BARRIERS TO EMPLOYMENT IDENTIFIED BY BLIND AND VISION-IMPAIRED PERSONS IN NEW ZEALAND

Steven J. La Grow School of Health Sciences Massey University, Palmerston North

Paula Daye Royal New Zealand Foundation of the Blind

Abstract

The Royal New Zealand Foundation of the Blind (RNZFB) has identified the low rate of employment among its members as a priority to be addressed in its latest strategic plan. The identification of the barriers to employment their members face, and the exploration of solutions for overcoming them, are necessary first steps for addressing this issue. This paper reports on a study of 95 members of RNZFB who were asked to identify barriers to employment, solutions for overcoming them and the types of training or educational programmes undertaken that proved most helpful in acquiring or retaining employment. The barriers identified clustered around two themes: (a) direct and indirect consequences of having a vision impairment, and (b) the attitudes and behaviours of potential employers. Solutions offered clustered around three themes: (a) the provision of disability-specific training and adaptive technology, (b) altering attitudes among potential employers, and (c) the provision of better vocational services. Vocational training was identified as being the most beneficial type of programme attended, followed by disabilityspecific training for adaptation. The implications of these findings in relation to existing policy for disability are discussed.

INTRODUCTION

Participation in the workforce is a primary activity for most people of working age. Work provides obvious economic rewards, as well as a sense of identity, accomplishment and meaning. The workplace also often provides the majority of one's social interactions outside of the home. Numerous studies show participation in the workforce (i.e. employment) to be related to increased self-esteem and higher levels of self-efficacy, while unemployment has been shown to result in depression and low selfesteem, and to have a negative impact on families and personal relationships (Leonard 2000). Disabled people are generally under-represented in the workplace, and those with significant vision disabilities are among those most disadvantaged (Wolffe and Spungin 2002). Even in the most developed countries, it appears that only about 30% of working-age adults with a significant vision disability are meaningfully employed, compared to 70%–80% of the population as a whole (Bruce et al. 1991, Hagemoser 1996, Hanye and Crudden 1999, Kirchner 1988, Leonard et al. 1999, McNeil 2001, Roy et al. 1998).

Although there are some real limitations imposed by the consequences of a vision impairment, there is little doubt that factors external to one's ability to perform a given job also play a huge role in limiting employment opportunities among this population (Hagemoser 1996). Wolffe and Spungin surveyed 102 organisations of the blind in 75 countries, asking them a series of open-ended questions, one of which was to identify the "greatest barriers to employment for persons who are blind or vision impaired" (2002:246). The responses in descending order of frequency were:

- poverty
- discrimination
- lack of education and resources
- employer awareness of the abilities of persons with vision disabilities
- lack of necessary technological aids and appliances
- inadequate legislative support
- economic factors affecting society as a whole
- difficulties with mobility and physical accessibility to the workplace
- · workforce opportunities dominated by high-tech industries
- inability to read print
- lack of exposure to the world of work
- unfavourable workplace policies
- lack of social skills
- lack of role models.

The frequency of responses varied somewhat according to the socio-economic development of the countries surveyed, yet the order of the responses differed little from developed to developing countries (Wolffe and Spungin 2002).

THE SITUATION IN NEW ZEALAND

In terms of rates of employment among those with a vision disability, the situation in New Zealand is similar to that experienced elsewhere. A recent study of a randomly selected group of 150 working-age members of the Royal New Zealand Foundation of the Blind (RNZFB) found employment rates to range from 26% for those who had "no usable vision" to 65% for those with "a lot", with a mean rate of 39% across the entire sample (La Grow 2003). This compares to an employment rate of 40% for all disabled adults and 70% for those without disabilities (Statistics New Zealand 2002:17). The rate of employment found for this group may be considered representative of that which

would be found for all persons with a significant vision disability in New Zealand, as RNZFB is the only provider of specialised rehabilitation services for this population and registration as a member is required for access to those services. As a result, the vast majority of persons with a significant vision disability in this country are registered members of RNZFB.

RNZFB has addressed the implications of these findings in objective 1.6 of their strategic plan for 2004–2007 in which they state: "We will assist members to secure or retain employment consistent with their skills, abilities and interests" (RNZFB 2004:16). This objective is in line with objective 4 of the New Zealand Disability Strategy, which is to provide opportunities in employment and economic development for disabled people.

