TOWARDS AGE-FRIENDLY CITIES AND COMMUNITIES: A CASE STUDY OF THE SLIEMA LOCALITY

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A dissertation submitted in partial fulfilment of the requirements of the Master of Gerontology and Geriatrics

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Name of Student (in CapS)
Dedicated to

MY HUSBAND

for his continuous support

MY SONS MICHELE AND BEPPE

for making everything worthwhile
ACKNOWLEDGEMENTS

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ABSTRACT

The aim of the study was to evaluate age-friendly measures and barriers which determine age-friendliness in Sliema. The purpose of the thesis was to assess the degree of age-friendliness in Sliema through a baseline assessment and evaluation of grid services that are available to older Sliema residents. Since the researcher opted to select cases to represent a selected geographical region, and thus within an ecological boundary, a case study research approach was used to achieve the aims and objectives of the study. The objectives were achieved through a quantitative approach whereby through the formulation of a questionnaire, so that the researcher studied the perception of residents in Sliema (Malta) as regards the localities’ age-friendliness across the 8 domains among 181 participants. Mean scores for all 8 age-friendly domains were determined. ‘Social participation’ had the highest mean score and ‘Respect and Social Inclusion’ had the least mean score. The overall mean score for all 8 domains was of 2.11 The results provided a source of baseline data to identify key areas of concern. The research examined the relationship between the independent variables being ‘perceived quality of life’, ‘perceived physical health’, ‘perceived mental health’, ‘age’, ‘gender’ and ‘level of education’, to the dependent variable ‘age-friendliness’. There was a positive correlation between 5 out of the 6 variables. Recommendations on how to improve age-friendliness in Sliema have been put forward. The way to move forward is the formulation of an action plan where all the concerned stakeholders combine their resources and move towards a more age-friendly Sliema.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>INTRODUCTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1.1</td>
<td>Rationale</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Aim and Objectives of the study</td>
<td>4</td>
</tr>
<tr>
<td>1.3</td>
<td>Chapter outline</td>
<td>5</td>
</tr>
</tbody>
</table>

- Title Page
- Declaration Statement
- Dedication
- Acknowledgements
- Abstract
- Table of Contents
- Table of Appendices
- List of Figures, Tables and Graphs
## CHAPTER 2  LITERATURE REVIEW

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Introduction</td>
<td>8</td>
</tr>
<tr>
<td>2.2</td>
<td>Age-friendly cities and communities</td>
<td>9</td>
</tr>
<tr>
<td>2.3</td>
<td>The development of global age-friendly cities</td>
<td>10</td>
</tr>
<tr>
<td>2.4</td>
<td>Creating age-friendly communities</td>
<td>12</td>
</tr>
<tr>
<td>2.5</td>
<td>Age-friendly framework and wellbeing of older people</td>
<td>13</td>
</tr>
<tr>
<td>2.6</td>
<td>Assessing a city’s age-friendliness</td>
<td>14</td>
</tr>
<tr>
<td>2.6.1</td>
<td>Outdoor Spaces</td>
<td>15</td>
</tr>
<tr>
<td>2.6.2</td>
<td>Transportation</td>
<td>16</td>
</tr>
<tr>
<td>2.6.3</td>
<td>Housing</td>
<td>18</td>
</tr>
<tr>
<td>2.6.4</td>
<td>Social Participation</td>
<td>19</td>
</tr>
<tr>
<td>2.6.5</td>
<td>Respect and Social Inclusion</td>
<td>20</td>
</tr>
<tr>
<td>2.6.6</td>
<td>Civic Participation</td>
<td>21</td>
</tr>
<tr>
<td>2.6.7</td>
<td>Communication and Information</td>
<td>21</td>
</tr>
<tr>
<td>2.6.8</td>
<td>Community Support and Health Services on and Information</td>
<td>23</td>
</tr>
</tbody>
</table>
2.6.9 Healthcare

2.7 Demographic Trends in Malta

2.7.1 Employment among older adults

2.7.2 Participation among the older citizens

2.7.3 Independence of the Maltese

Older Person

2.8 How age-friendly is Sliema at present?

2.9 Conclusion

CHAPTER 3 METHODOLOGY OF THE STUDY

3.1 Aim and objectives

3.2 Research Approach

3.3 Research Hypotheses

3.4 Research Design

3.5 Research Method

3.6 Sample Population

3.7 Data Analysis

3.8 Reliability and Validity

3.9 Ethical Considerations

3.10 Limiting Factors
# CHAPTER 4  
## RESULTS AND FINDINGS

4.1 Introduction  
4.2 Socio demographic findings  
4.3 Domain 1 (D1): Outdoor Spaces in Sliema  
4.4 Domain 2 (D2): Transportation in Sliema  
4.5 Domain 3 (D3): Housing in Sliema  
4.6 Domain 4 (D4): Social participation in Sliema  
4.7 Domain 5 (D5): Respect and Social Inclusion in Sliema  
4.8 Domain 6 (D6): Civic Participation and Employment in Sliema  
4.9 Domain 7 (D7): Communication and Information in Sliema  
4.10 Domain 8 (D8): Communities and Health Services in Sliema  
4.11 Overall age-friendliness in Sliema  
4.12 Correlation of Variables  
4.13 Conclusion
# CHAPTER 5

## DISCUSSION

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Introduction</td>
<td>85</td>
</tr>
<tr>
<td>5.2</td>
<td>Review on Social participation In Sliema</td>
<td>87</td>
</tr>
<tr>
<td>5.3</td>
<td>Review on Community and Health Services in Sliema</td>
<td>90</td>
</tr>
<tr>
<td>5.4</td>
<td>Review on Communication and Information in Sliema</td>
<td>93</td>
</tr>
<tr>
<td>5.5</td>
<td>Review on Outdoor spaces and Buildings in Sliema</td>
<td>95</td>
</tr>
<tr>
<td>5.6</td>
<td>Review on Transportation in Sliema</td>
<td>98</td>
</tr>
<tr>
<td>5.7</td>
<td>Review on Housing in Sliema</td>
<td>101</td>
</tr>
<tr>
<td>5.8</td>
<td>Review on Civic Participation in Sliema</td>
<td>104</td>
</tr>
<tr>
<td>5.9</td>
<td>Review of Respect and Social Inclusion in Sliema</td>
<td>105</td>
</tr>
<tr>
<td>5.10</td>
<td>Analysis of Hypotheses</td>
<td>106</td>
</tr>
<tr>
<td>5.11</td>
<td>Linking the Social and Physical Dimensions</td>
<td>109</td>
</tr>
<tr>
<td>5.12</td>
<td>Conclusion</td>
<td>112</td>
</tr>
<tr>
<td>SECTION</td>
<td>PAGE</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>CHAPTER 6</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>CONCLUSIONS AND RECOMMENDATIONS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REFERENCES</td>
<td>118</td>
<td></td>
</tr>
<tr>
<td>APPENDICES</td>
<td>130</td>
<td></td>
</tr>
</tbody>
</table>
## APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPENDIX A</td>
<td>Research Ethical Proposal and FREC forms</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td><strong>Page</strong></td>
<td></td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>Covering letter for questionnaire in English</td>
<td>138</td>
</tr>
<tr>
<td></td>
<td>Covering letter for questionnaire in Maltese</td>
<td>139</td>
</tr>
<tr>
<td>APPENDIX C</td>
<td>Modified CASOA tool</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>WHO Global Age-Friendly Cities Checklist</td>
<td>149</td>
</tr>
<tr>
<td>APPENDIX D</td>
<td>Questionnaire used in the study in English</td>
<td>154</td>
</tr>
<tr>
<td></td>
<td>Questionnaire used in the study in Maltese</td>
<td>163</td>
</tr>
<tr>
<td>APPENDIX E</td>
<td>Liveable Communities: Evaluation Guide 2005</td>
<td>173</td>
</tr>
</tbody>
</table>
LIST OF FIGURES, TABLES AND GRAPHS

LIST OF TABLES

Table 4.1  Score distribution by each age-friendly measure for Outdoor Space  

Table 4.2  Score distribution by each age-friendly measure for Transportation  

Table 4.3  Score distribution by each age-friendly measure for Housing  

Table 4.4  Score distribution by each age-friendly measure for Social Participation  

Table 4.5  Score distribution by each age-friendly measure for Respect and Social Inclusion  

Table 4.6  Score distribution by each age-friendly measure for Civic Participation and Employment  

Table 4.7  Score distribution by each age-friendly measure for Communication and Information  

Table 4.8  Sources of gathering information on programmes and services  

Table 4.9  Score distribution by each age-friendly measure for Community and Health Services
LIST OF FIGURES

Figure 4.1  Distribution of participants by gender 48
Figure 4.2  Distribution of participants by age 48
Figure 4.3  Distribution of participants by level of education 49
Figure 4.4  Distribution of participants by preferred language 49
Figure 4.5  Participants’ rating for Sliema as a place to live in 50
Figure 4.6  Participants’ rating for Sliema as a place to retire in 50
Figure 4.7  Distribution of Physical wellbeing 51
Figure 4.8  Distribution of Mental well being 51
Figure 4.9  Distribution of perceived quality of life 52
Figure 4.10  Outdoor Spaces by mean score and overall mean score 54
Figure 4.11  Transportation by mean score and overall mean score 56
Figure 4.12  Housing by mean score and overall mean score 58
Figure 4.13  Social Participation by mean score and overall mean score 60
Figure 4.14  Respect and Social inclusion by mean score and 62
overall mean score
Figure 4.15  Civic Participation and Employment by mean score 64
and overall mean score
Figure 4.16  Communication and Information by mean score and 66
overall mean score
| Figure 4.17 | Sources of gathering information on programmes and services | 67 |
| Figure 4.18 | Community and Health Services by mean score and overall mean score | 69 |
| Figure 4.19 | Overall mean score for age-friendliness in Sliema | 70 |
| Figure 4.20 | Overall mean age-friendliness by Gender | 71 |
| Figure 4.21 | Overall mean age-friendliness by Age | 72 |
| Figure 4.22 | Output summary for relationship between Quality of Life and perceived age-friendliness | 74 |
| Figure 4.23 | Output summary for relationship between physical health and perceived age-friendliness | 76 |
| Figure 4.24 | Output summary for relationship between mental health and perceived age-friendliness | 78 |
| Figure 4.25 | Output summary for relationship between gender and perceived age-friendliness | 80 |
| Figure 4.26 | Output summary for relationship between age and perceived age-friendliness | 82 |
| Figure 4.27 | Output summary for relationship between level of Education and perceived age-friendliness | 84 |
LIST OF GRAPHS

Graph 4.1  Line of Best fit for Quality of Life  73
Graph 4.2  Line of Best fit for Physical Health  75
Graph 4.3  Line of Best fit for Mental Health  77
Graph 4.4  Line of Best fit for Gender  79
Graph 4.5  Line of Best fit for Age  81
Graph 4.6  Line of Best fit for Level of Education  83
INTRODUCTION

1.1 Rationale

In 2001, the United Nations had predicted that the proportion of people aged 60 and over was projected to double globally from 11% to 22% by the year 2050 (United Nations, 2001). By that time the number of older adults in the population will be greater than the number of children for the first time in human history (United Nations, 2006). This same forecast argued that the increase in the proportion of the population who are 60 and over will occur most rapidly in the developing counties and that within 50 years, 80% of the world’s older people will be living in the developing world compared to 60% in 2005. (United Nations Population Funds 2007). In 2007, The World Health Organization (WHO) envisaged that this dramatic demographic shift will occur alongside a parallel increase in urbanisation. By giving communities a heads up for this coming phenomenon, many countries equipped themselves with analytic tools, and implementation of initiatives to address the impact of population ageing and an increasingly urban population. The combination of these two phenomena will in turn shape health care, urban planning and policy around the world for many years to come.

We are now in 2018, seventeen years away from the alarming indications on population ageing. What have communities around the world done to address this phenomenon? Policy makers and gerontologists around the world have worked on the concept of age-friendly cities and communities:

In an age-friendly city, policies, services, settings and structures support and enable people to age actively by: recognizing the wide range of capacities and resources
among older people; anticipating and responding flexibly to ageing-related needs and preferences; respecting their decisions and lifestyle choices; protecting those who are most vulnerable; and promoting their inclusion in and contribution to all areas of community life. (WHO, 2007 : 5)

This concept evolved out of the recognition that cities around the world must develop an organised response to the increasing senior population and devise effective strategies for promoting active ageing. The global age-friendly cities project under the patronage of the WHO has gained momentum as a global response to population ageing and urbanisation (WHO, 2007). The main goal of the project was to promote active ageing throughout the life course of seniors, through the improvement of their urban environments so that the seniors’ health, participations and security is enhanced.

When seen from a gerontological point of view and not from an ageist point of view, an ageing population is a font of both challenges as well as opportunities within a community. An ageing population presents an opportunity since many senior residents are committed, long time residents who contribute their time and energy to local issues. Alley and colleagues (2007) argued that communities can use planning to create an environment that supports and capitalises on this ‘elderpower’. If communities support ageing-in-place, through appropriate infrastructure, older residents can be empowered to continue as active residents and volunteers for many years, enriching communities through their time and experience.

Ageing in place is a concept that allows people to live independently by receiving services as needs change. It represents a transaction between an ageing individual and his/her residential environment that is typified by changes in both the person and environment over time, with the physical location of the person being the only constant. (Phillips, Ajrouch, and Hillcoat-Nalletamby, 2010 : 17)

On the other hand, supporting ageing-in-place is a major challenge for many communities. Pynoos (1993) explained how ageing-in-place refers to individuals growing old in their own homes, with an emphasis on housing and environmental modifications to compensate for limitations and disabilities. Policy makers are working towards the ideal scenario where
older residents should not have to move, to be in a supportive environment. According to the American Association for Retired Persons (AARP) in 2013, over 80% of older American residents expressed a desire to remain in their own home as long as possible.

Yet, throughout these last 17 years since the UN prediction, what were our communities doing to support our senior citizens. Ageing-in-place is not possible without community services. As physical and cognitive functions decline with age, older persons need additional support to maintain their independence. Age-friendly measures can be seen in a two-way approach. There are measures where adults can contribute to their community and measures offered by the community to care for its’ senior residents.

Two hundred fifty cities and communities in 27 countries across the world are participating in the WHO Global Network of Age-Friendly Cities and Communities (GNAFCC). Communities are currently applying and testing this approach to create more age-friendly environments. The network was established to foster the exchange of experience and mutual learning between cities and communities worldwide.

The mission of the GNAFCC is to simulate and enable cities and communities around the world to become increasingly age-friendly. The network seeks to do this by inspiring change, connecting cities and communities to facilitate the exchange of information and supports cities and communities to find appropriate innovations and evidence based solutions. With current demographic trends in Malta, as well as advanced milestones towards ageing in place at governmental and local community level, Malta being a WHO member state would surely benefit from joining this network.

On the 4th of July 2015, the Malta Today announced that the WHO will be opening a collaborative centre in Malta on research and health matters in small countries. The setting up of the collaborating centre was proposed by the then Parliamentary Secretary for Health, Dr. Chris Fearne, who stated:
“WHO are recognising Malta’s improvements and innovation in the health sector and are eager to bring similar changes to other countries. The process for establishing Malta as a WHO collaborating centre is well underway and we are very proud of what we have achieved over the past two years. The plan is to have Malta established as a WHO collaborating centre.” (Malta Today, 2015, paragraph 6)

Before implementing age-friendly measures within communities, policy makers and all the concerned stakeholders, including the senior residents themselves, should evaluate and identify where and how their community can become more age-friendly. This can be done using the available proposed tools to assess the degree of age-friendliness in a community. The phenomenon of ageing in Malta is no different from the rest of the world. The findings from this study highlighted the importance and the need for villages and towns across Malta to firstly evaluate and assess the degree of age-friendliness within their communities, and secondly through the data collected implement age-friendly measures and initiatives towards ageing-in-place. One cannot overemphasise the importance and the need of a Maltese national study on age-friendly communities across the island. The age-friendly checklist tool would not be a system for ranking one community’s age-friendliness against another but it should be a tool for a community’s self-assessment and a map to chart progress.

1.2 Aim and Objectives of the study

The town of Sliema’s senior population is growing. At present, Sliema has the second highest senior population across Malta with a mean age of 48.2 and total population of 5,126 senior citizens out of a total of 13,621 residents. This means that 37.6% of all Sliema residents are older residents. This explosive growth of older residents represents both opportunities and challenges at the community level (National Statistics Office, 2012).

Gerontologists and policy makers are aware that Sliema and other villages and towns across Malta are faced with challenges and need to find answers by asking two key
questions. Firstly how age-friendly is Sliema to its’ senior residents and what is the way forward to address the phenomenon of an age-friendly community?

The purpose of this study is to provide an overview of the age-friendly measures and barriers which determine age-friendliness in Sliema to ensure that Sliema older residents are supported to age in place. The purpose of this thesis was to assess the degree of age-friendliness in Sliema through a baseline assessment and evaluation of grid services that are available to older Sliema residents. Through the evaluation of the study the researcher wanted to highlight and encourage current positive age-friendly measures and services which are enhancing and promoting ageing in place in Sliema. On the other hand the study identified and addressed barriers which prevent older Sliema residents to age-in-place.

The study assessed the necessary elements Sliema must have to create an age-friendly community. These particular elements are important to evaluate the needs of Sliema senior residents in all levels of services, health and infrastructure, that may help to develop a community that is fully accessible from inside the dwelling to ‘down the street’ and into the doctor’s office, promenade or shops.

1.3 Chapter Outline

In the next chapter (Chapter 2), the researcher discussed demographical trends, age-friendly measures and evaluated the current age-friendliness measures and barriers available in Sliema by following the WHO global network of age-friendly cities and communities programme. These age-friendly measures can be categorised into 2 categories, ranging from physical infrastructure (outdoor spaces, housing and informative services) to social infrastructure (community planning, employment, social and civic participation and social inclusion). Throughout the chapter the researcher discussed the complexity of elements for an age-friendly community. The study of age-friendliness of a community is complex due to the interrelated nature of physical and social infrastructure
component and age-friendly domains in general. Sharlach (2012) explained how a community is simultaneously a physical space, a social space and a set of social bonds.

