor but it was still pretty traumatic, emotionally traumatic to go to the Doctor and sort of plead for some painkillers, it was pretty horrible and I didn’t want to do that, so when this woman gave me the ten Voltarin it was just such a life saver and so I felt pretty bad about the attitude of that [former] Doctor, it was really unhelpful I felt…and this, ten was enough, I mean I still have some, I didn’t need a lot…”

Another participant received inconsistent treatment from the nurses at Student Health Services. Initially, a nurse gave the participant wrist supports. On a subsequent visit, another nurse told the participant that a doctor would have to prescribe the wrist supports for him.

Two participants commented on the aggressive attitude of a Student Health Services’ doctor.

“…I ended up crying when I was there [Student Health Services]…because he [a doctor] was just going on and on, you’re never going to get a job if you don’t… I thought he was
really harsh but... if you don't start to take some you know sort of initiative for yourself and do your exercise..."

"...I was just sort of going through the story of what had happened...and he said, it seems to me that you've got the idea that it's something that's...that is fixable, I think that was the word he used...I think he thought that I thought that it was completely over and done with, which I knew that it wasn't but...it was basically a blow that it had sort of come back so quickly and so fiercely...which I was sort of trying to build up to say and now I'm at the point where I'm being anxious about it but...he didn't ever leave me a chance to say that...so...at that point I burst into tears and told him I thought he was being a bit aggressive [laughs] which, and he kind of readjusted himself then but he kind of screwed up the interview really because...yeah 'cause I didn't feel safe any more..."

Two out of the three participants who had received treatment from the Physiotherapy Clinic for their OOS condition, left the Clinic feeling as though their OOS was "all in the mind". They got the impression that their condition would disappear if they improved their posture, exercised and "got a real life".

"...I don't know who she was but she was like, oh you know we don't call it OOS, it's all in the mind, you have to do exercises and then she just put a heat pack on me and left, and I was like,
mmm...like I felt...then you go through the thing of, you know
do I...is it as bad as I'm thinking it is you know and that's that
whole guilty thing again and I just felt, I just...I didn't go back
because I felt like she didn't believe me or something [laugh]
you know..."

The health professionals' attitude that students with OOS conditions have sole
responsibility for managing their OOS, could in turn prevent these students from
seeking assistance to manage their studies. It is important to bear in mind that the
Student Health Services' doctors can act as gatekeepers in terms of assessing a
student's eligibility for assistance.

**Additional Financial Costs**

Students with disabilities often face additional financial costs for equipment and
support services (Lang 1993; McKay et al. 1995; Stage and Milne 1996). The
participants generally had to pay for ergonomic furniture, equipment, voice-activated
software, photocopying and/or a typist.

"...it's cost me thousands of dollars getting the equipment so I
can study..."

"Spending a fortune on photocopying."
"...it'll cost me a lot of money that [title of assignment] won't it?
To get it typed up and retyped..."

Two of the participants felt that the Aotearoa New Zealand Government should allocate more money for students with disabilities in tertiary education. These participants also stressed how important it was that Victoria University spent all of the money that they received for students with disabilities, on equipment and support services for these students. In 1998, the Co-ordinators for Students with Disabilities spent all of their funding on labour intensive services, equipment and operating costs (Gibson 1999).

**Note-taking**

Students with disabilities often experience problems with note-taking in lectures and tutorials (Lang 1993; McKay et al. 1995). Seven of the participants had difficulty taking notes because writing aggravated their OOS symptoms. One of these participants withdrew from a paper because the *speed* at which the lecturer talked, exceeded the speed at which the participant was able to take adequate notes. Another participant withdrew from a paper because she was unable to cope physically with the *amount* of note-taking that was required.

Five of the participants sought to eliminate their problems with note-taking by arranging note-takers through the Co-ordinators for Students with Disabilities. Another participant however, used visualisation to recall information in an exam.
Consequently, she felt that it would be detrimental for her to have a note-taker, because she would be unable to visualise herself taking notes in a lecture or tutorial.

One of the five participants who had requested note-takers was satisfied with the note-taking scheme. The other four participants had experienced difficulties.

The first of the four participants was embarrassed by the manner in which her lecturer "almost coerced" her classmates into being her note-taker. The participant then had to "negotiate" with the administration assistant before her note-taker was able to photocopy her notes for the participant. Theoretically this situation should not have occurred, because the Vic Volunteer Co-ordinator informs the administration assistants that students with disabilities will be collecting notes from their respective offices on a weekly basis (Appendix H).

Students with disabilities are responsible for contacting their Student Advisor if they have difficulties with the note-taking scheme (Appendix I). The first participant talked with a Co-ordinator for Students with Disabilities about her experiences. I believe that such feedback is vital because not only does it make the Co-ordinators aware of the weaknesses in the existing scheme, but it also enables them to develop procedures that will counteract those weaknesses.

The second participant spoke about the "hassle" of re-organising collection points for her notes, at the beginning of each semester. In 1999, the Co-ordinators for Students with Disabilities will assist each administration assistant to develop an effective system for distributing notes to students with disabilities (Gibson 1998).
The third participant only received one set of notes from her note-taker. The Co-ordinator for Vic Volunteers had to confirm with the note-taker that they had dropped out of the scheme, before he could arrange another note-taker for the participant. After a month, the participant informed the Co-ordinator that she had organised to photocopy a classmate’s notes instead. The participant’s behaviour suggests that she is used to taking active steps to modify her circumstances in order to maintain control over her OOS symptoms.

This participant indicated on her tutorial preference sheet that she wanted to be in the same tutorial as “[name of note-taker]”. This made it easier for the participant to understand her note-taker’s tutorial notes. Usually however, neither the student with a disability nor the note-taker know one another’s identity. This ensures that the arrangement between the student and the note-taker can be mediated on a purely professional basis. Consequently, the Co-ordinators for Students with Disabilities generally advise a student with a disability to ask another student in their tutorial group to take notes for them (ibid).

The last participant did not receive any notes from her note-taker until the fifth week of Semester One. Fortunately she was able to photocopy a friend’s notes in the meantime. The participant then found that she was constantly going “backwards and forwards” to the department because her note-taker varied the days on which they photocopied and left their notes for the participant. Furthermore, this participant was “interrogated” when she went to collect her notes from an administration assistant.
"...I said to her, well you know someone sent me some notes and told me I had to come here. She said, well [what] sort of problem have you got? And I said, well I've got OOS and she went, oh well...well is there anything that you can do about that? [Laughs]. And I was sort of standing going, what are you talking about? I said, look you know carrying a back pack around all day is very heavy blah, blah, blah, having to write notes, I can't do that, I need a note-taker and she said, oh well, so you're carrying your books around with you? And I said, well I am at the moment and she said, well you're just making the situation worse aren't you? And I thought, who the hell is she to tell me how to manage my condition...I got upset about that..."

