

**ADAPTING TO THE WORK ENVIRONMENT
BY THE
RECENTLY VISUALLY IMPAIRED**

by

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SUMMARY

Adapting to the work environment
by the
recently visually impaired

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It is possible for Visually Impaired people to do most jobs if they have the right training, technological assistance and emotional support. Yet it is difficult for Visually Impaired people to get employment, and also difficult to adapt to the workplace when a person becomes Visually Impaired.

The purpose of the study is to explore how those who become Visually Impaired adapt to their work environment. In exploring these adaptations, the research aims to discover, firstly, if the Visually Impaired are doing the jobs they want to and how they go about doing so. Secondly, to discover which technology, equipment, support and training is helpful in aiding the VI in the workplace. Thirdly, to discover if the Visually Impaired person feels normal if physical and social barriers in the workplace are removed. And lastly, if the Visually Impaired do adapt to the workplace after they become Visually Impaired.

The physical and social barriers a Visually Impaired person faces at work, the emotional adaptation that needs to be made when Visual Impairment sets in, the adaptive technology and equipment that assist the Visually Impaired at work, as well as the legislation relevant to the Visually Impaired worker are discussed.

The qualitative approach is used as the method of research as the objective of the study is to understand the experience of those becoming Visually Impaired and adapting to their workplaces from within their own environments.

Data was collected by means of interviews from five participants, and case studies written to describe their experiences. Comparisons were drawn to assist in analyzing the participants' experiences. A number of assumptions were then made about Visually Impaired people, as a number of possible issues came to light that the majority of Visually Impaired people might experience in some way or other, as a result of the similarities in the experiences of the Visually Impaired participants.

The following assumptions were made:

The Visually Impaired do adapt to the work environment.

The Visually Impaired must make certain adaptations to cope at work under their new circumstances.

Adaptive technology and equipment, training and support are necessary and helpful to the Visually Impaired in the workplace.

Some of the Visually Impaired participants are doing jobs they want to do, and others are not.

Some Visually Impaired people feel normal and have always feel normal; others need physical and social barriers removed, to feel normal; and yet others would feel normal if they could have those things they took for granted before, back.



The positive reaction of colleagues, clients and managers depends on two things: their knowledge of the Visually Impaired and the Visually Impaired person's attitude to life and his/her impairment.

Most Visually Impaired people need and can find some form of meaningful activity in their lives.

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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION AND MOTIVATION FOR THE STUDY

Although it is possible for a Visually Impaired (VI from now on) person to do most jobs, the right training, technological assistance, and emotional support is essential.

According to the RNIB Factsheet on 'Employment of Visually Impaired people', only 25% of VI people are employed and they are not likely to occupy managerial or professional positions (Thompson, 1994: 7). The lack of training, support, equipment & confidence are sighted as some of the reasons.

It is difficult for the VI to get employment, and it is also difficult to adapt when a person who is employed becomes VI. The researcher became interested in how those who become VI adjust to their work environment, as she experienced some vision loss due to an eye disease that leads to some difficulties in doing ordinary office tasks.

1.2 WHAT IS IMPAIRED VISION?

'Blindness' does not necessarily mean a total loss of sight. A so-called blind person is not able to perform work where eyesight is essential (Jackson & Finlay, 1991: 167). Partial sight or low vision, however implies a substantial and permanent handicap where clarity of sight is permanently reduced so that everyday visual tasks are difficult to perform and comprises all those who are not totally blind (Dodds, 1988: 51). As most people think the word 'blindness' implies 'total blindness' the term visually impaired (VI from now on) is used. Fonda (1981: 4) therefore classifies impaired vision as total blindness *or* partial seeing.

1.3 CAUSES OF LOW VISION

According to the Pretoria Eye Institute's: Understanding Low Vision, Low Vision has various causes including congenital conditions, hereditary effects, infections, disease & trauma.

Some of the common conditions that cause low vision are Macular Degeneration, Diabetic Retinopathy, Retinal detachments, Glaucoma, Retinitis Pigmentosa, and Albinism.

1.4 PURPOSE OF THE RESEARCH

The purpose of the study is to explore how those who become Visually Impaired adapt to their work environment. In exploring this adaptation, the research aims to discover: *Firstly*, if the VI are doing the jobs they want to and how they go about doing so. *Secondly*, to discover which technology, equipment, support & training is helpful in aiding the VI in the workplace. *Thirdly*, to discover if the VI person feels normal if physical and social barriers in the workplace are removed. And *lastly*, to discover if the VI do adapt to the workplace after they become visually impaired.

1.5 EXPLANATION OF THE RESEARCH

1.5.1 Study of Literature

Research on literature already available on the subject of Visual Impairment was done to discover what the VI person experiences as regards the workplace. The emotional difficulties and adaptations, as well as the social and physical barriers faced by the VI were determined, in a hope to understand the experiences a VI person goes through. The various technological solutions to VI worker's functional problems were discovered. Legislation relevant to the VI worker was researched to discover his/her rights.

1.5.2 Research method

1.5.2.1 Research Strategy

Five Individual cases of VI individual's who have experienced the loss of sight and yet managed to continue working and adapt to the work environment were studied by means of an interview. The interviews were recorded to provide evidence of what recently VI adults actually experience. Data will be represented in the form of individual case studies.

1.5.2.2 Population and Respondents

The candidates came from within the VI population of South Africa. The limitations placed on them were that they had to have lost their sight when they were of working age, had to have a job, or had had a job after becoming Visually Impaired, and could give a description of the adjustments and adaptations they experienced.

1.5.2.3 Data Collection

Data has been collected through an interview to discover if the interviewee's have adapted to the onset of Visual Impairment, and what the adaptation involves. An interview plan/schedule was drawn up, to help keep the interviews structured and similar, and to ensure all major issues are covered during the interviews. Data will be qualitatively analysed for trends, described and compared.

1.6 OUTLINES OF THE CHAPTERS

Chapter 2 sets out the barriers a VI person faces in the work environment. Both physical and social barriers experienced by the VI are discussed in an attempt to discover how barriers can best be removed.

Chapter 3 discusses the emotional adaptation a VI person must make when Visual Impairment sets in. The loss felt when deprived of sight as well as the rehabilitation necessary to continue are discussed. The need

to feel like one is the same as every one else, to feel like one is normal, despite the impairment, is highlighted.

Chapter 4 examines the various technologies a VI person can use to aid his/her progress and adaptation at work. Various adaptive and assistive technologies are examined to determine how a VI worker's life and functioning can be improved.

Chapter 5 discusses the legislation and corresponding issues relevant to the VI worker, such as the responsibility of society towards the VI, as well as the place of Managing Diversity in the VI worker's life.

CHAPTER 2: BARRIERS EXPERIENCED BY THE VISUALLY IMPAIRED

2.1. INTRODUCTION

The disability and inertia that one often sees in the VI originates in the physical and social barriers they experience in society and specifically in the workplace. It is, however not primarily the physical condition, but the impact of society's attitudes on the individual, that create the greatest obstacle of all. It does not take long before these attitudes have an impact, as the VI person lives in this world of preconceived bias and prejudice, struggling to survive against it emotionally and financially every day.

2.2. PHYSICAL BARRIERS

2.2.1. Introduction

There are various physical barriers or problems in the workplace for the VI. Many of the problems are relatively easy to deal with, both in the effort required and the money needed to rectify the problem. It would however appear that employers often just do not think of making the necessary adjustments.

2.2.2. Ergonomics

Ergonomics can be used to solve many of the problems/issues with the relative ease of positioning, lighting and design of the workplace. A little forethought can make a tremendous difference to the ease with which a person with an impairment functions.

Specific Physical Barriers

Each VI worker will have a specific physical barrier, which if removed, will greatly increase the individual's ability to undertake his or her daily activities. It may be blinds on the windows, a work station the faces away or towards the window, rails along passage walls, or desks that are placed in such a way as to provide a clear path for walking between them.

Communication about which physical barriers need to be moved or adjusted is vital to productivity.

2.3. SOCIAL BARRIERS

2.3.1 Introduction

Social barriers are generally speaking even bigger problems to the VI than physical barriers. Other people react negatively towards VI people due to stereotypes of them and their abilities, prejudice and negative reactions to what they perceive to be their mood and capability.

Disabled people may feel negative and depressed about their situation. Social factors, such as other people's misguided attitudes, lack of knowledge about blindness and inappropriate responses may be the cause of much of their anxiety.

VI people are actually able-bodied people, capable of performing a multitude of tasks, and functioning very well within the workplace environment. And yet they are regarded as unmotivated and poorly adjusted, due to the passivity and hopelessness that they often display. Ironically these types of behaviour are usually a result of how others react to the visually impaired.

2.3.2 Prejudice & Stereotypes

According to Pierce, there are many prejudices and obstacles that make it difficult for VI people to demonstrate their qualifications and skills. (Dobbs, 1999: 96). She furthermore lists pity, ignorance and misinformation as the reasons for joblessness among the VI.

The definition of Visual Impairment generally accepted by society is also a barrier to employment. People are seen as helpless and handicapped if

their vision is impaired. Most legally blind people are not functionally blind though, and partially sighted people – although often encouraged to accept a functionally blind life-style – have enough residual vision to read, write & move independently (Genensky et al, 1979: 1). It is thus unfortunate that the VI are labeled in a way that causes others to stereotype them.

Many people with impaired vision lack confidence in their abilities. This is worsened by prejudice as the way people act towards a VI individual has an impact on how they see themselves. If the VI are told they are incapable often enough, eventually they believe what they are told, and eventually they cannot do the tasks necessary to survive in the work environment (RNIB, 1992: 1).

Ignorance of both the needs and abilities of VI people lead to a lack of understanding by sighted people. And this lack of understanding only leads to a deepening of the belief in their inability to be successful, for both the VI individual and the man in the street.

Few VI people do not have a memory of some event where they were treated as helpless and pitied by some uninformed stranger. According to Rowland (1985: 4) there is a narrow perspective of VI people, as they are seen behaving uniformly and have their requirements satisfied in very specific ways. People draw a number of conclusions from this: a VI person leads a life without variety; the aids they make use of are ‘special’ in nature; their lives are drawn out in a struggle to achieve modest goals.

The question is whether these impressions are true, or just an expression of those placed in authority over the VI. It should be noted that these ideas do not take into account new developments such as training

courses, new occupations and the electronic revolution, which has enhanced VI people's skills.

Stereotypes have two main characteristics, namely persistence (i.e. their continuation across generations) and rigidity (i.e. a lack of flexibility in the application of an idea). The danger of stereotypes lies in the assumptions, which are so easily made about a group based on their membership. The VI are, for example, seen in a negative light, and the cumulative effect of building a negative image about the VI, shapes the attitudes of those who work with the VI, as they are continually being subjected to this kind of information.

The VI person is frequently seen as a sighted person who has merely been deprived of sight, and a direct comparison is thus made between sighted and non-sighted people. Science then readily characterizes VI people as inferior, as science fails to distinguish between blindness, between the lack of sight and the lack of opportunity (Rowland, 1985: 9). It is a short step then to seeing VI people as being unable to work or as only capable of performing certain kinds of tasks. The onus, according to Swain (1993: 45) is placed on the disabled or VI to cope in a non-disabled society, and to cope with their limitations in a way not expected of the able-bodied.

2.3.3 Work Attitudes

What do people's actions and attitudes in the workplace depend on?

The biggest hurdle the VI face in the able-bodied world is other people's attitudes. Wolffe (1998: 11-12) says that how others act depends on whether the VI person has the following skills:

Work experience

Experience validates ability for the VI. Either paid or volunteer work is an important step to promote the VI person's career, as references can be

obtained from people who have seen them in action. Prospective employers will then be able to discover the potential VI employee's worth.

Achievements

A VI person has credibility when he/she has evidence of having accomplished tasks in the past.

Dependability

A person is seen as dependable when they are willing to work until a task is complete. Employers expect all workers to be at work at all times (during working hours), to be on time, not to miss too much work for personal reasons and to be willing to stay after regular working hours now and again if necessary. Workers with VI should understand that employers see them in the light of their dependability.

Flexibility

Today's job environment is constantly changing. Workers must be able and willing to adjust and try new things. VI people should acquire as many skills as possible, as versatile employees are more attractive to employers.

2.4 SOCIAL MODEL AND RESPONSIBILITY

Disabled people are not only disabled by disease, but by their environment and society. The social nature of the workplace results in job terminations occurring due to social factors rather than poor performance (Lehr & Brown, 1996: 287). VI people face significant challenges in achieving social integration into any workplace environment. Internships can solve this problem by providing work experience necessary for VI people to get a job. Otherwise the main cost burden falls on the VI individual, where society should assure adequate support for the victims of VI (Topliss, 1979: 25).

The VI individual is seen as a person with many needs. Counseling, training and facilities may be provided, and yet one asks if his needs will be satisfied. The VI person is also seen as an incomplete person who becomes whole when some other person adds the right things (Rowland, 1985: 10).

Whereas the sighted person experiences a need, the blind person is seen to have a problem. So where sighted people have an infrastructure provided – to which they are thought to be entitled – VI people have special needs, which are seen negatively as problems that require extra and unnecessary efforts to remedy.

All of these factors cause a problem as they make it difficult for people to accept that Visually Impaired people can actually lead a normal life (Shearer, 1981: 13).

2.5 PERSONALITY

Cutsforth (Zahl, 1950: 175) believes a VI person has both a personality and a social problem. The social environment, a world unaccustomed to Visual Impairment, affects the person's personality as he/she attempts to live in this world. VI at a later age may cause a rearranging of attitude towards oneself and of one's social reaction patterns. This leads to a change in personality, which in turn often leads to an added social barrier, as the VI struggles with the attitudes of others, and those that are self-inflicted. Both attitude problems separate him/her from society, and often result in a feeling of social inadequacy.

2.6 DIVERSITY

Society needs to recognize that separate facilities are inherently unequal, and that even an open door to an institution full of both attitude related and culture related barriers does not guarantee equal opportunity (Crewe

& Zola, 1983: 358). Furthermore equal treatment does not necessarily mean equal opportunity. This is because VI people may need special adjustments to their environment and people's attitudes.

People with disabilities are as diverse as the human race, and are united merely by a functioning impairment and common social disenfranchisement. (Crewe et al, 1983: 360). It would be ludicrous to treat all VI people in the same manner as they come from different backgrounds and cultures, have different interests and abilities.