In the methodology chapter (Chapter 3) and discussion chapter, (Chapter 4), the researcher applied the knowledge gained from the literature review to assess the extent of age-friendliness in Sliema as perceived by its’ senior residents. The study found that connectivity between housing and basic services and between the pedestrian infrastructure to accessible community services, offered mobility options to older adults especially to those who do not drive. Through well connected transport infrastructure older adults may have accessibility to more mobility options. The study concluded that due to the fact that in Sliema older residents have the advantage of clustered retail services that are within walking distances to their residences, this alleviated the need of transportation, support and enabling residents to participate in the community. Barriers in the built environments reduced their mobility and constrain their opportunities to participate in social, economical, culture and spiritual lives which in turn increases the risk of social isolation and loneliness. Physical barriers increase the risk of falls and injuries which in turn may discourage physical exercise. Barriers in social environments, such as ageist attitudes or services not adapted to seniors’ needs, may prevent them from getting the support and care they need and from actively contributing to and shaping community life.

Throughout the Recommendations and Conclusions chapter (Chapter 6), the research encouraged the way forward for policy makers, Non Governmental Organisations (NGOs), church stakeholders to liaison in order to move towards an age-friendly Sliema from concept to the actual implementations. An age-friendly community is expected to include an adequate general physical and social infrastructure that promotes health and well being, have minimal age related barriers when older adults try to access the infrastructures, have compensatory and enabling features to address age related needs and have mechanisms for engaging older adults as valued contributors to community life.
Sliema is an urban densely populated community in Malta. The urban environments, in which older people live and grow, play significant roles in shaping their experiences of ageing-in-place. The natural, built and social environment including provided services, determine whether people with levels of function can continue to undertake the activities importance for them.

The study concluded that working towards an age-friendly Sliema requires both political commitments especially at local council level, active involvement of the older people, caregivers, service providers and NGOs including the parishes so that together they identify the needs and priority areas for action, implementing change and evaluation progress over time.
LITERATURE REVIEW

2.1 Introduction

The world's population is getting older, challenging society with an increased concern among public health agencies and governments around the world (World Health Organization, 2007). According to the World Health Organization (WHO) (2007) in most countries, the fastest growing age group is 60 years and older. The number of people in this group is expected to increase from 841 million in 2013 to more than 2 billion in 2050. This indicates an almost doubling phenomenon in worldwide proportion, increasing from 11.7 to 21.1 percent in 2050. For the first time ever in history, the expected number of older persons exceeds the number of children under the age of 15 in the world. According to United Nations (2010), over half of the world’s older population lived in urban areas in 2015. The percentage of older adults in urban areas was higher for developed countries to developing nations (United Nations, 2015).

Population ageing poses a great challenge to policy makers. According to the WHO (2002), if ageing is to be a positive experience, longer life must be accompanied by continual opportunities for health, participation and security. The WHO (2007) has adopted the term active ageing to express the process for achieving this vision.

In the active ageing policy framework, WHO (2002) presents seven main challenges for active ageing. One of these challenges focuses to forge a new paradigm of old age. Far from the traditional perception that old age is associated with retirement and dependency,
policy makers have been working to view the older person as an active participant in an age integrated society and as an active contributor as well as beneficiary of development.

The challenge is now to incorporate the phenomenon of ageing in society and keeping our older persons as independent and integrated in society as possible. For citizens to be as active as possible, policy makers have to plan for age friendly environments. The following section goes into an overview of what is age-friendliness.

2.2 Age-friendly cities and communities

An age-friendly community is an inclusive and accessible community environment that optimises opportunities for health, participation and security for all people, in order that quality of life and dignity are ensured as people age. For a community to be age-friendly, policies, services and settings need to recognise the wide range of capabilities and resources among older persons, anticipate and respond to ageing related needs and preferences, respect older people’s decisions and lifestyles and promote inclusion of older people in the community.

The WHO (2007) has introduced initiatives to enhance age-friendliness in cities and communities. An age-friendly city is an inclusive and accessible community environment that optimises opportunities for health, participation and security for all people in order that the quality of life and dignity are ensured as people age. The Global age-friendly cities guide (2007) describes age-friendliness in cities as follows:

“An age-friendly city encourages active aging by promising opportunities for health, participation and security in order to enhance quality of life as people age.” (WHO, 2007, p. 1)
It further states that in practical terms, an age-friendly city adapts its' structures and services to be accessible to and inclusive of older people with varying needs and capabilities. Ageing-in-place is a popular term in current ageing debates; Davey and colleagues (2004: 12) defined it as “remaining living in community, with some level of independence, rather than residential care.”

Boldy and colleagues (2011) pointed out that older people wanted choice about where and how they age-in-place. ‘Ageing-in-place’ was seen as an advantage in terms of a sense of attachment or connection and feelings of security and familiarity in relation to both homes and communities. When older adults age-in-place they will have a sense of identity both through independence and autonomy and through caring relationships and roles in the places they live. Callahan (1993) argued that people prefer to age-in-place because it is seen as enabling older people to maintain independence, autonomy, and connection to social support, including family and friends. Through the literature one can see that the term ageing-in-place is ambiguous. It is a complex process, not only about the attachment to a home but where the older adult is continually integrating with place through a combination of social, political, cultural and personal changes. Two very crucial factors that play an important role are neighbourhoods and communities. The Madrid Report on Ageing (2008), emphasised a need for governments, in partnership with civil society, to promote age integrated communities, invest in local infrastructure and environmental design to support multigenerational multicultural communities and to consider affordability and equity of access and choice.

2.3 The development of Global Age friendly Cities: A guide

In 2007 the WHO in partnership with the Public Health agency of Canada (PHAC) launched a Global Age-friendly Cities project, and collected data from focus groups of older persons aged 60 and over, their carers and families. 1485 individuals participated in the study. There were 158 groups and the study was conducted in 33 different countries worldwide. The purpose of the study was to gather information about the experiences of
older people living in cities around the world. The scope of the study was to help determine the key elements of the urban environment that supports active and healthy ageing. It addressed the barriers and problems that older adults encountered and the characteristics which are present or missing from the environments around them that would improve their health, participation and security. Focus groups involved not only the older adults but also caregivers and service providers. Service providers from the public, voluntary and commercials sectors were also asked to make observations based on their interactions with older persons. Focus groups covered aspects of the city’s structures, environments, services and policies in an effort to construct a comprehensive picture of the physical and social factors of the environments that promote or hinder active ageing. The results of the feedback received were transcribed and grouped according to common themes that emerged from the data and formed overall impressions of the issues that were most important to older adults (WHO, 2007). Out of all the hard work and data, WHO has come up with eight domains of age-friendliness. The WHO identifies these 8 domains as key areas of interest for anybody who is interested in studying age-friendliness. These eight domains include outdoor spaces and buildings, transportations, housing, social participation, respect and social inclusion, civic participation and employment, communications and information and community support and health services. To further aid in the study of age friendliness WHO came up with a checklist (Appendix C.1), that allowed assessors to determine whether a city is age-friendly or not. The checklist goes through the 8 domains and assesses if the features for each of the domain are present or not within that city,

The initiative gave way to a guide by the name of "Global Age-friendly cities" (2007) Following this guide the WHO has established the Global Network of Age-friendly Cities and Communities (WHO 2011), where the cities wishing to join the network must join a process diagnosis, planning and implementation of programs with a focus on continuous improvement of its policies and programs. Any community that demonstrates that it is actively engaged in the process of becoming more age-friendly can apply for the membership to the network. The network functions as a hub where communities and cities can share stories of age-friendly communities (AFC) innovation and progress.
2.4 Creating Age-Friendly Communities

To promote the physical and psychosocial wellbeing of the older generation, changes in the physical and social infrastructure have to be made. According to Scharlach (2012), this meant having a community with resources including housing, transportation and mobility, health, social interaction, productivity, cultural religious involvement, educations and leisure activities.

Scharlach (2012) captured the concept of age-friendliness in five domains namely continuity, compensation, connection, contribution and challenge. Continuity refers to the ability to maintain established patterns of social behaviour and social circumstances so as to preserve internal psychological structures. Compensation refers to the availability of products and service to meet the basic health and social needs of individuals with age related disabilities. Connection refers to opportunities for meaningful interpersonal interactions that foster reciprocal support and maintains social connecters. Contribution reflects the important adult developments task of generosity and the lifelong need to feel that one is having a positive impact on one’s environments. Challenge refers to age appropriate opportunities for stimulation whether in the form of physical exercise, intellectual demands, or social engagement.

A variety of terms have been developed to refer to this area, such as age-friendly communities, liveable communities, communities for all ages and community aging initiatives. In this study the term AFC will be used.
2.5 Age-Friendly Framework and Wellbeing of older people

The fundamental knowledge of the 8 domains gives us the opportunity to delve into the interaction among these domains. Cunningham (2004) studied how the aspects of physical environment (neighbourhood and buildings) as well as the social environment (participation, sense of belonging and inclusion) can have a significant impact on health and well-being in later life. Age-friendly Communities should utilise the bottom-up approach whereby older adults are involved at every stage of the age-friendly process. This approach helps encourage the participation of the older persons and in turn this encourages community actions.

Steel (2015) has brought to light that whilst studies have focused on particular issues related to the physical and social environment like accessibility to green spaces, home adaptations and volunteering, some studies bridge concerns in both the physical and social aspects of the environment. According to Zeitler and colleagues (2012), the provision of reliable, affordable and accessible public transport is an important fact in encouraging and enabling older persons to participate in family and community life as well as assisting older persons to remain mobile and independent. The authors found that well-maintained footpaths, provision of bus shelters and nearby bus stops can result in older persons feeling less isolated as well as enabling mobility and walkability.

Other studies have noted the complex and multifactorial relationships between housing and health in older adults. Various studies have tested interventions to enable older persons to age-in-place. These interventions focus on adaptations within the home such as placements of handrails, bathroom modification and nonslip steps.

According to Scharlach and colleagues (2013), social environment can provide social support opportunities, for education, learning employment and volunteering. With respect to volunteering, 51% of volunteers in Malta are aged 50-plus (Formosa, 2014). There is no doubt that an undisputed premise is that the presence of older persons in volunteering roles
holds an important potential for the securing of sustainable futures. Continuing engagement in formal volunteer activities at older ages benefits the health and well-being of the volunteers themselves, the non-governmental organisations in which they volunteer in, the clients served by organisations, as well as society in general. Yet, numerous studies show many older adults remain uninvolved in volunteering opportunities, highlighting the numerous obstacles that stand in their way, and the lack of relevant policy that strengthens and supports older volunteering. One crucial issue concern is that the field of volunteering is firmly located in, and around, the younger and adult ‘territories’ of the life course, with older persons being generally excluded from both policy discussion and empirical research.

2.6 Assessing a city’s Age-Friendliness

As was reviewed above, the WHO 8 domains analysis remains the most common used however there were several attempts to document the community characteristics that older adults identify as most important. The largest investigations of older adults’ opinions about their communities have been done by the Association of American Retired People (AARP) in a nationwide study of Americans over the age of 45 (AARP 2003). Participants were asked about both community characteristics and about those services most important to them to age well. At the local level, the city of Calgary and North Western Illinois Agency on Ageing, conducted extensive focus groups of older persons and service providers in the years 2001 and 2002 respectively. AARP liveable communities’ evaluation guide includes a toolkit that local community volunteers use to assess the age friendly characteristics also using the 8 domains.

The AdvantAge Initiative created an instrument that has been also been used in America assessing respondents’ personal well being and their perspectives on community well being regarding the 33 characteristics of age-friendliness.
As was seen in the above literature an age-friendly community combines features at environmental, social levels to create living spaces that offer people rich opportunities for active ageing. These aspects should be complimentary and mutually reinforcing to allow older people to continue living and participating in the community. The following paragraph will discuss the necessary level of favourable community conditions that can be achieved through combination of well planned outdoor spaces, buildings, housing, transportation, and sound economic activity, law abiding behaviours of residents and well operated community services.

2.6.1 Outdoor Spaces.

Outdoor spaces and buildings are two major features of a community that influence the ability of a person to age-in-place. In the WHO (2007) project, older people consider urban landscape and built environment as very powerful findings. The beauty of the city’s natural surroundings is a feature that people mention as an age-friendly feature. In Rio de Janeiro and Cancun, living close to the ocean was seen as an advantage as is living close to the river in London. On the other hand in a number of cities the perceived dirtiness of the city detracts from old person’s quality of life. Having green spaces is also vital, with areas of shelter against weather conditions for an older resident. Toilet facilities which are clean and well maintained and the availability of seating are a necessity for older adults. These factors tend to be considered by older persons when deciding to use the outdoor spaces. An older adult from Melville stated

“There are very few seating areas.... you get tired and need to sit down. The condition of pavements has an obvious impact on the ability to walk in local area. Safe pedestrian crossings, a secure environment and age friendly buildings are factors that determine age-friendliness” (WHO, 2007, p.13).

Scharlach (2012) suggested that communities in urban settings are ill equipped for dealing with dramatic demographic changes. The author argued that in America there is separation
of residential neighbourhoods from commercial centres thus these are only accessible by car or require a substantial amount of walking. In Sliema as many other urban towns in Malta there is no zoning regulations to reduce housing density. Feldman (2004) argues that older persons are largely reliant on driving for access to goods and services as well as to maintaining social connections. Rosenbloom (2009) in his study found that only 40% of America’s cities and towns have roads signs that are appropriate for older drivers, even though 25% of the US drivers will be over the age 65 within the next twenty years.

Chong and colleagues (2016) discussed accessibility for seniors in a barrier free society. The Community on Ageing issues (CAI) cited by the same author, describe the visions for accessibility for seniors in Singapore as an inclusive age-friendly place, one that allows older persons to integrate with the wider community and lead active lives providing safe and unhindered access in homes, buildings, and outdoor built environment as well as a user friendly transport system.

2.6.2 Transportation.

In order for older adults to remain civically and socially active, they have to be able to safely and conveniently travel around one’s community. Physical difficulties being a non driver or having no one to drive them can precipitate entry to long term care. According to the liveable community indicators for sustainable ageing-in-place, community characteristics that fall under the umbrella term transportation include transportation options; walkable neighbourhoods and safe driving conditions. According to the same paper older persons, non drivers especially, are more dependent on their local community for resources and transportation. It presents the five ‘As’ of age-friendly transportation as being Availability, Accessibility, Acceptability, Affordability and Adaptability to diverse needs. Neal (2014) highlighted that social and civic participation and access to community and health services are also mediated by transportation.
The Action Plan for Age-Friendly Portland (2013) discussed how transportation infrastructure has to be located in whole proximity to housing in order for the older adult to do his activities of daily living. Although public transportation may be readily available, many older adults find difficulty accessing public transportation by finding difficulty walking to the bus stops and waiting for the bus to arrive. An older person may have difficulty accessing public transport and conducting errands unassisted particularly when carrying bags (Scott Ball, 2008).

Fitzgerald (2014) emphasised walking as a form of transportation in densely populated areas. Lyonott (2009) cited by Fitzgerald (2014) brought to light the concept of ‘complete streets’ policies which was introduced in the United States. This complete street initiative encourages and helps architects and planners to consider roadways from the perspective of which minimises the segregation between modes of road users.

Where walking is a highly used form of transportation among adults due to parking problems, sidewalks and crosswalks may need to be constructed, a thorough safety assessment needs to be done regularly. Sliema has an aged population however one has to also consider the considerable amount of expatriates living in the same community for whom Sliema is both a residential as well as a work place hub. Thus regulation of the use of sidewalks by finding safe options for bicyclists on streets is of utmost importance. In an interview with Sliema’s mayor, Mr Anthony Chircop, it was explained that due to the poor state of most pavements around Sliema and due to the introduction of free scooter service offered by SOS Malta, the local council is working on an initiative called shared space. This is an urban design approach which minimises the segregation between modes of road users. By introducing this measure on certain residential streets the speed limit for cars will be reduced thus pedestrians and cars can share the street.
2.6.3 Housing.

Affordable, safe and appropriate housing is vital for the community’s built environment. Affordable and adequate housing allows older adults to age-in-place and lowers the need of community services and long term care. To offer the possibility to age in the community, housing structures in a community should be varied (single family housing, apartments, multifamily housing, shared housing, accessory dwelling units, congregate care, assisted living facilities, ) MetLife Mature Market Institute (2013) as can be seen in Appendix E.1.

Beard and colleagues (2012) suggested that new housing units should include universal design features including a no step entry into the home, living space on one level, lever doorknobs, light switches located low enough for a wheelchair user, and walk in showers.

According to the MetLife Mature Market Institute (2013), every community should be targeting towards two proactive approaches namely visitability so as a wheelchair or other mobility aid should be able to visit the home. Visitability has three core features: a zero step entrance, wider doorways and at least a half bath on the main floor. According to Pynoos (1993) visitability principles eliminate barriers and promote accessibility.

The results of a study conducted by Addae-Dappah (2008) found that despite the evident benefits of age-friendly home features and provision of senior centre services and facilities in age segregated communities in Singapore, the benefits were outweighed by the corresponding negative effect of the psychological and social environments which results from a homogenous group which enhances morbidity, a sense of rejection and despair. The same study highlights that 74% of older persons in these high rise studio apartments preferred age-integration to age–segregation and 78% considered age–segregation detrimental to their wellbeing.
Housing affordability and suitability is also exhausted in the literature. The ability of individuals to remain in their own home or neighbourhood is dependent on the personal, environment as well as their external environment that surrounds them. If a wheelchair dependent resident lives in an apartment located close to shopping and services, but does not have the resources to adapt to their special needs, then the ideal location does little good.

2.6.4 Social Participation.

Social participation, social support and social connectedness are the main pillars to a good quality of life to senior citizens; they contribute to the physical and mental health outcomes of our senior population. For a city to be age-friendly it needs to provide opportunities for social participation and create the necessary structures to allow the senior citizens to access these opportunities. According to the Liveable community indicators for sustainable aging in place (2013), the first indicator of participation in a community is the presence of a variety of organisations, such as community centres, universities, museums and libraries where older adults can participate in social activities.

Older persons participate in formal and informal activities as ways to maintain or establish relationships with colleagues, friends, and family, feel respect and esteem, and exercise competence. Access, variety, affordability, awareness, encouragement to participate, integration of generations, and culturally diverse communities are key factors to how much an older person participates in the community. Employment and volunteering opportunities are important to older persons and are economically and personal beneficial.

Fitzgerald (2014) described how participation of the older adults in the development of an age-friendly initiative can take many forms. The authors state that at minimum, information can be sought from older adults through community hearings, focus group
interview, or formal survey research. Neal and colleagues (2014) mentioned how older adults were involved as interviews in age-friendly initiative in Portland.