In order to reach these objectives, the barriers to doing so must first be made explicit so that they may be addressed. This is essential because it is not clear how well the barriers listed above represent those experienced by blind and vision-disabled people in New Zealand. Those reported by Wolffe and Spungin (2002) represent (a) the views of organisations of the blind rather than individuals, and (b) an international aggregated view as opposed to the unique perspective of those living in New Zealand. Findings from studies that have directly canvassed individuals about their perceptions of the barriers to employment do differ from those reported above, and usually identify two primary concerns: (a) attitudes of the employer (e.g. discrimination or ignorance), and (b) limitations imposed by the interaction between one's visual abilities (i.e. vision impairment) and the demands of the environment (e.g. issues of accessibility and demands of the job) (Crudden 2002, Hagemoser 1996, Malakpa 1994, O'Day 1999, Rumrill et al. 1997, Salomone and Paige 1984, Tillsley 1997). However, none of these studies have used questions that were as open ended as those used by Wolffe and Spungin (2002). As a result, it is not clear if the findings vary due to the perspective of the respondents, or to the methodology used, or both. Nor were any of these studies conducted in New Zealand, and as a result their findings may be no more representative of the experience of those living in this country than those reported by Wolffe and Spungin (2002).

Therefore, the purpose of this study was to identify the barriers to employment experienced by blind and vision-disabled people in this country, and to gather suggestions for ways of overcoming those barriers from those most affected by them.

METHOD

All participants in this study were aged between 18 and 65 and were registered members of the RNZFB. (Membership requires either visual acuity of no better than 6/24 in the better eye after the best possible correction, or a visual field that does not

subtend 20 degrees at its widest angle.) In addition, study participants had to be either employed or state an interest in gaining employment at the time of the study. Participants were drawn from a wider research group used for a number of studies conducted between September 2001 and September 2002 on factors affecting employment among this population (La Grow 2003, 2004). The wider group was a random sample of 150 working-age RNZFB members, 79% of whom identified themselves as New Zealand European, 10% as New Zealand Māori, 4% as Pacific peoples and 7% as other, similar to the ethnic distribution of the New Zealand population as a whole. Ninety-five people from this wider sample met the criteria for inclusion in this study, being employed, seeking employment or being interested in employment at this time. Fifty were male and 45 were female. They ranged in age from 18 to 64, with a mean age of 41.6 years. Fifty-nine were currently employed; 36 were not.

In a telephone interview, participants were asked to describe barriers to employment and to suggest possible ways or means of breaking down those barriers. They were also asked to identify the educational programme, qualification or training they had received over the years which they felt was most useful to them in gaining and keeping employment, or advancing their career or job. Responses to these open-ended questions were recorded and then grouped into categories.

Demographic information was also reported. Sex, age at onset (congenital, adventitious) and employment status (employed, not employed) were treated as dichotomous variables, and age groups (18–32, 33–47, 48–65) and amount of usable vision (none, a little, a lot) were treated as ordinal variables. The Chi-square test for independence was used to determine if the frequency of those reporting they had experienced barriers to employment differed by sex, age, age at onset, amount of usable vision and/or employment status.

RESULTS

Seventy-five participants (79%) said they had experienced barriers to gaining employment, retaining employment or advancement in their careers. There were no significant differences found by sex, age, age at onset, or degree of vision disability (i.e. amount of useful vision). However, there was a significant difference in terms of employment status (Chi square = 8.38, p = .004), with 55% of those currently employed stating they had experienced barriers to employment compared to 90% of those who were interested in employment but not currently employed.

When asked to identify those barriers, 180 individual responses were given. As can be seen in Table 1, 90% of these responses (n = 162) fell into five main categories:

- factors arising from the vision impairment itself
- access to jobs and environments
- discrimination from employers or co-workers
- personal characteristics
- ignorance on the part of employers as to the potential capabilities of blind and/or vision-impaired workers.

The remaining 10% of responses were spread across seven categories, including lack of training or funding for training and retraining, lack of specialised equipment or low vision aids, and "other".