Freedom, according to Macleish (Crewe et al, 1983: 357) is the right to choose and create choices for oneself. The VI should have same right to pursue careers that interest them as the rest of the workforce, who are also so different from each other in other ways.

When one asks why disabled people are not given the opportunity to choose, the answer may be that the values of society in general are threatened. Society is accustomed to discriminating and still thinks it is justifiable to judge a person based on what he or she can do.

People should however experience equality in treatment, regardless of their capabilities or limitations. An individual should have a choice as far as his/her career and workplace is concerned, and a willingness to accept the responsibilities connected to the consequences of their choice.

Crewe et al (1983: 361) remind one that that which "we do to the disabled today, we will have done to ourselves tomorrow."

2.7 ORGANISATIONAL ENVIRONMENT

When one examines workplace approaches to differences, one needs to ask if a business case can be made for employing VI people? In other words is it a financially viable thing for a business to do? One also has to

ask if a reason can be found to retain and value the skills and contributions VI people make to an organization. If VI workers are valued, perhaps an environment can be created which enables VI people to fulfill their potential.

The environment can play an enabling or an obstructive role. Individuals can experience a different severity of disablement in different environments. It all depends on the barriers people knowingly or unknowingly put between the VI individual and his/her ultimate success.

2.7.1 Cost as a barrier

Many organizations perceive the moral and ethical grounds for equality initiatives, but the perceived costs act as barriers to change. When policy intervenes to change this, they threaten the organisation's "bottom line". This makes any change unpopular.

The size of the disadvantaged group and the related costs to achieve equal opportunities lead disabled people to be low on the priority list.

People with disabilities are extremely diverse, constituting a more heterogeneous group than other previously disadvantaged groups, such as women or black people, so that any initiative taken may benefit few disabled employees, if not only one employee, and are therefore far more difficult to justify on economic grounds (Woodham, 2000: 411).

2.7.2 Reasonable Accommodation

According to legislation employers are nevertheless required to make reasonable accommodations for each VI employee.

2.8 REMOVAL OF BARRIERS

2.8.1. Introduction

If all disabled workers are to realize their potential, their environment should be welcoming and accessible to all individuals with visual impairments. According to Woodhams (2000: 413) organisations advocating a total barrier removal approach to disability would have to examine their communications, premises, location, job and work station design.

Barrier removal for VI people would require a great deal of organizational disruption, specialist advice, training and money. The consequences may not be useful for all, as that which enables one disabled person may disable another. Thus barriers, specific to VI people would have to be addressed, and these may not benefit those with other impairments.

2.8.2 Job restructuring

Job restructuring extends the concept of adaptation beyond individual tasks to the relationship among tasks. An employer identifies the company's needs, observes various jobs to identify how employees are completing them. *Job Sharing* can then take place. In job sharing a job that is traditionally performed by one employee may be restructured into different parts, each performed by a different employee (Lehr et al, 1996: 286).

2.8.3 Social enhancement procedures

When disabled people lose their jobs, social factors rather than poor performance are often the cause. According to Gayland-Ross et al (Lehr et al, 1996: 287) systematic instruction on how to initiate and respond to social interaction can increase direct social interaction among co-workers, and also result in the inclusion of the disabled or VI worker in the social network. This may help to decrease prejudice and dispel stereotypes,

thus leading to less social barriers being put in the VI person's way, and the breakdown of resistance of co-workers and supervisors.

According to Wolffe (1998: 11) VI people need to master certain skills to compete in an increasingly international and technological labour force such as understanding of other cultures, the ability to speak multiple languages, computer skills, providing evidence of achievements, dependability and flexibility.

2.8.4 Natural supports

Natural supports are naturally available people who are not paid to specifically train, supervise, or support a disabled employee (Lehr et al, 1996: 290).

Three examples of support roles are:

Mentor roles, where a co-worker or supervisor supervises a VI person already trained to do the job on an ongoing basis.

Training consultant roles where an employment specialist trains a co-worker who trains and supervises the VI worker.

Job sharing roles where a VI and a sighted worker divide the job responsibilities, and the sighted worker provides ongoing support to the VI employee.

An example of how the natural supports process can be developed and of how the employment specialist role becomes a facilitative role rather than a trainer role is given below. The VI person participates directly in the process, by:

Gathering information regarding strengths, interests and experiences,

Developing a vision of a fulfilling future as regards employment and social relationships,

Identifying and implementing the necessary actions to attain this vision

Securing a co-worker's commitment to assist the VI individual achieve his/her vision.

2.8.5 Technology

Visual Aids: Using currently available visual aids more extensively, and receiving training in the use of the visual aid.

Enabling technologies: It is vital for a VI person to keep abreast of new technologies that enable him or her to function more effectively in the workplace.

2.8.6 Staffing

The need to hire from underrepresented groups has led to VI people being given a chance. It has therefore become necessary to go about recruitment and selection procedures somewhat differently, in order to be fair.

Behaviour focused interviewing is a competencies-based selection process that removes some of the subjectivity and bias from hiring interviews. VI people thus have a better chance to obtain positions with this new approach to staffing (Totta, 1995: 37).

2.8.7 Business Planning

Each manager in an organisation is responsible for setting individual goals, for the hiring, retention and advancement of the disabled, and the VI. The goals set are based on what the managers think they can realistically achieve. Once again attitude plays a big role in the opportunities offered to the VI.

2.8.8 Architects, City Planners & Legislators

Architects need to become increasingly aware of barrier-free design, in terms of accessibility and independence.

City Planners can avoid the construction of inaccessible public projects that later require expensive adjustments.

Legislators need information to be effective in serving the disabled.

Service providers increasingly find themselves working with larger numbers of disabled individuals who now occupy their positions in the mainstream of society. Knowledge can increase the disabled people's personal comfort as well as professional effectiveness (Crewe et al, 1983: 11).

2.9 SUMMARY

Despite the competence to practice his chosen profession, public opinion and prejudice are hard to overcome for a VI worker. To make up for the difficulties that most people perceive, the VI professional must be better trained, more ambitious, and more resourceful than his sighted competitor, if he/she wants to be successful (Zahl, 1950: 233).

The way to remedy the problems caused by the barriers, is to provide the structure, support, technology and equipment that is lacking. Furthermore an awareness of stereotypes and prejudices, and their influence on people should be created in sighted people, whose negative attitudes can be a serious barrier for the Visually Impaired.

CHAPTER 3

EMOTIONAL ADAPTATION

3.1 INTRODUCTION

A person who becomes visually impaired experiences many things, including denial, anger, fear and loss. Each person experiences and handles it differently. Some surrender and feel hope departing, others fight and survive. The adjustment needed to cope with the new life is often awe inspiring, and assistance is generally necessary.

3.2 REHABILITATION

Zahl (1950: 199) defined vocational rehabilitation as a service that renders disabled person fit to engage in remunerative employment. Vocational rehabilitation is dedicated to restoring, for the disabled person, the equal opportunity to work.

Vocational Rehabilitation used to equate disability with an inability to work in one's customary occupation. Dr. H. Rusk (Berkowitz, 1987: 158) then brought about a change in mindset when he realized the importance of examining the whole man, believing it was impossible to separate occupational & non-occupational problems when a VI person was re-entering the work force. The idea poses a problem as many find it difficult to accept that disabled people can lead a normal life (Shearer, 1981: 13).

It is vital to consider the socio-cultural context in which rehabilitation takes place, and essential to remember that behind every VI person, there is a family, a community and an entire social structure upon which success depends. Rehabilitation is therefore best offered closest to the place and time in which the VI will use the skills they are taught (Kupfer, 1988: 91).

The essential components of effective rehabilitation programs were outlined in Kupfer (1988: 92) as:

Teaching critical, functional skills needed and used in the homes and workplaces.

Teaching in the natural environment in which the skills are to be used.

Assuming that the skills taught are culturally and age-appropriate.

Aiming at equal access to vocational, social and economic choices.

Emphasis on the strengths and capabilities of the individuals, rather than the impairment.

Rehabilitation counselors and employment development specialists spend a lot of time coordinating and helping in the career development of VI clients. They work extensively with prospective employers to dispel stereotypes and obtain workplace accommodations for VI employees. It is important to attend to the employers' expectations and ever-changing needs when assisting the VI person in his preparation for the workplace.

This also leads to rehabilitation specialists helping the VI gain the skills they need to secure employment (Wolfe, 1998: 11), as the employer's expectations are taken care of and met. Internships can provide the necessary work experience that VI people must have to get entry-level jobs. Hayne (1998: 844) says this kind of assistance is vital, as VI people do not usually have the kind of early employment experiences that sighted people have.

Dobbs (1999: 96) indicates that a lack of rehabilitation efforts leads to discrimination, and that is a large part of the makeup of the prejudice and stereotypes the VI experience. Without Rehabilitation, the VI individual's emotional adaptation can be considerably more difficult.

According to Zahl (1950: 196) an adequate vocational rehabilitation program will sign the individual up, as soon as possible, once he has become VI. In this way hopelessness does not have time to set in. The VI person has to be seen and comprehensively studied as a total personality. To do this dependable information must be collected by the counselor, so that aptitude, interests, physical health, emotional balance and characteristics, which inhibit or facilitate satisfaction, can be diagnosed.

3.3 BEING NORMAL

Striving for independence and a 'normal' life is a frequently voiced desire among the disabled, and VI (Barton: 1989). For VI people, a lifetime of being stared at, of strained interaction and of dealing with the stigma attached to their impairment can become very tiring.

The biggest obstacles to achieving success in their chosen careers, are the attitudes and misconceptions of employers, and co-workers. VI people wish then only to be able to do what "real" people do (Coombs, 1999: 208) and be seen as normal. They would like others to change their attitudes, so they can recognize that VI people really are normal after all. VI people often attribute their success to supportive social structures that do not treat them as if they were blind, but normal, like everyone else.

3.4 INDEPENDENCE

Dependency implies the inability to do things for oneself and therefore the reliance upon others to carry out some or all of everyday tasks. In reality, Barton (1989) says no one in a modern industrial society is completely independent. The dependence of disabled people is not a feature, which makes them different, but is a difference in degree compared to non-disabled people.

'Independent Living' (IL) means allowing people with disabilities to live as they choose in their communities rather than confining them in institutions (Crewe et al, 1983: 9). Giving up care for the risk, stress and effort involved in making many decisions that shape the VI person's life is difficult. It means the VI person needs a network of support services, and the kind of involvements with other people, that gives *life meaning*. The IL movement means a commitment to bringing down environmental barriers that have so long kept VI people out of sight.

Because VI people are aware of and concerned about their rights to *self-determination*, they are no longer likely to be passive. They expect to be involved to a degree in decisions about their future. VI people now have quick access to the printed word and no longer need to rely on sighted readers. This has opened a new world of independence enriched with pleasures and increased skills (Insurance Advocate, 1997: 20) Enabling technology is the key to both education and employment for the VI and therefore a major contributing factor to the VI person's independence. (Pearson, 1997: 27)

A properly adapted computer gives the VI person the ability to access information. This has freed and empowered the VI population. Conversely, retooling to keep up with the never-ending invasion of digitized information can be frightening and overwhelming (Coombs, 1999: 208).

3.5 EMOTIONAL NEEDS

Training to give the VI individual real life job skills is as important as the ability to complete his/her tasks. *Mentors* play an important role in this as they can lift the morale of the VI person, as well as influence other employees (Battaglia, 1998: 74). The mentor is someone with whom the

VI employee can talk about frustrations and fears. Advice can be received and a sense that someone understands, achieved.

3.6 COPING WITH THE DEMANDS OF THE JOB

Support and communication at all levels is, according to Lazo et al (1997: 5) essential for VI people to cope at work. Exploring all avenues and learning how to make people feel comfortable helps. The VI individual needs to be detail-oriented, organizing and planning and absorbing as much information about work, as possible. A sense of humour about oneself also helps (Culp, 1998: 45).

3.7 LOSS

Thomas J. Carroll, invoked the religious teaching of death and rebirth to interpret the meaning of blindness, which occurs in adult life. In "Blindness: What It Is, What It Does, And How to Live with It" (1961) he wrote

"When, in the full current of his sighted life, blindness comes on a man, it is the end, the death, of that sighted life"

The devastating effect is manifested in two stages (Rowland, 1985: 17):

Shock and the numbed inability to function

Grief/mourning for the life that is lost.

Only when these two stages have been experienced can any rehabilitation take place, can a new person be born. Can a person return to "normal"?

According to Shearer (1981: 14) the mind adjusts itself to produce equality among people. Life is what you make it.

Despite the rebirth, the losses are numerous and continue to be dealt with throughout the VI person's life. A summary of the losses, according to Rowland (1985: 17-25) are:

Basic losses of psychological security includes the loss of:

Physical integrity;

Wholeness;

Confidence in the senses that remain;

Reality contact with the environment;

Visual background (the background in which objects exist).

Losses of basic skills include:

The loss of mobility;

The loss of the ease of spoken communication – as lips and gestures can no longer be seen.

Losses of appreciation include:

The loss of visual perception of the pleasurable and of the beautiful;

The loss of recreation in many forms.

Losses concerning occupational and financial status includes:

The loss of career or opportunity;

The loss of financial security.

Losses to the whole personality:

The loss of personal independence;

The loss of social adequacy or individuality;

The loss of self-esteem or total opinion of oneself.

These losses alter the VI person's whole existence, and mean that he/she will never be quite the same again. Yet with appropriate rehabilitation, support and understanding, the VI person can learn the skills to surpass the obstacles in his/her path.

3.8 THE EXPERIENCE OF BEING VISUALLY IMPAIRED

Apart from the loss experienced, the VI person engages in the world in a certain way. The person, who is adventitiously VI, has the capacity to draw upon a store of visual memory and is capable of interpreting sensory information in visual terms. Rowland (1985: 46) discussed the

dynamics of social interaction, and indicated that a person who is adventitiously VI will have many factors in common with the person who is congenitally VI, but will qualitatively be able to change his consciousness of his environment and the people in it, because he is able to give his experiences a visual reference.

Blindness is, furthermore, the unfolding of a personal history, which is influenced by the cumulative effect of experience, and the uncertainty of the future, that a VI person experiences. Frustration and a new dependence lead to self-pity. The realization that life, although tough, will go on, inspires the VI person to keep dependence to a minimum, and make life as interesting as possible (Shearer, 1981: 17).

It should be remembered that Visual Impairment is a tragedy not only for the person, but for his family as well. And as such the whole family needs to adjust to the experience of being Visually Impaired, and furthermore so do the co-workers.