According to one participant, other students tend to assume that the participant’s note-taker has to accompany her to all of her lectures. This participant thought that more students might volunteer to be note-takers, if they were told that being a note-taker simply meant photocopying their own notes and leaving them with an administration assistant. In reality, lecturers should already be conveying this information to their students, given that it is included in the information sheet for staff and prospective volunteers (Appendix H).

This participant went on to suggest that at the beginning of each semester, the Coordinator for Vic Volunteers could notify each student of when and from whom they
should collect their notes each week. The Co-ordinator implemented this procedure at the end of 1998 (ibid).

Another participant thought that each note-taker should be required to photocopy and leave their notes with an administration assistant on the same day each week. In fact, the Vic Volunteer Note-taker Application Form already states that note-takers are responsible for photocopying their lecture notes at the same time each week (Appendix J).

**Course Assessment**

Students with disabilities often find assignments and examinations problematic, because either it is painful for them to write at length or at speed, or because their disability prevents them from using a keyboard (Lang 1993).

Four of the participants found that typing severely aggravated their OOS symptoms, and so they had to employ someone to type their course work for them. This caused financial difficulties. One participant thought that Victoria University should organise a typing service for students with disabilities, which would prevent these students from having to spend “a whole lot of student loan money” on typists.

Many of the participants found that handwriting tests and/or examinations was a painful experience. Four of the participants decided to alleviate this pain by arranging extra time for tests and/or examinations. All four found that having extra time meant that they could pace themselves and thereby avoid aggravating their OOS
symptoms. Unlike the students with disabilities in the surveys conducted by McKay et al. (1995) and Reindal (1995) respectively, none of these participants complained about being disturbed during extra exam time.

One participant did not apply for extra exam time partly because she did not realise that she could do so, and partly because she thought that she would be alone in a special examination room. This participant also questioned why she had to go to Student Health Services every time she wanted to arrange a note-taker or extra time. Similarly, students with disabilities have questioned why they have to “prove” that they have a disability every time they apply for assistance (Lang 1993).

The Co-ordinators for Students with Disabilities require students with OOS conditions to obtain a medical certificate each time they apply for assistance, because the changeable nature of OOS symptoms means that students might require different accommodations at different times. A Student Health Services’ doctor can however, recommend permanent assistance (Gibson 1998).

Another participant ceased to apply for extra exam time once she had decided that it would be more problematic to convince a doctor at Student Health Services that she was in pain, than to write an exam in three hours. The participant’s decision might have been influenced by her apparent belief that her OOS condition was no longer a disadvantage, because she had gained control over her symptoms.

“...I didn’t apply for extra time because I was quite aware that I didn’t want to put myself above other people, you know you
don’t want to give yourself an advantage that other people don’t have... whereas the year before I was really just sort of struggling to survive so I didn’t mind if I had extra time...”

Five of the participants sought to eliminate their problems with tests and/or examinations by arranging writers through the Co-ordinators for Students with Disabilities.

One of the five participants thought that having a writer was “brilliant” because it meant that her exam was a painless experience.

Three of these participants however, found the actual process of dictating their answers to a writer difficult. One of these participants thought that exam by dictation was an unrealistic way of assessing an individual’s ability. Another believed that having a writer cost students half a grade, “so if you’re worth an A, you’ll get an A-”.

The fifth participant had difficulty arranging a writer through her course co-ordinator, because the course co-ordinator appeared to be disinterested in this task. The participant was told that she had a writer the day before her test despite giving the course co-ordinator a month’s notice. Previous research suggests that academic staff delay organising alternative assessment methods, because either they are unsure how to do so, or they have failed to understand the participant’s need for an alternative assessment strategy (Andrews 1995; McLennan 1996). The Co-ordinators for Students with Disabilities are currently developing a terms test policy,
which will tell course co-ordinators how to organise a writer for a student with a disability (Gibson 1998).

Some of the participants who arranged writers had devised strategies that made it easier for them to successfully complete examinations by dictation.

One participant prepared mock answers and then timed how long it took her to read these answers aloud. Another participant told her writer when she was thinking aloud and when to write down what she was saying. This meant that the participant was able to organise her thoughts before her answer was written down.

Still another participant wrote down key words in an answer book that was handed in with her exam transcript. These words acted as a memory jogger for the participant and as a spelling guide for the writer. This participant commented that writers must be able to write neatly and quickly and be good spellers.

Interestingly, three participants did not arrange writers because they felt that they would have difficulty organising their thoughts before dictating them to a writer. One of these participants went on to say that she would opt out of doing a paper that was assessed by examination, because it was unlikely that she could sit and write for three hours.

Generally students with disabilities would like to reduce their written workload by having more oral assessment (McKay et al. 1995). Likewise, a participant felt that
students with OOS conditions should be given the option of presenting their assignments orally.

One participant thought that lecturers should assure students with OOS conditions that their marks would not be adversely affected if they submitted a hand-written assignment. Moreover, this participant felt that lecturers should avoid assessment strategies that involve a lot of writing in a short space of time, such as weekly assignments and take home tests. Another participant also mentioned that

“That's another reason why I'm not doing [name of paper] or anything like that at the moment because...they a have a test every week...and sometimes my energy levels are not as consistent as that...”

It is concerning that two of the participants found their respective practice placements “really quite difficult”. One of these participants had to use an inappropriate workstation, while the other participant had to continually record hand-written observations. Another participant had to search for a host organisation that was able to “accommodate a person with different requirements”. At present, the Co-ordinators for Students with Disabilities are not responsible for assisting students with disabilities with their placements (Gibson 1998).
AIDS, TECHNIQUES AND SUPPORT SERVICES

The participants used a variety of aids, techniques and support services to minimise the impact that OOS had upon their studies.