Table 1Barriers to Employment, Retention of Employment or Advancement in
Career Identified by Persons with Significant Visual Disabilities

Barrier	N
Factors arising from vision impairment	57
Access issues	41
Discrimination	31
Personal attributes	20
Ignorance on the part of the employer	13
Lack of training or funding for training and retraining	8
Lack of specialised equipment or low-vision aids	4
Other*	6

Responses categorised as "other" comprised: OSH safety regulations (n = 2), fear of losing benefits (n = 1), inflexibility in hours (n = 1), lack of jobs in general (n = 1), and difficulty acquiring information from government agencies (n = 1).

When asked for suggestions to overcome barriers, 98 were posed. The six most common themes were to provide:

- education to employers about the abilities and capabilities of people with vision disabilities
- better vocational services
- more opportunities for training to persons with vision disabilities
- increased accessibility through technology or low-vision equipment (i.e. magnification and/or non-standard prescription aids)
- opportunities to prove self on the job
- improved transport systems.

Table 2	Possible Ways and Means of Overcoming Barriers to Employment
	Suggested by Participants

Suggestions	Ν
Education for employers	16
Provide better vocational services	16
Provide more and better training	16
Increase accessibility through technology or low-vision equipment	14
Provide opportunities to prove self on job	13
Improve transport	7
Other*	16

* The responses categorised as "other" comprised: promote empowerment or self-advocacy (n = 5), improve the services of WINZ, Workbridge and/or Topps programmes (n = 4), and enact proactive legislation to promote employment for disabled people (n = 4). (Note: WINZ is no longer in existence. Its functions and services are now the responsibility of the Ministry of Social Development.)

When asked "Of the education, qualification or specific training you have received over time, what was the most useful to you in terms of gaining and keeping employment, or advancing your career?" most people identified courses or opportunities that could be best classified as on-the-job training. This was followed by job-specific courses, general skills development and tertiary degrees or qualifications.

Table 3Education, Qualifications and Training Identified as Most Useful in
Gaining and Keeping Employment, or Advancing in One's Career or Job

Response	N
On the job training &/or apprenticeship	27
Job or career specific courses	25
General skills development for disability specific adaptations	14
Tertiary qualifications	13

DISCUSSION

The majority of the participants in this study (79%) said that they had experienced barriers to gaining employment, retaining employment and/or gaining advancement in their careers. The majority of responses were centred on two themes: (a) the direct and indirect consequences of having a severe vision impairment (i.e. factors arising from the vision impairment itself and access issues), and (b) attitudes and behaviours of potential employers (i.e. discrimination and ignorance on the part of the employer). The barriers categorised under these two themes made up nearly 80% (n = 142) of the total responses given to this question, with those characterised as arising from the consequences of having a severe vision impairment (n = 98) being raised more than

twice as often as those resulting from the attitudes and behaviours of potential employers (n = 44). (The latter, however, was mentioned more often than all of the remaining categories combined (n = 38). Of these, personal attributes (n = 20) was mentioned most often, followed by lack of training or funding for training and retraining (n = 8) and lack of specialised equipment or low-vision aids (n = 4). No other barrier was mentioned by more than two participants.)

Direct and indirect consequences of having severe vision impairment included those limitations that would make it difficult or impossible to do a particular job and the limitations in options that this would impose. It also included secondary consequences relating to the issues of physical accessibility that arise from not being able to drive, and limitations in the cover provided by public transport. These two are usually a result of having to travel over long distances to get to a job or to do the job and the limitations imposed by transport systems that stick to limited routes of travel within tight timeframes. There were also a few responses that dealt with accessibility issues that did not relate to transport. These may be due to an individual's limitations for independent travel or other safety factors. The former may include trying to access workplaces that are in environments not safe for pedestrian travel.

Two additional barriers mentioned may also be related to the consequence of vision impairment. The lack of specialised equipment or low-vision aids most certainly is, given that those aids are required to successfully adapt to the limitations imposed on functioning by severe vision impairment. The other, lack of training or funding for training or retraining, most likely refers to training required for the use of specialised equipment (e.g. Braille reading and writing systems, adaptive computer systems, screen reading systems for Windows, etc.) or techniques for adaptation (e.g. the use of a long cane or guide dogs for independent travel). However, it is also possible that this refers to the need for training or retraining in general and is not, in fact, related to the consequences of vision impairment in any way.

