Copyright Statement

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

This thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognise the author’s right to be identified as the author of this thesis, and due acknowledgement will be made to the author where appropriate.
- You will obtain the author's permission before publishing any material from their thesis.

To request permissions please use the Feedback form on our webpage.
http://researchspace.auckland.ac.nz/feedback

General copyright and disclaimer

In addition to the above conditions, authors give their consent for the digital copy of their work to be used subject to the conditions specified on the Library Thesis Consent Form.
EXPLORING THE NEXUS OF LONELINESS, STIGMA, HEALTH COMPLAINTS, AND PRIMARY MEDICAL CARE IN OLDER NEW ZEALANDERS

LOMA HELEN HECTOR-TAYLOR

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Psychiatry and Behavioural Science School of Medicine University of Auckland

November 1997
ABSTRACT

The nexus or linkages between loneliness, stigma, health complaints, and primary medical care in older New Zealanders was explored from a social constructionist perspective. The intent of the studies was the support and explanation of the underlying arguments of the thesis. For this age group loneliness is a clinical condition which merits greater recognition, diagnosis, and treatment from general practitioners than it presently receives. As a society we silence and stigmatise loneliness in our senior citizens making it likely that they will present indirectly to their doctors when experiencing severe effects of the condition. This behaviour will increase their risk of inappropriate medical intervention at possible cost to themselves and to society.

A cross sectional, randomly selected survey of 300 New Zealanders over 60 years old, aimed to establish the patterns of loneliness in the sample using quantitative analysis. The second qualitative study used the methodology of discourse analysis to identify the themes concerning loneliness and medical care in the accounts of older adults, and how these were used. Fourteen people, deemed by their doctors to be lonely and to need frequent medical care, were interviewed in order to further knowledge of the dynamics of loneliness and the medical encounter.

Fifteen percent of the sample of 300 had moderate to severe loneliness scores. The sociodemographic indicators of loneliness were extremely easy for a practitioner to recognise. Less than 2% of the total of self reported doctor visits were explicitly for loneliness. According to Barsky's (1981) model, the most likely pathways to the doctor were through symptom amplification and lowered self ratings of health, with a less likely pathway through focusing on and worrying about symptoms, leading to perceived need for medical care. The predictive variances in regressions of loneliness on all health outcomes, except for self reported visiting of more than one doctor for symptoms, were lower for chronic than for situational loneliness.

The most important conclusions from the second study were the identification of three rhetorical strategies or "etcetera clauses" which provided a social prescription for the indirect presentation of loneliness by older people. Loneliness may be discussed with the doctor; if it affects your physical health; if you are consulting for another reason; and if the doctor picks it up. Also, the individual doctor defines loneliness as a worthy, or non-worthy, condition for consultation.
ACKNOWLEDGEMENTS

I would like first to thank the respondents, patients, and doctors who participated in the studies. Without them this research would not have been possible. I thank them for their time, energy, and commitment.

I would also like to thank Dr. Peter Adams, my supervisor, for his support and for his confidence in me. His guidance and criticisms were invaluable. He was most free with his time and always available and approachable for help. He made me laugh whilst learning and he opened up a whole new and exciting world of discourse analysis. I thank Dr Keith Petrie for introducing me to Peter and for his criticisms of my work.

Doctors Joanna and Alistair Stewart, John Gribben, Murray Black, and Gail Elkind gave statistical and programming advice, and John West was always there to rescue me from computer problems. Ray Nairn and Dr Jan Pryor kindly commented on drafts of my work.

This research was partially funded by the University of Auckland Research Committee and the Department of Psychiatry and Behavioural Science.

Josie McCallion, Denise Reynolds, Toni Cathie, and my room mates Helen Jerram and Anthony Sidaway provided the warmth of friendship during this time in the Department of Psychiatry and Behavioural Science.

Thank you to my pussy beloveds Jasmine, and her successor Tillie, for their affection, warmth, humour, and paper shredding assistance throughout the hours I spent working at home.