Aids

All of the participants indicated that they were using aids that enabled them to meet their course requirements without aggravating their OOS symptoms. Generally the aids used are the same as those suggested for students with OOS conditions by the Co-ordinators for Students with Disabilities and the Student Learning Support Service (SLSS).
Table Four: Aids the Participants Used to Manage their Studies

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Ergonomic Furniture</th>
<th>Voice-activated Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backpack</td>
<td>Adjustable chair</td>
<td>IBM Simply Speaking</td>
</tr>
<tr>
<td>Dictaphone</td>
<td>Adjustable workstation</td>
<td>IBM Via Voice</td>
</tr>
<tr>
<td>Foam pen grip</td>
<td></td>
<td>Dragon Naturally Speaking</td>
</tr>
<tr>
<td>Footrest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Stable Table”(^8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Microsoft Natural Keyboard”(^9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bookstand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fat pens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foam pencil grip</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slanted writing stand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Table Mate”(^9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^8\) A portable writing table that consists of a flat plastic tray attached on top of a bag filled with polystyrene balls.

\(^9\) A portable writing table that consists of an adjustable tray that is attached to legs. The legs can be hooked under a couch.

\(^10\) A split, sloped computer keyboard.
One participant had decided to use the aids that were recommended to her by a health professional. Two of the participants had chosen aids that they thought (after much consideration) would assist them to manage their studies. The remaining ten participants selected aids on the basis of “trial and error” and “word of mouth”.

“I guess I discovered that holding a very thin pen gave me cramp in my hands so you look at, well what can I do about this? Oh they have a thing called a pen grip, I'll try that, yeah that works...”

In addition, one participant specifically chose an aid that would assist her to complete her paid work tasks as well as her assignments.

“...it's acceptable in [name of organisation] to use a Dictaphone, they're available, they have typists who are used to going from ears to keyboard and it would be useful for me to get to know how to use one...”

Aids that had “worked” for some participants had been discarded by others. The latter found that it was unhelpful, uncomfortable, or painful to use backpacks, foam pen grips, slanted writing stands and/or the Microsoft Natural Keyboard.

Moreover, one participant stressed the difficulties that she was having with a voice-activated software package.
“...people who say it's absolutely wonderful are either A, trying to sell it or B, use it sporadically but are able bodied...I haven't met anyone yet who is...you know has OOS to a severe extent and is totally reliant on...any voice recognition package for it to be working really well...”

It appears therefore, that students with OOS conditions need to remain flexible when choosing aids to manage their studies. As one participant explained,

“You've got to be able to think laterally...and look at other options...”

Techniques

The techniques that the participants used to manage their studies, are similar to those suggested by the Student Learning Support Service (SLSS) for students with OOS conditions who are taking notes, writing essays and preparing for exams (Appendix A).
### Table Five: Techniques the Participants Used to Manage their Studies

<table>
<thead>
<tr>
<th>Self-care</th>
<th>Energy Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Exercising</td>
<td>• Designated study area</td>
</tr>
<tr>
<td>• Positive reinforcement</td>
<td>• Planning ahead</td>
</tr>
<tr>
<td>• Taking regular breaks</td>
<td>• Scheduling days off</td>
</tr>
<tr>
<td>• Stress management</td>
<td>• Time management</td>
</tr>
<tr>
<td>• Typing on alternate days of the week</td>
<td>• Structuring course to accommodate low energy levels</td>
</tr>
<tr>
<td>• Performing a variety of tasks during the day</td>
<td>• Structuring timetable to accommodate low energy levels</td>
</tr>
</tbody>
</table>
Note-taking

- Using own form of short-hand
- Summarising note-taker's notes
- Photocopying lecturers' overheads
- Highlighting key phrases in note-taker's notes
- Tape recording lectures and transcribing the tapes
- Highlighting key phrases in own textbooks and books of readings
- Ripping course books and books of readings into smaller sections

Preparing Assignments

- Using a typist
- Highlighting key phrases in own textbooks and books of readings
- Typing notes straight onto a computer from books and journal articles
- Photocopying books and journal articles and highlighting the key phrases

Studying For Exams

- Mind-mapping
- Using mnemonics
A notable omission by the participants is that the Student Learning Support Service (SLSS) suggests that students should make lecturers aware that stress can aggravate OOS symptoms, ask lecturers not to talk too fast, and request photocopies of lecture notes and overheads. While some participants had asked their lecturers if they could photocopy their lecturers' overheads, others felt that they would be unable to talk with their lecturers about OOS-related matters because the university system does not "empower" students to do so.

"...you don't really feel you can go up to a lecturer who has got three hundred people in their class in a first, second or third year paper you know and say, look I really want...I want notes of your overheads and I want it because I have OOS...you know it's a really hard thing to say isn't it? It's hard enough to ask for help of any kind let alone go up...[to a] major lecturer who's like this really big person and knows everything and you're just the scum of the earth [both laugh] and say, I want your overhead notes, it's not like something you do, it doesn't occur to you..."

While it is common for tertiary students to use study tactics such as highlighting, mind-mapping and mnemonic devices (Hadwin and Winne 1996; Wade et al. 1990), the participants emphasised the importance of planning ahead so that they had enough time to balance course work with exercise and rest.
Neale and Hayward (1997) reported that most first year students with disabilities had difficulty maintaining a balance between their study, paid employment and family commitments. This was not the case in the current research, possibly because the participants had had to learn how to manage their time effectively so that they avoided aggravating their OOS symptoms. Indeed, Royer (1995) found that people with chronic conditions “pace” themselves so that they are able to perform their daily activities without exacerbating their symptoms.

“I remember early last year I'd do a lot of all nighters where I'd be up to like four or five in the morning...as it usually happens and that was really really bad for my RSI, so I've been trying to do that a lot less...I'm actually starting...ahead of schedule a lot more...”

“As you can see I've got my [unclear] calendar up there...just lets me know...yeah, so I can sit here and look...okay well I've got three weeks before my essay's due and just do a little bit of it at a time...”

One participant chose techniques that matched her own visual learning style, such as mind-mapping and photocopying the lecturers’ overheads. This participant also found that a particular technique suited the subject matter of her course.

“...I find that the tape is useful because...in [name of course] for instance they often do demonstration classes on sound...”
However, tape recording lectures leads to a substantial increase in workload because, like other students with disabilities (McKay et al. 1995; Stage and Milne 1996), the participants either used the tapes to enhance their hand-written notes, or they transcribed the tapes verbatim.

It is also interesting to note that photocopying can aggravate OOS symptoms.

"...that's still one of the things that gives me pain, is photocopying, because you have to pick up the...you're always picking up and lifting a heavy book to turn the pages..."