The attitude of the employer was the second most common type of barrier raised. Discrimination against people with a disability was mentioned more often than any other single barrier. This category also included statements about the attitudes toward them of the employer and fellow workers, and ignorance on the part of the employer, believing that they were unsafe or not nearly as capable as they actually are.

The suggestions made for overcoming barriers reinforce the salience of the two main types of barriers. All but one¹ of the suggestions clustered around three themes:

• the provision of disability-specific training and adaptive or assistive technology (comprising the response categories "provide more and better training", "increase

¹ The exception was "to enact proactive legislation".

accessibility through technology", "provide for ongoing needs assessment for equipment and training" and "improve transport")

- altering potential employer attitudes toward hiring people with vision disabilities (comprising the response categories "education for employers" and "opportunities to prove self [to employers] on the job")
- the provision of better vocational services in general (which could also include promoting empowerment and self-advocacy, and improving services of various government agencies or programmes).

The third theme may relate as much to employer attitude as to vision-disabled workers using specialised skills and equipment to perform the job. Many participants expressed the opinion that vocational services were lacking. Some (like placement services) were available, but not tailored to their unique needs. Others were simply not available, including opportunities to work from home, role models and mentors, information phone lines for employers, ongoing support to employers and a central point of contact for employment issues.

Thus, the three themes identified for the suggestions for overcoming barriers to employment (i.e. the provision of disability-specific training and adaptive or assistive technology, altering potential employer attitudes toward hiring people with visual disabilities, and the provision of better vocational services) directly reflected the two themes of the barriers to employment (i.e. direct and indirect consequences of having a severe vision impairment, and attitudes and behaviours of potential employers).

When asked what they considered to be the educational programme, qualification or training that was most valuable in gaining or retaining employment, the majority responded with some form of vocationally oriented training (i.e. on-the-job training, and job-specific or career-specific courses), followed by general skills development (disability-specific training), and then tertiary qualifications. This, too, seems to reflect the two themes under which the barriers clustered and the suggestions offered for overcoming them.

The findings of this study were more in line with those found in other studies involving individuals with vision disabilities (Crudden 2002, Hagemoser 1996, Malakpa 1994, O'Day 1999, Rumrill et al. 1997, Salomone and Paige 1984, Tillsley 1997) than with those reported by Wolffe and Spungin (2002), where organisations of the blind were the respondents. While all the studies have identified societal attitudes as a barrier to employment, the main difference has been in the emphasis that individuals place on the direct and indirect consequences of having a severe vision impairment.

POLICY IMPLICATIONS

Two key issues emerged from this study. Firstly, participants identified the consequences of having severe vision impairment as posing real barriers to employment. These consequences included a number of accessibility issues. Participants suggested goodquality rehabilitation and basic skills training, along with appropriate adaptive technology, as ways of overcoming the majority of these barriers. However, the built environment, shortcomings in infrastructure and lack of flexibility in transit systems exacerbate the barriers and these cannot be overcome by individual ability or effort. These problems must therefore be addressed by government at the local, regional or national level.

Secondly, participants told us that vision-disabled persons, like others with disabilities, either directly or indirectly (through ignorance) face discrimination in the workplace. They identified good-quality, proactive vocational training and placement services as ways to overcome the barriers put up by reluctant or ignorant employers, as well as educational programmes designed to change these attitudes.

The finding that attitudes held by others are seen to constitute a major barrier to participation in society in general, and work in particular, for disabled people mirrors one of the main premises underlying the New Zealand Disability Strategy and is the crux of the social model of disability which informs it.² Next to the direct and indirect effects imposed by the presence of the impairment itself, beliefs and attitudes of prospective employers were identified as the major barrier people said they faced in gaining and retaining employment. Education for employers was put forward as a way of overcoming barriers to employment as often (n = 16) as the suggestions to provide for better vocational services and better training in general put together. This suggestion was in line with action 4.3 of the New Zealand Disability Strategy, which is to "Educate employers about the abilities of disabled people". In addition to the suggestion to educate employers, the participants in this study wanted the opportunity to prove themselves on the job. This may be another way in which action 4.3 could be achieved. We recommend that the Government consider implementing programmes that give disabled people an opportunity to prove their abilities to potential employers as one means of educating employers and therefore of achieving action 4.3 of the New Zealand Disability Strategy. Other means of educating employers should be implemented as envisaged.