Older persons can be included on boards and advisory committees that provide policy directions to age-friendly initiatives. In Massachusetts in the United States, the legislature in 1954 called for the creation of municipal councils on ageing. Nowadays councils on ageing have a board mandate to identify the needs of older persons, to enhance participation of all the residents in addressing their needs and to promote and support programs that benefit older people in the community.

2.6.5 Respect and Social Inclusion.

Social inclusion is closely related to opportunities for social participation. Respect is a behaviour based on attitudes towards older adults. Due to demographic shifts it is critical to identify real opportunities to integrate older adults into activities and communities in a meaningful way and to work against ageism. Research suggests that older adults often have smaller social networks. Those older adults who are socially isolated are at risk for a number of negative outcomes, including depression, chronic illness and mortality (MetLife Mature Market Institute, 2013). Social integration is a characteristic that is difficult to assess. One indicator is the percentage of older persons who live alone.

Lui and colleagues (2009) insisted that literature concedes that the older people’s ability to participate may be compromised by a lack of social recognition. So far there has been limited exploration of effective ways to deal with individual differences and values in modern communities that have become increasingly diverse and complex. Minngaleeva (2016) found that public attitudes towards old age in Tuymazy Russia were negative, whilst older participants reported unconditional support from close neighbours and relatives. The author suggested creating subsidized coffee shops for older adults, as well as more open clubs and organising intergenerational and educational opportunities.
2.6.6 Civic Participation.

The AdvantAge Initiative (2013) suggested that new approaches are required engaging older adults in a manner that utilises their skills, experience and wisdom for the good of their community. According to the same guide older adults are often frustrated in their attempt to find meaningful engagement opportunities that utilise their experience and knowledge.

Volunteerism among older adults falls under this domain. Minnigaleeva (2016) brought to light that residents in Tuymaz in Russia continue to have the expectation that their needs should be met by the government thus residents tend to have an aversion to volunteering. Keyes and colleagues (2016) brought up an example of the innovative idea of a community garden in Mableton in the United States. This provided residents with a place to grow fresh fruits and vegetables, opportunities for social interaction ad location for health and wellness activities. Minnigleeva (2007) emphasises that the diversity of the voluntary sector is very limited. The author found that most of the activities of the existing NGOs are oriented towards leisure time and social activities. There were very few Examples of cooperation between non profits and governmental organisations. Most of the time the relations were spontaneous and lone time occurrences. Formosa (2010) argued that lifelong learning opportunities in Malta promote more older persons to continue to learn through their later life by targeting especially older cohorts when planning lifelong learning programmes. The Government in Malta encourages participation to these programmes by implementing age-friendly initiatives to encourage older persons to make use of these programs.

2.6.7 Communication and Information.

Communication and information is another domain on which most of the other domains depend on. Effective communication allows older persons to keep up to date about the
information available to age actively. Fitzgerard (2014) discussed that for a community to be age-friendly it has to thoughtfully make use of existing resources and in today’s society lack of information can be a barrier to access the resources available. The use of available resources including community services, health services and social services depends on how the relevant information is disseminated.

Certain availability of data may appear insignificant but in actual fact can be so influential in promoting ageing in place and active ageing. An example of this is brought to light by Fitzgerard (2014) who brought an example of promoted information in Massachusetts in the United States, where the city offered a guide to restrooms which are open to the public. Need for frequent urination may discourage some older residents from leaving home. Information about the location of restrooms promotes walkability which in turn promotes wellness.

The same age-friendly programme in Massachusetts cited by Fitzgerard (2014) provided better parking opportunities for older residents. The Brookline Council disseminates information about the permit programme that is available. Without information about the availability of such an initiative, senior citizens might miss out on such an opportunity.

As one can conclude having age friendly services and opportunities available without the knowledge that they exist will be losing the scope of the initiatives. The local councils, the church, NGOs and the private sector, within a community can make utmost use of age friendly measures and initiatives if all these stakeholders do not work individually but liaison with one another. The joint effort of these stake holders may include a data base system through which communication messages, products and approaches can be developed.

Communication and Information channels include newspapers, television and radio. Internet and social media as a communication channel is gaining popularity among senior
citizens. According to Minnigleeva (2007) access to the internet and social media can be costly. Furthermore ageist approaches that older adults refrain from using web sites, hinders the effort to communicate the relevant information with appropriate contact for older adults.

According to the AdvantAge Initiative(2013), print media and community information such as pin boards, pamphlets and displays are preferred or required by many older persons. On the other hand the council encourages websites to be more age-friendly and provision of educational opportunities for learning new technology and media is encouraged.

2.6.8 Community Support and Health Services.

Community support and health services are instrumental in supporting ageing-in-place. Viral community services include grocers, vendors of healthy foods, government services, retail outlets, arts and cultural destinations, entertainment venues, beauty and hygiene.

Age-friendly communities provide access to health care to support the physical and mental state of older persons. Since older adults are more likely to suffer from multiple chronic pathologies, disabilities and limited financial resources, an adequate health care system is vital.

2.6.9 Healthcare.

Supportive services include presence of home and community based services like home health care, meals on wheels and day centres together with the presence services, of caregiver support services such as respite and support groups. Chong and colleagues
found that a multi modal service provider programme saw the most significant increase in the sector of day care centres, home medical, home nursing services and home help services from 1998 to 2005 in Singapore.

2.7 Demographic Trends in Malta

The above phenomenon and trends are thoroughly reflected in Malta. According to the Census of the Maltese Island carried out in 2011 (National Statistics Office, 2012), Malta's number of senior citizens sums up to 98,755 out of a total population of 412,432 citizens. This means that 23.9% of the Maltese population is above the age of 60. In congruence with this statistical finding, policy makers in Malta, need to address the concept of age-friendliness in towns and cities, in which the population of senior citizens is always on the rise. The sex ratios for cohorts aged over 65+ and 80+ are 79 and 55 respectively. As for the remaining age cohort of 90 years and over, the number of females was double that of the male counterpart. In Malta, 12.9% of the population make up a household of two adults with no dependent children and at least one resident is aged 65 years and over. This dramatic increase in the elderly population primarily reflects the ageing of the baby boomers cohort, namely, older persons who were born between 1946 to 1965. Demographic data indicates a worse scenario for the coming years, where in 2012 the European Union revealed that between 2010 and 2016, Malta’s life expectancy should increase to 84.9% from 77.6% for males and from 82.3% to 88.9% years for females. In light of what was discussed above Malta needs to be proactive for this demographic foresight and thus policy makers need to address these phenomena by implementation of services and policies to promote ageing-in-place.

A European country can determine how ready it is for the age of ageing by analysing its positining on the Active Ageing Index. Back in 2013 Malta was far from prepared for this demographic change. In fact in 2013 Malta placed 19th amongst the 27 EU Member states. The active age index (AAI) was developed by the European Centre for Social Welfare Policy and Research. Its three main pillars include the domain dealing with employment,
the domain pertaining to participation of the older adult and the third domain focusing independent living in the community. According to Zaidi (2013) Malta had the lowest score in the employment sector placing 26th place. As for the participation and independent living, Malta placed 15th and 17th respectively.

In 2013 apart from other reforms in the Ageing sector, Malta launched the National Strategic Policy for Active Ageing: Malta 2014-2020 National Commission for active ageing (2013). This policy aimed at addressing the actual three pillars of the ageing index namely focusing on active participation in the labour market, social participation and independent living. With this strategic policy together with other strategies and initiatives, in 2014 Malta managed to improve its position on the AAI to the 18th position.

2.7.1 Employment among older adults.

In a thorough analysis on active ageing policies in Malta, Formosa (2016) sustained that apart from public campaigns to promote employment for senior citizens, there needs a holistic policy programme to make employment more age-friendly. The overall employment rate of older workers in Malta aged between 55-64 years increased by some 3.4 percentage points between 2002 and 2017 (the employment rate represents employed persons as a percentage of same age total population). Similarly, at 15.2% the ratio of older workers in part-time employment in relation to their total employment in Malta is considerably lower than the EU-27 average of 22.6%. Formosa (2016) argued that the main reasons why older persons aged between 55 and 64 are inactive include mandatory retirement for males and family or personal responsibilities for females. Such a state of affairs require the Government to improve up its efforts to facilitate the participation of older persons in employment. Conflicting signals relating to active ageing in employment have been given in recent years. On one hand, positive policies costing considerable effort and money such as those highlighted in this chapter have been implemented. On the other hand, several early retirement schemes have been announced or abetted, contradicting the goal of extending persons’ working lives. More work, in line with the publicity campaign promoting older workers carried out by the Employment and Training Corporation some
years ago, needs to be carried out to reduce the culture of age discrimination. There needs to be greater effort to increase the flexibility of the labour market without encouraging precarious employment. Besides, proactive organisational practices such as succession planning and gradual retirement also need to start finding their way into collective agreements. Most importantly, there needs to be a comprehensive strategic plan which ties together all the measures directly or indirectly relating to the participation of older persons in employment.

2.7.2 Participation among the older citizens.

Volunteerism plays an integral part in Malta’s position on the Age index. Only 4.2% amounting to 3690 older adults did voluntary work. Formosa (2013) argued that for such a low ranking to improve, policy makers need to enhance information on volunteering opportunities, older adults should be trained and that older adults should not only not be in any way exploited when they volunteer but volunteering should be promoted as a advancement in social inclusion and active ageing for the individual.

Maltese older persons are offered with many opportunities for them to participate actively in the community they live in. A case in point is the availability of day centres. These centres offer opportunities for older adults to remain physically mentally and socially active. Whilst in Malta there are 21 active ageing centres, another 4 active ageing centres with a difference have been opened recently. The whole idea was to move away from the day centre idea whereby a day centre was perceived as a place where were one would engage only in passive opportunities namely meeting new people, bingo and other non educational activities, but move towards the concept that these centres are hubs where older adults can learn in an informal way and share their skills with others.

The University of Third Age is also an initiative that addresses participation of the older adult. Its role is that of providing knowledge and promoting exchange of knowledge for
registered senior citizens. The educational programmes vary from health related topics to cultural and social activities.

The National Office of Statistics (2012), found that 80% of voluntary workers participate in organisations providing institutional care, organisations involving religious activities and organisations engaged in other social roles. Nearly half of the volunteers felt it was a moral obligation to do voluntary work, while others felt that it was a form of recreation and social integration. In a typical month, 25% of older persons carrying out voluntary work, spend 10-19 hours volunteering, whereas 30% spent less than 10 hours. The findings shows that out of 28 hours per month, men spend about 8 hours per month more doing voluntary work than females.

2.7.3 Independence of the Maltese older adult.

Notwithstanding the fact of Malta not ranking high in the AAI, Maltese older adults benefit from opportunities that promote active ageing and aging-in-place. The main stakeholder in offering community services in Malta is the government where most of the services are offered at no cost. However one has to mention that Non Governmental Organisations (NGOs) and the church in Malta also contribute to the provision of free community services.

The Governmental services include a carer at home scheme, Community Geriatric services, meals in wheels, night shelters, continence services, Telecare+, telephone rent rebates, home help services, handyman service, dementia activity centres, domiciliary nursing. Community health care is also provided including physiotherapy, occupational therapy, podiatry and nutritionists.

The National Health Service Clinical Geriatric Services in Malta to date has 11 consultant geriatricians. The service is consultant based with the support of 4 resident specialists, 3 higher specialist trainees and 3 basic specialist trainees on rotation.
Every older person benefits from Karlaanzjan, whereby services are given at a waiver or are highly subsidised. Crossing over from Malta and Gozo by ferry is free of charge and the use of public transport is heavily subsidised. The National Strategic Policy for active ageing, showed that lack of access of public transport in Malta often lead to social exclusion. Even though policy tackles independent living amongst older adults, the transport dimension is not given detailed consideration. Hence although Malta has a projected increase in the older population, it is clear that more national plans are needed. Bajada and colleagues (2016) stated that between 2001 and 2011 Malta witnessed an increase of 9279 driving licence holders for people aged 60 and over. According to the authors, older adults appreciated customer care assistance structure and comfort. Users also rated positively accessibility in terms of low floor buses. The same study found that there were deficiencies in waiting time but older adults were happy with the interchanging facilities. According to the same census the three most elderly populated towns in Malta are Floriana with a mean age of 48.4, followed by Luqa and Sliema with a mean age of 48.2.

2.8 How Age-Friendly is Sliema at Present?

Sliema is a town located on the northeast coast of Malta in the Northern harbour district. In Sliema the total community population stands at 13,621, out of which 5,126 are senior citizens above the age of 60. This means that 37.6% of all Sliema residents are older residents. In Sliema 17% of the population is in the 60-69 age groups, 12.9% is in the 70-79 age groups, 6.5% is in the 80-89 age groups and 12% makes up the 90-99 age groups (National Statistics Office, 2012)

Sliema is divided amongst 5 geographical areas namely parishes. Sliema has a regularly scheduled public bus service with stops located within a few minutes walk from retail outlets and residences. Even though Sliema can boast with a one of the best promenades on the island, the main problem with outdoor spaces in Sliema is that of the continuous construction works being carried out. These jeopardise the street and sidewalks safety as
well as being the culprit to noise and dust pollution. Services like meals on wheels, homehelp and maintenance grants fall under the central government responsibility. The local council has limited physical and human resources to invest in age-friendly measures such as one stop shop or professional help for the over sixty cohort residing in Sliema. One initiative that the council has lately taken, with the help of the voluntary sector is the dial a ride service.

Residents over the age of sixty can book a cab (provided by the local council) to do errands and attend other social activities even outside Sliema. Social and cultural activities for the older adults are offered mostly form parishes and local council. In Sliema there is currently one day centre having round 30 members. According to Mr. Anthony Chircop (2018), mayor of Sliema, the poor attendance rate occurs due to factors namely that if geographical division which can be interpreted in terms of social class and secondly that Sliema residents tend to find it downgrading to ask for help. There is one private hospital in Sliema and no health centre. Sliema residents make use of the Gzira health centre. A morning GP clinic service located adjacent to the council is open to all Sliema residents. Presently the Sliema local council is working with the private sector to improve the street safety situation and improve the infrastructure of the streets. There are 6 accessible washrooms in Sliema with rest places only available on Tower Road and the Strand promenade.

In Sliema, the demographic shift has coincided with a rapid urban transformation, which had resulted in large scale resettlement of a population from low rise houses to high rise housing units constructing further the breakdown of previously close knit family ties and neighbours. As for housing in Sliema one finds only single family homes. There are no multifamily homes, accessory dwelling units, assisted living facilities, continuing care retirement communities and a nursing home is currently under construction.

Social and cultural activities are organised by the parishes and the local council. There is one library and there is no hot line or directory of services for older adults.
Notwithstanding the fact that Sliema has one of the most densely older adult populations throughout Malta and withstanding the presence of the NGO Volunteer Sliema, there is no availability of human resources and at present there are no volunteers.

2.9 Conclusion

In conclusion these different domains are to be seen and evaluated as ‘integrated and mutually enhancing’. Buffel and colleagues (2014) identified three issues requiring particular attention in the further development of age-friendly communities, namely the need to recognise the diversity of cities and their inhabitants: the requirement for a life course perspective that takes into account needs of residents of all ages and the need to actively involve older persons in the community planning and development actions.

With the publication of the WHO age-friendly cities and community guide, several initiatives have been brought to light around the globe, thus the WHO together with partners in several countries created the “Global Network of Age friendly Cities and Communities” WHO (2011) where the cities join a process diagnosis, planning, implementation and evaluation with a focus on continuous improvement of its policies and programmes to become age-friendly.

The European Commissioner recently created the Action Group D4 on age-friendly environment as part of the of the European innovations partnership on active ageing and healthy ageing, which has approximately 70 commitments from partner organisations. The group met, presented their commitments and will soon begin connecting notable practises and results from a survey that focused on the added value of an EU age friendly environment initiative for regions and local authorities European Commission 2013. There is also an upcoming 2 year project with the WHO Europe on updating the guidelines on age-friendly environments. AFEE, (Age-Friendly Environment in Europe) is a joint project
between the European Commission department of Employment, social affairs and Inclusion is the WHO Regional Office of Europe.
CHAPTER 3

METHODOLOGY

3.1 Aim and Objectives

The aim of the research was to explore the perceptions of older persons living in Sliema of the extent that the locality is age-friendly. The objectives of the study were achieved through a quantitative approach whereby through the use of a questionnaire, the researcher studied the degree of age-friendly measures throughout 8 domains, in the locality of Sliema.

3.2 Research Approach

Since the researcher opted to select cases to represent a geographical region and thus have the presence of boundaries, in order to achieve the above aim and objectives a case study research approach was chosen.

“A case study is an empirical enquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between the phenomenon and context are not clearly evident.” (Yin, 2003, p. 23).

In a case study, one needs to establish a research focus to which the researcher can refer over the course of studying a complex phenomenon, in this case the phenomenon being age-friendliness in Sliema. The focus of this study is established by forming questions
about the situation or problem to be studied and determining a purpose for the study. In this study, the researcher’s object was a group of senior citizens residing in Sliema. The aim of the research, when using a case study, was to investigate the object in depth, using a variety of data gathering methods to produce evidence that leads to understanding of a case and answers the research question.

Since case study research is meant to answer one or more questions which begin with how or why, this case study addressed the degree of age-friendliness that Sliema offers towards its' senior citizens as seen through the eyes and perception of senior citizens themselves.

### 3.3 Research Hypotheses

The case study is the most useful method for generating hypotheses in the first stage of the total research process, while other methods are more suitable for hypotheses testing and theory building. The case study approach contains a bias towards verification in order to confirm the researcher’s preconceived notions.

The hypothesis were chosen after a thorough investigation of the available literature. A thorough research was done to identify the variables that effect age-friendliness among older persons. The literature emphasised that quality of life, physical and mental health, gender, age and education play a major role in the perception of age-friendliness of an older person.

The research tested the hypotheses that senior citizens residing in Sliema perceive Sliema as an age-friendly community. Moreover it will attempt to identify and test the following hypotheses:
1. [1] *The better the perceived quality of life of the individual the more the perception of age-friendliness in Sliema* on the basis that studies on the significance of age-friendly environments towards quality of life among older adults have been limited (Tiraphat et al., 2017).