To my family, my dear husband Murray, and my sons Matthew, James, and Hamish, thank you for your ongoing support through the peaks and troughs of Ph. D research. Murray as usual provided practical help as well as love and understanding. The boys were always there to ensure that my loneliness study did not become experiential, and to suggest ways in which to ease the physical ravages of long hours on the computer.

This study is dedicated to my family, now delightfully extended by the addition of Cara and Toby.
TABLE OF CONTENTS

Abstract ...........................................................................................................................................ii
Acknowledgements ........................................................................................................................iii
Table of Contents ................................................................................................................................iv
List of Tables ..................................................................................................................................xi
List of Figures ..................................................................................................................................xiv
List of Abbreviations .....................................................................................................................xv

Chapter 1. Introduction .......................................................................................................................1
   Clarification of loneliness related concepts .....................................................................................1
   Background and justification of research .......................................................................................5
   The present studies ........................................................................................................................9
   Summary ......................................................................................................................................15

Chapter 2. Loneliness and Health .......................................................................................................16
   Discriminating amongst related variables ...................................................................................17
   Health and social contact .............................................................................................................23
   Health and feelings of loneliness ..................................................................................................28
      Feelings of loneliness and quality of life ....................................................................................29
      Feelings of loneliness and immune suppression .........................................................................31
      Feelings of loneliness and health complaints and behaviours .................................................36
   Summary of loneliness and health associations in older adults ....................................................40

Chapter 3. Loneliness: A Review of Major Issues ..........................................................................44
   Prevalence of loneliness ................................................................................................................44
   A theoretical overview of loneliness .............................................................................................45
   The nature of loneliness ................................................................................................................47
      Social needs perspective ..............................................................................................................47
      Behaviour/personality perspective ............................................................................................49
      Cognitive processes perspective ...............................................................................................50
   Critical appraisal of the theoretical perspectives ..........................................................................52
   Loneliness in older persons ..........................................................................................................54
Chapter 4. Loneliness measurement  69

Measurement issues ......................................................... 69

(1.) Use of term “loneliness” .............................................. 69
(2.) Self-reports .............................................................. 70
(3.) Unwillingness or inability to report loneliness ................. 71
(4.) Selection of loneliness indicators .................................. 72
(5.) Dimensionality of loneliness ........................................ 73
(6.) Temporal characteristics of loneliness ........................... 75
(7.) Statistical control and level of analysis .......................... 75

Loneliness measures .......................................................... 76

Unidimensional loneliness scales ............................... 76
Multidimensional loneliness scales ............................... 82
Situational versus chronic loneliness scales ....................... 87
Chapter 5. Rationale, Aims, & Hypotheses For Study 1

Overview ...................................................................................................................... 92
Growing older in New Zealand .................................................................................... 92
Conceptualisation of the problem ................................................................................ 96
  Loneliness and sociodemographic predictors ......................................................... 97
  How loneliness might foster physician utilisation .................................................. 97
  Differences between situational and chronic loneliness and the study findings .... 97
General aims of Study 1 .............................................................................................. 98
Component 1: Personal characteristics and loneliness ............................................. 98
  Underlying theoretical models ................................................................................ 98
  Specific aims for Component 1 ................................................................................ 101
  Selection of variables for Component 1 ................................................................. 101
Component 2: Loneliness and health outcomes ......................................................... 102
  Underlying theoretical model ................................................................................ 102
  Specific aim for Component 2 ................................................................................ 103
  Hypothesis formation ............................................................................................ 103
  Selection of variables for Component 2 ................................................................. 104
Component 3: Situational and chronic loneliness ....................................................... 105
  Rationale ................................................................................................................ 105
  Specific aim for Component 3 ................................................................................ 106
Summary of aims of Study 1 ...................................................................................... 106

Chapter 6. Methodology for Study 1 ......................................................................... 107
Overview .................................................................................................................... 107
Ethics ........................................................................................................................ 107
Subjects .................................................................................................................... 108
Design ....................................................................................................................... 109
Instruments and measures ......................................................................................... 109
  Loneliness ............................................................................................................... 109
Chapter 7. Results Study 1

Overview .......................................................... 121

Part 1: Personal characteristics of the sample .......................................................... 121

Correlational analysis of sociodemographic variables ........................................... 126