Support Services

Ten of the participants thought that Victoria University had fulfilled their obligation to accommodate students with OOS conditions.

One of the three participants who commented that the University had failed to accommodate students with OOS, felt that staff members were unwilling to acknowledge different requirements because they wanted "...everyone to be doing everything at the same time...". Another participant had discovered that "...you've got to be quite assertive [laughs] and prepared to stick up for what you need...".

Four of the participants believed that they were successfully managing their studies on their own, and so had not spoken to a staff member about their OOS condition.
One of these participants was however, unaware that voice-activated software was available on campus and that he could apply for extra exam time. Both Lang (1994) and Neale and Hayward (1997) found that students with disabilities are often unaware of the services that are available at Victoria University.

Co-ordinators for Students with Disabilities

A number of the participants had contacted the Co-ordinators for Students with Disabilities in order to arrange a note-taker, and extra exam time or a writer. All of the participants were satisfied with the way in which the Co-ordinators had responded to their request for assistance.

One of the participants thought that the Co-ordinators for Students with Disabilities should advertise in the Student Health Services’ waiting room and along the corridors at the Law School. This might counteract the doctors’ apparent failure to advise students with OOS conditions to contact the Co-ordinators.

OOS Drop-in

Two of the participants valued the opportunity that they had had to meet other students with OOS conditions at the OOS Drop-in. In contrast, the “self-pitying atmosphere” depressed another participant. She preferred the more active approach that Marie Powell (Occupational Health Nurse) took to managing OOS conditions.
OOS Busters

Both of the participants who had attended OOS Busters had benefited from this exercise programme.

Library

Students with disabilities are able to book lockers and carrels in Victoria University’s library. Both of the participants who had a locker thought that it was a “wonderful” storage facility. In contrast, two of the three participants who had booked a carrel stopped using it.

“...I couldn’t be bothered because whenever I went to my carrel someone else was always there and they’d always be huffy and I found that I didn’t enjoy working in the library anyway...and you can’t just leave your stuff there [at the carrel] and waltz off...”

“...I was given a carrel in the bottom floor but because the books I need are on the top floor and my locker’s on level two, I sort of gave up using the carrel in the bottom floor because it means that I was bumbling up and down the stairs the whole time...”
One participant had found that the Sutherland Room was a good place to store books and to learn about services from other students with disabilities. Another participant thought that it was “great” just knowing that there was another room for students with disabilities at the south end of the campus.

**Works and Services**

One of the participants thought that it was “really good” that there were computers with ergonomic keyboards in the Commerce Building’s computer laboratories.

Likewise, a post-graduate participant thought that it was “fantastic” that Works and Services had supplied and set-up an adjustable workstation in her office. Another post-graduate participant had not been informed about this service. She had had to “purloin” an adjustable workstation instead. This participant remarked that post-graduate students were arbitrarily provided with the equipment and resources that they needed to complete their studies. She emphasised that staff members who are responsible for the well-being of postgraduate students, should warn these students directly about OOS.

**Additional Services**

Three of the participants suggested employing a representative from the Occupational Safety and Health Service (OSH) to speak to all first-year students about preventing OOS conditions, managing OOS conditions and the services that are available for students with OOS conditions.
In 1996 and 1997, the Student Learning Support Service (SLSS) organised a representative from the Accident Rehabilitation and Compensation Insurance Corporation (ACC) to run seminars on OOS prevention for students and staff. The 1996 seminar attracted 90 people, but despite widespread advertising, very few people attended the 1997 seminar. In 1998, an expert from Working Wise ran an interactive workshop on OOS prevention and management. 20 students attended this workshop (Scott 1998). Marie Powell (1998) (Occupational Health Nurse) currently gives seminars to students on OOS prevention if asked to by a staff member.

Another participant felt that a seminar on stress management should be offered at different times during Semester One and Semester Two respectively. The Counselling Service currently runs a “Summer Workshop” and a “Winter Workshop” on dealing with stress. In addition, the Student Learning Support Service (SLSS) incorporates stress management in their seminars on time management (Scott 1998).

This participant also suggested that Victoria University could work with the People’s Resource Centre, to provide massages for students with OOS conditions at a reduced cost.

Still another participant thought that Victoria University should produce a booklet containing “helpful hints” for students with OOS conditions.
SUMMARY

The participants in the current research have taken active steps to manage their studies so that they can meet their course requirements without exacerbating their OOS symptoms. The participants’ need to control their OOS symptoms has led them to use ergonomic aids, self-care strategies and energy management techniques, as well as more common study tactics such as mind-mapping and mnemonic devices. However, most of the participants found that they still required assistance with handwriting lecture notes, typing essays and/or handwriting examinations.

Generally the participants’ experiences indicate that there are weaknesses in some of the support services currently provided for students with OOS conditions at Victoria University. In addition, the findings from the current research suggest that some students with OOS conditions might fail to seek assistance with managing their studies, because they do not want to be treated with scepticism, or they do not want to risk being embarrassed in front of other students. Moreover, the attitude displayed by some lecturers and health professionals might have made some students with OOS conditions feel that they had sole responsibility for solving any OOS-related problems.
CHAPTER FIVE:
CONCLUSIONS AND RECOMMENDATIONS

The medical and social models of disability have influenced the participants’ actions, as well as those of Victoria University’s staff members. The University’s doctors, nurses and physiotherapists assisted participants to manage their OOS symptoms by prescribing wrist supports, providing heat packs, promoting “good” posture and by emphasising the importance of exercise. The health professionals’ actions indicate that they view disabilities as medical conditions that prevent people from performing “normal” human activities. This is in accordance with the medical model of disability.

The medical model’s focus on the symptomatic features of an individual’s impairment might explain the health professionals’ apparent failure to inform participants about Victoria University’s provisions for students with OOS conditions. Moreover, the absence of a detectable injury that matches OOS symptoms appears to have led some of the physiotherapists to doubt the existence of OOS. Their scepticism made some participants feel guilty for developing an OOS condition.

The medical model of disability is also applicable to the participants’ actions. Having recognised that OOS symptoms such as pain, tiredness and low energy would prevent them from completing study-related tasks, the participants chose aids and techniques to enable them to meet their course requirements without aggravating their symptoms. These tactics included ergonomic aids, self-care strategies and
energy management techniques. However, despite such study tactics, most of the participants required assistance with managing their studies.