² See: www.odi.govt.nz/nzds/index.html.

However, the most commonly mentioned barriers to employment by participants in this study were those that could be categorised as direct or indirect consequences of having a severe vision impairment (i.e. factors arising from the vision impairment itself and access issues). Two of the three most common suggestions for overcoming barriers to employment mentioned by the participants in this study were to provide more and better training, and to increase accessibility through the provision of technology (adaptive or assistive) or low-vision equipment.

Participants were generally referring to adaptive or assistive computer technology, which allows people with no or very little vision to access computer screens and other digitised outputs, while low-vision equipment serves the same purpose for those who have more usable vision but still a significant vision impairment. This relates to the need for overcoming barriers to the accessibility of information that is normally only available in a visual format, and is in line with action 4.10 in the New Zealand Disability Strategy that reads: "Make communication services, resources and flexible workplace options available". It is not specified whether that action envisages the inclusion of assistive and adaptive technology and training in its use, but the findings of this study suggest that it should.

Finally, the participants suggested that the provision of better vocational services, including advocacy and the provision of placement services by those with specific knowledge of the barriers to employment for those with a vision disability, would be helpful. This suggestion seems to be in keeping with the Government's overall strategy for vocational services identified in its document *Pathways to Inclusion*,³ and the Ministry of Social Development's Sickness and Invalids Benefit Strategy,⁴ as do all the suggestions identified by the participants in this study for overcoming the direct and indirect consequences of having vision impairment. Specifically, they relate to actions 1, 2 and 3 of the seven actions the Government has pledged to implement:

- 1. Increase the focus on employment: ensure services provide the foundation skills that are vital for people to participate in the communities and in employment and training.
- 2. Encourage and enhance community participation: recognise that people need different pathways, and sometimes a mix of pathways to inclusion in their communities, and provide practical options to removing barriers to participation in society and improve community services and facilities.
- 3. Ensure services are responsive to the needs of all groups of people with disabilities.

³ See: www.odi.govt.nz/publications/nzds/pathways-inclusion/strategy.html.

⁴ See: www.msd.govt.nz/work-areas/people-with-disabilities/sbib-strategy.

The findings of this study suggest that a major challenge for those implementing these policies is to ensure that those barriers resulting from direct or indirect consequence of having a given impairment are recognised, and the solutions to those barriers are implemented with the same vigour as are those that result as a consequence of societal attitudes. This challenge arises from the explicit adoption of the social model of disability as the basis for the New Zealand Disability Strategy and the subsequent *Pathways to Inclusion*.

The social model of disability identifies the barriers imposed by the environment (i.e. social and built) as being the underlying cause of disability. The tenets of this model are often posed in direct opposition to the medical model of disability, which tends to identify the direct and indirect consequences of having an impairment as the cause of disability. Yet the respondents in this study – all vision-disabled persons – clearly identified both the environment, in the form of employer attitudes and inflexible transit systems, and the consequence of having a severe impairment as contributing to these barriers. Their suggestions for overcoming these barriers included both those designed to change attitudes and those provided to overcome the direct and indirect consequence of the vision impairment itself, such as the use of and training in adaptive and assistive technology. Thus they encompass both views of disability and recognise both models in a practical fashion. The findings from this study suggest that more than one approach to and view of the problem may be needed to overcome the barriers that vision-disabled persons face in finding and maintaining employment.

Since the completion of this study, RNZFB has acquired support from the Ministry of Social Development to re-implement specialist placement services for their members, establish an additional vocational advisory position in Auckland and run a series of enhanced Job Club Programmes across the country (personal communication, Paul Barclay, RNZFB, June 26, 2005). In addition, RNZFB has hired three specialist teachers of adaptive computer technology and is piloting a mobile adaptive technology unit in the lower North Island using charity funding. RNZFB is also self-funding three employer awareness positions and, with the support of Vodafone, has developed a CD for employers entitled *Blind Ambition: Let's Get Working* to raise the awareness of employers as to the abilities of blind and vision-impaired workers.

More generally, the Office for Disability Issues, in their annual progress reports on the implementation of the Disability Strategy, have reported to Parliament that the Ministry of Social Development has established and distributed a Quality Fund to assist providers to improve vocational service delivery to disabled people, while the Government announced its decision to increase its direct funding to vocational service providers through contracts in the 2004 Budget (Office for Disability Issues 2004, 2005).