Univariate analysis of sociodemographic variables .............................................. 127

Regression analysis of sociodemographic variables ............................................ 130

Summary of results: Part 1: Loneliness and sociodemographic variables .............. 132

Correlations ...................................................................................... 133

Univariate comparisons ............................................................................... 133

Multivariate comparisons ........................................................................... 133

Part 2: Loneliness and health ........................................................................... 133

Hypothesis testing of health variables ............................................................. 136

Regression analysis of health variables ........................................................... 139

Summary of loneliness and health characteristics of the sample ....................... 142

Part 3: Situational and chronic loneliness ......................................................... 144

Chapter 8. Discussion and conclusions Study 1 ........................................... 147

Overview ...................................................................................... 147

Prevalence of loneliness .................................................................................. 147

Sociodemographic profile of a lonely older adult ............................................. 149

Perceived health status and loneliness ............................................................ 155

Symptom amplification and loneliness ............................................................ 159

Focusing on and worrying about symptoms and loneliness ......................... 163

Self-reported physician visiting explicitly for loneliness ............................... 167
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situational and chronic loneliness differences warranting further research</td>
<td>169</td>
</tr>
<tr>
<td>Methodological considerations</td>
<td>172</td>
</tr>
<tr>
<td>Strengths</td>
<td>172</td>
</tr>
<tr>
<td>Limitations</td>
<td>172</td>
</tr>
<tr>
<td>Statistical procedures</td>
<td>173</td>
</tr>
<tr>
<td>Conclusions, implications, and recommendations from Study 1</td>
<td>174</td>
</tr>
<tr>
<td>Further research</td>
<td>177</td>
</tr>
<tr>
<td>Summary of the discussion and conclusions</td>
<td>178</td>
</tr>
</tbody>
</table>

**Chapter 9. Rationale and background for Study 2**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale for Study 2</td>
<td>181</td>
</tr>
<tr>
<td>Background</td>
<td>181</td>
</tr>
<tr>
<td>Social forces and the medical encounter</td>
<td>182</td>
</tr>
<tr>
<td>Asymmetric doctor-patient power relationship</td>
<td>187</td>
</tr>
<tr>
<td>Asymmetric doctor-patient power relationship</td>
<td>188</td>
</tr>
</tbody>
</table>

**Chapter 10. Discourse analysis of loneliness and the medical encounter**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourse analysis</td>
<td>192</td>
</tr>
<tr>
<td>Aims of Study 2</td>
<td>196</td>
</tr>
<tr>
<td>General aims</td>
<td>196</td>
</tr>
<tr>
<td>Specific aims</td>
<td>196</td>
</tr>
<tr>
<td>Analyses for Study 2</td>
<td>197</td>
</tr>
<tr>
<td>Methodology for Study 2</td>
<td>197</td>
</tr>
<tr>
<td>Sample selection</td>
<td>197</td>
</tr>
<tr>
<td>Collection of texts</td>
<td>199</td>
</tr>
<tr>
<td>Key questions</td>
<td>201</td>
</tr>
<tr>
<td>Overall structure of interview</td>
<td>202</td>
</tr>
<tr>
<td>Overview of the analysis</td>
<td>203</td>
</tr>
</tbody>
</table>
Chapter 11. Overall conclusions and recommendations for Studies 1 and 2

Conclusions 228
Recommendations 231
Emerging issues 232
New foci for research 233

REFERENCES 234

APPENDIX A: 270
Consent form Study 1 271
Consent form Study 2 272
Covering letter Study 1 273
Covering letter Study 2 274
Doctors' letter Study 2 275
Questionnaire 276
APPENDIX B: 283
Additional tables for results of Study 1................................. 284

APPENDIX C: 294
Examples of interpretative repertoires from Study 2.......................... 295