2. [2] *The more physical healthy a resident is, the more he/she perceived Sliema to be age-friendly* on the basis that healthy ageing is an important focus of the European Healthy Cities Network, and has been supported by WHO since 2003 as a key strategic topic (Jackish et al., 2015).

3. [3] *The more mentally healthy a resident is, the more he/she perceived Sliema to be age-friendly* on the basis that mental ageing is a crucial component for older persons to engage in the opportunities that age-friendly cities provide them with (Jackish et al., 2015).

4. [4] *Males perceive Sliema to be more age-friendly than femalism, [5] The younger the resident the more he or she perceived Sliema to be age-friendly, & [6] Senior citizens having tertiary education, perceived Sliema to be less age-friendly*, on the basis that gender, age and education - according to the WHO (2015) - are key intervening variables for older persons to be proactive towards age-friendly opportunities.

### 3.4 Research Design

In order to address the aims and objectives of this study, a quantitative research design was chosen. Quantitative research is a statistical way of collecting and analysing data obtained from different sources. It is conclusive in its purpose as it tries to quantify a problem and understand how prevalent it is by looking for projectable results to a larger population. According to Neuman (2006), quantitative research is the approach which focuses on interactive processes and events. He states that quantitative data techniques are data condensers, as they condense data in order to see the big picture. In this study the phenomenon under investigation was age-friendliness in the community of Sliema, and
was studied via statistical and mathematical techniques. The objective of quantitative research is to develop hypotheses pertaining the phenomenon as was discussed above. Since the researcher wanted to study a large group of older adults, a quantitative design seemed to be the right choice. Although other research designs, especially the qualitative tradition, were considered for this research, they were found to be unsuited due to the fact that this dissertation sought to uncover normative trends amongst hundreds of persons living in a locality. As such, it was decided that a quantitative design was best suited for this case-study:

variations in terms of intrinsic, instrumental and collective approaches to case studies allow for both quantitative and qualitative analyses of the data. Some longitudinal studies of individual subjects, for instance, rely on qualitative data from journal writings which give descriptive accounts of behaviour. On the other hand, there are also a number of case studies which seek evidence from both numerical and categorical responses of individual subjects (such as Block, 1986; Hosenfeld, 1984). While Yin (1984:25) cautions researchers not to confuse case studies with qualitative research, he also notes that “case studies can be based … entirely on quantitative evidence”. (Zainal, 2007 : 4)

Indeed, since the measurements of age-friendliness in Sliema was the only means by which observations could have been expressed numerically thus investigating causal relations and associations.

3.5 Research Method

Since the researcher wanted a baseline assessment tool, a survey method using a questionnaire was formulated. Conducting a baseline assessment is an essential step in an age-friendly cities process, because it allows comparisons to be made in the future to determine a community’s progress towards defined strategic goals. By using a questionnaire, the researcher has the ability to obtain a representative sample of the target population, the opportunity to gather responses on a broad range of topics and the ability to measure change over time. While communities across the world namely Canada and USA
have successfully conducted individual needs assessment and have begun to implement their strategies to improve age-friendliness, the movement so far has lacked coherent approach to the issues of assessment of needs within each of the eight WHO domains. Following the direction of the WHO Global age-friendly cities: A guide (WHO, 2007), The WHO guide provides framework for communities to perform their evaluations of age-friendliness in eight key domains, namely: Outdoor spaces and buildings, Transportation, Housing, Social participation, Respect and Social inclusion, Civic participation and employment, Communication and Information and Community support and Health Services. To date, even though the researcher found many different assessments all targeted to measure age-friendliness in cities, little research into the relationship between improving the age-friendliness of a community and the outcomes for the older adults has been done and there is a lack of accurate and specific measurement of age-friendly community characteristics.

The researcher found many assessment tools but only a few offered a baseline assessment with a measure of age-friendliness. The two main assessments used worldwide are the WHO guidelines as seen in appendix C.2 and the Liveable Community: An evaluation guide, produced by the AARP (Appendix E). In a study done by Dellamora and colleagues (2013) at the University of Western Ontario the researcher studied strategies for assessing age-friendliness. The purpose of the study was to review existing assessment tools, surveys and questionnaires that can be used to assess the baseline age-friendliness of a community and determine which were the most appropriate for measuring age-friendliness. In the absence of established tools many individual communities have elected to create their own survey or questionnaire using the WHO age-friendly checklist as a guide. Dellamora (2013) found that out of a total of 25 instruments, out of the three instruments with proven validity, reliability and sensitivity to change, there was only one with questions that represented all eight WHO domains of age-friendliness. The tool was the Community Assessment Survey for older Adults or CASOA created by the National Research Centre in USA. Evidence showed that the tool did not represent all eight domains equally and the survey had less than 7 questions in the categories of outdoor spaces and buildings, housing, transportations and communication and information. For this reason a group of researchers came up with the Modified CASOA (M-CASOA) tool. (Appendix C.1) The researcher
evaluated other research options. One research option was to use the WHO Global age-friendly cities checklist. However the checklist did not have a baseline measurement. However it had the advantage of having the format divided in the 8 domains of age-friendliness. Thus to achieve both the baseline measurement as well as the 8 age-friendly domain analysis, the researcher opted for the modified CASOA tool.

Since, for this study, the researcher wanted the questionnaire to be divided into the eight WHO domains and wanted to have a baseline survey for each of the domains, the researcher used the Modified CASOA tool, modified it in such a way that questions were subcategorised under the 8 WHO domains. Since the M-CASOA was very extensive and due to limited resources and time the researcher chose from 5 to seven questions per domain from the M-CASOA as was seen mostly applicable for Sliema older adults (Appendix D.1). The researcher also included additional indicators which were highlighted in the literature but which were not on the M-CASOA which was thought would be meaningful, such as the presence of a night shelter. (Appendix D.1)

The Maltese and English questionnaire had a total of 55 questions, grouped under the 8 WHO domains with a scoring system of 4 to 1 for each question as seen in Appendix D.1 and D.2. The first 8 questions asked the participant’s age, gender and level of education, perceived quality of life and perceived mental and physical health. Forty six questions, categorised according to the WHO domains, were closed ended questions and one question was an open ended question. The participant had a choice to answer each of the 46 questions on a Likert scale from excellent to poor for each of the 46 questions, thus giving a scoring system for each question separately, for each domain and for the overall domains. Each excellent answer was given a score of 4, good was given a 3, fair was given a score of 2 and poor was given a score of 1.

The majority of the domain questions asked respondents to provide information on the attitudes or perceptions about different aspects of the community by domain. All questions were closed questions. Each overall domain score could be conceptualised as a rating. The
survey excluded ‘don’t know’ category thus the response could vary from excellent, good, fair and poor with excellent having a score of 4 and poor a score of 1. Thus the most positive response was paired with the highest score. The end of the questionnaire included an open ended question. Participants were asked to mention some age-friendly recommendations that they would propose for a better age-friendly Sliema.

A key strength of a case study method involves using multiple sources and techniques in the data gathering process. For this reason the researcher also opted for an elite interview with the local council mayor of Sliema, Mr. Anthony Chircop. The elite interview was chosen as it plays a pivotal role in conducting political issues and also understands the multifarious human interaction of a society. Elite interviewing refers to specialised cases of interviewing individuals that are “considered to be the influential, the prominent, and the well-informed people in an organisation or community” (Marshall and Rossman, 1995: 83). The researcher met in person with the mayor and interviewed the mayor using the ‘Liveable community evaluation survey’, published by the American Association for Retired People in the USA in 2005, (Appendix E). The survey as previously discussed in the literature review is divided into the eight WHO domains. The questions have been formulated by the AARP and have been written to highlight the areas that groups of active older adults have identified as important to maintaining independence and quality of life. Questions have been changed to address the situation of age-friendliness measures in Malta. A pilot study was conducted on 10 randomly selected senior citizens in order to test the overall ease of answering the questionnaire, both in English and Maltese. The researcher performed the pilot testing at different geographical areas and parishes in Sliema to cover as many heterogeneous older adults as possible, keeping in mind the language barrier among Sliema residents.

### 3.6 Sample Population

The target population for the survey was adults over the age of sixty, residing in the town of Sliema. The inclusion criteria for eligibility to complete the questionnaire, which was
presented both in Maltese and English were: 60 years and older, resident of Sliema, enlisted on the Sliema local council mailing list.

A representative sample of 200 participants was desired considering that there are 5,126 senior citizens residing in Sliema. Large samples give the principle of randomisation; a chance to operate and the statistic calculations from them are more accurate than those from smaller sample. Although a small sample is subject to more sampling error, Bailey (1991) believes that it is less prone than large samples to non-sampling error including administrative, statistical ad computations error. He states:

“A carefully designed sample survey may collect more reliable data than an entire population survey simply because certain sources of error can be controlled much more effectively when on a small number of items are to be examined.” Bailey, (1991: p. 106)

When quoting results for a study it is imperative that the researcher establishes the margin of error for the findings. In this study the entire older population residing in Sliema stands at 5126. The entire study population was of 181. Using the sample size calculator, the researcher determined how many participants needed to be interviewed in order to get the results that reflect the target population as precisely as needed. To determine the sample size one must have the confidence levels and confidence intervals or the margin of error. This is the plus or minus figure one would achieve if the whole populations of 5,126 senior citizens residing in Sliema were interviewed.

The confidence level presents the level of precision of your margin of error. It is expressed as percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval. In the analysis the researcher used the 95% confidence level. Quoting 95% confidence level, the margin of error for a total population of 5,126 and a sample size of 181 is of 7.16.
The researcher had different options when choosing the sample population. Choosing random sampling method by an online emailing system increased the response rate. The electronic emailing system was chosen over the postal mailing system due to participation quota and cost involvement. In order to have a representative sample, the researcher needed around 200 responses and thus to send the full questionnaire both in English and Maltese by post and considering the unanswered response, the emailing system was chosen over the postal service.

The Sliema local council currently holds an emailing list of residents all of whom are sent regular updates on activities and current issues. This email system offers correspondence between the senior citizens and the local council. The mayor accepted to send the questionnaire to all the mailing recipients who were over the age of 60. The list included around 700 residents.

The researcher wanted to reach out as many heterogeneous senior residents as possible. By choosing the emailing system, residents who responded came from different parishes in Sliema, senior residents who were house bound or with limited mobility and who do not visit their parishes could easily participate too. Even though some would assume that because respondents used an emailing system, they must have a high level of education, however this was not the case, as respondents from different levels of education answered the questionnaires.

The questionnaire in both English and Maltese, was transcribed on Survey Monkey, whereby respondents first chose their preferred language. The covering letter lead the respondent to the attached survey monkey link and participants answered the questionnaire online. The questionnaire was disseminated on the 14th of November with a reminder email sent one week later. Access to the survey was terminated on the 29th of November. The advantages of using Survey monkey included having constant monitoring of responses, timed questionnaire duration, access to analysis of skipped questions and dropouts along the survey. The whole questionnaire took an average of 7.07 seconds to complete all the 55
questions. The questionnaire response rate started with 289 responses and 181 completed the questionnaire. The reason why there was a substantial amount of drop outs is that once the respondent chose their preferred language, the survey takes the participant directly to the corresponding section, however since the analytic tool showed a total of 108 questions (English and Maltese versions merged) to complete some participants dropped out along the way.

3.7 Data Analysis

To facilitate data interpretation, all data was collected through the survey monkey. Through the use of excel methods; pivot graphs of data were designed accordingly. For interpretation purposes participants who failed to answer all questions were excluded from the survey leaving a total number of participants of 181 (n=181). Data analysis was divided into three stages.

Stage 1

The first analysis was done to interpret the participants’ characteristics namely age, gender, education, quality of life and mental and physical health of the participants.

Stage 2

Since the questionnaire’s questions were recorded on a score from 4 being excellent to 1 being poor, all data was manipulated on excel giving a score for each variable. The data was analysed systematically according to the order of question in the questionnaire. The aim of the study was to achieve a score for age-friendliness in Sliema. The questions covered the 8 domains of age-friendliness and each domain covered a number of questions. Thus for interpretation of data each question was analysed separately and a mean score for the individual variable was calculated. The total permissible score for each variable was 4. Considering that baseline score was to be extrapolated, all 8 domains were equally
representative meaning that each domain had a weight of 12.5%. Thus for each domain a mean of each of the scores achieved in the individual questions pertaining to that domain was calculated.

To achieve the total score of age-friendliness which is indicated as AF, an average of all the mean scores of the 8 domain (D1 to D8) was calculated. The maximum permissible score was 32 (Maximum score for each domain was 4 multiplied by the 8 domains.) Results were also translated into percentages where a score of 4 represented 100%, 3 represented 75%, 2 represented 50% and 1 represented 25% with a 7.16 % margin of error.

Stage 3
To test the hypotheses the researcher used the relationship between the output variable which is age-friendliness (AF) and other variables namely age, gender, level of education, quality of life, and physical and mental health of participants.

Scatter plots or scatter grams were used to display values for two variables. In scatter graphs the variables are plotted in such a way that the AF (age-friendliness) which in this case, is the output variable is plotted against another variable. For every set of data the researcher used the Cartesian coordinates. Scatter graphs were used over other plots as scatter plots show how much one variable is affected by another. The researcher used individual participant markings for each variable thus obtaining the relationship between variables so called a correlation. In the case where the second variable has only two options as in the case of gender, a bar graph was used instead of scatter graph. In this study the researcher assumed that correlations causes causality. Once a scatter graph was drawn, a line of best fit or regression was interpreted to give a correlation.

In statistics, the coefficient of determination is used to test the level of significance of the hypotheses result. The coefficient of determination denoted as R squared is the proportion of the variance in the dependent variable that is predictable from the independent variable.
In this study when testing the hypothesis, the dependent variable is age-friendliness while the independent variables are age, gender, level of education, physical and mental health and perceived quality of life.

To get a significant value for correlation and to analyse the level of significance of the hypotheses correlation result, the researcher used Microsoft excel. In Microsoft excel correlations procedures are run through a data analysis tool, however the researcher still obtained a p value to assess whether a given correlation was significant or not. The p value was found through regression. After inputting the input y and input x ranges, the summary output results were extrapolated. Having just two variables, the Multiple R is identical to the Pearson r. Thus the researcher ran the regression to obtain a correlation. As can be seen in the next chapter, from the ANOVA table, the researcher extrapolated the P-value. The Significant F is identical to the P-value. When using an alpha of 0.05, the decision rules as follows, if the P-value given by the Significance F or the P-value is less than 0.05, then the correlation is statistically significant.

3.8 Reliability and Validity

The researcher considered reliability, validity and sensitivity factors when planning the research tool. Validity refers to the extent to which a tool measures what it is intended to measure (Rossi and colleagues, 2004). In a quantitative study, determining validity is far more complicated than measuring reliability as, whereas reliability is basically concerned with technicalities, validity is concerned with the nature of reality.

The researcher addressed validity of the tool by implementing the following parameters:

The target population was senior citizens over the age of 60. Lowering the age to 55 would have had the advantage of analysing perceptions of adults who would become
senior citizens in Sliema within the coming decade. However since the study was a quantitative one, whereby perceptions of the individual were considered, the researcher wanted to reach older adults who already were considered as senior citizens and who may be actually experiencing the ailments and disadvantages of old age and living in Sliema. Residents under the age of 60 may still be working full time and thus may be biased when responding to the questions. Participants chosen from the local council emailing systems were residents who permanently reside in Sliema and who experience life in Sliema on a daily basis. Most of the respondents are involved in networks within Sliema. The questionnaire thus reached out to senior citizens from different parishes, different geographic areas of Sliema. After a long discussion with the mayor one of the major challenges the council has to face is the division of the residents due to geographical areas, social class, economic status, and education level. The chosen sampling recruitment process made sure that a wide range of participants from the different networks were reached. By involving the members of the University of Third age would run the risk that the respondents will be by far of a higher level of education. On the other hand in Sliema the day centre is only frequented by around 30 residents, as its geographic area attracts people of certain areas. Also the tool reaches persons who have limited mobility or are housebound. A bottom up approach was used when formulating the questionnaire. As discussed in the literature, the mayor responded to a checklist formulated by the AARP (America Association of retired people) Liveable communities: An evaluation guide. The scope of asking the mayor to answer to this survey was to highlight available grid services and age-friendly measures available around Sliema. However the analytic tool focused completely on the senior residents themselves as they were the ones who are experiencing at firsthand what advantaged and disadvantages there are for a senior resident residing in Sliema. To improve reliability the questionnaire was sent only to residents over the age 60 and the questions clearly emphasised that that the questionnaire was targeted towards people over the age of 60. The tool was formulated to offer a baseline assessment analysis. Thus the Likert scale was used and the indictors excellent, good, fair and poor were chosen over strongly agree, agree, disagree and strongly disagree. The indicator ‘doesn’t know’ was excluded so as to guide the participant to a judgemental answer. When formulating the research tool the researcher modified the M-CASOA determinants into eight categories namely the WHO age friendly domains. Due to time constraints only the most relevant questions that applied to Malta were selected. The questionnaire approach offered many
advantages over other methods. It was relatively cheap in terms of time and money as no postal costs were involved. A large number of senior residents could be reached inexpensively and easily from the comfort of their own home. The lack of face to face contact between the researcher and the participant reduced certain psychological and social barriers. Participants had more time to think when responding online, than they had to do an interview and could complete the questionnaire at their own time.

3.9 Ethical Considerations

Ethics approval for this project was obtained from the University of Malta, Faculty Research Ethics Committee (FREC) on the 15th of September 2017 (Appendix A).

A recruitment letter in both English and Maltese were attached with the survey as seen in Appendix B.1 and B.2. Participation for the study was voluntary and anonymous. Participants could refuse to answer any questions in the survey. No personal questions were asked other than age, gender and level of education, quality of life, and perceived mental and physical health. There were no known or anticipated risks or discomforts associated with participating in this study. For the study to be anonymous the survey was sent by the local council office to guard data protection of participants on the local council’s mailing list. Participants had anonymity and confidentiality since they carried out the survey using survey monkey.

