Ageing and Vision Impairment:
Activity, Independence and Life Satisfaction

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Abstract

Vision impairment profoundly affects older people, yet we do not know specifically which areas of daily living are most affected by vision impairment. Nor do we know how daily levels of activity and independence differ for this population compared to others their age. Understanding these differences can enhance goal-setting practices and improve rehabilitation services for older individuals with impaired vision. This study examined activity, independence and life satisfaction of older adults living in the Manawatu region of the North Island of New Zealand, using an adapted model of the World Health Organization’s International Classification of Functioning, Disability and Health. The adapted model introduced subjective dimensions of functioning including satisfaction with activity, independence and life. This study was conducted with registered members of the Royal New Zealand Foundation of the Blind and with a random selection of registered voters in the region. Results indicated that both age and vision impairment had significant main effects on activity and independence. An interaction of age and vision had effect on the number of recently relinquished activities participants reported, social comparisons of activity and independence, and on satisfaction with independence and with life. An examination of age cohorts assisted in an improved understanding of daily functioning for this population. Unique findings were that social comparison of activity and satisfaction with social support contributed more to overall life satisfaction than did activity and independence levels. Unexpectedly, the oldest age cohort of those with impaired vision reported a higher level of overall life satisfaction than did their sighted peers in the oldest age cohort or younger cohorts with impaired vision. Results of this study will enable a better
understanding of daily life for older people, and the differences which can be attributed to vision impairment. Older people and those that provide rehabilitation services to them can use this information to set more realistic and appropriate goals for rehabilitation. The results of this study will also allow those involved in personnel preparation programmes to develop curricula to improve new practitioners' understanding of typical daily life of older people with and without impaired vision.
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Dedication

To my parents Ed and Justine Good – my first and finest teachers.
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Notes on the Text

- The choice of language used in this thesis has been explained in Appendix A, an extended glossary of terms.

- Some of the analyses have been presented in text form for easier access to those using electronic formats for speech access. Tables have been presented in appendices.

- Any deviations from the American Psychological Association (APA) style are purposeful and for ease of visual access.
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABC</td>
<td>Association of Blind Citizens of New Zealand, Inc.</td>
</tr>
<tr>
<td>ACVREP</td>
<td>Academy for Certification of Vision Rehabilitation and Education Professionals</td>
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<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
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<tr>
<td>ADL</td>
<td>Activities of daily living</td>
</tr>
<tr>
<td>AER</td>
<td>Association for Education and Rehabilitation of the Blind and Visually Impaired</td>
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<tr>
<td>ANOVA</td>
<td>Analysis of variance</td>
</tr>
<tr>
<td>APA</td>
<td>American Psychological Association</td>
</tr>
<tr>
<td>AQOL</td>
<td>Australian Quality of Life Measure</td>
</tr>
<tr>
<td>ARMD</td>
<td>Age-related macular degeneration</td>
</tr>
<tr>
<td>BADL</td>
<td>Basic activities of daily living</td>
</tr>
<tr>
<td>COPD</td>
<td>Chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>COPM</td>
<td>Canadian Occupational Performance Measure</td>
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<tr>
<td>CVRT</td>
<td>Certified vision rehabilitation therapist</td>
</tr>
<tr>
<td>DPA</td>
<td>DPA-NZ, The National Assembly of People with Disabilities</td>
</tr>
<tr>
<td>FAI</td>
<td>Frenchay Activities Index</td>
</tr>
<tr>
<td>FIMBA</td>
<td>Functional Independence Measure for Blind Adults</td>
</tr>
<tr>
<td>HFA</td>
<td>Health Funding Authority</td>
</tr>
<tr>
<td>IADL</td>
<td>Instrumental activities of daily living</td>
</tr>
<tr>
<td>ICF</td>
<td>International Classification of Functioning, Disability and Health</td>
</tr>
<tr>
<td>ICIDH</td>
<td>International Classification of Impairments, Disabilities and Handicaps</td>
</tr>
<tr>
<td>IWRP</td>
<td>Individual Written Rehabilitation Plan</td>
</tr>
<tr>
<td>M</td>
<td>Mean (arithmetic average)</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>MCBTC</td>
<td>Michigan Commission for the Blind Training Center</td>
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<tr>
<td>MUHEC</td>
<td>Massey University Human Ethics Committee</td>
</tr>
<tr>
<td>MSD</td>
<td>Ministry of Social Development</td>
</tr>
<tr>
<td>NCHS</td>
<td>National Center for Health Statistics</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Orientation and mobility</td>
</tr>
<tr>
<td>PANAS</td>
<td>Positive and Negative Affect Scale</td>
</tr>
<tr>
<td>QOL</td>
<td>Quality of life</td>
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</table>
| RNZFB         | Royal New Zealand Foundation of the Blind  
Formerly known as the Royal New Zealand Foundation for the Blind |
| RT           | Rehabilitation teacher or rehabilitation teaching |
| SD           | Standard deviation |
| SPSS         | Statistical Package for the Social Sciences |
| SSQ          | Social Support Questionnaire |
| SWLS         | Satisfaction with Life Scale |
| V.I.         | Vision impairment, vision impaired |
| VFQ          | Visual Function Questionnaire |
| WHO          | World Health Organization |
Outline of Thesis

This thesis is presented in five chapters. Chapter One provides a broad overview of the topic under research, ageing and vision impairment. Also presented in the first chapter are the research problem and an introduction to the classification framework to be adapted for use in this study, the International Classification of Functioning, Disability and Health (ICF).

Chapter Two provides an in-depth review of literature related to ageing, activity, independence, life satisfaction and vision impairment, resulting in a revised model for investigating the research questions, and the hypotheses to be tested. In the revised model of the ICF developed for this study, subjective dimensions of functioning are identified as important factors to consider when exploring the effect of impaired vision on older people.

Chapter Three is an explanation of the methods used to test the hypotheses and explore the research questions. The design of the study, the measures used and the statistical methods used in this study are described.

Chapter Four is a presentation of the results of the statistical analyses of the survey data. Descriptive details about the participants and comparisons of demographic details of those with impaired vision and those with sight are provided as well as descriptions of demographic characteristics within the three age cohorts. Analyses are presented to explore each of the research questions and their associated hypotheses.
Chapter Five is a discussion of the findings in relation to the literature, previous studies and the adapted ICF model used in this study. Conclusions are drawn about how this information can inform research and assist educators and practitioners as they deliver rehabilitation services to older people with impaired vision.