APPENDIX D: 312
Article generated from this research........................................... 313
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table 1. Design of Study</th>
<th>.................................................................</th>
<th>110</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2. Ns, means, and standard deviations of situational and chronic loneliness groups</td>
<td>.................................................................</td>
<td>120</td>
</tr>
<tr>
<td>Table 3. Means or percentage proportions of personal characteristics of the study sample and of those aged over 65 who completed Census data in 1991</td>
<td>.................................................................</td>
<td>123</td>
</tr>
<tr>
<td>Table 4. Percentages of responses to loneliness predisposing and precipitating questions</td>
<td>.................................................................</td>
<td>125</td>
</tr>
<tr>
<td>Table 5. Summary of sociodemographic variables significantly correlated with situational loneliness</td>
<td>.................................................................</td>
<td>126</td>
</tr>
<tr>
<td>Table 6. t test statistics, means, and standard deviations of sociodemographic variables by situational loneliness</td>
<td>.................................................................</td>
<td>127</td>
</tr>
<tr>
<td>Table 7. Results of ANOVAS and Tukey HSD means, standard deviations, and pair wise comparisons of sociodemographic groups by situational loneliness</td>
<td>.................................................................</td>
<td>128</td>
</tr>
<tr>
<td>Table 8. t test statistics, mean situational loneliness scores, and standard deviations for loneliness predisposing variables experienced in the past year by situational loneliness</td>
<td>.................................................................</td>
<td>129</td>
</tr>
<tr>
<td>Table 9. t test statistics, mean situational loneliness scores, and standard deviations for loneliness precipitating variables experienced in the past year by situational loneliness</td>
<td>.................................................................</td>
<td>130</td>
</tr>
<tr>
<td>Table 10. Significant variables remaining in the model following stepwise regression of sociodemographic variables on situational loneliness</td>
<td>.................................................................</td>
<td>131</td>
</tr>
<tr>
<td>Table 11. Variance accounted for by significant variables in stepwise regression of sociodemographic variables on situational loneliness</td>
<td>.................................................................</td>
<td>131</td>
</tr>
<tr>
<td>Table 12. Means, standard deviations, and ranges of health variables and high and low situational loneliness groups</td>
<td>.................................................................</td>
<td>135</td>
</tr>
<tr>
<td>Table 13. Means, standard deviations, and approximate percentages of the total number of self reported visits to the doctor in the past year</td>
<td>.................................................................</td>
<td>136</td>
</tr>
<tr>
<td>Table 14. ANOVAS of perceived health variables by high and low situational loneliness groups</td>
<td>.................................................................</td>
<td>138</td>
</tr>
<tr>
<td>Table 15. Results of Chi-square analysis of high and low situational loneliness groups by number of different doctors visited for symptoms</td>
<td>.................................................................</td>
<td>139</td>
</tr>
<tr>
<td>Tables 16. Stepwise regression of situational loneliness on health outcome variables with current and chronic medical conditions and negative affect forced onto the first step</td>
<td>.................................................................</td>
<td>141</td>
</tr>
</tbody>
</table>
Table 17. Logistic regression of current and chronic medical condition, negative affect, and situational loneliness on whether or not respondent has visited more than one doctor for symptoms .......................................................... 141

Table 18. Summary of differences in results when situational loneliness tests were repeated with chronic loneliness .............................................................................................................. 145

Table 19. Correlations of situational and chronic loneliness scores with sociodemographic and loneliness predisposing and precipitating variables ................................................. 284

Table 20. Correlations of situational and chronic loneliness scores with confounding and health outcome variables ........................................................................................................ 285

Table 21. t test statistics, means, and standard deviations of sociodemographic variables by chronic loneliness .................................................................................................................. 286

Table 22. ANOVAS and Tukey HSD means, standard deviations, and pair wise comparisons of sociodemographic groups by chronic loneliness .................................................................... 286

Table 23. t test statistics, mean chronic loneliness scores, and standard deviations for loneliness predisposing variables by chronic loneliness ........................................................................... 286

Table 24. t test statistics, mean chronic loneliness scores, and standard deviations for loneliness precipitating variables experienced in the past year by chronic loneliness ........................................................................ 287

Table 25. Significant variables remaining in the model following stepwise regression of significantly correlated sociodemographic variables and chronic loneliness .................................................. 287

Table 26. Variance accounted for by significant variables remaining in the model following stepwise regression of sociodemographic variables on chronic loneliness ................................................................ 287