Victoria University has acknowledged that architectural barriers, negative staff attitudes, inappropriate teaching practices and/or inappropriate assessment practices disable students with impairments. This is evidenced by the University’s efforts to accommodate students with disabilities’ physical access needs and learning characteristics in the University’s policies and practices. While these accommodations are consistent with the social model of disability, they are also based on the medical model of disability as a student’s eligibility for a particular type of assistance is determined by their symptoms.

Unfortunately, weaknesses in Victoria University’s accommodations for students with OOS conditions hindered the participants’ attempts to successfully manage their studies. These weaknesses included a lack of ergonomic furniture, negative staff attitudes and assessment strategies that either required consistent energy levels, or involved intense periods of handwriting or typing. Some of the participants had learnt that they had to take active steps to overcome a weakness in the University’s practices, if they wished to remain in control of their OOS symptoms. Hence the behaviour of some participants who had experienced a problem with the Vic Volunteer note-taking scheme; they organised to photocopy another student’s notes.

The goal of this thesis was to enable students with OOS conditions to demonstrate their abilities at Victoria University. I have achieved this by sharing information
about the strategies that some of these students used to manage their studies, without aggravating their OOS symptoms.

In addition, the changes that I have recommended to policies and practices will either help prevent students from developing OOS conditions, or will assist students with OOS conditions to successfully manage their studies at Victoria University.

**OOS PREVENTION**

OOS conditions can be prevented. Moreover, OOS symptoms are reversible if detected early enough and managed appropriately. It is vital therefore, that students are informed about OOS prevention and told how to recognise and report OOS symptoms.

Victoria University must consult with Marie Powell (Occupational Health Nurse) to determine whether it would be feasible for Ms Powell to present a seminar on OOS prevention in all of the first-year papers and post-graduate courses. If not, Victoria University should contract a representative from the Occupational Safety and Health Service (OSH) to do so.

**FUNDING**

Students with OOS conditions related to study are ineligible for compensation under the Accident Rehabilitation and Compensation Insurance (ARCI) Act 1992. Consequently, these students have to spend their student allowance, student loan, or
savings, on equipment and support services that are not currently provided by
Victoria University. This University should lobby for change to the 1992 ARCI Act,
so that students with OOS conditions related to study are not financially
disadvantaged by having to pay for aids and services to enable them to succeed in the
tertiary education sector.

PHYSICAL ENVIRONMENT

The Works and Services Department is seeking to prevent students from developing
OOS conditions by providing adjustable workstations and gas lift chairs in the
computer laboratories and in post-graduate students’ offices. In addition, this
Department would make it easier for students with OOS conditions to take notes
during lectures if they provided ergonomic furniture in the lecture theatres and in the
Adam Concert Room. They should also improve the design of the electronic music
studios.

ATTITUDES

The Disability Action Research Group (DARG) and the Co-ordinators for Students
with Disabilities, are working towards increasing disability awareness amongst
general and academic staff by providing information and training on how to work in
partnership with students with disabilities. However, the participants’ experiences
indicate that some administration assistants, lecturers and health professionals still
act in an inappropriate manner towards students with OOS conditions.
DARG and the Co-ordinators for Students with Disabilities must ensure that staff members understand that alternative teaching and assessment strategies provide students with disabilities with an equal chance (as opposed to a greater chance) to demonstrate their abilities. Such an understanding might make staff feel more comfortable about accommodating the learning characteristics of students with OOS conditions. In addition, administration assistants and lecturers might feel more confident about organising and implementing alternative teaching and assessment strategies for students with OOS conditions, if the Co-ordinators for Students with Disabilities' staff handbook included step-by-step instructions on how to do so.

Students with disabilities and academic staff must inform other students that alternative teaching and assessment strategies ensure that students with disabilities receive fair and equitable (rather than special) treatment.

Generally staff members are more likely to value Victoria University's commitment to providing an inclusive learning environment for students with disabilities, if this University is seen to be actively promoting equal educational opportunities for these students. Victoria University's current statement on equal employment opportunities in staff recruitment, emphasises the importance of making tertiary education accessible to women, Maori and Pacific Islanders. This statement should also include a section dedicated to encouraging enrolments from people with disabilities, and to improving students with disabilities' level of educational attainment.

The Student Health Service and the Physiotherapy Clinic must develop a code of best practice for treating students with OOS conditions. This code should include
educating students about their OOS condition and informing them about the other support services that are available at Victoria University. The Student Health Service and the Physiotherapy Clinic must then run staff seminars on the medical management of OOS conditions and the type of assistance that is provided by the Office for Students with Disabilities, the Student Learning Support Service (SLSS) and the Counselling Service.

**CO-ORDINATORS FOR STUDENTS WITH DISABILITIES**

The Co-ordinators for Students with Disabilities should continue to encourage feedback from students with OOS conditions so that general and academic staff can be held accountable for their behaviour towards these students.

The Co-ordinators should also promote the equipment and support services that they provide for students with disabilities through a monthly column in *Salient* and *Vic News*. This should help to increase students’ awareness of the resources that are available at Victoria University.

In particular, the Co-ordinators should advertise that students with OOS conditions are able to arrange research assistants through the Co-ordinator for Vic Volunteers. Having a research assistant would eliminate the problems that some of the participants have experienced with copying down references from the library catalogue, retrieving library books, and photocopying library books and journals.
NOTE-TAKING

There are a number of ways in which lecturers could prevent students from developing OOS conditions, while enabling those students with OOS conditions to take lecture notes without aggravating their OOS symptoms. Firstly, lecturers could schedule a five-minute break every half-hour, during which students would be encouraged to get up and stretch. Secondly, a lecturer could include the key points from each lecture in their course outline, thereby giving students the discretion to take supplementary notes as needed. This would reduce the amount of writing that is currently required during lectures. Thirdly, lecturers could put copies of their overhead transparencies and power-point presentations on Closed Reserve in Victoria University’s Library. This would allow students to photocopy these documents prior to the relevant lectures, thereby lessening the amount of note-taking that was required during those lectures. Finally, lecturers should talk at a moderate pace and in short spells, so that students with OOS conditions have sufficient time to take notes.

The Vic Volunteer Co-ordinator and the Co-ordinators for Students with Disabilities have implemented (or intend to implement) a number of procedures that will improve the current note-taking scheme. In addition, the Vic Volunteer Team Leaders need to ensure that note-takers are fulfilling the requirement to photocopy their lecture notes at the same time each week.