Although it appears that action is being implemented to remove barriers, both for disabled people in general by government and for vision-disabled people by RNZFB, progress on the success of these actions can only be judged in light of participation rates in the workforce by disabled people. Thus, it will take time to see the impact of these actions through research on both the quantity and quality of the experience of disabled people in the workforce in the years to come.

REFERENCES

- Bruce, I., A. McKennell and E. Walker (1991) *Blind and Partially Sighted Adults in Britain: The RNIB Survey Volume* 1, HMSO, London.
- Crudden, A. (2002) "Employment after vision loss: Results of a collective case study" Journal of Visual Impairment and Blindness, 96(9):615–621.
- Hagemoser, S.D. (1996) "The relationship of personality traits to the employment status of persons who are blind" *Journal of Visual Impairment and Blindness*, 90(2):134–144.
- Hanye, R. and A. Crudden (1999) "Innovative links to competitive employment through Industries for the Blind" *Journal of Vocational Rehabilitation*, 12(1):9–18.
- Kirchner, C. (1988) Data on Blindness and Visual Impairment in the US (2nd edition), *American Foundation for the Blind*, New York.
- La Grow, S. (2003) "Employment among working-age members of the Royal New Zealand Foundation of the Blind" *Journal of Visual Impairment and Blindness*, 97(7):429–433.
- La Grow, S. (2004) "Factors that affect the employment status of working-age adults with vision impairments in New Zealand" *Journal of Visual Impairment and Blindness*, 98(9):546–559.
- Leonard, R. (2000) "Vision impairment in working age adults" in B. Silverstone, M.A. Lang, B. Rosenthal and E. Faye (eds.) *The Lighthouse Handbook on Vision Impairment and Vision Rehabilitation*, Oxford University Press, Oxford.
- Leonard, R., T. D'Allura and A. Horowitz (1999) "Factors associated with employment among persons who have a vision impairment: A follow-up of vocational placement referrals" *Journal of Vocational Rehabilitation*, 12(1):33–43.
- Malakpa, S. (1994) "Job placement of blind and visually impaired people with additional disabilities" *RE:view*, 26(2):69–77.
- McNeil, J. (2001) *Americans with Disabilities: 1997: Current Population Reports* (Series p-70, No. 73), US Government Printing Office, Washington, DC.
- O'Day, B. (1999) "Employment barriers for people with visual impairments" *Journal of Visual Impairment and Blindness*, 93(10):627–642.
- Office for Disability Issues (2004) Progress in Implementing the New Zealand Disability Strategy 1 July 2002 – 30 June 2003: Third Annual Report from the Minister for Disability Issues to the House of Representatives, www.odi.govt.nz/nzds/ progress-reports/july02-june03.html

- Office for Disability Issues (2005) Progress in Implementing the New Zealand Disability Strategy 2003–2004: The Fourth Annual Report from the Minister of Disability Issues to the House of Representatives www.odi.govt.nz/nzds/progress-reports/july03june04.html
- RNZFB (Royal New Zealand Foundation of the Blind) (2004) *Royal New Zealand Foundation of the Blind Strategic Plan: July 2004 to June 2007*, RNZFB, Auckland.
- Roy, A.W.N., G. Dimigen and M. Taylor (1998) "The relationship between social networks and employment of visually impaired college graduates" *Journal of Visual Impairment and Blindness*, 92(7):423–432.
- Rumrill, P.D., B. Schuyler and J. Longden (1997) "Profiles of on-the-job accommodations needed by professional employees who are blind" *Journal of Visual Impairment and Blindness*, 91(1):66–76.
- Salomone, P. and R. Paige (1984) "Employment problems and solutions: Perceptions of blind and visually impaired adults" *Vocational Evaluation and Work Adjustment Bulletin*, 23(2):55–59.
- Statistics New Zealand (2002). Disability Counts, Statistics New Zealand, Wellington.
- Tillsley, C. (1997) "Gaining access to employment opportunities" *British Journal of Visual Impairment*, 15(2):67–71.
- Wolffe, K.E. and S. Spungin (2002) "A glance at worldwide employment of people with visual impairments" *Journal of Visual Impairment and Blindness*, 96(4):245–254.