Table 27. Means and standard deviations of high and low chronic loneliness groups .................................................................................................................................................. 287

Table 28. Means and standard deviations of types of self medication in the past three months, and total medication scores ........................................................................................................ 287

Table 29. Ranked means and standard deviations of symptom frequency ........................................................................................................................................................................ 288

Table 30. Ranked means and standard deviations of symptom severity ............................................................................................................................................................................. 288

Table 31. ANOVAS of health variables by high and low chronic loneliness groups .......................................................................................................................................................... 288

Table 32. Results of Chi-square analysis of high and low chronic loneliness and whether or not respondent has visited more than one doctor for symptoms ................................................................ 289

Table 33. Results of Kruskall Wallis Chi-square analysis of high and low situational loneliness groups and health outcome variables .................................................................................................. 289
Table 34. Results of Kruskall Wallis Chi-square analysis of high and low chronic loneliness groups and health outcome variables ................................................................. 290
Table 35. Zero-order correlations and partial correlations of health variables with situational loneliness (Controlling for self esteem) ................................................................. 290
Table 36. Zero-order correlations and partial correlations of health variables with situational loneliness (Controlling for anxiety) ................................................................. 290
Table 37. Zero-order correlations and partial correlations of health variables with situational loneliness (Controlling for depression) ................................................................. 291
Table 38. Zero-order correlations and partial correlations of health variables with situational loneliness (Controlling for negative affect) ......................................................... 291
Table 39. Zero-order correlations and partial correlations of health variables with chronic loneliness (Controlling for self esteem) ................................................................. 292
Table 40. Zero-order correlations and partial correlations of health variables with chronic loneliness (Controlling for anxiety) ................................................................. 292
Table 41. Zero-order correlations and partial correlations of health variables with chronic loneliness (Controlling for depression) ................................................................. 293
Table 42. Zero-order correlations and partial correlations of health variables with chronic loneliness (Controlling for negative affect) ......................................................... 293
Table 43. Stepwise regressions of chronic loneliness on health outcome variables with current and chronic medical conditions and negative affect forced onto the first step ........................................ 294
Table 44. Logistic regression of current and chronic medical condition, negative affect, and chronic loneliness on whether or not respondent has visited more than one doctor for symptoms ................................................................. 294
LIST OF FIGURES

Figure 1. Frequency distribution of number of respondents by age group categories........ 124
Figure 2. Percentage frequency distribution of self rated health and life satisfaction........ 134
Figure 3. Percentage frequency distributions of situational and chronic loneliness......... 144
Figure 4. Interview wheel.................................................................................................. 200
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>BELS</td>
<td>Belcher Extended Loneliness Scale</td>
</tr>
<tr>
<td>DLS</td>
<td>Differential Loneliness Scale</td>
</tr>
<tr>
<td>ESL</td>
<td>Emotional versus Social Loneliness Scale</td>
</tr>
<tr>
<td>ESLI</td>
<td>Emotional-Social Loneliness Inventory</td>
</tr>
<tr>
<td>LRS</td>
<td>Loneliness Rating Scale</td>
</tr>
<tr>
<td>NKCC</td>
<td>Natural killer cell toxicity</td>
</tr>
<tr>
<td>NYU</td>
<td>New York University Loneliness Scale</td>
</tr>
<tr>
<td>PHA</td>
<td>Phytohemaglutinin</td>
</tr>
<tr>
<td>PILL</td>
<td>Pennebaker Inventory of Limbic Languidness</td>
</tr>
<tr>
<td>TUKEY HSD</td>
<td>Tukey’s test of Honestly Significant Difference</td>
</tr>
<tr>
<td>UCLA</td>
<td>University of California Loneliness Assessment Scale</td>
</tr>
<tr>
<td>UCLA-V1</td>
<td>University of California Loneliness Assessment Scale Version 1</td>
</tr>
<tr>
<td>UCLA-V2</td>
<td>University of California Loneliness Assessment Scale Version 2</td>
</tr>
<tr>
<td>UCLA-V3</td>
<td>University of California Loneliness Assessment Scale Version 3</td>
</tr>
</tbody>
</table>