Furthermore, the Vic Volunteer Co-ordinator should automatically arrange another note-taker two weeks after a student with a disability has notified the Co-ordinator.
that they are no longer receiving notes from their original note-taker, unless the Co­
ordinator has confirmed that the original note-taker is still participating in the
scheme.

**COURSE ASSESSMENT**

Victoria University needs to decide who is responsible for assisting students with
disabilities while they are on placement. It also needs to determine the type of
assistance that will be provided to these students.

Victoria University should re-consider forms of assessment that involve a lot of
handwriting and/or typing in a short amount of time. Not only are these forms of
assessment problematic for students with OOS conditions, but they could contribute
to the development of OOS amongst students generally.

The Student Learning Support Service (SLSS) should organise workshops for
students who would like to present their assignments orally. The purpose of these
workshops would be to teach students how to prepare oral assignments. This Service
should also hold workshops for students who have arranged writers for their tests
and/or examinations. These workshops would assist students to develop strategies
for successfully completing a test and/or examination by dictation.
THE FUTURE

Victoria University must remove the barriers that prevent students with OOS conditions from managing their studies effectively. This should result in improved levels of educational achievement by students with OOS conditions. Moreover, Victoria University's efforts to provide an inclusive learning environment for students with OOS conditions should encourage more people with OOS to enrol at this institution.
APPENDIX A

Student Learning Support Services’ Information Sheets
Study Techniques for People with OOS Taking Lecture Notes

1. Use a note-taker (organised by Disabilities Co-Ordinator, ground floor, Robert Stout Building, Phone 472-1000 extension 8231).

2. Organise a study buddy and arrange to photocopy their notes. Concentrate in lectures on listening, thinking, and absorbing - an effective notetaking technique.

3. Ask lecturers to provide handouts of lecture notes or put a copy on a noticeboard for easy access.

4. Ask lecturers not to talk too fast and write only a few key points. This is more effective for retention than writing verbatim anyway.

5. Tape record notes and when playing back take down the main points only or mind map main points or find a typist to transcribe your notes (an expensive option).

6. Use mind mapping technique - see SLSS for information (uses a central image and key words, and links them up).

7. Shorthand and/or abbreviated writing.

8. Use an ergonomic pen.

9. Practice relaxation, sit comfortably and watch your posture.
Essay Writing for People with OOS

1. Put your readings and notes for the essay onto a tape and get someone to type it up. You would then need to make corrections and improvements and ask someone to re-type the final draft or if word processed to make corrections on the existing essay perhaps stored on disk.

2. Photocopy readings and highlight main points.

3. Use mindmapping techniques to take notes.

4. Practise relaxation and sitting comfortably and check your posture.

5. Take frequent breaks.

6. Use your friends and family as much as possible to help you take notes.

7. Use an ergonomic pen.

8. Use shorthand and/or abbreviated writing.


10. Investigate using Oral Presentations instead.

11. Awareness of lecturers regarding the stress of assignment deadlines for OOS sufferers.
Exam Study Technique for People with OOS

- Practise relaxation.
- Sit comfortably - watch your posture.
- Take frequent breaks. Stretch, exercise and walk around during breaks or lie down and rest.
- Tape record what you need to learn and keep playing it over and over.
- Photocopy material required from books and use a highlighter.
- Ask lecturers for copies of lecture outlines and use a highlighter for key points.
- If you need to make notes use an ergonomic pen, only take down main points and have frequent rest breaks.
- Mind mapping
- Arrange for a writer for the exam.
- OR arrange with counselling services for more time to sit the exam.
- Organise a study buddy and arrange times to study together.
- Use a sloping desk/ clipboards/ bookstands/ footrests.
- Investigate using memory techniques.
APPENDIX B

Information Sheet
Dear [insert participant’s name],

How Do Students With OOS Conditions Manage Their Studies At Victoria University?

Thank you very much for agreeing to participate in the study that I have undertaken as part of my Master of Arts in (Applied) Social Science Research, at Victoria University of Wellington.

The purpose of my research is to contribute to the development of a more supportive environment for students with OOS conditions at Victoria University, and not to provide an assessment of these students.

I envisage that other students with OOS conditions will learn about new aids and techniques that they can use to manage their studies, from my research findings. In addition, it is probable that my research findings will enable the Student Learning Support Service and the Co-ordinators for Students with Disabilities, to substantiate the needs that they currently think students with OOS conditions have and to assess the advice that they give to these students.

The interview should take between one and two hours to complete. It is my hope that you will allow me to tape record this interview.

All of the information that I collect during my study will be treated as strictly confidential. Access to this information will be limited to myself and to Linda Lee (who will be transcribing the tape recording of your interview). You are however, entitled to have access to the write-up and tape recording of your own particular interview. Please indicate on the enclosed consent form, whether or not you would like to have such access. I will collect the consent form at the interview.

I will destroy the write-up and tape recording of your interview once I have completed my study, unless you have indicated on your consent form that you would like these to be returned to you.
The findings from this study will be grouped together in my thesis, so you will not be able to be identified personally.

A copy of my thesis will be held by the Student Learning Support Service, by Ava Gibson at the Students with Disabilities Office, by Jenny Neale in the Department of (Applied) Social Science Research, and in Victoria University’s Library. It is also my intention to submit an article for publication in Salient and Vic News.

A summary sheet of my research findings will be given to you at the end of the study.

If you have any questions, please feel free to telephone me on [insert my telephone number].

I look forward to meeting with you at [insert time of interview] on [insert date of interview].

Yours sincerely,

Sarah Talboys.
APPENDIX C

Interview Guide
1. Tell me about your OOS condition.

- The participant’s own definition of OOS.
- The type of OOS condition that the participant has been diagnosed as having.
- The participant’s explanation as to why they developed an OOS condition at that particular time. The events that led up to their being diagnosed as having an OOS condition.
- The physical symptoms that the participant experiences.
- The severity of those symptoms.
- Whether the participant had an OOS condition before they enrolled at Victoria University. And if so, whether the participant is retraining as a consequence of developing an OOS condition, or whether they are studying aside from having that condition.
- The participant’s own attitude towards their OOS condition. Whether the participant’s attitude has changed over time.

2. How would you describe the attitudes of other people towards your OOS condition?

- The participant’s perception of the attitudes of other people towards their OOS condition.
3. Tell me about the aids that you are currently using to manage your studies.