3.9 WHAT DOES IMPAIRMENT BRING TO YOUR LIFE?

Disability brings a new perspective to some, and a narrowing of life and its pleasures to others (Shearer, 1981: 16).

3.10 SUMMARY

The sooner a VI person starts with some form of rehabilitation, the sooner they begin to cope and feel as if they are capable and still worth something. The loss of sight is not something one can even begin to comprehend, and yet when one begins to feel normal and make independent decisions, a new and positive perspective of life can arise.

CHAPTER 4: TECHNOLOGICAL AND OTHER AIDS

4.1. INTRODUCTION

Technology has drastically changed the workplace, and has made it easier for the VI to obtain employment and perform more effectively at work. The significance of new technologies for VI people is increasingly gaining recognition. About 90% of the VI use computers at work. And it can be said that computers are more important for VI people than for anyone else (Dobbs, 1999: 96). With proper training and adaptive technologies, such as voice synthesizers, Braille embossers, or pocket-sized Braille notepads, VI people can work in many different environments.

Despite this, some view technological Aids as a *mixed blessing*, because it leads people to think that the disabled person no longer needs assistance. Changes in technology can also be particularly difficult for blind people. When companies upgrade their technology, VI workers must also find compatible upgrades for their adaptive equipment. This means they regularly need to learn twice as much when new computer programs are introduced. So, although VI people constantly face new *challenges*, they also have a constant set of new opportunities arising from technological change.

Interestingly enough, according to Lachenauer (1999: 34), when professionals have an application for an innovation (for example a computer program that takes and reads back dictation) it has an added payoff for VI workers. The VI employee becomes a more accepted part of the workforce, as they are not considered different, when they profit from the same advancements as able-bodied people.

Other positive aspects which technology offers are more employment options; a wider range of tasks the VI employee can perform; the possibility of flexible working arrangements and enhanced quality of working life (Swain, 1993: 241-242).

Training also boosts confidence and creates a ripple effect, in that when employers see a VI worker prove his/her abilities – they are more willing to give another VI applicant a chance (Dodds, 1999: 100-101).

4.2. EMPLOYEE NEEDS

When adaptive technologies are implemented the special needs and abilities of the VI worker should be determined first (Lazzaro, 1993: 1). There are a wide range of available aids, and yet only a few employees with Visual Impairments use them. This is often the result of a lack of information on the part of both the employer and the VI employee. In some situations, audible rather than visual aids are preferred. Matching the right aid to the person is clearly important. Receiving specialist advice makes sense in trying to gauge which is the most appropriate aid to meet the employee's particular need. It is obviously important to promote an awareness of the options, and to realize that full consideration of each individual's needs helps VI workers compete more effectively in the workplace (Joseph & Harper, 1997: 542).

4.3 VISUAL AIDS

Visual Aids are devices that help improve one's vision to some extent (RP information, 20). Many workers improve their residual sight by using different low vision aids. These can be considered within the framework of two visual systems.

Category one: Aids which serve to improve acuity in the center of the field e.g. monoculars or binoculars.

Category two: Aids, which serve to increase the field of view. These are the field expanders designed to make use of the remaining central vision.

It is important to note that systematic training is necessary in the use of all visual aids (Dodds, 1988: 58-59). Fonda (1981) describes the optical aids that can be used for distance and for near observation. These include spectacles, telescopes, magnifiers and closed circuit televisions.

4.4. ADAPTIVE TECHNOLOGY (AT)

AT is a device that allows individuals with disabilities to perform independently. Advances in adaptive computer technology give VI people an opportunity to access information and to participate at the workplace (Lazzaro, 1994: 1066).

Personal computers (PC's) represent freedom and independence to the VI person, as they can be adapted for a wide range of visual problems. The PC is now the foundation on which most adaptive technology is built, as AT can easily interface with a standard PC. The thrust of these technologies is to change the keyboard or monitor, so that the user can read or input information in the format they need.

Most adaptive technologies work with the MS-Dos, Macintosh, and Windows operating environments. One to four megabytes of RAM, with a few expansion slots and a number of serial and parallel ports are needed (Lazarro, 1993: 59).

There are countless examples of technologies that help visually impaired users, including:

Speech synthesizers – that read the text on screen aloud.

Braille input and output (e.g. printouts),
Optical character recognition (OCR),
Customized scanners that plug printed mail into computers to be read aloud,
Voice services to listen to the day's business news.
Computer programs that take and read dictation
Closed circuit TV cameras that put magnified images of reading material on a screen.
Braille printers allow word processors to print Braille on command
Voice recognition systems allow users to give verbal commands to their PC
Various software that magnifies the items on screen.

Graphic User Interfaces (GUIs)

As text based applications become scarcer the use of GUI among VI computer users is increasing. According to Kostyshyn (Lazzaro, 1994: 3), GUI platforms rely on spatial and pictorial representations to convey information, which makes them much more difficult for VI users to use. To make a GUI based program available to a VI user, speech synthesis program developers must verbalise information about the interface (e.g. buttons, menus, text associated with graphical objects) and the application itself (including the cursor, font colour and graphical images) (Lazzaro, 1994: 3).

The current generation of graphics-based screen readers do not always accurately read all the information, or reliably track the mouse as it moves across the screen, causing the user to get lost in a jumble of information. The problem could be greatly reduced if online access providers,

mainstream software companies and screen reader manufacturers co-operated in graphical applications design.

Fortunately more GUI's are being adapted for the blind with speech, Braille, and magnification systems. In addition, the commission of the European communities has funded GUIB (Graphical User Interfaces for Blind people), which is exploring speech, Braille and audio output technologies.

Although GUI-based platforms have become more accessible, Kostyshyn says the next wave of operating systems will offer new challenges. GUI platforms will also be complicated by expected increase in 3-D applications. According to Morsford the translation of 3D graphic screens into Braille or speech output is a formidable task for the programmer, and can be a steep learning curve for a VI user (Lazzaro, 1994: 4).

In the meantime, it is unfortunate that some networking tools (including those based on graphical user interfaces) threaten to erode the accessibility of electronic resources. Everyone that is unable to access computer software may lose opportunities, and even their jobs (Lazzaro, 1994: 1066).

AT can easily interface with a standard PC. The thrust of these technologies is to change the keyboard or monitor, so that the user can read or input information in the format they need.

Speech Synthesis Systems read the screen efficiently in so far as keystrokes are spoken aloud, and the video screen is read on command. To make a computer talk one must have specific hardware (i.e. circuit card) and software that drives the voice hardware, a screen reader. It is possible to make windows-based programs speak aloud, using screen

reader and speech hardware. Win Vision for example allows users to hear their keynotes spoken aloud and to receive verbal feedback when the mouse cursor moves. Win Vision identifies and reads icons as well (Lazzaro, 1994: 1067).

Graphics Access becomes more and more important as computer interfaces rely more on graphics. VI computer users feel concern as Windows-based and other GUIs become more accessible, since the currently used Windows-based screen readers and mainstream applications do not always work well together. The VI user then gets lost on the screen or does not hear vital information (Lazzaro, 1994).

Magnification systems

A magnified image shows a larger version of the information being viewed, making it easier to see. This increases access to PCs and digital information. Most programs offer a wide range of magnification levels, and can magnify all screen items (including mouse cursor, text cursor, icons, title bars). A common feature of such programs includes a viewfinder, which splits the screen into magnified and unmagnified areas, and the ability to automatically move across and down a magnified page so they can fit onto the screen (Earl & Leventhal, 1997: 5).

Software-based magnification systems are inexpensive and can easily be moved from one PC to another, thus enabling easy access. This results in such systems being at the forefront of adaptive technologies. Some examples of this software include Magic from Micro systems Software, a Windows-based magnification package, which is compatible with Windows-based databases and spreadsheets. Zoom Lens, a free program that can be downloaded from the Internet, opens an adjustable window that only magnifies the area where the cursor is located. (Sneiderman, 1996: 21-22, Lazzaro, 1994: 1067)

Accessibility and the Future

There are many different things that can be done to improve VI people's successful access to technology. The mouse cursor's size or colour can be changed. Sounds can be attached to Windows events. A shrinking circle can appear around the mouse pointer – called a sonar function – making it easier to find (Earl & Leventhal, 1997: 5-8).

These, and many other, features make it possible for individuals with visual impairments to enter and remain in the labour market and contribute to society. To maintain this equality, access to computers and flow of data is vital.

The Internet has revolutionized how information is shared. If the access to this vast data network is ensured, and the information technology industry takes the special needs of visually impaired people into account, there should be a future of greater access and success for everyone (Lazzaro, 1993: 61).

The Internet

The Internet represents equal access to information as those who struggle to reach the places where information is physically located can log onto the Internet, and download data at will (Lazzaro, 1993: 61).

VI people can use the Internet to send and receive e-mail, transfer files, access document archives, search databases and even interact with others. A GUI that can effectively be used with adaptive equipment is however often needed.

The Productivity Works' talking Web browser released pwWebSpeak/32 for Windows 95/98/NT, which was designed to give VI people access to

the Internet. The software provides visual and audio information, uses adjustable large-print text, can modify background colours and reads sites by page, word or character (Anonymous, 1998: 1).

Graphic User Interface and the Internet

The online world, as is the whole computer industry, is moving towards GUIs. This could effectively close the door on information access for VI. A GUI that can be used with adaptive equipment is therefore needed.

Some specific problems related to the Internet include:

Graphic interfaces are often chosen for public information terminals, which are connected to the Internet. They rely heavily on graphics to display information to the user, and touch screen technology. (E.g. Office building directory search and retrieval systems) These are both obviously difficult for visually impaired people to use.

Interactive video systems pose an access problem for VI users (e.g. document delivery systems, online encyclopedias).

There are various solutions to these problems. The needs of all users should be taken into consideration when the software is written. Mainstream vendors should cooperate with adaptive vendors and the user community when the products are designed. Laws and regulations that establish guidelines for information technology, so the hardware and user interfaces are accessible to all are needed (Lazzaro, 1994: 5).

The success of Adaptive Technology should be measured by usability and accessibility. Successful access occurs when visual information is received through speech, Braille or enlarged output. Successful technological access leads to jobs, and a higher quality of life for the Visually Impaired.

There are many programs or kinds of software available. No one approach is the right one for all users. The objective is to give people the

information they need to make decisions about which approach or product that best fits their needs (Earl et al, 1997: 7).

4.5 ACCOMMODATING THE VISUALLY IMPAIRED

Legally one is expected to make a reasonable effort to accommodate a disabled worker or applicant. A successful effort to accommodate the VI person will require an adjustment of the situation to the needs of the individual, and so to the organization.

The accommodation process does not only involve technical accommodations, but organizational accommodations as well. The organization needs to be both flexible and proactive in its efforts to accommodate the VI. A change in mindset is necessary for recruitment, training, and facilities, which should not be segregated, as VI employees should have access to all common areas.

The ideal is for the VI person to be involved in all aspects of the process involved in finding the best way to accommodate the available technology to the employees and users needs. The user is most likely to know what he /she needs from the technology (Macy, 1994: 17-21).

4.6 ERGONOMICS

Ergonomics is the study of the relationship between workers and their environment (Collins Concise Dictionary: 1985).

VI workers often experience physical difficulties with their environment at work.

Some of the barriers people experience at work include:

Mobility can be an issue as people encounter problems entering the workplace, floors that are slippery, having to work and move around others, obstacles in the workplace, and long distances to restrooms.

Signs for entrances, exits, elevators and restrooms are often inadequate.

Bright computer screens - Glare guards for computer terminals reduce eyestrain.

Lack of emergency evacuation procedure

Lines painted on stairs.

Lighting that is too bright – can be filtered with Venetian blinds or film over the windows (Rumrill, 1997: 66-72, Write, 1999: 476-84).

Job sites can be adapted by wiring the walls with receivers that communicate with sonar devices worn by the visually impaired person.

The device tells them where they are. (Lachenaer, 1999: 34).

There are also a number of aids that make it easier to work at home. The workspace, which should be situated in the main living space, should be designed and adjusted to meet the workers specific needs. For example the home office is most accessible when it is located in the main living space. The desk needs to be the right height. Arm reach should be considered, and the placing of the telephone and other necessary items should be carefully considered (Syarto, 1998: 48-9). Assistive Technology is vital in this environment and must be chosen to meet the users specific needs.

The accommodations people need are often just modifications to their present set up (e.g. glare guard, Venetian blinds or computer software) and they often cost little (Johnson: 1992: 16). Advice can in fact be given on the use of correct lighting, use of colour and contrast, training in new visual skills, reading positions (Low Vision Services, 1996: 12).

4.7. SUMMARY

Computers, and the assistive technology that comes with them, are vital for the VI. Although technological and ergonomic aids are not the only answer to solving VI workers problems, they make a tremendous difference to their access to information, and their ability to function normally in the workplace. Each individual's specific needs must be taken into account when choosing the appropriate technologies, software and environmental setting. The VI person's input should be used at all stages of the process of design, both of computer related technology and of ergonomic environment.

When adequate thought is put into the work setting, and appropriate adaptive technology is made available to the VI worker, he/she will have access to the information and tools to be successful in the workplace.

CHAPTER 5: LEGISLATION AND THE RIGHTS OF THE VISUALLY IMPAIRED

5.1 INTRODUCTION

Equity has been achieved for people with disabilities around the world, through various pieces of legislation. Furthermore, many people have also come to know and understand the social role they have to play as regards those with disabilities, and the responsibility one has towards such people. The management of diversity is also an essential skill, necessary to treat people with disabilities fairly, and help others come to terms with those different to them.

5.2 SOUTH AFRICA

The legislation that affects South Africa's disabled population includes:

The Constitution of SA (1996), which guarantees fundamental rights to all citizens, says "No person may unfairly discriminate directly or indirectly against anyone on one or more grounds, including" disability, among other things.

The Labour Relations Act (1995), makes explicit the legal boundaries of discrimination as set out in the Constitution (Gerber, 1996: 57). The Labour Relations Act focuses on the capacity of the employee to work and not the disability. Specific attention has been given to unfair dismissals and recruitment and selection practices. Provision has been made not only for those already employed and but also those seeking employment. The provisions of the Labour Relations Act are guidelines for appropriate practices, but are not sufficient to remove discriminatory practices or support the creation of equal employment opportunities for people with disabilities.