3.10 Limiting Factors

Lack of contact meant that the questions couldn’t be clarified or reworded. By using survey monkey the word font and size depended on the setting on the individuals’ computer or gadget, thus some senior residents might have found difficulty in reading the text. By using the emailing system, the researcher had no control over the different age
groups of the participants thus by having an imbalance on response rate across the different age groups, may have ended up with unanalysed perceptions of certain age groups. The perceptions and needs of the young old may vary from those of the old old. The questionnaire could only be answered by literate residents unless they had a carer who was willing to help them fill in the questionnaire. A key limiting factor was that due to the method of questionnaire distribution, the study excluded residents who despite being digital literate did not have an email account, those who failed to check their email and those who for some reason or other are not on the email list of the local council. The researcher might have been biased when choosing questions from the M-CASOA Survey.
CHAPTER 4

RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the quantitative results derived from the questionnaire. Since the study assumed that correlation causes causality, bar graphs, scatter graphs and tables were used to statistically interpret data. Scatter graphs were also used to prove the hypothesis discussed in the previous chapter.

The response rate at 100%, quantified responses of 181 older adults residing in Sliema (n=181), who answered the questionnaire as described in Chapter 3. Results were divided into socio-demographic characteristics, Individual domain scores and variable correlation of data. The final part of the findings described the correlation of participant characteristics in relation to the hypotheses of the study.

4.2 Socio Demographic Findings

The first section focuses on the socio-demographic characteristics of the participants, as can be seen below. Figures 4.1, 4.2 and 4.3 illustrate the participants’ distribution by gender, age and level of education.
There were 87 females and 94 males participating in the study, creating a good balance in gender distribution. Participants were divided amongst 4 age groups, namely the 60-69 age groups, the 70-79 age groups, the 80-89 age groups and the 90 plus age group. 44.2% (80 participants) pertained to the 60-69 age group, 39.2% (71 participants) occupied the 70-79 age group, 15.5% (28 participants) formed part of the 80-89 age group and 1.1% (2 participants) made up the 90 plus group as can be seen in Figure 4.2

Figure 4.1: Distribution of participants by gender.

Figure 4.2: Distribution of participants by age.
Figure 4.3 shows that 90 participants (n=181), had a tertiary level of education, 83 had a secondary level of education and only 8 participants had a primary background in education.

![Figure 4.3: Distribution of participants by level of education.](image)

The questionnaire was disseminated in both English and Maltese. 93.3% chose English to be their preferred language to answer the questionnaire while 6.6% answered the survey in Maltese.

![Figure 4.4: Distribution of participants by preferred language](image)
Very similar findings were found for participants’ rating for Sliema as a town to live in and to retire in. 24.3% (44 participants) scored Sliema to be an excellent town to live in and 27% (49 participants) described it as excellent to retire in. 55.8% (101 participants) found Sliema to be a good town to live in as compared to 53% (96 participants) who scored good as a place to retire in. 15.5% (28 participants) rated Sliema as a fair place to live in whilst 16.6% (30 participants) scored Sliema as a fair place to retire in and only 4.4% (8 participants) rated Sliema as a poor town to live in and 3.3% (6 participants) rated it as poor to retire in.

Figure 4.5: Participants’ rating for Sliema as a place to live in.

![Bar Chart: How do you rate Sliema as a place to live?](chart1)

- Poor: 8
- Fair: 28
- Good: 101
- Excellent: 44

Number of participants (n=181)

Figure 4.6: Participants’ rating for Sliema as a place to retire in.

![Bar Chart: How do you rate Sliema as a place to retire?](chart2)

- Poor: 6
- Fair: 30
- Good: 96
- Excellent: 49

Number of participants (n=181)
Participants were asked to rate their overall physical and mental health. Mental health differentiated mostly from the physical health perception in the excellent and fair categories. 71.2% rated their physical health as good while 68% rated their mental health as good.

**Figure 4.7: Distribution of Physical health.**

![](image1.png)

**Figure 4.8: Distribution of Mental well being.**

![](image2.png)

78% participants rated their quality of life as good while 12.7% perceived their quality of life as excellent.
Figure 4.9: Distribution of perceived quality of life

How do you rate your quality of life?

<table>
<thead>
<tr>
<th>Quality</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor, 2</td>
<td>2</td>
</tr>
<tr>
<td>Fair, 15</td>
<td>15</td>
</tr>
<tr>
<td>Good, 141</td>
<td>141</td>
</tr>
<tr>
<td>Excellent, 23</td>
<td>23</td>
</tr>
</tbody>
</table>

Number of participants (n=181)
4.3 Domain 1 (D1): Outdoor Spaces in Sliema

As for all the other domains below, each participant scored 4 points for every question which was answered as excellent, 3 points for questions answered with good, 2 points for fair and 1 point for poor. The outdoor domain (D1) had 8 questions related to it. For each question the maximum permissible score was of 724 (n=181) and each question’s maximum score was 4). For each of the individual questions in each domain the weighted mean score for the question was calculated by dividing the total scores achieved for the individual age-friendly measure divided by the total number of participants (n=181) as can be seen in Table 4.1.

Table 4. 1: Score distribution by each age-friendly measure for Outdoor Spaces. Domain 1 (D1).

<table>
<thead>
<tr>
<th>Domain 1 (D1): Outdoor Spaces in Sliema</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>Total Score</th>
<th>Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1.1 Accessibility of public buildings</td>
<td>10</td>
<td>76</td>
<td>88</td>
<td>7</td>
<td>454</td>
<td>2.51</td>
</tr>
<tr>
<td>D1.2 Accessibility of businesses</td>
<td>10</td>
<td>44</td>
<td>115</td>
<td>12</td>
<td>491</td>
<td>2.71</td>
</tr>
<tr>
<td>D1.3 Places to sit or rest in the parks</td>
<td>12</td>
<td>46</td>
<td>100</td>
<td>23</td>
<td>496</td>
<td>2.74</td>
</tr>
<tr>
<td>D1.4 Places to sit or rest in the town’s centre</td>
<td>39</td>
<td>71</td>
<td>67</td>
<td>4</td>
<td>398</td>
<td>2.20</td>
</tr>
<tr>
<td>D1.5 Availability of public washrooms</td>
<td>93</td>
<td>65</td>
<td>22</td>
<td>1</td>
<td>293</td>
<td>1.62</td>
</tr>
<tr>
<td>D1.6 Ease of entering and exiting public buildings</td>
<td>12</td>
<td>81</td>
<td>87</td>
<td>1</td>
<td>439</td>
<td>2.43</td>
</tr>
<tr>
<td>D1.7 Ease of walking on pavements and in public places</td>
<td>124</td>
<td>35</td>
<td>20</td>
<td>2</td>
<td>262</td>
<td>1.45</td>
</tr>
<tr>
<td>D1.8 Cleanliness of public spaces</td>
<td>99</td>
<td>68</td>
<td>14</td>
<td>0</td>
<td>277</td>
<td>1.53</td>
</tr>
</tbody>
</table>

Mean Score for Domain

Weighted Mean Score for Domain 1 = (Avg of D1.1 + Avg of D1.2 + Avg of D1.3 + Avg of D1.4 + Avg of D1.5 + Avg of D1.6 + Avg of D1.7 + Avg of D1.8) = 2.15
Figure 4.10 shows that the age-friendly measure which obtained the highest overall score was places to sit and rest followed by accessibility to businesses. The total mean score for the Domain 1 was calculated. When the mean of the weighted mean of each question was calculated the overall mean score for Domain 1 was of 2.15 (the maximum score permissible was 4).

**Figure 4.10: Outdoor Spaces analysis by mean score and overall mean score**

<table>
<thead>
<tr>
<th>Domain 1 (D1): Outdoor Spaces in Sliema</th>
<th>0.00</th>
<th>0.50</th>
<th>1.00</th>
<th>1.50</th>
<th>2.00</th>
<th>2.50</th>
<th>3.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1.1 Accessibility of public buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.51</td>
<td></td>
</tr>
<tr>
<td>D1.2 Accessibility of businesses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.71</td>
<td></td>
</tr>
<tr>
<td>D1.3 Places to sit or rest in the parks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.74</td>
<td></td>
</tr>
<tr>
<td>D1.4 Places to sit or rest in the town’s centre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.20</td>
<td></td>
</tr>
<tr>
<td>D1.5 Availability of public washrooms</td>
<td></td>
<td></td>
<td>1.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1.6 Ease of entering and exiting public buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.43</td>
<td></td>
</tr>
<tr>
<td>D1.7 Ease of walking on pavements and in public places</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1.8 Cleanliness of public spaces</td>
<td></td>
<td></td>
<td></td>
<td>1.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Score for Domain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.15</td>
<td></td>
</tr>
</tbody>
</table>
### Domain 2(D2) : Transportation in Sliema

Only 1 participant chose excellent for ease to travel by car in Sliema whilst 97 participants (n=181) chose poor for the same question. For all the questions the distribution focused on the good response except for the availability of priority parking bays for older adults which scores an 80% poor response rate as can be seen below.

#### Table 4.2: Score distribution by each age-friendly measure for transportation. Domain 2 (D2).

<table>
<thead>
<tr>
<th>Domain 2 (D2): Transportation in Sliema</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>Total Score</th>
<th>Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2.1 Ease to travel by car in Sliema</td>
<td>97</td>
<td>64</td>
<td>19</td>
<td>1</td>
<td>286</td>
<td>1.58</td>
</tr>
<tr>
<td>D2.2 Ease to get to the places you frequently visit</td>
<td>34</td>
<td>71</td>
<td>72</td>
<td>4</td>
<td>408</td>
<td>2.25</td>
</tr>
<tr>
<td>D2.3 Ease to use public transport</td>
<td>41</td>
<td>60</td>
<td>67</td>
<td>13</td>
<td>414</td>
<td>2.29</td>
</tr>
<tr>
<td>D2.4 Availability of information provided to older people on bus routes and schedules</td>
<td>46</td>
<td>72</td>
<td>56</td>
<td>7</td>
<td>386</td>
<td>2.13</td>
</tr>
<tr>
<td>D2.5 Accessibility of public services by public transport</td>
<td>38</td>
<td>88</td>
<td>50</td>
<td>5</td>
<td>384</td>
<td>2.12</td>
</tr>
<tr>
<td>D2.6 Reliability of public transport</td>
<td>71</td>
<td>67</td>
<td>39</td>
<td>4</td>
<td>338</td>
<td>1.87</td>
</tr>
<tr>
<td>D2.7 Accessibility of buses by older people</td>
<td>40</td>
<td>88</td>
<td>47</td>
<td>6</td>
<td>381</td>
<td>2.10</td>
</tr>
<tr>
<td>D2.8 Affordability of taxis</td>
<td>60</td>
<td>81</td>
<td>33</td>
<td>7</td>
<td>349</td>
<td>1.93</td>
</tr>
<tr>
<td>D2.9 Availability of priority parking bays for older people</td>
<td>141</td>
<td>32</td>
<td>8</td>
<td>0</td>
<td>229</td>
<td>1.27</td>
</tr>
</tbody>
</table>

**Mean Score for Domain 2**

\[
\text{Mean Score for Domain 2} = \frac{(\text{Avg of D2.1} + \text{Avg of D2.2} + \text{Avg of D2.3} + \text{Avg of D2.4} + \\
\text{Avg of D2.5} + \text{Avg of D2.6} + \text{Avg of D2.7} + \text{Avg of D2.8} + \text{Avg of D2.9})}{9}
\]  

\[
= \frac{286 + 408 + 414 + 386 + 384 + 338 + 381 + 349 + 229}{9} = 203
\]
Ease to use public transport weighed the highest mean while availability of priority parking bays for older adults weighed an average score of 1.27. The overall calculated mean score for transportation was of 2.03.

**Figure 4.11: Transportation analysis by mean score and overall mean score.**
4.5 Domain 3 (D3): Housing in Sliema

The overall domain mean was of 1.91. As one would expect, the age-friendly measure of availability of affordable housing in Sliema was the only measure throughout the questionnaire which ranked no excellent scores and a 60.2% for poor. Throughout the other measures there was a scarce response of excellent scores ranging from 0 to 16. Presence of housing with appropriate equipment to meet environmental conditions and availability of equipment for housing modifications ranked similar results. The question mean scores range from 1.46 for availability of affordable housing to 2.15 for presence of housing with appropriate equipment. Affordability of services provided to enable older adults to remain at home and adequate information to older adults to help them age-in-place both scored a mean of 1.98.

Table 4.3: Score distribution by each age-friendly measure for Housing Domain 3 (D3).

<table>
<thead>
<tr>
<th>Domain 3 (D3): Housing in Sliema</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>Total Score</th>
<th>Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3.1 Availability of affordable housing in Sliema</td>
<td>109</td>
<td>60</td>
<td>12</td>
<td>0</td>
<td>265</td>
<td>1.46</td>
</tr>
<tr>
<td>D3.2 Choice of housing options in Sliema</td>
<td>67</td>
<td>76</td>
<td>36</td>
<td>2</td>
<td>335</td>
<td>1.85</td>
</tr>
<tr>
<td>D3.3 Presence of housing with appropriate equipment to meet environmental conditions (e.g. appropriate air-conditioning or heating)</td>
<td>35</td>
<td>87</td>
<td>55</td>
<td>4</td>
<td>390</td>
<td>2.15</td>
</tr>
<tr>
<td>D3.4 Availability of equipment for housing modifications</td>
<td>41</td>
<td>86</td>
<td>52</td>
<td>2</td>
<td>377</td>
<td>2.08</td>
</tr>
<tr>
<td>D3.5 Affordability of services provided to enable older people to remain at home, to “age in place”</td>
<td>51</td>
<td>85</td>
<td>43</td>
<td>2</td>
<td>358</td>
<td>1.98</td>
</tr>
<tr>
<td>D3.6 Adequate information to older people to help them age in place</td>
<td>50</td>
<td>85</td>
<td>45</td>
<td>1</td>
<td>359</td>
<td>1.98</td>
</tr>
<tr>
<td>D3.7 Feeling of safety in the environment around older people</td>
<td>67</td>
<td>75</td>
<td>37</td>
<td>2</td>
<td>336</td>
<td>1.86</td>
</tr>
<tr>
<td>Mean Score for Domain</td>
<td>Mean Score for Domain 3 = (Avg of D3.1 + Avg of D3.2 + Avg of D3.3 + Avg of D3.4 + Avg of D3.5 + Avg of D3.6 + Avg of D3.7)</td>
<td>1.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.12: Housing analysis by mean score and overall mean score.

Domain 3 (D3): Housing in Sliema

<table>
<thead>
<tr>
<th>Metric</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3.1 Availability of affordable housing in Sliema</td>
<td>1.46</td>
</tr>
<tr>
<td>D3.2 Choice of housing options in Sliema</td>
<td>1.85</td>
</tr>
<tr>
<td>D3.3 Presence of housing with appropriate equipment to meet environmental conditions (e.g., appropriate air-conditioning or heating)</td>
<td>2.15</td>
</tr>
<tr>
<td>D3.4 Availability of equipment for housing modifications</td>
<td>2.08</td>
</tr>
<tr>
<td>D3.5 Affordability of services provided to enable older people to remain at home, to “age in place”</td>
<td>1.98</td>
</tr>
<tr>
<td>D3.6 Adequate information to older people to help them age in place</td>
<td>1.98</td>
</tr>
<tr>
<td>D3.7 Feeling of safety in the environment around older people</td>
<td>1.86</td>
</tr>
<tr>
<td><strong>Average Score for Domain</strong></td>
<td><strong>1.91</strong></td>
</tr>
</tbody>
</table>
4.6 Domain 4 (D4): Social participation in Sliema.

The total average score for the domain was of 2.61. The average response for the 6 age-friendly measures pertaining to social participation ranged from 2.43 to 3.08. Opportunities to attend religious and spiritual activities ranked first with a mean score of 3.08, service offered by the public library and opportunities to attend local council meetings had the same weighted mean of 2.9, followed by opportunities to attend social activities, communication with older adults about social activities and lastly affordability of social activities and local attractions.

Table 4.4: Score distribution by each age-friendly measure for Social Participation. Domain 4 (D4).

<table>
<thead>
<tr>
<th>Domain 4 (D4): Social participation in Sliema</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>Total Score</th>
<th>Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D4.1 Opportunities to attend social activities</td>
<td>18</td>
<td>69</td>
<td>87</td>
<td>7</td>
<td>445</td>
<td>2.46</td>
</tr>
<tr>
<td>D4.2 Opportunities to attend Religious and spiritual activities</td>
<td>2</td>
<td>23</td>
<td>115</td>
<td>41</td>
<td>557</td>
<td>3.08</td>
</tr>
<tr>
<td>D4.3 Service offered by the public library</td>
<td>15</td>
<td>55</td>
<td>100</td>
<td>11</td>
<td>469</td>
<td>2.59</td>
</tr>
<tr>
<td>D4.4 Opportunities to attend public local council meetings</td>
<td>15</td>
<td>57</td>
<td>97</td>
<td>12</td>
<td>468</td>
<td>2.59</td>
</tr>
<tr>
<td>D4.5 Communication with older people about, social activities</td>
<td>19</td>
<td>71</td>
<td>85</td>
<td>6</td>
<td>440</td>
<td>2.43</td>
</tr>
<tr>
<td>D4.6 Affordability of social activities and local attractions</td>
<td>11</td>
<td>70</td>
<td>95</td>
<td>5</td>
<td>456</td>
<td>2.52</td>
</tr>
<tr>
<td>Mean Score for Domain</td>
<td>Mean Score for Domain 4 = (Avg of D4.1 + Avg of D4.2 + Avg of D4.3 + Avg of D4.4 + Avg of D4.5 + Avg of D4.6)</td>
<td>2.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.13: Social Participation analysis by mean score and overall mean score

Domain 4 (D4): Social participation in Sliema

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D4.1 Opportunities to attend social activities</td>
<td>2.46</td>
</tr>
<tr>
<td>D4.2 Opportunities to attend religious and spiritual activities</td>
<td>3.08</td>
</tr>
<tr>
<td>D4.3 Service offered by the public library</td>
<td>2.59</td>
</tr>
<tr>
<td>D4.4 Opportunities to attend public local council meetings</td>
<td>2.59</td>
</tr>
<tr>
<td>D4.5 Communication with older people about, social activities</td>
<td>2.43</td>
</tr>
<tr>
<td>D4.6 Affordability of social activities and local attractions</td>
<td>2.52</td>
</tr>
<tr>
<td>Average Score for Domain</td>
<td>2.61</td>
</tr>
</tbody>
</table>
4.7 Domain 5 (D5)-Respect and Social Inclusion in Sliema.