- The aids that the participant is currently using.
- The participant’s reason for using these aids in particular.
- The influence that family commitments, household commitments, financial commitments and paid work commitments have had upon the aids that a participant uses to manage their studies.
- The aids that the participant has discarded and their reasons for doing so.

4. Tell me about the techniques that you are currently using to manage your studies.

- The techniques that the participant is currently using (including stress management techniques).
- The participant’s reason for using these techniques in particular.
- The influence that family commitments, household commitments, financial commitments and paid work commitments have had upon the techniques that a participant uses to manage their studies.
- The techniques that the participant has discarded and their reasons for doing so.
5. Which aspects of the University environment have prevented you from using the aids and techniques that you wanted to use, to manage your studies?

- The cost of certain aids and/or techniques. The participant might be experiencing financial difficulties, due to their inability to combine paid employment and study.
- The lack of government funding for particular aids and/or techniques.
- The inability to use aids and/or techniques due to high demand for resources.
- The aids and/or techniques did not come under Victoria University’s reasonable accommodation policy. Inflexible policies regarding course assessment.

6. Who have you approached for assistance with managing your studies at Victoria University?

- Family, friends, classmates, academic staff, administrative staff, Co-ordinator of the ‘OOS drop-in’, Co-ordinator for Students with Disabilities, Vic Volunteers, CAN-DO, other people in the Sutherland Room, OOS Busters class, Physiotherapy Clinic.
- The reasons why the participant sought assistance from this person.
- The person’s reaction to the participant’s request for assistance.
- The type of assistance that the participant expected to receive from this person.
- The type of assistance that the participant actually received from this person.
7. What could Victoria University do, to make it easier for you to manage your studies?

☐ New policies and procedures for students with OOS conditions.

☐ Changes to existing policies and procedures for students with OOS conditions.

8. What is your timetable like?

☐ The number of lectures and tutorials that the participant has.

☐ The amount of time that the participant spends on course-related reading and preparing assignments.

☐ The way in which the course is assessed.

9. Has Victoria University fulfilled their obligation to accommodate (within reason) your OOS condition?

☐ Whether the participant has had to withdraw from University courses due to their physical symptoms, or because the courses could not/would not accommodate the participant’s requirements.

☐ Whether the participant has had to study part-time as opposed to full-time because of their physical symptoms, or because the University could not/would not accommodate the participant’s requirements.

☐ Whether the participant has taken longer to complete their course because of their physical symptoms, or because the University could not/would not accommodate the participant’s requirements.

☐ Whether the participant has noticed any differences between studying at an under-graduate level and studying at a post-graduate level (where applicable).
10. Are there any other comments that you would like to make about managing your studies at Victoria University?
APPENDIX D

Advertisement For Volunteers

**STUDENTS WITH OOS.**
Contribute to the development of a more supportive environment for students with OOS at VUW by participating in an interview that aims to explore the way in which you manage your studies. All information will be treated as strictly confidential. Telephone Sarah on [number removed].

The following advertisement was published in *Vic News* on 25 May 1998.

**OOS courses and research**

**COURSES** to alleviate muscle fatigue for students and staff are run by the VUW occupational health nurse with assistance from 4th year Otago physiotherapy degree students every Tuesday morning, 9–10am in the lower floor of the Rec Centre.

The courses involve gentle upper back, neck and arm stretches, and short relaxation exercises. They are designed to be self-help - participants learn exercises and techniques that they can repeat in their own time. Participants should wear casual, comfortable clothes. Courses are free for students and staff, no booking is required, and people can attend any number of sessions. For further information, contact the occupational health nurse on extn 8845.

**OOS research:** Postgraduate student Sarah Talboys is calling for students with OOS to participate in a confidential study that aims to explore the way in which they manage their studies. “I’m interested in the aids and techniques that students with OOS use, and things they have tried that haven’t worked.” The study forms part of Ms Talboys’ MA (applied) in social science research. Telephone Sarah on [number removed].
APPENDIX E

Poster
STUDENTS WITH OOS

This is your chance to contribute to the development of a MORE SUPPORTIVE environment for students with OOS conditions at Victoria University.

How?: By participating in an interview that aims to explore the way in which you manage your studies.

When?: The interview will be arranged at your convenience and should take between one and two hours to complete.

Why Bother?: Firstly, other students with OOS conditions might learn about new aids and techniques from the research findings. Secondly, Victoria University staff members will be able to assess the advice that they currently give to students with OOS conditions.

Who Do I Call?: Sarah Talboys has undertaken to complete this study as part of her Master of Arts in (Applied) Social Science Research at Victoria University.

You can contact Sarah on [insert my telephone number].

All information will be treated as strictly confidential.
APPENDIX F

Telephone Guide
GUIDE FOR TALKING WITH POTENTIAL PARTICIPANTS

• Introduce myself.

• Check that a doctor has diagnosed the student with an OOS condition.

• Check that the student is an internal, part-time or full-time student at Victoria University.

• Explain that the purpose of my study is to contribute to the development of a more supportive environment for students with OOS conditions at Victoria University, and not to provide an assessment of these students.

• Mention that I envisage that other students with OOS conditions will learn about new aids and techniques that they can use to manage their studies, from my research findings. It is also probable that my research findings will enable the Co-ordinators for Students with Disabilities and the Student Learning Support Service to substantiate the needs that they currently think students with OOS conditions have, and to assess the advice that they give to these students.

• The interview should take between one and two hours.

• I would like to tape record the interview with the student’s permission.

• All of the student’s information will be treated as strictly confidential and they will not be identifiable in the aggregated results.

• Ask whether the student has any questions.
APPENDIX G

Consent Form
VICTORIA UNIVERSITY OF WELLINGTON
CONSENT TO PARTICIPATION IN RESEARCH

How Do Students With OOS Conditions Manage Their Studies At Victoria University?

I have read and understood the letter that was sent to me by the researcher Sarah Talboys, regarding the study titled How Do Students With OOS Conditions Manage Their Studies At Victoria University?. I understand the explanation of this study that has been given to me by Sarah Talboys. I have had an opportunity to ask questions, and have had them answered to my satisfaction.

I understand that I will have an opportunity to check the draft research findings. I also understand that Sarah Talboys retains the right to use the information that she collects in my interview without consulting me further (unless she considers it necessary to do so).

I understand that participation in this study is voluntary. I also understand that I may withdraw myself (or any information that I have provided) from this study before the information collection and analysis stages are complete, without having to give any reasons. I understand that the information that I provide will not be used for any other purpose or released to others without my written consent.