Employment Equity Act (1998) says employment barriers must be removed, workplace diversity furthered and reasonable accommodations

made. The Employment Equity Act prohibits any unfair discrimination stating that “No person may unfairly discriminate, directly or indirectly against an employee in any employment policy or practice, on one or more grounds, including race, gender, sex, pregnancy, marital status, family responsibility, ethnic or social origin, colour, sexual orientation, age *disability*, religion, HIV status, conscience, belief, political opinion, culture, language and birth.” In terms of the Employment Equity Act every designated employer must implement affirmative action measures for people from designated groups, such as ‘black people, women and people with disabilities’, in order to achieve employment equity.

According to the Code of Good Practice on Key Aspects of Disability in the Workplace, the Aim of the Employment Equity Act, No 55 of 1988 is to protect people with disabilities against unfair discrimination, and it entitles them to affirmative action measures. The code is intended to help employers and employees understand their rights and obligations, to promote certainty, and reduce disputes. The code is to be considered whenever the Employment Equity Act is to be interpreted or applied.

Legal Framework

The code is issued in terms of section 54(1)a of the Employment Equity Act No. 55 of 1998 and is based on the constitutional principle that no one may unfairly discriminate against a person on the grounds of disability.

Definitions of people with disabilities

People who have a long term or recurring physical or mental impairment, which substantially limits their prospects of entry into, or advancement in, employment.

Reasonable accommodation

Employers should reasonably accommodate the needs of people with disabilities, with the aim of reducing the impact of the impairment on the person's capacity to fulfill the essential functions of a job.

Employers may adopt the most cost-effective means that are consistent with effectively removing the barrier to a person being able to perform the job and need not accommodate the person if it would impose an unjustifiable hardship on the business of the employer.

The obligation arises when the employee voluntarily discloses the disability, or if the need is reasonably self-evident to the employer.

An employer may evaluate work performance against the same standards as other employees, although the nature of the disability may require the way performance is measured to be adapted.

Recruitment

Employers should identify the inherent requirements and essential functions of the position. The job skills must be clearly defined. Reasonable criteria for selection should be set. Application forms should focus on ability and advertisements should be accessible to persons with disabilities.

Selection

Selection involves a two-stage process of determining if an applicant is suitably qualified; and determining if the 'suitably qualified applicant' needs any accommodation to be able to perform the inherent requirements or essential functions of the job. The employer may not request information from a third party about the disability.

Interviews

Selection interviews should be sensitive, objective and unbiased. Interviewers should avoid making assumptions about people with

disabilities, and focus on the applicant's qualifications. Interviewers should ask all applicants how they perform the essential functions of the job, and if accommodation is required.

Conditional Job Offers

An employer may make a job offer conditional on medical or functional testing to a suitably qualified applicant.

Terms and Conditions of Employment

Employers may not employ people with disabilities on less favourable terms and conditions for reasons connected with the disability.

Medical & Psychometric Testing

Tests must be relevant and appropriate to the kind of work/job.

Placement

Orientation and initial training should be accessible, responsive to and able to accommodate the need of employees who have disabilities.

Employment Equity Planning

The code of Good Practice for the Preparation, Implementation and Monitoring of Employment Equity Plans spells out additional measures to ensure that people with disabilities who are suitably qualified for a job can enjoy equal opportunities and are equitably represented in the workplace.

Employers should heighten employee's awareness of the value of recruiting and retaining employees with disabilities. If people with disabilities are underrepresented in occupational levels & categories in the workplace, employers should seek guidance from experts. If the disabled employees are concentrated in particular occupational categories, the employer should consider if its selection criteria or

performance standards could be adapted to facilitate employees with disabilities being employed in different categories.

5.3 THE SOCIAL MODEL, AND MANAGEMENT OF DIVERSITY.

Impairment is, according to Oliver (1983), an individual limitation, whereas a disability is a socially imposed restriction (Swain, 1993: 17). This would therefore imply that blindness is an impairment, and the lack of access to written information is a disability. The social environment creates the disability, and something as simple as technological adaptation could solve the problem.

According to Woodhams & Danieli (2000: 403) disability is a social construct, which can only exist within a social environment, which devalues difference. Non-disabled people are the benchmark for establishing difference in relation to disabled people.

The biological model casts disability as a negative experience, while the social model highlights the positive dimensions of being disabled. It is therefore, according to the Social Model, possible to reduce the disability by adjusting the social and physical environment. This ensures that the rights and needs of impaired people are met, rather than hoping to change the people to fit the environment.

In the UK the Sex Discrimination Act (1975), the Race Relations Act (1976) and the Disability Discrimination Act (1995) all enshrine the legal tradition of treating all individuals equally. This means all individuals should be treated the same, despite their differences. The idea is to guard against decisions being made that focus on differences that are assumed to exist based on social or biological groupings. If such a decision is made it is often discrimination of an unfair nature (Woodhams & Danieli, 2000: 405).

The strategy of Managing Diversity puts the nature and consequences of differences in a more positive light. There is a need to move away from a collective identity, and towards an appreciation of diverse talents and strengths. In the workplace, a commitment to diversity allows all employees to contribute their individual ideas, talents and skills, which ultimately drive the bottom line (Crockett, 1999: 10).

The promotion of individuality has implications for disabled people. Firstly, the justification of equality shifts the rationale from the moral to economic arguments, e.g. skill shortages and the advantages of organizations mirroring the composition of clients. Secondly, a move beyond minority group assimilation towards an appreciation of difference and mutual respect. Thirdly, an enabling environment is sought where individuals can achieve their full potential. If this approach to managing diversity were implemented one would expect to see disabled people being actively sought for their skills, practices which actively acknowledge the different needs of disabled people and remove barriers which restrict them from achieving their full potential (Woodhams et al, 2000: 406-7).

According to the social model it is important that people know of the impairment or disability as misunderstandings and self-damaging strategies could result if the visually impaired person felt compelled to succeed by, for example, working longer hours. This seems to indicate that it is not the impaired person and his/her abilities and capabilities that are at fault, but the society or specific organizations involved.

The employer should therefore be making reasonable efforts to accommodate the impaired person, who should then be able to adapt to the environment (Swain, 1993: 46). The employer could, for example, use behaviour-focused interviewing, competency-based selection processes,

targeting recruitment measures disability awareness training, customised performance standards, adequate time frames and adequate counseling (Lazo, 1997: 4, Totta, 1995: 37, Woodhams et al, 2000: 407).

Although the equality of opportunity for disadvantaged groups is accepted on moral and ethical grounds, the perceived costs do act as a barrier to change. According to Rubery (1996) policy interventions are unpopular as they threaten the organizational bottom line (Woodhams et al, 2000: 410, Totta, 1995: 36) notes that there is a widespread assumption that the cost of accommodating the special needs of disabled employees is prohibitively high. This is often not the case with Visually Impaired employees, but the assumption is nevertheless there.

Organisations which, in line with the social model, advocate the removal of all barriers to the disabled, would have to examine their premises, communication methods, accessibility, and job and work station designs.

True barrier removal for disabled people would therefore, require a great deal of organizational disruption, specialist advice, training and money. And unfortunately the consequences are not likely to help all disabled employees, as a structural alteration may enable an employee with one type of impairment, but further hinder another. Practices are, thus, likely to remain reactive and individually designed for some time to come (Woodhams et al, 2000: 413).

5.4 OTHER COUNTRIES

South Africa has most probably looked at both American and British legislation in the developing of its own legislation.

5.4.1 Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA), which was signed into law in July of 1990 makes it illegal to discriminate against a person based on disability (Thompson, 1999: 3). It is the world's first comprehensive civil rights law for people with disabilities, and is an historical benchmark and a milestone in America's commitment to full and equal opportunity for all its citizens (Thompson, 1994: 6).

ADA reflects the ideal that "contributions which individuals can make when free from arbitrary, unjust, or outmoded societal attitudes and practices that prevent the realization of their potential" are treasured (EEOC Americans with Disabilities Handbook, 1993: Preamble).

5.4.1.1 Reasonable Accommodation

The ADA protects qualified individuals with disabilities from employment discrimination. As such, it states, as South African legislation does, that 'reasonable accommodation' must be made for qualified individuals so they can perform the essential functions of the job.

Reasonable Accommodation is defined as any modification or adjustment to a job that does not impose an undue hardship on the operation or the financial resources of the company (Lazo & Kirk, 1997; 4). The disabled job applicant should be able to perform the essential functions of the position being sought (Macy, 1994: 17). The employer should modify the job or environment itself. Such accommodations generally include the acquisition or modifications of equipment necessary to adapt to the disabled employee's needs.

Not only is an adjustment to the needs of the individual, but also adjustments within the *organization*, required to accommodate a disabled employee successfully. The organisation's accommodations include

technical accommodations, equipment accommodations and specific organisational accommodations such as flexible and proactive recruiting, training & policy accommodations. A mindset change is needed for *recruiting* to make it fair and equitable. The ability to perform in a position is what really matters. The applicant's abilities are the focus of the information gathered when considering employing a disabled person.

Interviews: Employers, in the past, could not ask about necessary accommodations – even if the job applicant voluntarily disclosed the need for one – until after a job offer had been made. Under revised guidelines employers may ask questions about accommodations at the initial interview in the following situations:

The employer reasonably believes an applicant will need reasonable accommodation because of an obvious disability,

The applicant voluntarily discloses a hidden disability,

The applicant voluntarily discloses the need for accommodations during the interview. (Brady, 1996: 20)

If an applicant with a severe visual impairment applies for a job involving computer work, the employer may ask whether the VI person needs a reasonable accommodation to perform the job. If the applicant answers "No" the employer may not ask additional questions about accommodations. (The employer can, however, ask for a demonstration.)

If the applicant says "yes" the employer may ask questions about the type of accommodation involved. (For example. "What will you need?" or "Who makes the software you will need?")

The employer may not ask about the underlying condition or about other accommodations not related to the job function. (For example "Will you need help getting to the cafeteria?")

All other possible problem areas must therefore wait until after a job offer has been made, before they can be discussed. Employers may continue to ask applicants to describe or demonstrate how they will perform the job, as long as all applicants in the job category are asked to do so.

Training should include consideration of the accommodations that may be needed. To be effective, training should also seek to address attitudes of co-workers.

Policies should be reviewed to ensure they are not unfair or restrictive. Facilities should be examined to ensure equal access for all.

Necessary accommodations should also look at issues such as job design, flexible work schedules and job satisfaction. ADA's provisions oblige all companies covered by the law to re-evaluate the design of their offices, the kind of furniture used in them and the emergency evacuation plans for offices (Johnson, 1992: 15).

Visually Impaired employees should take an active role in the accommodation process helping to identify barriers to optimal job performance, and strategies to reduce or remove those barriers (Rumrill et al., 1997: 66). The employee is the best person to identify on-the-job barriers, and determine the best way to remove them.

Adaptive Technologies enable employers to comply with the ADA. It is important to remember that the specific needs of the worker, and the employee's abilities should be determined when implementing these technologies (Lazzaro, 1993: 59). Disabled people can thus live and work more independently with the help of talking computers and other gadgets (Lachenauer, 1999: 34). Luckily for the companies that need to comply with the ADA, more Graphic User Interfaces are being adapted for

the VI - with speech, Braille and magnification systems - all the time (Lazzaro, 1994: 2).

5.4.1.2 Equal Opportunities

While the ADA and similar legislation may impose some burden, society may have reached a point where some correction is needed. Disabled people have experienced difficulty in obtaining equitable employment opportunities. According to Macy (1994: 17) the percentage of people with disabilities in the workforce is less than half the rate for non-disabled people, and the disabled unemployment rate is more than twice that of non-disabled people.

Browell (1998: 27) indicates that promoting equal opportunities, and building disability into equal opportunities policies, are best practices, and are at the bottom of the idea of reasonable accommodation.

The ADA reflects a recognition that the surest path to America's vitality and strength is through the full realization of its citizen's contributions. According to William (1999: 21) an employer should identify which aspects of the work environment place disabled people at a substantial disadvantage, and consider which steps could reasonably be taken to eliminate them.

5.4.2 The Disability Discrimination Act (1995) of the United Kingdom

The DDA enshrines the legal tradition of treating all individuals equally. This equal treatment principle is interpreted in workplace policies and practices so that all individuals are treated 'the same', or no less fairly, despite differences (Woodhams et al., 2000: 405).

According to Goodwin v the Patent Office (1999 IRLR 4; EAT) evidence concerning an individual's ability as a whole must be considered first. It is

necessary to decide whether the disability could be said to have a substantial effect on day-to-day activities. It is also necessary to look at what the person cannot undertake and to determine the extent of the adverse effect of his/her condition on those activities (Williams, 1999: 22).

5.4.2.1 Reasonable Adjustments

Morse v Wiltshire County Council (1998 ICR 1023; EAT) outlines the steps to be considered when deciding whether reasonable adjustments are needed. Employers should:

Identify which aspects of the work environment place disabled people at a substantial disadvantage,

Consider what steps could reasonably be taken to eliminate this disadvantage (taking into account factors such as cost, disruption and effectiveness). This means asking what could, and should be done.

Morse also confirms that the duty to make reasonable adjustments applies to potential dismissals and redundancy situations (Williams, 1999: 21-22).

5.5 SUMMARY

The Constitution of South Africa and South African legislation says that an employer may not discriminate against a person with a disability, and needs to make reasonable accommodations to help such a person obtain a job, as well as do their job. VI people may thus not be discriminated against based on their inability to see, or such discrimination would be regarded as unfair. The various aspects regarding employment, for example interviewing, selection or workplace accessibility, should be examined for fairness, specifically as regards VI workers. Reasonable efforts should be made to accommodate VI people, so that they can function in the workplace.

CHAPTER 6: RESEARCH METHODOLOGY

6.1 INTRODUCTION

VI individuals are researched to discover their experiences as regards physical and social barriers; emotional experiences, reactions and adaptations; technological aids and equipment; and knowledge of the law as it affects them and their opportunities. As paper and pen questionnaires would be harder for VI people to complete, interviews were chosen as the most appropriate way to collect information from the selected participants.

6.2 BASIC RESEARCH CONCEPTS

The terms quantitative and qualitative research are often used to identify different approaches to answering research questions. Depending on the types of questions one wishes to answer, different research designs and methods will be more or less appropriate.

Methodology is a framework within which one places data, so that its meaning may be seen in a clearer manner. The various methodologies can be grouped into the two major approaches, quantitative and qualitative, for collecting and analyzing data.

The quantitative approach is used to answer questions about relationships among measured variables, measured with numbers and analysed with statistical procedures, with the purpose of explaining, predicting and controlling a phenomenon, in order to determine whether the predictive generalisations of the theory hold true.