The overall mean for the domain stood at 1.83. These age-friendly measures focus on the intergenerational relationship that lies between the older residents and the younger generation who reside in Sliema and the liaison that lies between the community networks and the older adults. This domain was made up of 2 questions namely consultation by public, voluntary and commercial services on ways to serve older adults better and secondly involvement of the older adult in local school activities with teachers and children. The weighted averages ranked very low with 1.98 and 1.69 respectively.

Table 4.5: Score distribution by each age-friendly measure for Respect and Social inclusion in Sliema. Domain 5 (D5).

<table>
<thead>
<tr>
<th>Domain 5 (D5): Respect and social inclusion in Sliema</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>Total Score</th>
<th>Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D5.1 Consultation by public, voluntary and commercial services on ways to serve older people better</td>
<td>46</td>
<td>95</td>
<td>38</td>
<td>2</td>
<td>358</td>
<td>1.98</td>
</tr>
<tr>
<td>D5.2 Involvement of older people in local school activities with children and teachers</td>
<td>77</td>
<td>83</td>
<td>21</td>
<td>0</td>
<td>306</td>
<td>1.69</td>
</tr>
<tr>
<td>Mean Score for Domain</td>
<td>Mean Score for Domain 5 = (Avg of D5.1 + Avg of D5.2)</td>
<td>1.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.14: Respect and Social Inclusion analysis by mean score and overall mean score.
4.8 Domain 6 (D6): Civic Participation and Employment in Sliema.

No participant scored excellent for the age-friendly measure of opportunities for older people to work and for opportunities for training in post retirement for older adults. Only three participants scored excellent for opportunities for older adults to volunteer in Sliema. 33.7% and 46.4% of participants scored good and fair respectively for volunteer opportunities for older adults. The mean scores ranged from 1.66 to 2.19 and the overall mean score for the domain D6 was of 1.9.

Table 4.6 Score distribution by each age-friendly measure for Civic Participation and Employment in Sliema. Domain6 (D6).

<table>
<thead>
<tr>
<th>Domain 6 (D6): Civic participation and employment in Sliema</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D6.1 Opportunities for older people to volunteer in Sliema</td>
<td>33</td>
<td>84</td>
<td>61</td>
<td>3</td>
<td>396</td>
</tr>
<tr>
<td>D6.2 Opportunities for older people to work</td>
<td>83</td>
<td>77</td>
<td>21</td>
<td>0</td>
<td>300</td>
</tr>
<tr>
<td>D6.3 Opportunities for Training in post-retirement for older workers</td>
<td>64</td>
<td>82</td>
<td>35</td>
<td>0</td>
<td>333</td>
</tr>
<tr>
<td>Mean Score for Domain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mean Score for Domain 6 = (Avg of D6.1 + Avg of D6.2 + Avg of D6.3)</td>
</tr>
<tr>
<td>Mean Score for Domain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.90</td>
</tr>
</tbody>
</table>
Figure 4.15: Civic Participation and Employment analysis by mean score and overall mean score

Domain 6 (D6): Civic participation and employment in Sliema

- D6.1 Opportunities for older people to volunteer in Sliema: 2.19
- D6.2 Opportunities for older people to work: 1.66
- D6.3 Opportunities for Training in post-retirement for older workers: 1.84
- Average Score for Domain: 1.50
4.9 Domain 7 (D7): Communication and Information in Sliema

The overall domain mean score was of 2.22. Eight age-friendly measures made up the domain. Means results ranged from 1.76 to 2.72. The most age-friendly measure which scored the most excellent scores was that of information about services and activities organised for older adults by the church, the least age-friendly measure was affordable quality mental health care with only 1 participants scoring excellent.

Table 4.7: Score distribution by each age-friendly measure for Communication and Information in Sliema. Domain 7 (D7).

<table>
<thead>
<tr>
<th>Domain 7 (D7): Communication and information in Sliema</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>Total Score</th>
<th>Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D7.1 Information on services organised for older adults by the local council</td>
<td>22</td>
<td>48</td>
<td>94</td>
<td>17</td>
<td>468</td>
<td>2.59</td>
</tr>
<tr>
<td>D7.2 Information about services and activities organised for older adults by voluntary organisations</td>
<td>27</td>
<td>80</td>
<td>66</td>
<td>8</td>
<td>417</td>
<td>2.30</td>
</tr>
<tr>
<td>D7.3 Information about services and activities organised for older adults by the government</td>
<td>54</td>
<td>81</td>
<td>40</td>
<td>6</td>
<td>360</td>
<td>1.99</td>
</tr>
<tr>
<td>D7.4 Information about services and activities organised for older adults by the church</td>
<td>12</td>
<td>50</td>
<td>96</td>
<td>23</td>
<td>492</td>
<td>2.72</td>
</tr>
<tr>
<td>D7.5 Information about resources of older adults</td>
<td>52</td>
<td>91</td>
<td>36</td>
<td>2</td>
<td>350</td>
<td>1.93</td>
</tr>
<tr>
<td>D7.6 Availability of financial or legal planning services</td>
<td>70</td>
<td>86</td>
<td>23</td>
<td>2</td>
<td>319</td>
<td>1.76</td>
</tr>
<tr>
<td>D7.7 Availability of affordable quality physical health care</td>
<td>51</td>
<td>80</td>
<td>46</td>
<td>4</td>
<td>365</td>
<td>2.02</td>
</tr>
<tr>
<td>D7.8 Availability of affordable quality mental health care</td>
<td>60</td>
<td>83</td>
<td>37</td>
<td>1</td>
<td>341</td>
<td>1.88</td>
</tr>
</tbody>
</table>

Mean Score for Domain Mean Score for Domain 7 = (Avg of D7.1 + Avg of D7.2 + Avg of D7.3 + Avg of D7.4 + Avg of D7.5 + Avg of D7.6 + Avg of D7.7 + Avg of D7.8) = 2.22
Good responses ranged from 23 participants scoring good for availability of financial and legal planning services to 96 participants scoring good for information about services and activities organised by the church. Distribution of fair responses was consistent through the 8 age-friendly measures. As for poor scoring the most measure which obtained the highest poor score was availability of financial and legal help with 70 participants and the least poor scoring was for church services and information.

Figure 4.16: Communication and Information in Sliema. Analysis by mean score and overall mean score.
The below table and figure, illustrate the various sources the participants get their information from.

Table 4.8: Sources of gathering information on programmes and services.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertisements at community centre or library bulletin board</td>
<td>6.63% 13</td>
</tr>
<tr>
<td>Church newsletters or bulletins</td>
<td>43.37% 85</td>
</tr>
<tr>
<td>Community associations</td>
<td>3.06% 6</td>
</tr>
<tr>
<td>Email newsletters</td>
<td>62.76% 123</td>
</tr>
<tr>
<td>Free newspapers</td>
<td>8.16% 16</td>
</tr>
<tr>
<td>Friends, neighbour or family member</td>
<td>23.47% 46</td>
</tr>
<tr>
<td>Internet on a personal computer</td>
<td>58.16% 114</td>
</tr>
<tr>
<td>Internet on public computer</td>
<td>3.57% 7</td>
</tr>
<tr>
<td>Senior’s helpline</td>
<td>1.53% 3</td>
</tr>
<tr>
<td>Yellow pages or phone book</td>
<td>9.18% 18</td>
</tr>
</tbody>
</table>

Figure 4.17: Sources of gathering information on programmes and services.

How do you currently get information on programmes and services for older adults in Sliema?
4.10 Domain 8(D8): Domain Community and Health Services in Sliema

The age-friendly measure in this domain focused on the availability of distribution of health services vis-a-vis the distribution of Social services throughout Sliema. Consistent results were found throughout the spectrum between the two measures. 17.7% and 15.5% respectively scored poor, 42.5% and 51.4% scored fair, 36.5% and 28.2% scored good and 3.3% and 5% scored excellent. The overall mean score for the domain was 2.24.

Table 4.9: Score distribution by each age-friendly measure for Community and Health services in Sliema. Domain 7(D7).

<table>
<thead>
<tr>
<th>Domain 8 (D8): Community and health services in Sliema</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>Total Score</th>
<th>Weighted Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>D8.1 Distribution of Health services throughout Sliema</td>
<td>32</td>
<td>77</td>
<td>66</td>
<td>6</td>
<td>408</td>
<td>2.25</td>
</tr>
<tr>
<td>D8.2 Distribution of Social services throughout Sliema</td>
<td>28</td>
<td>93</td>
<td>51</td>
<td>9</td>
<td>403</td>
<td>2.23</td>
</tr>
<tr>
<td>Mean Score for Domain Mean Score for Domain = (Avg of D8.1 + Avg of D8.2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.24</td>
</tr>
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</table>
4.11 Overall age-friendliness in Sliema

Once all the individual averages for the 8 domains D1-D8 were found, the overall average for age-friendliness in Sliema was calculated. The overall age-friendly mean score for Sliema was 2.11. The domain which scored the best average was Social participation (mean score 2.61), followed by Community and Health services (mean score 2.24), Communication and Information (mean score 2.22), Outdoor spaces (mean score 2.15), Transportation (mean score 2.03), Housing (mean score 1.91), Participation and employment (average score 1.9), and in last place there was Respect and Social Inclusion with an average score of 1.83. Having a total mean score of 2.11 ranks Sliema age-friendliness as fair as can be seen below.
The below graph categorises the mean score by domain by gender. One noticeable finding which is worth the mention is the fact that across all domains females perceived and scored each domain in a more negative way. The two domains in which there was the biggest difference were outdoor spaces and community and health services, with a difference of 0.27 between female and male scores. The least difference was found in the respect and social inclusion domain with a difference of 0.03 between females and males. The overall age friendly score in Sliema for females was 2.02 whilst that of males was of 2.14.
Figure 4.20: Overall average age-friendliness in Sliema by Gender

When analysing the age-friendliness by age group, one finds a clear consistency of results as can be seen in the figure below. Across the 8 domains, older adults in the 90 plus age group scored less than their counterparts in the other three age groups. The 80-89 age group ranked the best scores for all domains. The overall age-friendliness score for the 90 plus age group was of 1.6, followed by the 60-69 age group with an mean of 2.05, the 70-79 age group ranked a total mean of 2.07 and the most positive group was the 80-89 age group with a total mean score of 2.22.
Figure 4.21: Overall average score for age-friendliness in Sliema by Age

4.12 Correlation of Variables

 Scatter graphs were formulated to prove the hypotheses. The output and input variables through the use of the scatter graph projected a line of best fit which proved if a hypothesis is null or alternative. The Multiple R and p values were used to test the level of confidence for the correlation. As can be seen below in some cases the line of best fit indicates that a hypothesis is alternative and the correlation was significantly negative. This result does not affect the correlation but only the level of validity of this result. Limitations of the study can affect the negativity of the level of validity of the test.
4.12.1: Hypotheses 1: The better the quality of life perceived by the resident, the better the perception of age-friendliness in Sliema.

Graph 4.1: Line of best fit for Quality of life.

Out of all the studied hypotheses, this hypothesis showed the strongest correlation and most visible trend line. As one can see above the shift is strongly demarcated from the group of residents who perceived their quality of life as poor to their counterparts who perceived their quality of life as excellent. The results show that this hypothesis is alternative.
There is a significant positive relationship between the perceived age-friendliness and perceived quality of life.

\[ r (179)=0.21, \ p<0.05 \]

\( r \) is the value of Pearson \( r \)

179 is the degree of freedom (DF) which is calculated by \( n-2 \), (181-2) as can be seen below.

**Figure 4.22: Output Summary for the relationship between quality of life and perceived age-friendliness.**

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<td>Intercept</td>
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<tr>
<td>Quality of Life</td>
</tr>
</tbody>
</table>
4.12.2 Hypotheses 2: The more physical healthy a resident is, the more he or she perceives Sliema to be age-friendly.

Graph 4.2: Line of best fit for Physical Health.

A strong trend is visible on the above graph. The physically healthier the older resident perceives himself or herself the higher the shift, thus this hypothesis is also alternative.
There is a significant negative relationship between physical health and perceived age-friendliness.

\[ r (179) = 0.134, \ p>0.05 \]

\( r \) is the value of Pearson \( r \)

179 is the degree of freedom (DF) which is calculated by \( n-2 \), (181-2) as can be seen below.

Figure 4.23: Output Summary for the relationship between Physical health and perceived age-friendliness.

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<td>-0.007620169</td>
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</tbody>
</table>
4.12.3: Hypotheses 3: The more mentally healthy a resident is, the more he or she perceives Sliema to be age-friendly

**Graph 4.3: Line of best fit for Mental Health.**

Similar to physical health, this hypothesis is also alternative and the line of best fit shifts higher from the group of residents who perceived their mental health as being poor to those who perceived their mental health as being excellent. The better the perceived mental health, the better the perception of Sliema age-friendliness.
There is a significant negative relationship between the mental health and perceived age-friendliness.

\[ r (179) = 0.105, \ p > 0.05 \]

\( r \) is the value of Pearson \( r \)

179 is the degree of freedom (DF) which is calculated by \( n-2 \), (181-2) as can be seen below.

**Figure 4.24: Output Summary for the relationship between Mental health and perceived age-friendliness.**

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<td>Level of Mental Health</td>
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<td>-0.029155046</td>
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4.12.4 Hypotheses 4: Males perceive Sliema to be more age-friendly than Females.

Graph 4.4: Line of best fit for Gender.

As can be seen in the above scatter graph, one can conclude that males perceive Sliema as more age friendly than females. Thus hypothesis is alternative.
The significant relationship between gender and age-friendliness has a negative relationship but lies very close to being significantly positive since the p value is of 0.054.

\[ r(179) = 0.14, \ p>0.05. \]

\[ r \] is the value of Pearson r
179 is the degree of freedom (DF) which is calculated by n-2, (181-2) as can be seen below.

**Figure 4.25: Output Summary for the relationship between gender and perceived age-friendliness.**

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4.12.5 Hypothesis 5: The younger the resident the more he or she perceives Sliema to be age-friendly.

Graph 4.5: Line of best fit for Age.

For the youngest three age group, the best line of fit shows that the younger the age group the lower the age-friendliness score, thus this hypothesis is null. (HO)
There is a significant negative relationship between age and perceived age-friendliness.

\[ r (179) = 0.095, \; p > 0.05 \]

\( r \) is the value of Pearson \( r \)

179 is the degree of freedom (DF) which is calculated by \( n - 2 \), \((181-2)\) as can be seen below.

**Figure 4.26: Output Summary for the relationship between age and perceived age-friendliness.**

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4.12.6 Hypotheses 6: Senior citizens having tertiary education perceive Sliema to be less age-friendly.

Graph 4.6: Line of best fit for Level of Education.

The line of fit decreases slightly from the primary education variable to the tertiary variable, proving that this hypothesis is alternative.
There is a significant negative relationship between level of education and perceived age friendliness.

\[ r (179) = 0.03, \ p > 0.05 \]

\( r \) is the value of Pearson \( r \)

179 is the degree of freedom (DF) which is calculated by \( n - 2 \), \((181 - 2)\) as can be seen below.

**Figure 4.27: Output Summary for the relationship between level of education and perceived age-friendliness.**

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**SUMMARY OUTPUT**

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**ANOVA**

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</table>

**4.13 Conclusion**

This chapter has analysed the study findings according to the aim and objectives discussed in the previous chapters. The tested findings obtained the degree, that residents above the age of 60, perceive Sliema as an age-friendly town to live in. The following chapter will discuss the results obtained.
5.1 Introduction

In this chapter the researcher shall interpret and discuss the findings highlighted in the previous chapter. A clear theme from the findings is the importance of both the built and social environments for older Sliema residents. The significance of the home and neighbourhood environment is evident from comments that underscore the need of a cleaner Sliema, better infrastructure of pavements and buildings and the need of more police presence in the streets. These commensurate with the community’s respect for older adults and to the extent to which it provides the physical and social infrastructure that allow seniors to stay connected to their social networks. (Keyes and colleagues 2016). How to create a balance among people of different ages and with different backgrounds for an age-friendly town is a major challenge.

Based on the geographical, sociodemographic and economical position, it is understandable that the majority of participants are relatively content. However this does not mean that such facilities are tailor made for older adults. Cases in point are 2 domains namely ‘housing’ and ‘transportation’. The public transport system in Sliema is considered to be age-friendly as it addresses the needs of Sliema as a touristic area and thus reaches the entire Sliema locality.
However the service is not tailor made for the needs of the older resident. On the same line of thought, older adults were happy with the housing conditions but one has to appreciate that due to the economic status of older adults living in Sliema, most have the resources to maintain high housing standards with the majority of apartments installed with lifts and private home help.

On the contrary, ‘respect and social inclusion’ achieved a disappointing average score. One of the possible reasons is that older adults when compared to other age group residents are more in need of feeling wanted and useful. In other words age discrimination still prevails with older adults living in Sliema, not finding it easy to be respected or be socially included within their community.

Some have suggested that the entire range of age-friendly characteristics can be collapsed into a single dimension. Lui and colleagues (2009) developed a two dimensional model of age-friendliness. Community initiatives with domains displayed on a single continuum ranging from physical infrastructure to social infrastructure, thus physical and social components interact creating a sense of place.

All the age-friendly domains scores fell between 1.83 and 2.61. This demonstrates similarity in response patterns across the domains and suggested that overall the age-friendliness in Sliema lies between fair and good. Participants rated Sliema as a good place to live and retire, although some measures are worthy of further investigation.

Thorough investigation of perceptions to individual questions highlighted important information about various elements of Sliema age-friendliness and offered guidelines for future recommendations to enhance age-friendless in Sliema. These areas of interest will be further discussed below.
Thorough analysis of subjective responses to open ended questions (Appendix D) as well as interpretation of the mayor’s interview in available grid services (Appendix E) reveal important information about age-friendliness in Sliema. The below discussion should offer guidelines for the future initiatives in Sliema both at local level as well as central governmental level.

**5.2 Review on Social Participation in Sliema**

With the highest domain score of 2.6/4, ‘social participation’ (Domain 4) revealed that older adults in Sliema are actively engaged and are an integral part of their community. Opportunities to attend religious and spiritual activities were highly rated. This can be explained by the fact that Sliema is made up of 5 parishes extending from Gzira to St. Julian’s. Like most Western Countries the church influence can be strongly felt because of the catholic predominance as well as the geographic reach of the parishes. When asked about how they currently get their community information on programmes and services the majority chose the church newsletter and bulletins. This shows that the church in Sliema is a potential agent to outreach senior citizens.