I understand that any information I provide will be kept confidential to Sarah Talboys and Linda Lee (who will be transcribing the tape recording of my interview). I understand that my name will not be used in either the thesis or the article that is written by Sarah Talboys. I also understand that no opinions will be attributed to me in any way that will identify me.

I understand that the write-up and tape recording of my interview will be destroyed at the end of the study, unless I indicate that I would like them to be returned to me.

I understand that I will be given a summary sheet of the research findings, once the study is complete.
Please tick the boxes that apply to you:

[ ] I agree to take part in this research.

[ ] I give my permission for my interview to be tape recorded.

[ ] I would like the write-up of my interview to be returned to me at the end of this study.

[ ] I would like the tape recording of my interview to be returned to me at the end of this study.

Signature:

Name (please print clearly):

Date:
APPENDIX H

Vic Volunteers:
Information Sheet For Staff And Prospective Volunteers
The Vic Volunteer Service was set up to accommodate the needs of students with disabilities at Victoria, as part of the university's commitment to Reasonable Accommodation. This scheme is managed by the Vic Volunteer Co-ordinators, [insert names] and is overseen by the Manager, Disability Support Services, [insert name]. It's primary purpose is the provision of note-takers although other services such as the Student Services Mobility Van and personal readers are also available.

Note-takers are selected from students already enrolled in the course who have reliable attendance and take good, legible notes. Note-takers receive:
- Relevant training
- Back-up support by a Team Leader
- A Certificate of Recognition
- A book token, depending on the service provided

Please fill out the Vic Volunteers application form and return it to your lecturer. You will be contacted by the Vic Volunteer Co-ordinator should your services be required. Sometimes your services may not be needed immediately so please do not assume that you are the note-taker until you are contacted.

Lecturers are requested to ask in class for students who would like to volunteer their services as a note-taker to complete the attached Vic Volunteer application form. Please return all completed forms via internal mail to:

[insert the Vic Volunteer Co-ordinator's name and internal mailing address]

Departmental/School Administration Assistant: The Deans have been asked by the Director of Student Services to allocate a Faculty budget for which Chairpersons/Heads can claim expenses for photocopying notes and other relatively low cost items. Vic Volunteers will be using the departmental photocopier to copy their lecture notes. These notes will be left with you and will be later collected by a student with a disability. You will be sent the names of both the volunteer and the student(s) who require the notes by [insert name], the Vic Volunteer Co-ordinator, once the arrangements have been made. Students not on this list should not receive copies of notes. If a volunteer does not deliver notes as arranged, or a student does not collect them for more than two weeks, please let me know.

Contact Details: [insert the Vic Volunteer Co-ordinator's e-mail address and telephone number]

Thank you for being involved with the Vic Volunteers. It makes a difference!
APPENDIX I

Student Request For A Vic Volunteer Note-taker
VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o to Ika a Maui

DISABILITY SUPPORT SERVICES

Student Request for a Vic Volunteer Notetaker

Notes will be requested in confidence from a Vic Volunteer Note-taker. Arranging a note-taker may take a few weeks to organise but they will be backdated to the date that you requested the service. Once they are arranged, notes will be photocopied and left with the departmental secretary on a weekly basis.

In return we expect you to collect the notes weekly and to not make them available to other students. The note-taking service may be withdrawn if you do not collect your notes on a weekly basis. It is your responsibility to advise your Student Advisor if there is a breakdown in these arrangements.

Please complete the following details:

Name: __________________________ ID: __________________________
Email: __________________________ Ph: __________________________ Date: __________________________

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In signing this form I am giving permission for the relevant administration assistant to be informed that I will be collecting lecture notes once a week from their office.

Signed: __________________________________________________ student
APPENDIX J

Vic Volunteer Note-taker Application Form
VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

DISABILITY SUPPORT SERVICES

Vic Volunteer Note-taker - Application Form

A Vic Volunteer Note-taker is responsible for:
• Attending all classes and taking good quality notes
• Photocopying your lecture notes once a week at a regular time, and leaving the photocopied notes with the administration assistant for the course.

Please complete the following questions and return them to your lecturer so that they may be forwarded to us at Disability Support Services. We will then make contact with you and arrange any further details.

NAME: ___________________________ ID: ______________________

ADDRESS: __________________________________________

EMAIL: ___________________________ PH: ______________________

Please list all courses you are interested in note-taking for.

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Note-takers are selected from students already enrolled in a subject. Please do not assume you are the note-taker until you have been contacted by one of the Vic Volunteer Co-ordinators. This avoids confusion. Once you have been confirmed as a note-taker, you will be offered Note-taker Training and a Vic Volunteer Team Leader will contact you on a fortnightly basis to ensure that everything is well at your end. This is a preventative measure as there are about 100 note-takers each semester. As a note-taker you give a copy of your notes to the departmental secretary who will forward them on to a specific student or students. At the end of the semester, Note-takers receive a book voucher and a Certificate of Recognition.

If, for whatever reason, you wish to speak with one of the Vic Volunteer Co-ordinators there is a drop-in hour once a week at .... Alternatively, any questions can be sent to (insert a Vic Volunteer Co-ordinator’s e-mail address).

[Insert the Vic Volunteer Co-ordinators’ names and contact details]

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Massey University (undated) *Occupational Overuse Syndrome (OOS): How to avoid (or overcome) it while studying*, Palmerston North, Massey University.


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Neale, Jenny and Hayward, Bronwyn (1997) ‘We’ve Made It This Far: The First Year Experiences At University For Students With Disability’ in *New Zealand Journal of Disability Studies*, no.4, pp.130-140.


Staff Reporter (1991) ‘Relaxation technique is a key to avoiding OOS’ in Safeguard, no.12, pp.11.


Stewart, Jan (1998) personal communication.


Student Learning Support Service (undated a) *Essay Writing for People with OOS*, Wellington, Victoria University of Wellington.

Student Learning Support Service (undated b) *Exam Study Technique for People with OOS*, Wellington, Victoria University of Wellington.

Student Learning Support Service (undated c) *Helpful aids for people with OOS*, Wellington, Victoria University of Wellington.
Student Learning Support Service (undated d) *Study Techniques for People with OOS Taking Lecture Notes*, Wellington, Victoria University of Wellington.


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Wigley, Dr R. D. (undated) Overuse Syndrome: How You Can Prevent And Control It Yourself, Palmerston North, Dr R. D. Wigley.