The qualitative approach is used to answer questions about the nature of a phenomenon, with the purpose of describing and understanding the

phenomenon from the participant's point of view. Reporting the candidate's views from within his or her natural setting, helps to understand a social or human problem.

Depending on whether a researcher wants to deduce and test the implications of performed hypotheses, or to induce hypotheses from his or her own observations, a quantitative or qualitative approach would be selected respectively. Quantitative researchers usually start with a hypothesis to be tested. Relevant variables are isolated, standardised data is collected from many participants. The data is analysed so that the original hypothesis is supported or rejected, and conclusions are then drawn so that they can be generalised to the population as a whole.

Qualitative researchers start with more general questions. They then collect a reasonably large amount of verbal data from a few participants, by for example interviewing the participants about the phenomenon being researched. The researchers then present their findings in the form of descriptions that are intended to accurately reflect the situation.

A quantitative study usually ends with confirmation or disconfirmation of the hypothesis being tested. A qualitative study may conclude with tentative answers or hypotheses about what was observed. These tentative hypotheses may then form the basis of future quantitative studies designed to test the proposed hypotheses.

The qualitative approach was chosen for the purpose of this study, as the objective of the study is to describe and attempt to understand the experience of those becoming VI and adapting to their work environment. A small group of participants will be questioned on a number of issues, so that one can accurately reflect their situation and come up with some answers or hypotheses about the VI person's experiences.

6.3 AIMS OF RESEARCH

The experiences researched include:

How the VI worker got the job he or she is doing if it is the job he or she wanted to be doing.

What technology, equipment, training and support help the VI person to adapt to his or her work environment?

If the VI person feels normal when social and physical barriers are removed at work.

Which emotional reactions the VI display due to their new experiences.

Whether the VI do adapt to the workplace when losing their sight.

The purpose of this qualitative research is thus to seek explanations for the experiences of the VI, and to develop generalisations or assumptions about what might apply to the majority of VI people based on those explanations.

6.4 CHOICE OF METHODOLOGY

Having decided that a qualitative method of research would be most appropriate, various approaches are considered.

Phenomenological Research: A qualitative research method that attempts to understand participant's perspectives and views of social realities.

Grounded Theory Research: Qualitative research studies aimed at deriving theory through the use of multiple stages of data collection and interpretation.

Historical Research: The attempt to solve certain problems arising out of an historical context through gathering and examining of relevant data.

Ethnography: A type of qualitative inquiry that involves an in depth study of an intact cultural group in a natural setting.

Case and Field Study Research: Data is gathered directly from individuals or community groups in their natural environment for the purpose of studying interactions, attitudes or characteristics of individuals or groups.

As the data will be gathered directly from the VI individuals, with purpose of studying the characteristics and experiences of the individuals, the Case Study method of research has been chosen.

6.5 DATA COLLECTION

6.5.1 Objectives

The collection of data from VI individuals is necessary, as very little information exists regarding their adaptation to the workplace. The data collection is dependent on the personal involvement of the researcher in the setting, by meeting the respondents personally and interviewing them regarding their experiences in adapting to their workplace whilst becoming, or just after becoming VI.

6.5.2 Sample design

6.5.2.1 Population

The population upon which the research is focused is the VI population of South Africa who, firstly, have either recently become VI or are in the process of losing their sight. Those already having impaired vision, who recently experienced a marked decrease in their vision requiring adaptation within the work environment are also included. Secondly, VI

people who have a job and have adapted or are adapting to their work environment. Thirdly, those who use technology or aids of some kind at work to assist them in their daily functioning.

6.5.2.2 Limitations

The sample members have been limited by the following criteria:

They have to be of working age, and either have a job now, or have had a job after they became VI. There must have been an attempt at adjustment to the environment and the use of aids (technological or otherwise).

The sample members need to have been partially sighted for at least one year, and have attempted adjustment to the work environment for at least one year, before being interviewed.

6.5.2.3 Sample Selection Procedures

6.5.2.3.1 Locating & contacting respondents

Various institutions, such as the National Council for the Blind, Low Vision Services and the RP foundation were contacted to request names of possible participants in the study. In excess of thirty names were supplied from the three organisations. Those people, once contacted, were able to offer names of other VI people known to them, who may be suitable for the study. They were contacted as well to determine if they met the requirements set out for the study.

6.5.2.3.2 Screening

The possible participants were contacted by telephone to discover if they suited the criteria of the study. After short telephonic conversations with

each of the VI people, the most appropriate five were chosen to be interviewed.

6.5.2.3.3 Description of participants

The five participants eventually chosen were all people who matched the required criteria mentioned above.

6.5.3 Description of data collection

6.5.3.1 Interview Schedule

In order to ensure that the five interviews were undertaken in the same manner, focusing on the same issues, an interview schedule was used (See Appendix A).

The interview schedule was developed by the researcher, based on the aims of the research and the information obtained from the literature study.

6.5.3.2 Administering of Interview Schedule

The five participants were interviewed by using the interview schedule as a guide. The researcher made notes of the participant's answers and comments. When the participant's comments strayed far from aims of the study, the researcher used the schedule to return to the topics that had been decided upon before during the setting up of the interview schedule.

Each interview took between 45 minutes and one hour to complete.

Parts of the interview were taped to capture the details, and notes were made on the Interview schedule/ questionnaire of the general comments.

When answers to the particular topics came out earlier in the interview due to comments made by the participant, the answers to later questions were summarized for the participants when the researcher reached that section, to check they agreed with the statements.

6.6 ANALYSIS OF DATA

6.6.1 Introduction

While quantitative studies rely on deductive reasoning or analysis, qualitative studies tend to use an inductive reasoning, so that observations of a few particular cases can be generalized to a particular kind of case. Inductive reasoning emphasises an after the fact explanation where a theory emerges from the collected data. By observing the situation one hopes to increase ones understanding of the broader phenomenon of which the situation is an example.

Identification of issues in the lives of VI Participants

Those issues, which most or all of the five participants agree on or feel similarly about are identified as possible issues in the majority of VI peoples lives.

Other issues that came to light during the interviews, from the answers of the VI, were also identified as possible topics of interest to the VI.

6.6.3. Case Studies

The interviews are presented in the form of case studies, where an interpretive narrative derived from the data obtained in the interviews, is given. The case studies will then be analysed to determine the abovementioned similarities in the experiences of VI people adapting to the work environment.

CHAPTER 7: CASE STUDIES

CASE STUDY 1: STANLEY

Stanley is a 36-year-old man who became visually impaired due to a vein that burst in his head, as a result of high blood pressure, a number of years ago. During the last 12 months his vision has rapidly declined/worsened. He has been working at his present place of employment, a bank, as a switchboard operator for some time years now. He has started to struggle considerably more, during the past year, as a result of his deteriorating eyesight.

He experienced a great deal of *frustration* during this period and found the loss of sight difficult to live with. He has become more *aggressive*. He often feels *hopeless* and *isolated*. Simple tasks like buying groceries have become difficult and he ends up feeling like he has lost *control of his life*. He says he often has to *pretend* he is doing all right even when he is not, and uses *humour* as a *defense* to hide behind.

The problems and emotions he experiences have only being *getting worse* over the last year. He cannot play with his children anymore. His private and work life has deteriorated.

Stanley feels more relaxed amongst the VI, feeling out of place when with sighted people, as he feels *self-conscious* when he is with them.

Technology has helped at work and assists in making Stanley feel more worthwhile, as it gives him *independence*. He has however lost some independence, as he cannot walk around with ease anymore, but will not

use a cane, as his pride will not allow him to. Stanley has *lost* a good deal of *motivation* regarding his work because he has achieved *no upward movement* at work.

All of these restrictions and difficulties, perceived and real, have lead to Stanley suffering from *depression*. Even his religion is now in doubt.

He feels like he is *loosing* control of his life, and over the last year has *not* felt like he has *gained any control* over any aspect of his life.

The only *meaningful activity* he feels he has in his life includes the opportunity to play *Blind chess* and *cricket*, and participate in motor rallies.

Stanley uses the JAWS package, with a speech synthesizer that tells him the numbers he is looking for. His switchboard used to have Braille, but that was too slow to update.

Others no longer think he *needs help*, and this makes him feel good. It is the most significant way his *independence* has increased.

He feels he has *more control* over his work environment, as he now knows where the phone calls come from. He feels more professional and has more self-respect.

Stanley says that Technology (i.e. Computers) increase his *employment* and study *opportunities*. In his job/company he has however, in his opinion, come up against a wall in his development within the organisation, due to *management's view* of his incapacity to do a job he truly believes he can do.

He is not segregated from others at work, but he feels he cannot move around the building at work, as it is open plan. When he wants to go out to smoke, he finds it difficult to get outside.

He however moved his desk into a corner himself, because he wanted to be away from other, due to anger at the situation he finds himself in at work.

Stanley's co-workers ask others for help, not him. They sidestep him so they don't have to talk to him. He thinks they see him as incapable.

He hides behind *humour* so that he can be seen as a person.

Stanley feels that the people are *ignorant*, and therefore won't give him a chance to prove himself. They don't realise he has useful ideas, because his impairment makes them think he can't think.

Stanley says management does *not acknowledge* the problem. He feels he has to *work harder* than others to prove himself. Others respond to him *inappropriately* in that they talk to him as if he is incapable. This, he says, is due to *ignorance* of his abilities.

His co-workers see him as *unmotivated*, since he no longer tries as hard as he used to. They do however think he *has adjusted* well to his job, since he can do it well and without any difficulty.

Stanley does feel like he is expected to cope according to *sighted people's rules*. He has to get to their level. His company *does not integrate his non-work related problems* with his work related problems. He, for example, must organise his own transport, which can be a difficult issue at times.

He is not very aware of the *law* regarding disabled people. He is scared of losing his job and will therefore not fight about any issues either.

Management's lack of knowledge and understanding, and his lack of skills due to lack of training place him at a substantial disadvantage in the workplace.

As far as *training* goes Stanley feels management and co-workers have *supported* him adequately, and he has been trained sufficiently to overcome his impairment as regards his present job. The JAWS program helps with do his job.

The most serious problem he encounters is a *lack of communication* with management as he feels they don't have time to speak to him. They furthermore don't inform him of change. The authority to speak with/negotiate with department managers could rectify this, but he feels he does not have this authority.

Stanley does not think his vision is important in the kind of job he does. Where his co-workers write messages, he types on his computer. Furthermore the software on his computer enables him to know exactly what is going on.

He says he used to experience *job satisfaction*, but now he does not as he feels so de-motivated.

He says work was not so hard to adapt to, but he is not motivated to *adapt to adapt anymore*. Emotionally, Stanley, said he had to get used to the idea that others were *looking at him* all the time. He felt like he was being *discriminated against*.

Stanley is *not* doing the work/job he would like to be doing. When he was younger he had hoped to be involved in the medical profession. He says he has however been successful as a switchboard operator.

Stanley also says he *feels normal*, he feels like a *human being*. He is just *frustrated*, as he can't always do all the things others can do.

He says he would also feel a lot better about life if the company he works for would give him *more of a chance*. He thinks his employer should *make more of an effort to accommodate* his upward movement with the organisation.

Stanley thinks the VI *can adapt in the workplace* once they settle in and get comfortable.

Stanley says he would *feel more normal and happier* – like he used to – if the *barriers* at work removed.

CASE STUDY 2: PETER

Peter is a 40-year-old man who lost his sight at 38 due to a Brain Tumor. The Brain Tumor was not diagnosed in time, and grew exponentially against the optic nerve, until Peter started to lose his sight. At first he lost sight for 10 seconds at a time. Soon he was not able to drive anymore. The Brain Tumor caused him to start becoming psychotic as well. It was a very traumatic experience. He had an operation to remove the tumor in 1999. When he woke up, although he had completely and permanently lost his sight, he felt peaceful.

Since then Peter has had *no time to feel sorry for himself* as he set about building his new life immediately. He underwent *rehabilitation* and counseling through the military.

He says he only had a *three weeks* bad patch where he felt *depressed*. The most difficult time was the 5 days after the operation when he was inactive. Peter says he started to listen to tapes – from Tape Aids for the Blind – to try to understand what he was going through. He asked a Psychologist to help him with coping skills.

Peter says he is *not angry* about what has happened to him. There is no time for negativity and he says he is *emotionally stronger and more motivated* than before.

He is in fact working not only as a management consultant, but also as a motivational speaker. He is also busy with his MBA. He helps the Guide Dog Association with fund raising, and is a single parent.

Peter took an *assertive* stance and an *independent* course.

According to Peter he felt *stronger* and more *confident* in no time. He *positively* says great things have happened to him. His new Guide dog has given him a large degree of *independence*, as has his driver. Computer *training* has also been of enormous assistance to him.

He says he *accommodated* himself to his new restrictions speedily, and has never felt anything but *normal*. In fact he has not felt like he has lost *control* of his life anymore than sighted people occasionally must.

Peter believes his life is full of *meaningful activity*, and he thinks balance and growth in life is important.

He had to start from scratch to learn to walk, eat and listen, and this took time. His focus was to lead the most normal life he could. The challenge was to find a way.

Isolation, although a possible problem, was solved by a strong *support* network. He says he does not act like a blind person, as he does not want people to feel sorry for him.

Peter uses various kinds of specialised *equipment*. He has a cane to walk, a dictaphone, digital recorder, talking watch and Tape Aids that give him access to books. Computers are also of great use to him. He has access to e-mail and the Internet. He uses JAWS software, which reads what is on the screen to him. He can also scan documents into the computer, and JAWS reads them to him. Peter had some of these technological aids sponsored, which was a great help as they are relatively expensive.

Peter says that although he does not like people to help him unless he asks them to, people do meddle, thinking they can help. Peter however feels that he would rather ask for help when he needs it. He is not ashamed to ask, he just wants to see if he cannot do it himself.

Peter says he has experienced *technology* to be an exceedingly *positive* thing in his life. It has increased his ability to communicate, to read and write, to study and to record words. It has given him *independence* and dignity. Technology has increased Peter's *employment* options. He can perform a wider range of tasks. Peter agrees that technology has improved the *quality* of his life, at home and at work.

The *negative* things Peter has found about technology are that it can be cumbersome, expensive, not always accessible, and not advertised sufficiently, so that VI people and their employers often don't know the technology is available.

Peter only has access to a computer at work, but is fortunately not segregated from the other employees.