In Sliema, older adults felt the need for more social activities; they recommended various forms of activities ranging from Thai Chi, cultural outings, talks and physical activities. One interesting point was the fact that notwithstanding the fact that Sliema has a day centre, older residents feel the need for a recreational assembly centre where they can organise talks, physical activities and card parties. According to Sliema’s mayor Mr. Chircop, the day centre was stigmatised and perceived as a place which is frequented by dependent, frail and economical deprived residents. Sliema has always been attracted by residents of higher social standing and economically privileged people. Senior residents tend to hold on to this perception and even if their economic position deteriorated throughout their senior lives, they would still want to portray a privileged quality of life.
80.1% of participants perceived their physical health as good or excellent, while 95% of participants perceived their mental health as good or excellent, 91% subjectively perceived their Quality of life as excellent and good. These findings indicate that Sliema residents give high priority to the physical and mental health well-being. The mayor highlighted the mentality of ‘keeping up with the Jones’ cliché among senior residents. One element worth delving in is the perceived and portrayed economic status of senior citizens and the actual financial situation of residents. Keeping up appearances tends to be a priority among residents and thus they tend to invest in the physical and mental health in a very noticeable manner.

Sliema is in need of a senior centre which is not perceived by residents as a passive place frequented by older adults who have nothing better to do, but a structure where older adults can frequent, learn, feel useful and socialise and maintain their quality of life through the promotion of physical and mental opportunities.

The local council should be the agent of change in moving away from the idea that parishes work individually. On the contrary all stakeholders namely the 5 parishes, the voluntary organisations and the local and central government should unite resources to erect and sustain a geriatric leisure assembly point which meets the needs of older residents or as Formosa (2017) describes it a lifelong learning hub. This does not necessarily require funding but a unity of resources and making use of already available spaces.

Considering that Sliema is a business hub, very few private businesses invest in age–friendly business initiatives. Since affordability of social activities scored 2.5/4, further investigation is warranted to find out if this is occurring due to poor knowledge from businesses on age-friendly business initiatives or if the older residents are reluctant to pay for initiatives.
Services offered by the public library ranked high scores notwithstanding the fact that the library did not offer book discussions groups, and does not have audio books for residents with limited sight.

The perception of the older adult on social participation should not only focus on the physical factors, such as the physical, social activities and entertainment but should also consider activities that offer intellectual stimulation such as cultural events. Sliema needs an active centre or as Formosa (2017) describes it a ‘bubbly arena’ that serves as a centre for third age education and activities.

The unity of all stakeholders is vital in creating a new perception of the Sliema day centre. The council needs to involve other entities to move away from the present perception of the day centre and should run in collaboration with other entities to create a lifelong learning hub. This does not necessarily require funding but unity of resources and taking advantage of the Sliema open areas like the promenade to hold social activities and opportunities. One participant recommended dancing classes, boċċi, mini golf and chess activities. One aspect worth mentioning is that the score result for this domain might have been affected by the presence of the University of Third age in Sliema.

In the study, the domain ‘social participation’ considered activities but failed to include contact with family, friends and neighbours. Menec and colleagues (2014) highlighted the importance of having regular contact with family and friends as an age-friendly community feature apart from participating in formal social activities.

The present social participation situation needs to be addresses both in the short term and in the long term. Firstly it needs to address the current situation where the target population are primarily the baby boomers many of whom are born and bred in Sliema and share the same social circles. Secondly all the stakeholders should be proactive and work on a sustainable long term plan to target the future older residents i.e. in the under 60 age group.
and who will reach their golden age in the next decade or so. These younger residents will be coming from different cultures as there is a considerable number of expatriates, have different spiritual beliefs and have poor neighbourhood relations.

5.3 Review on Community and Health services in Sliema

The domain of ‘community support and health services’ (Domain 8) earned an overall score of 2.24/4, which was the second highest domain score. Such a result could have been biased due to only two questions were asked for the respective domain. This is a complex topic that deserves further investigation as the health component didn't differentiate between primary and tertiary sectors. The majority of participants rated fair with respect to other health and social services.

Notwithstanding the fact that the central government is responsible for the social services offered to senior citizens in Sliema, on the health level the local council has taken the initiative of offering a free daily morning clinic attended by a general practitioner to all residents with varying incomes, to alleviate the need of Sliema residents having to go to Gzira Health centre.

The plausible reasons why participants rated the health services as fair include that other than being offered health care next door to the local council, this new service offers a GP service only and is the only free health service offered at local level. Sliema is adorned with a private hospital offering all possible and state of the art services however service is offered against payment which might be too expensive for many senior residents. To alleviate the issue of senior citizens having to go to Gzira health centre which is only accessible by public transport, the Sliema local council has come up with the initiative whereby it offers the service of private transport to seniors to access their appointment throughout Sliema and outside of Sliema. Notwithstanding the fact that the domain scored fair, only 14 out if the 181 participants recommended initiatives focussing on health and
community services. 12 out of 14 recommendations highlighted that need of a Sliema health centre and not the one in Gzira, one which would be accessible to senior citizens and which will be served by a lift and not by stairs as is the case of the Gzira Health centre.

At present with a senior population of 5126, and being the 2nd most aged community in Malta, not only does Sliema merit a health centre of its own but a community senior centre with a variety of services. This health centre should cater for seniors only and offers specialised geriatric and gerontological services only. Participants also recommended the presence of free physiotherapy services and affordable specialised gym facilities.

To address the ageist issue, that old age is related to frailty and dependency, the community senior centre should be a senior activity centre (SAC), whereby seniors are encouraged to attend regularly, gaining both social and health benefits and services. Older adults living in Sliema make use of the department of Health for health issues but have to use the social services department for social issues. There is room for better coordination between the two departments for Sliema seniors. Having a one stop shop which offers liaison between the health services and social services provision and social participation programmes, will address the issue of limited primary health care for seniors and attracts older adults who would otherwise have not been reached out for health care or available social services, while remaining socially engaged with fellow older residents through physical, cultural and social activities taking place at the centre.

At present with the influx of expatriates residing in Sliema, private health services are mainly investing in the younger generation who have more spending power and are very health conscious. This can be seen by the opening of a number of gyms around Sliema which cater to the needs of the younger generation, lacking specialised geriatric resources both on a human resource level and facility resource level.
On a social level, Sliema lacks the presence of a night shelter. According to Sliema mayor, Mr Chircop such a project requires financial funds from the central government. The local council has already identified premises which are available for this scope.

Chong and colleagues (2016), in their study on successful ageing in a high density city, reviewed Singapore’s ageing policies and urban initiatives. The study mentioned the idea of a one stop primary care centre to be located in the local communities, thereby addressing service gaps for immediate residential care, fostering integrated care and rehabilitation centres. One specific idea in this kind of a one stop primary care centre is the senior care centre (SCC), formerly known as integrated day facility. The SCC provides day care, day rehabilitation services and basic nursing needs. The SCC would support a network of family physicians that can more easily provide continuous treatment for chronic conditions. By 2016 in Singapore there were 39 new SCCs to meet the increasing demand for aged care in the community, some also offering personal care services at the home of seniors, including personal hygiene, laundry and meal services and serve as staging points for the delivery of other home care services which would otherwise be unknown of by the senior residents.

Considering the demographic changes of Sliema, older adults, the local council and the central government need to address this phenomenon with regards to specialised geriatric services and centres which are based in the community. The health care model in Malta is shifting away from the ‘cure at all cost’ model to managing a gradual decline with the emphasis on well being and happiness. Due to competing land use in Sliema, it would be very challenging when it comes to planning seniors facilities around this community.
5.4 Review on Communication and Information in Sliema

For the domain of ‘communication and information’ (Domain7) respondents indicate that they feel they are generally well informed on services available in Sliema. The score was of 2.22/4, ranking the domain in the third place.

When comparing availability of information on services organised for older residents by the local council, voluntary organisations, government and the church the study concluded that there was a marked difference between available church information ranked which ranked 2.72/4 and available government information which stood at 1.99. This showed that even though the central government offered a number of services, some participants feel confident they do not have the information required to be knowledgeable about such services and opportunities. One of the lowest score within the domain was given to availability of information about resources of older adults, which may indicate that respondents were unsure in some cases where to go for information.

The study showed that there are many ‘communication and information’ channels in Sliema, ranging from email newsletter as the most popular (62%) followed by internet on personal computer and church newsletters. These results might be biased as the method of data collecting for the study was through the use of the database council emailing system, thus the majority of participants were computer literate. Currently the most basic information on senior services is available on the internet. Older adults may therefore encounter difficulty in accessing this information since some can be computer illiterate. An interesting finding was that participants coming from a primary level of education still utilised the mailing systems as a method of gaining information. One important point which merits further discussion is that none of the participants who answered in Maltese used internet as a source of information and communication.
The ranking position of the domain is justified by the minimal number of recommendations brought forward by participants. Recommendations suggested that printed material to be sent to homes, more information of activities through email and a Sliema council gazette targeted only towards seniors. At the time of the study the council had its’ own email system sent to 700 residents most of whom were over the age of 60. However the current activities highlighted in emails were targeted towards all residents and not towards the senior’s cohort.

There is a discrepancy when it comes to availability of services and knowledge of these services by the senior participants. This can be argued in light of 2 recommendations for services which are already being offered namely the scooter service and the transport service to the Gzira Health services.

The study concluded that there was an urgent need for centralising information regarding services, activities and organisations for older residents in a senior guide. This brings to light the previous aspect of the need of unity of stakeholders concerned. At present the church bulletin ‘Flimkien’ offers a detailed activities programme within the respective parish whilst the local council presents the community activities in a cyber form. Thus all stakeholders namely church, council, central governments and voluntary organisations need to unite their resources to outreach seniors living in Sliema with information regarding opportunities, activities and services available.

This can be done by a bimonthly magazine, internet courses in the local library and easy access to computers. Unlike Hong Kong where according to Chong and colleagues (2016), printed material was not popular among older cohorts, in Sliema 67.3% of participants used printed forms to access information. These included church newsletters and bulletins, advertisements on community boards, free newspapers and yellow pages or phone book. The 15.16%, who said that they use the internet for availability of information, showed that in Sliema due the high incidence of tertiary education among seniors, this might not be the case. The interpretation of third parties namely by friends, neighbours and family is an
important way whereby Sliema respondents got information on programme and services. Since there is lack of a broadcast channel, tailor made for older adults, the study questions did not include the use of TV and radio stations. Further investigations are warranted as the need of such a service within the community.

Dissemination of information to older adults proved to be a challenging initiative, considering the growing costs, clearly not enough team effort to communicate relevant information. As the demographics stand, the older Sliema cohort would benefit from a help line or support line which would be a platform for information dissemination. At present if a Sliema senior resident requires information during office hours then he or she will have to resort to the concerned individual entity bearing the bureaucratic procedures while outside office hours, he or she will have to wait till the follow working day. Further research may be beneficial to investigate differences in the information usage between the young old and the very old residents.

5.5 Review on Outdoor spaces and Buildings in Sliema

The domain of ‘outdoor spaces’ (Domain 1) had some particularly low scores that reveal valuable insights into the outdoor infrastructure in Sliema. The domain ranked 2.15/4 with a significant score difference amongst age-friendly initiatives across the board. With an overall score of 2.15/4 one can conclude that age-friendliness of outdoor spaces and buildings in Sliema is good with clear areas for improvement. According to Clarke and colleagues (2009) barrier free, supportive environments play an essential role in healthy active ageing, especially for older adults with greater risk of disability and poor health. The question item scores indicate that the accessibility of public buildings and business is good overall, but the provision of public washrooms needs improvement. Currently Sliema has six public washrooms, directly managed by the local council.
Results indicate that places to sit or rest in the gardens and promenade were perceived as better than places to sit or rest in the town’s centre. Two very visible issues which need to be addressed with urgency are the ease of walkability on pavements, public places and cleanliness of public spaces. When asked about adequate shading from the sun for resting places, Sliema’s mayor, Mr. Chircop revealed that shading was only available in the gardens but not available in secondary streets and the town’s centre. Void decks are important common areas for social activities in communities. Chong and colleagues (2016) stated that void decks in Singapore were often used for more senior related activities by senior citizens clubs and residents’ committees (RC). Even in the absence of activities as was previously discussed, seniors congregate in these spaces to socialise and take advantage of the shelter and seating provided. Considering Malta’s climate and Sliema’s promenade the 2 advantages should be utilised to create void spaces along the promenade and along Independence Gardens. Chan and colleagues (2016) found that engagement with nature, gardening and other green spaces is likely to be beneficial older adults and enhance their well being.

The ranking score for ease of walking on pavements and in public spaces was very worrying. While the issue of poor cleanliness affects the happiness of older adults, the measure of ease of walkability may affect the older resident’s mobility and independent living. Out of all the questions asked throughout the questionnaire, for all the domains, the measure of ease of walkability ranked the lowest with 1.45/4. The local council is working with private entities to improve the streets signage. It is also working on improving the provisions of curb cuts at ends of pavements. According to the pavement regulations in Malta, the width of pavements should be of 1.2 metres. In Sliema most pavements are narrower that that thus creating obstacles for older residents using wheel chairs and mobility aids.

An obvious reason why senior citizens rated the ease of walkability as poor was the constant ongoing construction sites which apart from limiting pavement access leave pavements in a shameful condition. Having better ease of walkability may result in seniors
choosing to walk longer distances this in turn will promote physical activity and successful ageing.

Out of the 181 participants, 51 made recommendations on outdoor spaces. Out of the 51 comments, 23 highlighted the poor state of pavements, complained that they are too high, are not levelled, and are of poor quality and that most pavements are difficult to walk on because of the cemented garage entries. These tend to be slippery when wet and are a hazard to senior citizens.

Fields and colleagues (2016) explained that it would be helpful to improve pedestrian friendly designs such as continuous barrier free sidewalks, adequate stop signage at intersections and accessible recreational facilities.

Another measure which merits discussion is the ease of entering and exiting public places. The main complaints highlighted that both the social service department and the Gzira health centre have no lift available, with both departments being on the first floor. Sliema residents are very fond of living close to the sea where they can enjoy swimming. However, results showed that they are limited to do so due to the poor accessibility to the water. Safe access to the sea should be given a priority so as to enhance physical activity and social engagement through swimming.

Notwithstanding the limitation to accessibility and ease of walkability which are so important for active ageing, this domain still had one of the highest scores. The explanation for this could be that notwithstanding the limitations, participants rate Sliema in relative terms. Doing so they relatively compare the ambience, geographical position and urban commodities which Sliema offers. Sliema senior citizens are happy living in Sliema and appreciate the advantages it offers.
5.6 Review on Transportation in Sliema

The fifth place was scored by the domain of transportation’ (Domain 2). Although the domain as a whole was scored as one of the least to be age-friendly, measures of ‘concerning ease to get to places’ and ‘public transport’ ranked as high as measures in other domains with the highest scores. The average score was negatively affected by the ease to travel by car in Sliema and the lack of priority parking bays for older adults. Older adults have unique needs related to transport use (Dellamora, 2013).

One observed that whilst ease to get to the places they frequently visit ranked the highest score of 2.25/4, 22 out of the 39 transport recommendations, suggested a circular transport service dedicated to older residents at reliable times. From the comments the study found that this service was offered in the past. Thus further delving on this initiative is of utmost importance.

At present as discussed previously the local council is offering the ‘dial a ride’ service which is an organised volunteer driver programme. This service takes older adults to any errands they might need to do. With the high demand for circular transport, senior citizens are either not making use of this initiative due to a lack of knowledge that it exists or they are finding it difficult to book the service. The reason why residents may prefer the circular transport service over the organised volunteer driver service is that one needs to be booked from beforehand thus limiting any spontaneous outing from home or multiple errands.

As for public transport, there is a general satisfaction with the public transport system. Participants were happy with the access of public services by public transport and accessibility of buses by older residents. The only parameter which was unsatisfactory was reliability of public transport with one participant arguing that waiting time normally takes more than 30 minutes.
Throughout the years huge milestones have been made where the public transport has been concerned. For example more low floors, wheelchair accessible buses were introduced, bus stops and taxi stands were improved, and shelters were installed. Besides physical infrastructure, transit fares became subsidised for seniors.

Currently the council has promoted a free scooter service campaign whereby seniors pre-book a scooter and it will be delivered to the resident's house, where he or she can make use of it for a limited period of time. However not withstanding this remarkable initiative, the mayor feared that due to being looked at as frail and dependent, residents may be reluctant to make use of this service. Large retail outlets in Sliema do not provide wheeled mobility aids to assist in shopping.

In many communities including Brussels and Manchester as discussed by Buffel and colleagues (2014), the transport domain gives utmost importance to propriety bike usage initiatives and bike ability training for older seniors. Considering the infrastructure of Sliema streets, such an initiative is far from being tangible. The process of complete streets is still in the initial phases, leaving Sliema streets especially secondary ones unfriendly to bike users.

A study conducted by The Malta Chamber of Scientists (2016) on accessibility as an indicator of transport equity, focused on the uniqueness of the Maltese public transport system. The paper looked at three aspects of accessibility related to road infrastructure, public transport and the bus fleets. The study argued that the pavements may not be solely designed to cater for the bus service but they are an integral part of it. The second aspect referred to accessibility of infrastructure in physical and cyber forms and lastly the bus fleet referred to the micro scale of accessibility which included boarding and alighting the vehicle. As far as Sliema residents are concerned the aspect which requires further investigation is the macro level aspect namely road infrastructure.
When one goes through the current research on age-friendly measures in communities, one will comprehend that no single domain can be studied in isolation from the rest of the domains (Wiles and colleagues 2011). One cannot present a thorough discussion on the transportation without analysing the effect of the outdoor space around Sliema and its effect on transportation. All stake holders agree that due to age related circumstances, several senior citizens have to surrender to driving consequently becoming dependent on either the public transport system enhancing their walkability to travel around their communities.

Senior pedestrian safety is a multi faceted issue. Seniors are one of the most vulnerable groups of road users who account for a significant number of total pedestrian casualties in traffic accidents in Malta. Current local council initiatives for pedestrian safely target in improving existing crossings, all pavements are in the pipeline to be accessible by wheelchairs. Traffic calming measures on dangerous intersection are to be introduced on the primary and secondary streets. Sliema is also working with private initiates to place road signage as part of an educational campaign for cautious driving especially at sensitive points. Another initiative to address walkability includes the placement of speed limit markings, reminding drivers on speed limits permissions. Reinforcing the above initiatives is of utmost importance for successful walkability results. These initiatives are the changes encouraged towards complete streets policies. Complete streets policies seek to create a more holistic design approach focusing on creating a safe transportation for users of all ages and abilities. In other words, complete streets policies coupled with access to transit, offer a much wider set of mobility choice that can increase the opportunities to age-in-place.