It was, Peter felt, *unnecessary to adjust* his working environment in any way. His employers have been good to him, but have made no adjustments on his behalf, as he did not want to be treated differently to his colleagues.

Peter says at first his *colleagues* wanted to help him, but soon saw it wasn't necessary. His co-workers have a *positive attitude* towards his impairment and do *not express pity or embarrassment*, although they do display a lack of knowledge about the problems involved. Peter's co-workers see him as *well adjusted* and he does *not feel he has to work harder to prove himself* than others do.

Some people do *act inappropriately* towards Peter. Some people shout as if he can't hear. He says that, as soon as one explains the situation to people, they get over it. Peter says, how one acts, depends on how one feels about oneself. Peter says his own attitude is the key to how other act towards him.

Peter does not think sighted people should accommodate him. He believes it is his responsibility to adjust to his impairment and his environment. His employer offered him assistance, but he maintains that he does not need more help than others.

Peter is aware of the *legislation* regarding disabled people. He does not think there are equal opportunities for disabled people. VI people are at a disadvantage in the workplace because there are many things they cannot do and they therefore have certain limitations. Peter does not think employers should do more to accommodate VI employees as this would make them a burden, and they need not be a burden. Peter says he does not want to be a burden.

Peter feels that his co-workers and management *support* him adequately. He has also been *trained* sufficiently to help him overcome his impairment at work. Peter says the only *adjustment* made for him at work was an accommodating attitude. The biggest problem he had to cope with at work was *sighted people's resistance* to the idea that his abilities were intact.

Not being able to see is important in his job because he cannot see people's *body language*, and therefore misses a lot of vital communication. Peter says there are however advantages to being VI in the workplace. He says it makes him an active listener, he is more

focussed, calmer and more relaxed than his co-workers, he does one thing at a time and thinks before he acts. He is more committed to making things work and overcoming problems. Peter feels that he does experience *job satisfaction*.

Peter says he has *emotionally accepted his impairment* and does not see it to be a negative in his life. He says one will always need new skills, and *cannot ever adapt completely*. He is doing the job he wants to. He got the *job* because of his proven track record from his previous sighted life. Old acquaintances had faith in him and gave him a chance, and he believes he is good at his job. He believes VI people can do anything they set their minds to.

Peter says he had to *adapt to the fact that people think he is stupid* because he is VI. He thinks VI people are not seen as equal. He had to *adapt* to new technology, learning how to find things and places, and how to move in the available space.

Peter thinks it is generally difficult for VI to *adapt* in the workplace. For him it was easy as he could carry on in his career. But Peter does say VI can *redevelop in new directions* if the barriers they encounter at work were removed.

CASE STUDY 3:

CHARL

Charl is a 42-year-old man, who has macular degeneration, which has caused his sight to deteriorate considerably over the last year. He is an attorney, has his own business and works from home.

Bitterness was the predominant feeling that Charl experienced, as he could not do the things other people take for granted. The *loss of independence* and not being able to *control his own transport* bothered him most.

Depression led to *passiveness* and that led to *withdrawal*. The last year was the worst, and things have been getting even worse all the time. He can no longer walk without a cane. Even going down stairs is difficult.

Nevertheless he says he is growing more *confident*. He says he has been going through this process for *some time* and is *still adapting*.

Recognising people becomes more and more difficult. Charl feels bad for not greeting acquaintances and friends. When it becomes obvious that he cannot see them, and they realise he has a problem, it gets better though.

Charl believes there is always a way to deal with problems and restrictions. He *does not feel abnormal*, he does not even feel disabled. His impairment is not holding him back. If he compares being VI to other diseases, it seems like a small problem to him. He says he is accustomed to his impairment and copes well at work. His wife drives him around, so he has transport.

Being able to walk alone with his cane gives him a lot of *independence*. He admits he avoids strange situations or he takes someone with him.

Even at the darkest times, he *never felt* he had *lost control* of his life. He admits, however, that he is still suffering from *depression*.

He also says he has a full life, full of *meaningful activities*, including playing blind cricket and spending time with his family.

Charl uses various types of technology or equipment to aid him at work. The tape recorder is the most important, and cheapest aid at his disposal. It plays the biggest role in overcoming his problems. He tapes notes for himself, and telephone numbers. Books are also available on tape.

His assistant reads a good deal of the documents and correspondence to him, or onto tape for him. He also has other people who read to him if he needs them to, for example his wife.

He also used to use a closed circuit Television, but it is no longer of use to him anymore. He does still occasionally use a magnifying glass if the notes are bold enough for him to see them in this way.

The newest technology that Charl uses is Braille and Speak, which writes Braille for him. Type and Speak, which he recently acquired has an ordinary keyboard and is portable. Charl can type, accurately although not fast. He can type whilst on the telephone. Later he can retrieve those notes and information, by having the computer speak them back to him.

JAWS is another computer programme Charl uses to assist him at work. It works on a normal PC, and uses windows, reading all the text on the

screen to the user. The programme helps to make him more independent. Finally, Charl has a little note taker, which looks like a calculator, and takes messages.

According to Charl, the fact that people are inclined to think he cannot do things, has a *positive* and *negative* side. On the one hand they are always willing to help, and yet on the other hand many people are disinclined to give him work.

Technology has however given him *independence* that he recognises as enriching his own level of satisfaction. Technology has probably increased his *employment options*, but he would prefer to remain working for himself. He also thinks jobs are hard to find.

Although he says he is still learning, he thinks technology will allow him to complete a wider variety of *tasks* successfully. Technology will also eventually increase the *quality* of his working life, like when he can do things for himself and know he has done them right.

Computers can also be a *negative influence* as, according to Charl, a person can become “stuck on” them, and end up being tired by them.

As Charl is his own employer, he has moved his environment so that it suits him. His office is at his home, in a side building. The space is large, which is a positive as there is room for him to move without bumping into anything. That is as long as no one puts anything in his way, where it does not belong. There is also no daily travel involved, which is a considerable advantage to him.

Technology, a functional environment and adequate light, including big windows and fluorescent lights, help Charl to cope with his physical workspace.

Charl's *employees* were all informed about his impairment before they started to work with him. They were therefore expecting it and handled it well. He has no problems with his employees or his clerk.

His *clients* are not told beforehand about his VI. He only tells them when they actually arrive at his office, as he does not want to frighten them away before the time. He then usually asks them to read the documents to him themselves.

On the whole the client's reactions are positive. Initially they seem to think less of him, but as he takes control of the situation, their confidence grows. He says a display of knowledge about the law helps the clients believe in him.

He says it is difficult to see if they pity him, but if they patronise him, or condescend to him, he cuts them off quickly. He tries not to be over sensitive, but does not hesitate to request clients not to talk to him in an inappropriate manner. He says that if their reaction is stronger than he is able to cope with, he must accept it and let them go as a client.

Charl admits there is a lot of *ignorance* about the VI. People are inclined to think they are *stupid*. At the same time although people don't understand the problems he faces, they do *acknowledge* them.

He does *not* really think he has to work *harder* to prove himself. He says it is, however, vital that he be persistent and keep trying until he succeeds.

He believes people, out in the world, do expect him to follow *sighted people's rules*. That's why he has had to create a niche for himself where he can follow his own rules.

Charl is aware of the *legislation* regarding disabled people. He thinks, as jobs are scarce, it is difficult to get an equal employment opportunity. Proper equipment and technology help, but the lack of these things put the VI at a substantial disadvantage in the workplace. Charl also thinks that people won't assist their VI colleagues enough, as they are not used to helping others.

As far as *training* goes, Charl has trained himself to use the necessary technological aids. He says this can be difficult as it takes time and can be expensive. He can, furthermore, not leave his work in the day to do this training, so he has to do it after hours when he is often quite tired,

According to Charl *adapting* to his impairment is a *lifelong task*, which is ongoing. The last year was bad, and he expects it will take him a few more years to adapt enough.

He still needs to learn to walk more regularly with his cane. Until now he has been trying to walk without the cane, to do it his "own way". He acknowledges that he will eventually have to do it the "blind way".

Charl says he is doing a *challenging job* that he likes and *studied to do*. He might have liked to try something different, but now he must stay with this career.

He says, as a person with a disability it might even be better for him to have a job with *less stress*, and therefore less challenge. As things are



now he does his work with his head, not his eyes. As such, the job suits his situation.

CASE STUDY 4: FRANSIE

Fransie is a 38-year-old woman who started losing her sight at age 33. She suffers from a rare eye disease, which caused her retina in her right eye to detach. She has reduced sight in her left eye, and apart from only being able to see from a very short distance, she runs the risk of her left eye's retina becoming detached due to her disease too.

She used to work as a nurse, but after losing her sight she started to work as a switchboard operator. Fransie spent 7 months at home in bed having to lie on her stomach due to the operations she had to undergo on her eyes. This was the hardest time for her, as she could do little, and worried about losing her job. She felt *isolated, depressed and scared*. She then tried to go back to nursing but within 2 days knew she could no longer function effectively as a nurse.

Her company then gave her the switchboard job, with only a basic explanation of how it works.

According to Fransie, as soon as she started to *take action*, she started to feel better and in *control* of her life. OPTIMA training, run by the National Council for the Blind, gave her a kick-start, by helping to prepare her for the challenges she had to face.

As time went on, Fransie found out it was not so bad to be VI. There were people and technological aids to help her.

She *accommodated herself* to her new restrictions, although she felt the hardest part to bear was not being able to *drive* anymore. She also *misses the simple things* one takes for granted, like sunsets and being

able to see the products on the shelves when she goes shopping. She says those small things in life now have more value for her now. Due to this loss she says she does *not always feel normal* anymore.

Fransie says she has a lot of *independence*, as she is able to catch the bus to work and use technology to help her with her daily tasks. She also has enough *meaningful activity* in her life. She is studying a Business Administration degree through UNISA. She has a daughter she spends time with and she has her job, which she enjoys. She participates in road running, swimming and occasionally blind cricket.

She uses various *technological aids*, such as binoculars with a zoom function, to see if the bus is coming, or what the products are on the shelf in a supermarket. Magnifying glasses help with reading big and bold letters, and a coil can sometimes be used for smaller print. On her computers, at home and at work, she uses Word and Excel and the Internet, and magnifies the words on the screen that she wants to see. She says she has found computers to be VI friendly, helping her a great deal with her studies, Internet contact with others through e-mail, and work.

She agrees with the idea that people tend to think one no longer needs help once one has technological aids. Luckily for her, her husband helps and supports her a lot.

Technology has increased her *employment options*, as she can accomplish a wider range of *tasks*. Technology also increases the *quality* of her working life.

At work, Fransie adapted her working *environment* to suit her better. The height of the computer was adjusted and made mobile. An extra light

was put in to assist her in making the most of her remaining vision. Fransie says her *employer has been very good* to her, making a big effort to help her with the accommodations to her workstation.

All Fransie's *co-workers* were empathetic and supportive when she returned to work. They have a *positive* attitude towards her impairment. She says they are more inclined to joke about her impairment than be sorry for her. Her co-workers asked many questions about the things they wanted to know. She thinks it helped a lot that her co-workers were young people.

One of the biggest *problems* Fransie experienced was that she appears to look past people even when she feels she is looking directly at them. She says she finds it hard to tell people that she is actually looking at them and therefore talking to them.

Fransie does feel she has to *work harder to prove herself*, as she is afraid that people will think she is taking chances and relying on her impairment to pull her through. This, she says, also applies to her studies.

Her co-workers therefore see her as both *motivated and well adjusted*. She says she is furthermore *not* expected to cope according to *sighted people's rules*. Her management is very supportive, and has been throughout the whole process. She was given time off for her operations, whilst still receiving part of her salary, and was given a whole new leave cycle when she returned to work.

Fransie is aware of the *law* regarding disabled people. She says she's not sure about whether they get equal employment opportunities, as she has not needed to look for a job.

She would say that any job that involved sitting behind a computer should suit a VI person just fine. It is walking around which would pose a problem.

The National Council for the Blind provide the OPTIMA courses which Fransie attended. She says that by attending the Rehabilitation, Typing, Braille, Computer Introduction, Telephonics and Visual Basic courses, which her company paid for, she has been adequately *trained* to overcome her impairment at work.

Fransie also says she experiences *job satisfaction*. She has a good deal of *autonomy* as she is allowed to do her own thing and arrange her job as it suits her best. She has thus been able to put new ideas into operation. She figured the telephone management system out on her own and computerised the company's codes and speed dials herself.

Fransie would say it took her a *year to adapt completely*. She had to accept that she could no longer be a nurse, could no longer drive and struggled to talk to people. She has to walk against the wall and had to change her job. She says that she is doing the job she *wants to do* now. It will probably not be for life, and when she has finished studying, she'll move on to new things.

Fransie believes that as *some doors close to one, others open*. She says there are many other things one can do with your life. All you need is support.

CASE STUDY 5: JOHAN

Johan is a 26-year-old man who has had macular degeneration for a number of years. It has been getting steadily worse. He works as a switchboard operator at a bank. He has been working in his present position for two years.

He felt shy and embarrassed for a long time when he started losing his sight. He felt *isolated* and like he had to *pretend* when with others. A *hopeless* feeling was replaced with *aggression*. Now he *accepts* his situation and things are getting better. He feels *stronger* and more *confident*. He has accommodated himself to his restrictions by using technology.

Johan says he feels like the same person he was before. He feels *normal* and like he has *adjusted* adequately.

Other than not being able to drive, Johan says he has a great deal of *independence*. He plays sport, buys groceries, and catches the bus to work.

He has *control* over his life now, although he often wakes up wondering why he had to lose his sight. He has struggled tremendously to *accept* the loss of his ability to see. Despite this he feels he has *meaningful activity* in his life as he has a job he can do.

Some of his *co-workers* understand his difficulties, for example some of them will write notes messages and numbers with a big black marker, so that he can see the notes, while others constantly need to be asked to be considerate.

The *computer screen* Johan uses is bigger than usual. He also uses Zoom text, which enlarges the portion of the screen he is looking at.

Johan feels technology has increased his *employment options*, as he is able to complete a wider range of *tasks*. He is 100% sure that technology increases the *quality* of his working life. He believes that companies are however unaware of these benefits due to *ignorance*.

At first Johan's desk faced the window, but the sharp light hurt his eyes, as it often does to those with macular degeneration. So he turned his desk himself so that his side faced the window.

His employer *accommodated* him by getting him the large screen and Zoom text. His employer also helps him by giving him sports leave to play blind cricket.

Johan's co-workers reacted to him with *curiosity*. He got the impression they thought he was *dumb*. Johan thinks this was the result of *ignorance*.

He says that his management and even co-workers have a more *negative* than positive attitude towards his impairment, as they don't know what he is capable of. He has, therefore, got to prove himself constantly.

Johan felt people were *embarrassed* about his impairment, and even *pitied* him. He also had to point out his difficulties, and things only got better once people knew he was VI, and understood the consequences and difficulties involved.

Management has however always responded *inappropriately* towards Johan by treating him like he is *stupid, instead of VI*. He believes this is

due to their ignorance misperceptions about disabled people. This makes him feel like he should resign. He says that because of this problem, his co-workers see him as *unmotivated*. He says he is not motivated to achieve within his present organisation.

Johan does think people expect him to cope according to *sighted people's rules*. His employer does not see his *non work related problems* as being relevant to them.

Although Johan is aware of the *laws* regarding disabled people, he says he does not think most employers know that Affirmative Action includes disabled people. As a white male, Johan does not see that there are equal employment opportunities for him out there.

Johan does think management should be doing *more to accommodate* him as a VI person, at work. They could start by educating themselves about the VI and disabled people. In order to be effective at work he has to explain everything to management, including his abilities and the adjustments he needs.

Although he feels his co-workers *support* him adequately, he feels management does not. He had to train himself. The person who installed his software on his computer, showed him how it works. That was all the training he received. He has however been on Switchboard and Customer Service courses.

A *lack of opportunities* to move up within the organisation, is the biggest problem Johan faces. Another problem involves the *negative attitude* he now has towards the organisation, which he explains, is a result of their attitude towards him.

He suggests that a *change in attitude* on the part of management would create more opportunities for him to grow within the organisation, and would thus go a long way towards solving his problems.

Johan does not think his vision is important in his present job, although he would like to be involved in sport development and management, which he might struggle more with. He still thinks it would be possible.

Johan has had to *change jobs*, as he could not drive anymore, once his vision had deteriorated. He then had to get a new more accessible job.

Specialised technology and the use of a broad felt pen/marker are the only things Johan does differently to his co-workers at the moment. His workplace is also perfectly accessible to him.

As a result of the attitudes of others, his own resulting attitude, and his boredom with his present job, Johan does *not experience job satisfaction*. His goal is to become involved in Sports Development, which he believes would be more satisfying, but at this stage his motivation to take action and make it happen is somewhat impaired.

It took Johan *6 months* to adapt to his workplace, as regards his impairment. It took him considerably longer in his private life. In the beginning he says he didn't talk, and kept to himself, as he felt shy and *embarrassed* of his impairment.

The most important adaptation he made at work was to *stop feeling sorry for himself*, when he realised that life carries on. When he started to socialise at work his co-workers realised that he was human, just another guy.



Johan *feels normal*, like other people. He is able to do his present job, although it is not what he wants to do. He says he *has the confidence*, now he *needs the support*, and organisation needs knowledge to be able to support VI people. They need to know that he is just another person, not a disease.

CHAPTER 8: COMPARISONS OF CASE STUDIES

8.1 INTRODUCTION

Similarities and differences were identified between the case studies, based on the issues identified in the interviews. Comparisons were then drawn between those interviewed.

8.2 COMPARISONS

See Appendix B for tables of comparisons of the experiences of the VI participants.

8.2.1 Similarities between case studies

8.2.1.1 Emotional Adaptation

Both Peter and Fransie received rehabilitative training, and as a result appeared to cope and adjust in a more positive and motivated manner. The others, especially Stanley and Johan, had to rehabilitate and train themselves, and consequently seemed to struggle considerably more to adjust and move forward.

All five VI people said that they had more independence now, as they had all lost some or all of their independence when they lost their sight. Technology, however, played a large role in their regaining their independence. For Stanley, only technology has given him a measure of his independence back. Peter's Guide dog and driver on the other hand played a large role in increasing his level of independence.

Stanley, Charl, Fransie and Johan all feel like they face some sort of barriers at work that make coping harder. Stanley and Johan feel that

management and the uncaring attitude and ignorance it displays, plays a large role in holding them back.

The five VI people all felt a variety of basically similar emotions. Isolation, hopelessness and depression characterised their experience of becoming VI. Some felt the need to pretend they were coping better than they were. Some felt frustration, fear and bitterness, along with a loss of control.

With the exception of Stanley each of them began to feel stronger and more confident, if not fully adapted, within a year of their seriously starting to lose their sight. One can also see the idea that one continues to adapt coming through in their stories.

Each of the participants accommodated him/herself to the restrictions accompanying becoming VI. Stanley, although he accommodated himself to his restrictions, still struggles as he feels management should make more of an effort to accommodate him. Peter's accommodation was quick as he took an assertive and independent course. This is perhaps what is missing in Stanley's view of his situation. He, by comparison, seems inclined to feel sorry for himself.

In a different way, each of the participants feels he or she has control over his or her life. Stanley feels technology helped him regain some control, although in the as far as the other elements of his life go he does not feel he has control. While Peter and Charl feel they never lost control, Fransie says that taking action, and not being passive helped her regain control of her life. Johan also gained control of his life again over time. One can furthermore see that in all the case studies the participant is coping with the emotional demands of his or her job.

Although most of those interviewed expressed that they had experienced loss in some way, Fransie and Peter were the ones to point out that new doors have opened to them that may not have, if life had not taken this turn. Each of them feels they have some kind of meaningful activity in their life. Charl said his life is full of meaningful activity. Peter pointed out that balance and growth in life are important. Sport, plays a role in making Johan, Charl, Fransie & Stanley feel they have some meaning in their lives.

Peter, Charl and Fransie (those with training, support and challenging jobs) experience job satisfaction. Charl likes his job as it is challenging, and it helps that he is using what he studied. For Fransie, the autonomy that her employer gives her, along with the OPTIMA training she received and can use, provide her with job satisfaction. Stanley and Johan are both too demotivated to experience job satisfaction as a result of their management's lack of support.

Lastly, although Peter and Johan said they feel normal, Fransie, Charl and Stanley expressed doubt, with Stanley admitting he would feel more normal if the barriers at work were removed.

8.2.1.2 Reactions of others

The participants experienced their co-workers reactions to their being VI in different ways, but on the whole their experiences were positive. Stanley and Johan feel embarrassed and believe their co-workers think they are incapable. Charl, who deals with clients, said that although they are often surprised and perhaps slightly negative at first, they generally end up with a positive attitude when they see he is capable.

Only Stanley and Johan think people express pity and embarrassment towards them. At the same time all of the participants, with the exception

of Fransie, thought some people sometimes acted inappropriately towards them.

All five participants experience the feeling that people are ignorant about the VI and their experiences and capabilities.

Only Charl and Fransie think people acknowledge their problems, yet only Stanley and Fransie feel they have to work harder to prove themselves.

Not unexpectantly, Stanley and Johan feel others see them as unmotivated and unadjusted.

Stanley, Charl and Johan feel they are expected to cope accordingly to sighted people's rules. Fransie has received a great deal of support from her employer, and they have assisted her a lot with all her problems, including those not related to work. She understandably does not feel pressured to cope with sighted people's rules. Peter, however does not think he should be accommodated by sighted people. He stubbornly says, that although his employer would assist him with his personal problems and issues, he prefers them not to help him, as he does not want to be a burden.

Peter, although he is not keen to recognise them, admits there are social barriers in his path. Stanley and Johan feel that management are their major barriers, and both feel inclined to suspect their co-workers and the public of pitying them. Charl thinks that his clients can be construed as a social barrier. Fransie does not see herself as confronting any social barriers, as she receives so much support.

8.2.1.3 Technological and other Aids, and the Environment

Technological aids and equipment have been used in some form by all of the VI participants, to help them cope with their environment, and their life. Four of them use the JAWS package, which includes a speech synthesiser that reads the text on the screen to the user, on their computers. Two of them have access to the Internet and e-mail. Fransie and Johan use Zoom text. Furthermore, walking canes, dictaphones, binoculars and magnifying glasses also aid the participants with their daily activities.

The positive consequences of technology in their lives seem, predominantly to be an increase in their independence, dignity and control over their lives. They are also more functional at work.

All five participants felt that their employment options had been increased by using technology. They furthermore feel they are able to accomplish a wider range of tasks and that technology increases the quality of their working life. Despite this Charl prefers to work for himself, and Stanley feels his present managers would need to change their attitude, if they were to offer someone like him an equal opportunity at work.

Those interviewed all have access to computers, and are segregated only in terms of their having specialised software on their computers. Socially some of them have separated themselves by moving their desks away from co-workers.

With the exception of Peter, who feels it to be unnecessary, each of the participants has adjusted his or her environment to suit him or her better. Stanley and Johan moved their desks themselves. Johan's company helped him with the necessary technology. Charl moved his whole office environment to suit him. Fransie adjusted the height and mobility of her

desk and computer, and added light to make it easier for her to see her screen. Fransie's employer assisted her with these adjustments.

The physical barriers that the case studies demonstrate include open plan environments that make movement difficult and people walking around, who need to be avoided – as Fransie does by hugging the wall when she walks. Peter uses a cane and a guide dog that help him to negotiate his environment. Charl struggles to find his way around, and is still learning to be independent with only a cane to aid him. He finds it particularly difficult in the office if someone leaves something where it is not supposed to be.

8.2.1.4 Legislation

Although the participants are aware of the legislation regarding disabled people, including those who are VI, they do not think there are equal job opportunities for VI people. Charl notes that jobs are already scarce without employers having to deal with the accommodations that need to be made for the VI. Johan does not think employers realise that Affirmative Action is actively supposed to include the VI. As Fransie has not had to look for a new job, but has remained with the same organisation, she is not sure if there would be equal opportunities for her out there.

8.2.1.5 Training and Support

All of the participants feel they have received adequate support from co-workers. Stanley and Johan, however, question management's level of support.

Peter & Fransie received training which influenced their lives in a tremendously positive way, whereas Stanley, Charl and Johan basically had to train themselves to use their technology.

8.2.1.6 Adaptation

Stanley, Peter, Charl, Fransie and Johan have all adapted to their impairment. They all believe VI people *can* adapt to their new lifestyle. Johan took 6 months to adapt at work, but longer in his personal life. Fransie says it took her one-year to adapt; and both Peter and Charl said it was a lifelong process, as one cannot ever adapt completely.

8.2.2 Some differences between the case studies

The five participants have different working environments and even lives. Although three of them have ended up working on a switchboard, one is an attorney and the other a management consultant, Only Peter and Fransie appear to be doing more than just making the best of a bad situation. Peter is doing what he wants to do, and Fransie says it's what she "wants to do now" while she studies to move on.

Fransie and Peter, who underwent the rehabilitation, seem to be more positive than the others who did not receive rehabilitative training. Fransie and Peter are positive about the new directions life can offer them.

Although each of them experienced a different group of emotions, the experiences were similar. Despite this some of them are more motivated than others. Peter and Fransie, are for example more motivated, while Charl is coping, and Johan and Stanley are demotivated about life and their opportunities.

While Stanley and Fransie felt they had to work harder to prove themselves, Peter and Charl merely felt had to persist until they succeeded.

Fransie's employer is very supportive about her private problems and assisting her. Stanley and Johan feel their employers pay no attention to their non-work related problems. Peter, not wanting to be a burden under any circumstances, does not want assistance with his personal, or any other problems.

The participant's opinions about whether people withhold their help once the VI person had adaptive technology at his/her disposal, is inconsistent. Only Stanley and Fransie seemed to think this is the case.

The few comments made about the negative impact of technology in the lives of the VI include, according to Peter, the fact that it is cumbersome, expensive and not always easily accessible. Charl thinks people can become overly involved in the technology and Johan says people are ignorant of the benefits of technology.

Various things are thought by the participants to put them at a substantial disadvantage within the workplace. Peter thinks there are many things VI people cannot do. A lack of the necessary technology and equipment will, according to Charl, make it hard for a VI person to accomplish the necessary tasks. Having to move around and not being able to sit in one place at your computer is what Fransie sees as a problem.

The following are seen as the most serious problems to be faced at work: Stanley thinks that lack of communication is a problem as management appears not to have time to speak to him, Peter sees sighted people's resistance to the idea that his abilities are intact as the biggest problem he encounters, Charl believes ignorance to be the most prominent problem he faces at work, Fransie's appearing to look past people makes life at work hard for her and Johan's lack of opportunities to move

upwards in his organisation, and his resultant negative attitude are the issues that bother him most at work.

The fact that Fransie and Peter's employers offer, (and in Fransie's case, provide support,) and Stanley and Johan's employers do not, seems to make a difference to the way they view their experiences at work.

8.3 CONCLUSION

There are various similarities between the experiences described in the five case studies. Furthermore, there were experiences that differed from those of the other VI participants interviewed by telephone, during the search for appropriate candidates.

If one then looks at the similarities, one sees a number of possible issues that the majority of VI people might experience in some way or other.

The issues that were not necessarily the same between the participants could be things some VI people experience.

CHAPTER 9: CONCLUSION

9.1 INTRODUCTION

Having explored how those becoming VI adapt to their work environment in regard to various issues, such as their emotional reactions to events they experience, the technology they use to function more efficiently, the training they receive to be able to adequately use the adaptive technology at their disposal, the support they receive from co-workers and management, their co-workers reactions to their impairment and their knowledge and belief in the legislation relevant to the VI person, the researcher is able to make a number of assumptions.

9.2 ASSUMPTIONS

9.2.1 The VI do adapt to the work environment.

All five of the participants in this study have adapted to their work environments. It has taken them different lengths of time and amounts of effort to adapt, and the process is not necessarily complete. Yet they all agree that it is possible for them to adapt to the work environment.

9.2.2 The VI must make certain adaptations to cope at work under their new circumstances.

They have to make diverse kinds of adaptations, from accepting that they can no longer do the job they want to and have been doing, to learning to use new adaptive technology, to learning to move around and to find things, adjusting to people thinking they are stupid just because they cannot see, learning to talk to people despite their own embarrassment of their situation, or the sighted person's inappropriate response towards them.

9.2.3 Adaptive Technology and Equipment, Training and Support are necessary and helpful to the VI person in the workplace.

The VI person cannot function effectively in the work environment without the right technology or equipment that reduces or eliminates the obstacles they face at work. They need training to be able to use that technology effectively, and support from both management and co-workers to give them the knowledge that someone will help them if necessary, and also give them opportunities to improve upon what they are busy with at the moment.

To illustrate these needs and the probable results if they are met, one must ask what Peter and Fransie, and Stanley and Johan have in common. Peter and Fransie both received rehabilitative training and as a result, have positive outlooks on their careers and the opportunities life offers them. They plan to move on and achieve something with their lives, they look ahead and take on new activities, and believe it is possible to make something more of themselves.

Stanley and Johan both feel they lack opportunities for growth, challenge and upward movement at work. They have not received much training to use technology or equipment that will assist them to move on at work, or even any form of rehabilitative training about coping as a VI person. They have also not experienced active support at work from management and consequently are demotivated and have negative attitudes.

9.2.4 Some of the VI participants are doing jobs they want to do, and some are not.

Nowadays the VI can do most jobs with the right training, equipment, technology and support. Education, the organisation's attitude, the VI

person's attitude and the track record of the VI person also affect whether or not they are doing the job they want to or not.

9.2.5 Some VI people feel normal and have always felt normal; others need physical and social barriers removed, to feel normal; and yet others would feel normal if they could have those things they took for granted before, back.

Participants such as Stanley and Peter both think VI people would feel more normal if physical and social barriers were removed. Fransie specifically notes that she would feel more normal if she could still see and appreciate the things other people can.

9.2.6 The positive reaction of colleagues, clients and managers depends on two things: their knowledge of the VI and the VI person's attitude to life and his/her impairment.

Ignorance is seen as a major issue since sighted people react negatively or inappropriately towards VI people. This is due to misperceptions about VI people's capabilities and a lack of knowledge about their potential if they have the necessary technology, training and support.

The VI person's attitude seems to depend largely on what form their rehabilitation takes. Those that receive training and support are positive about life and their prospects. Other people pick up on this positive attitude and seem therefore to treat them positively too.

9.2.7 Most VI people need and can find some form of meaningful activity in their lives.

The participants mentioned various aspects regarding their present life that gave them the feeling that they have meaning in their life.

Sport, such as blind cricket and road running, the opportunity to study, job satisfaction, and spending time with their families and children are some examples of the activities that they feel give their lives meaning.

9.3 ASPECTS THAT MAKE A DIFFERENCE IN THE VI PERSON'S LIFE

- ❖ A chance to prove themselves and opportunities to encounter new experiences.
- ❖ The understanding and knowledge of others regarding Visual Impairment, i.e. sighted people's awareness of the issues in VI people's lives and their capabilities.
- ❖ A positive attitude about their life and opportunities, due often to training and appropriate support.
- ❖ Supportive employers and co-workers in the work environment.
- ❖ Adaptive Technology that the VI person has been trained to use optimally.

9.4 RECOMMENDATIONS

Employers should become knowledgeable about VI people's potential, rights, needs and abilities, and the benefit of the right kind of training. In this way they can include these diverse members of society in their organisations and benefit far more from their contributions.

VI people should make every effort to receive training to make them more capable, develop positive attitudes, accept help and support, and grab each opportunity they come across to develop themselves and enhance their experiences.

An open mind can go a long way towards improving the quality of the VI person's life and the input they give to an organization.

BIBLIOGRAPHY

Anonymous. (1998). Talking Web browser helps visually impaired. Computer Dealer News, (14(18): 44).

Barton, L. (1989). Disability and dependency. The Farmer Press.

Battaglia, A. (1998). Whitsons to take part in training program for visually impaired. Nations Restaurant News, (32(32): 74).

Berkowitz, E. (1989). Disable policy. Cambridge University Press.

Brady, R.L. (1998). The ADA and Job interviews. H R Focus. (April: 26).

Browell, S. (1988). Visual disability, learning and education – a practical approach. Industrial and Commercial Training, (30(1): 24-29).

Collins Concise Dictionary of the English Language. (1985). Guild Publishing London.

Coombs, N. (1999). Enabling technologies. New patrons; new challenges. Library Hi Tech, (17(2): 207-210).

Crewe, N. & Zola, I.K. (1983). Independent living for physically disabled people. Jossey-Bass Publishers.

Crocett, J. (1999). Winning Competitive Advantage Trough a Diverse Workforce. HR Focus, (May: 10).

Culp, M. (1998). Visually Impaired transcend Office Barriers. San Diego Business Journal, (19(40): 45).

Dobbs, A. (1988). Mobility Training for Visually Handicapped People, A person – centered Approach. Croom Helm.

Dodds, K. (1999). Who's leading the blind? Training, (36(10): 96-108).

Earl, C.L., Leventhal, J.D. (1997). Windows 95 Access for Blind or Visually Impaired Persons: An overview. Journal of Visual Impairment & Blindness, (91(5): 5-8).

EEOC. AMERICANS WITH DISABILITIES HANDBOOK. (1993).

Fonda, G.E. (1981). Management of Low Vision. Thieme – Stratton Inc.

Garrun, T. (1998). Employment Equity “good for business”. Workplace, (April: 5).

Garrun, T. (1998). EE Act good news for disabled people. Workplace, (December: 3).

Genesky, S.M., Berry, S.H., Bikson, T.H. & Bikson. T.K. (1979). Visual Environment Adaptation Problems of the Partially Sighted: Final Report. Centre for the partially sighted Santa Monica Hospital Medical Center.

Gerber, P.D., Nel, P.S. & Van Dyk, P.S. (1998). Human Resources Management, Fourth edition. Johannesburg: Thomson.

Government Gazette. (2001). Employment Equity Act, 1998 (Act No 55 of 1998) Draft Code of Good Practice: Key Aspects of Disability in the Workplace.

Hanye, R. (1998). The Missing Link: Real Work Experiences for people who are Visually Impaired. Journal of Visual Impairment & Blindness, (92(12): 884).

International Agency for the Prevention of Blindness under the direction of Carl Kupfer. (1988). World Blindness and its prevention. Volume 3, Oxford Medical Publications.

Jackson, C.R.S. & Finlay, R.D. (1991). The Eye in General Practice. Ninth edition. Churchill Livingstone Publishers.

Johnson, S.E. (1992). Create a barrier – free work environment. HR Focus, (69(7): 15).

Joseph, A. & Harper, R. (1997). A summary of recent developments in computer technology to aid the visually impaired in the workplace. Ophthalmic Physiological Opt, (17(6): 542).

Lachenauer, K. (1999). High-tech items help disabled go to work. Business Courier, (15(51): 34).

Lazo, M. & Kirk, J. (1997). Performance shock. Journal of Workplace Learning, 9(2)

Lazzaro, J. (1994). Adapting GUI software for the blind is no easy task. [http:// www.byte.com/art/9405/sec3/art8.htm](http://www.byte.com/art/9405/sec3/art8.htm).

Lazzaro, J.L. (1993). Computers for the disabled. Byte, (18(7): 59-62).

Lazzaro J.L. (1994). Adaptive Computing and the Internet. One Step Forward, two steps back? Internet Research; Electronic Networking Applications and Policy, 4(4).

Lehr, D. & Brown, F. (1996). People with disabilities who challenge the system. Paul Brooks Publishing Company.

Low Vision Services. (1996). Understanding Low Vision. Pretoria Eye Institute.

Macy, G. (1994). Organisational and Technical accommodation for the disabled, with an emphasis on the visually impaired. SAM Advanced Management Journal, 59: 17-21.

Mbeki, T.M. (1997). White Paper on an Integrated National Disability Strategy.

Neuman, W.L. (1997). Social Research Methods. Third edition. Allyn and Bacon.

Nobile, R.J. (1997). Coping with ADA. HR Focus. Special Report on Employment law.

Pearson, K. (1997). When lack of vision is not a problem. Management Accounting. (75(1): 26).

Raviv, J. (1981). Uses of Computers in aiding the disabled. North Holland Publishing Co.

Retinal Preservation Foundation of SA. Information about Macular Degeneration.

RNIB. (1992). Factsheet – Employment of Visually Impaired people.
<http://www.rnib.org.uk>

Rowland, W.P. (1985). Being – Blind – in – the – World. South African National Council for the Blind Pretoria.

Rumrill, P.D., Roessler R.T., Battersby – Longden J.C. & Schuyler B.R. (1998). Situational assessment of the accommodation needs of employees who are visually impaired. Journal of Visual Impairment and Blindness, (92(l): 42-54).

Rumrill, P.D., Schuyler, B.R. & Longden, J.C. (1997). Profiles of on-the-job Accommodations Needed by Professional Employees Who are Blind. Journal of Visual Impairment & Blindness, (91(l): 66-72).

Shearer, A. (1981). Disability: Whose handicap? Basil Blackwell.

Sniederman, P. (1996). JHU students software helps visually impaired computer users. Campus – Wide Information Systems, (13(3): 21-22).

Soul City & Jacana Education. (2001). Disability rights are human rights.

Swain, J., Finkelstein, V., French, S. and Oliver, M. (1993). Disabling Barriers – Enabling environments. Sage Publications.

Syarto, M.Z. (1998). The accessible home office. Home Office Computing, (16(11): 48-49).

Thompson, M. (1994). An examination of the Evolution and Role of Persons with disabilities within American Society. <http://www.nmsu.edu/Resources/References/ac.../evolution.htm>

Thompson, M. (1995). "Invisible" Computing for blind clients. [http://www.nmsu.edu/Resources/Reference/ac.../invisible .htm](http://www.nmsu.edu/Resources/Reference/ac.../invisible.htm)

Topliss, R. (1979). Provision for the disabled. Second edition. Basil Blackwell & Martin Roberttson.

Totta, J.M. & Burke, R.J. (1995). Integrating diversity and equality into the fabric of the organization. Women in Management Review, (10(7): 32-39).

Wareham, E. (1999). Tech tools let visually impaired workers compete. Computing Canada. (25(26): 16-17).

Wellesley. (1997). Kurzweil Reading Machine for Blind, Visually Impaired takes giant technical leap forward. Insurance Advocate, (108(15): 20).

Williams, A. (1999). Enabling Compliance. People Management, February (5(3): 21-22).

Wolfe, K. (1998). Preparing people with Visual Impairments for work. Journal of Visual Impairment & Blindness. (92(2): 11).

Woodhams, C. & Danieli, A. (2000). Disability and diversity – a difference too far? Personnel Review, (29(3): 402-416).



Wright, M.S., Hill, S.L., Cook, G.K. and Bright, K.T. (1999). The Perception of lighting quality in a non-uniformly lit office environment. Facilities, (17(12/13): 476-484).

Zahl, P.A. (1950). Blindness Modern Approaches to the Unseen Environment. Princeton University Press.

Visual Impairment Adaptation Interview Schedule

Section A: Background

1. Name
2. Male / Female
3. How old are you? (Age)
4. What age did you become visually impaired?
5. What caused your Visual Impairment?
6. What job do/did you do?
7. If you do not work anymore, why not?

Section B: Emotional reaction and adaptation

1. When you became Visually Impaired, what did you feel?
2. Which of these emotions did you feel: depressed, passive, aggressive, hopeless, uncertain, cynical, exhausted, anxious, isolated, the need to pretend.
3. What other emotions did you experience?
4. Did you begin to feel stronger and more confident?
5. Please describe the process.
6. How long did it take?
7. Did you accommodate yourself to the new restrictions, and how?
8. Did you experience a desire to 'feel normal'?
9. How much independence do you have?
10. Do you feel like you are in control of your life? (Did you feel like you had lost control?)
11. Do you feel a need for meaningful activity in your life?

Section C: Technology / Equipment

1. Has technology or specialized equipment played a role in your life?

2. Do you find people think you do not require assistance anymore once you have technical aids
3. What are the positive aspects of technology you experienced
4. Has technology increased your employment options?
5. Does technology enable you to accomplish a wider range of tasks?
6. Does technology increase the quality of your working life?
7. How else have computers affected your life at work?
8. What are the positive / negative aspects technology bring to your life?
9. What kind of access do you have to computers?
10. Is the computer segregated?
11. Does your work computer have specialized software on it?

Section D: Other Aids

1. What other things have helped you adapt to your work environment?
2. Did you adjust your physical environment at work to make your job easier for you?
3. Did the employer accommodate you in this?
4. Did your employer help you adjust in any other way?

Section E: Reactions of others

1. How did your co-workers react to your Visual Impairment?
2. Did they have a positive / negative attitude towards your impairment?
3. Did they express embarrassment, or pity?
4. Did they display ignorance or awareness regarding VI?
5. Was there a lack of acknowledgement of the problem?
6. Do you feel you have to work harder to prove yourself?
7. Do people respond to you inappropriately?
8. Did your co-workers see you as unmotivated or poorly adjusted?

9. Do others expect you to cope according to sighted peoples rules?
10. Does your work integrate your non-occupational (not work related problems) to your work related problems?(eg transport)

Section F: Legislation

1. Are you aware of the law regarding disabled people?
2. Do you think there are equal employment opportunities for you?
3. What aspects of any workplace do you feel put you at a substantial disadvantage?
4. Do you think employers should be doing more to accommodate VI people at work (make it easier for you to work there)?

Section G: Lack of Training and Support

1. Do your co-workers and management adequately support you?
2. Have you been trained sufficiently to help you overcome your impairment at work?
3. Have adjustments been made to your job to make it easier for you to cope?
4. Which would you say was the most serious problem you face at work?
5. What will help fix the problem?

Section H: Job Experiences

1. Do you think your vision is important in the kind of job you do?
2. Did you ever change jobs because of changes in your vision?
3. Is there anything you do differently to your sighted co-workers?
4. Are any of those activities advantages in the workplace?
5. Do you experience any problems at work because of your sight?
6. What other problems do you experience at work? / What limits you?
7. Is your workplace accessible to you?

8. Do you experience job satisfaction?

Section H: Adaptation (Summary)

1. How long did it take you to adapt? (Completely)
 2. What adaptations did you have to make emotionally and at work?
 3. Are you doing the job you want to do? (Continuing with your chosen profession)
 4. How did you go about getting the job you wanted to do?
 5. Do you feel normal, like other people?
 6. If not, would it help if the physical and social barriers at work were removed?
 7. Do you think your employer should accommodate you?
 8. How did your co-workers adapt?
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9. DO YOU THINK THE VI ADAPT IN THE WORKPLACE?
 10. WHAT ADAPTATIONS MUST THEY MAKE?
 11. HOW DOES TECHNOLOGY, TRAINING, EQUIPMENT, SUPPORT HELP?
 12. IF THE BARRIERS ARE / WERE REMOVED, DO / WOULD YOU FEEL NORMAL?