It is a known fact that jaywalking is not uncommon among seniors for a variety of reasons, such as their limited capability of walking long distances, their desire to avoid unpleasant walking experiences, and a lack of adequate road crossing that directly connect popular destinations. Thus, optimising the locations, the number and the quality road crossings from a senior centred perspective should be incorporated into the planning of accessibility.
From a transportation design perspective the changes needed in Sliema to foster walkable communities with connections to transit are simple and cost effective. The study concludes that one reason why the seniors use walking methods or public transport around Sliema is the unavailable parking bays for older residents. This is a very complex issue and serious planning is required.

5.7 Review on Housing in Sliema

The domain of ‘housing’ had some particularly low scores that reveal valuable insight into the housing realities and challenges faced by older Sliema residents. Sliema is quite unique in the housing types it offers. This community only offers single family homes which offer individualised living environments but which are not generally designed to meet the unique needs of older adults As one would expect, the fact that property prices in Sliema are on the very high end, results to the very low score 1.46/4 obtained for availability of affordable housing in Sliema. Most properties owned by the older adults were purchased when those same owners were younger and their financial means was stronger. The upkeep of a property in Sliema is always becoming more expensive.

If the resident lives in a condominium, common part expenses are always on the rise due to the younger generation being a more financially advantaged generation and occupying accommodations within the same condominium, thus older adults have to use up their savings on regular housing maintenance. If the older resident decides to down size, with the current property market value in Sliema, they would have to opt for small apartments whose design is more suitable for the younger generation. Smaller rooms including the bathroom would mean that modified housing equipment could not be installed to meet the needs of the older resident. In Sliema, there is a lack of tailor made housing for older adults due to the market driven orientation of land developers.
In Singapore the Housing development board (HDB) presents various methods to seniors who want to downsize and monetise their current homes. One of the initiatives is the idea of high rise studio apartments (SA). Other schemes in Singapore included the so called ‘Silver Housing Bonus’ which allows senior homeowners to sell their flat and downsize to a smaller one, while relieving a cash bonus. Another scheme is the ‘Enhances Lease Buyback’ which allows the homeowner to sell a portion of their existing flat lease to the housing development board for some retirement income, while continuing to live in the flat. This scheme supports the notion of ageing-in-place.

In Sliema, for a significant number of older owners, the housing expenses can exceed their level of resources and require disaving.

“New forms of improvement emerge among the population of small property owners, in particular women whose retirement pensions remain notoriously lower than those of men.” (Ogg and colleagues, 2013, p. 2)

However for those residents especially widowed females whose financial position doesn’t allow them to live in their current home and choose to downsize from their existing home, this could mean moving away from their current familiar neighbourhood or parish. Doing this in the older years can be difficult for seniors to adjust to the new community and neighbourhood, thus exacerbating a sense of isolation and loneliness.

Presence of housing with appropriate equipment had the highest score (2.15/4). The score could have been effected as most condominium and apartments in Sliema are installed with a lift, thus accessibility to the home was very age-friendly. On the other hand, affordability of services provided to enable older residents to remain at home, ranked significantly less (1.98/4), showing that inability to do it yourself, prohibiting costs and lack of available of service providers may all be barriers to making modification. Home modifications that are relatively simple, will increase safety, prevent falls and support activities of daily living of senior citizens.
The study concluded that a lack of adequate information and lack of affordable services to enable the older resident to age in place, are barriers which reflect significant areas for improvement in the provision and delivery of ageing in place home modifications. The study also concluded that the current Sliema property prices are not affordable, there is a lack of available land where housing projects could be developed and a lack of strong networks which help senior residents to downsize.

Choice of housing options in Sliema ranked, 1.85/4, meaning that some participants are unaware of the lack of possible home options that exist in other communities. Since Sliema has no residential care homes for senior citizens, it is of utmost importance to help residents age in place. There are no senior multifamily homes, shared housing, accessory dwellings units, mainly due to the concentration of apartments.

The only assisted living facility or congregate care which was present, recently closed down, leaving seniors with no other housing options. Fact remains that the current situation between ageing-in-place services and lack of seniors’ homes, Sliema needs to find intermediate forms of resources to tackle the rehabilitation of built area and environments.

Considering the socio economic position of older Sliema residents, intergenerational residences are of little concern to residents. Alternative projects like grouped dwellings of co-operative housing should be considered by the private development sector.

Shannon and colleagues (2016) highlighted that in Ireland, in recognition of the desire to older people to age in place, the Aging well Network, developed a programme called older people remaining at home (OPRAH), which helps older residents to age-in-place. The person’s social and health and housing needs are assessed. A care plan is developed in collaboration with the older residents and the family to meet their particular needs, preferences and priorities. The care is provided by formal and informal caregivers and complimented with the use of technology when appropriate. The position of support co-
ordinator to co ordinate and manage the support package is central to this approach. Having the responsibly to draw on a broad holistic range of support from a variety of public, voluntary private and community agencies in the area, considering the individual needs and wishes of the older resident. This programme is the way forward in implementing a new more personalised approach to the provision of care in the community and ageing-in-place.

5.8 Review on Civic Participation in Sliema

‘Civic participation and employment’ domain, (Domain 6) ranked in the 7th place, being the only domain which had 2 questions with nil excellent scores namely in opportunities for older Sliema resident’s to work and opportunities for training in post retirement for older workers.

Volunteer Sliema has been recently launched and is a partnership between SOS, Sliema local council and Capua Hospital. This initiative is a pilot project which seeks to ensure that vulnerable senior Sliema residents feel more mobile and able to access essential services. Additionally the project seeks to provide emotional support to Sliema senior residents through the creation of a community volunteer’s network which will combat isolation experienced by seniors in the community. The project includes 3 key elements. Primarily the development of local volunteer network of at least 30 volunteers, to carry out community support such as befriending and supporting the older resident in their home and running the logistics of the transport system. Secondly the project develops a community transport scheme as was discussed previously through the ‘dial a ride’ initiative and scooter service. Thirdly to establish a local stakeholder network to support the implementation of the scheme. At the time of the study, applications for volunteers were open however a few days away from the closing date, no applications were handed in or received buy the local council.
The mayor emphasised that notwithstanding the fact that presently there is constant call for volunteers, not even one resident was interesting in volunteering. The dial a ride service is run by a volunteer driver residing outside Sliema. Having no helpline or other communication system to help potential volunteers learn about types of services needed may be the reason of lack of volunteering, since only 3 participants scored excellent for opportunities for older adults to volunteer in Sliema. The same can’t be said where the parishes are concerned. The parishes run by the church find many volunteers who are willing to help in social activities and the church upkeep. Further investigation is needed to find out what can be done to encourage more volunteering around the community of Sliema. Sliema residents don’t seem to give volunteering much importance as it was the only domain that had only 1 recommendation among the 181 participants.

Minngaleeva (2016) emphasised that the notion of volunteering can be looked at from another perspective away from grandmother to grandchildren approach to the grandmother to grandmother initiatives, whereby experienced senior citizens offer their long years of experience and expertise for the good of their community.

According to Adler and colleagues (2007), older adults who volunteer tend to be female, more educated and of high socio economic status than men volunteers. Thus in Sliema one would think that the number of volunteers would be high. There were a considerable number of participants who recommended suggestions like grandparents visiting orphanages, and older people. The study concluded that either the information availability is limited or not enough initiatives are being offered for the number of volunteers to increase.

5.9 **Review of Respect and Social Inclusion in Sliema**

The domain in the 8th place and with the lowest score was ‘respect and social inclusion’ in Sliema, (Domain 5). The study concluded that there is a very poor involvement of the older
Sliema residents and the younger generation. There were minimal opportunities whereby senior residents mingle with school children and other activities which involve children like scouts and sporting activities.

The study concluded that Sliema senior residents do not criticize destructively but they tend to constructively make recommendations and suggestions. This can be proved by the fact that in social participation domain which ranked in first place there were 42 recommendations brought forward for the respective domain. On the other hand outdoor spaces ranked 4th place but still had a recommendation number of 51. This shows that Sliema senior citizens do not complain but are willing to participate constructively within the community.

The need of organising intergenerational and educational opportunities cannot be overemphasised. Due to a changing family structure as a result of the high cost of Sliema property, many Sliema residents have no family living close to them and thus weakening the family support. In a community where older adults find no role to play in the contemporary family structure, there can be declining ‘concept’ respecting the old. One way to combat ageism is through implementation of intergenerational programmes that pair children or younger people with older adults. An example of this is the service-learning programme whereby the younger person provides services to older adults and in turn the older adults reciprocate through experience and expertise.

5.10 Analysis of Hypotheses

As the literature suggests, the more the physically and mentally healthy the older person was, the more age-friendly he or she perceived their community. In turn, the more physically and mentally an older adult was the more the perceived subjective quality of life. The more physically and mentally a resident is the more opportunities he or she will have to go outdoors and engage in community activities. Thus residents who are more
physically and mentally healthy are not limited in doing activities and enjoying the benefits that Sliema has to offer to its’ senior residents. The healthier the older resident, the more he or she can participate in social events, walk around Sliema, use facilities including the day centre, public library, enjoy the sea and the promenade and be civically involved in the community. The more mentally fit the individual is, the more informed the resident will be and remains up to date with age-friendly measures which are offered within the community. Having better physical health will improve the walkability around the community. This in turn will continue to prevent complications of inactivity in old age (Dawn Alley 2007). By meeting older adults from their own cohort, residents maintain a sense of integration within the community and this reduces the risk of isolation.

As for gender and age-friendliness, males perceived Sliema to be more age-friendly. This result could be affected by the notion that females tend to remain engaged in household chores and responsibility of the everyday family life, including babysitting their grandchildren, thus spending more time at home. On the contrary often retired males tend to have more time on their hands, go out more and thus are more actually involved in their community. Females tend to perceive Sliema as less age-friendly due to the fact that females especially widowed females may have less spending power than males, thus having less opportunity to socialise and participate in activities. Fear from crime might also be a factor which influenced the female perceived age-friendliness in Sliema. A lack of a night shelter and a lack of community and social services could affect female perceptions.

Age-friendliness was found to be perceived higher by seniors of a lower level of education. The higher the level of education of a senior citizen the more his knowledge on ageing-in-place and the resources necessary to achieve this. Being more educated one tends to be knowledgeable as to what is available in other countries thus their expectations of age-friendliness are higher. As was discussed earlier, the residents with a lower level of education may feel satisfied with the availability of a day centre. On the other hand residents having a higher level of education may be reluctant to use the Sliema day centre and they perceive a lack of presence of a senior centre in their community. Notwithstanding the presence of the University of Third Age, residents with a higher level
of education still feel the need of a senior meeting place where they can socially participate in activities other than educational and cultural ones.

As physical and mental health decline with age, the physical and social needs increase. Thus the older the adults, the more physical and social modifications that would be needed for him or her to age-in-place. One would expect that the older the resident is, the level of perceived age-friendliness is less than that of younger older adults considering that the overall age-friendliness was 2.11. The study concluded that the older the resident the more the perceived age-friendliness. This conclusion could have been effected by the fact that older senior residents who did not downsize and still lived in their family home had the resources to live independently. When comparing the baby boomers to the old old, the latter may have fewer expectations from the community since they experienced war and thus may appreciate community assets more.

The study conclusions on the relationship between age and age-friendliness can be explained in relative terms whereby the old old being less physically abled, feel that they still can participate socially and not feel isolated when living in Sliema. The results may be justified by considering that Sliema when relatively compared to other towns and villages across Malta offers some unique resources which collectively older Sliema residents may benefit from. These include the presence of a number of parishes which are easily accessible and within walking distance from another, the promenade which is easily accessible, the sea and the presence of shops and entertainment. Thus the notion of ‘home is close to everything’ tends to give a sense of security to the older seniors who reside on their own and want to remain independent, thus influencing the relationship between age and the perceived score of age-friendliness.
5.11 Linking Physical and Social dimension of age-friendliness

Environmental gerontology applies to the multidisciplinary focus of the relation between older persons and the sociospatial surroundings. Plouffe (2010) discussed that current research evidence suggests that well-being in later life is closely related to the physical environment, which is an important factor mediating ageing experiences and opportunities.

WHO (2007), emphasised the relationship between health status on one hand and the built, natural and social environments on the other (as well as the role of local government) in promoting active living for all ages. Lui and colleagues (2009) found that different terminologies have been used to describe an age-friendly environment. Whatever the term used, whether ‘livable community’, ‘lifetime neighbourhood’ or ‘age-friendly community’, there is one dimension which is of utmost importance that is the continuum between an emphasis on physical infrastructure and services and the quality of the social environment.

Some models, like the AvantAge initiative (2013), concentrate on the physical end of the continuum. It examines in detail the community infrastructure or resources as well as the design specifications for various aspects of the built environment that addresses the needs of the older persons living in the community. Examples of these include housing, transportation services and home modifications programmes. In contrast there are other approaches that pay relatively more attention to the importance of social quality or the quality of social relations that promote inclusion, participation and personal development.

The trend for analysing age-friendliness in a community is to include both the social and the physical environments. As has been discussed earlier, built and social environments are dependent on each other and mutually reinforcing. The tool used in the study focused both on the environmental or physical dimension as well as the social dimension of age-friendliness in Sliema. One point worth mentioning from the study findings, is that the highest and the lowest scores for age-friendliness in Sliema pertained to two social
dimensions namely social participation with the highest score of 2.61 whilst social inclusion scoring 1.83 placing it in the last place.

Clarke and colleagues (2012) discussed studies which are based on the effect of factors that influence social interaction and independence (such as street conditions, accessible public transport) and the policies that determine the scope of these environmental features (like city planning). Today many communities are becoming to recognise the importance of thinking about traditional ageing services in the context of the wider communities in which they operate. These new initiatives focus in improving both the physical and social environments that surround older persons to facilitate independent and neighbourhood cohesions. The study findings show that in order to address both the physical dimension as well as the social dimension, a bottom up approach should be utilised, whereby older adults are involved at every stage of the age-friendly process.

The relationship between quality of life and community design is important when assessing and planning for aging populations. The lack of community preparedness for the inevitable aged population in Sliema in part reflects the Maltese tendency to prioritise individual responsibility rather than a societal problem reflecting Maltese values of individualism, independence and autonomy. Older persons are expected to solve their own problems, principally by individual effort or by purchasing products and services. The well-being of older persons is apt to be seen as a social problem where their situations incur public costs. Sliema policy makers must focus on the ageing in place principle not ageing in community, whereby social policies and agendas regard the need of older persons paying attention to quality of life, social integration and community participation and other non economic outcomes of helping older persons to remain living in their homes and neighbourhoods. By changing the physical and social infrastructures of Sliema, one will be promoting the physical and psychosocial well-being of community members as they age. An Age-friendly community is one where older residents can continue to engage in lifelong interests and activities, enjoy opportunities to develop new interests and offers a source of fulfilment and receive the necessary support and accommodation that help meet their basic needs.
Here, it is also noteworthy that Scharlach and colleagues (2013) explained that the concept of age-friendliness is captured in five concepts derived from lifespan development psychology, namely ‘continuity’, ‘compensation’, ‘connection’, ‘contribution’ and ‘challenge’. Continuity refers to the ability to maintain established patterns of social behaviour and social circumstances so as to preserve internal psychological structures and health promoting activities. Compensation refers to the availability of products and services to meet the basic health and social needs of individuals with age-related disabilities. Connection refers to opportunities for meaningful interpersonal interactions that foster reciprocal support and maintain social connectedness. Contribution reflects the important adult development task of the lifelong need to feel that one is having a positive impact on one’s environment. Challenge refers to age-appropriate opportunities for stimulation whether in the form of physical exercise, intellectual demands or social engagement. Responsiveness to these five developmental tasks is reflected in a community’s physical and social infrastructure. For example in Sliema older adults are apt to walk more and be more functionally independent since in Sliema residential housing co exists with retail and commercial uses. Thus, in age-friendly Sliema, zoning regulations encourage more multiple family buildings and mixed use neighbourhoods, bringing people of all ages closer together with one another and with the services and products they need. Physical access and social integration are also facilitated by complete streets that enable multiple types of mobility, including walking, self-propelled and electric wheelchairs and bicycles. In Sliema, pedestrian crossings are programmed to allow slow moving pedestrians to cross safely. Social infrastructure of age-friendly communities also is designed to foster community participation and integration as residents age. As has been proposed by the Sliema mayor, with sufficient incentive and support, many older persons can participate in social, recreational and educational activities, as well as community focused civic engagements and volunteer opportunities. In so doing age-friendly communities can help to promote well being and inclusion of older Sliema residents, while also strengthening community integration and available social capital.
5.12 Conclusion

From the study’s findings one can conclude that a community assessment assists residents and local structures with the identification of community’s assets, lack of resources that either support or hinder ageing in place.

In congruence with Kinchman and colleagues (2007) significant challenges exist in Sliema in the promotion of ageing-in-place including, a lack of community based services and infrastructure to keep seniors healthy and independent for as long as possible. The study concludes that all too often, Sliema seniors are fairly happy with their community but there needs to be improvements, throughout the eight domains specifically with regards to mobility options, adequate and affordable housing and social respect and inclusion and civic participation.

According to the Philadelphia Corporation for aging (2008) connectivity or easy access either in the neighbourhood or via public transportation to shopping, cultural and educations opportunities, health providers and other service providers contribute positively to senior’s perception of a good neighbourhood and their ability to age in place. Finding the right people to lead these initiatives is therefore critical and at time challenging. Menec and colleagues (2016) couldn’t have described it better:

“Lots of people like to talk but they don’t like to do the walk... Trying to find those people that will follow through on getting things going as far as they can to get things done” (Menec and colleagues 2016, p. 112)

The study concluded that initiatives towards a more age-friendly Sliema should be a priority when considering the demographics of seniors in Sliema as well as the overall score of 2.11/4. Seniors should be involved in decision making and all the stakeholders
namely the central government, the local council, the church parishes and the NGOs should work in synchrony in engaging seniors’ initiatives through their experience and needs. In conclusion as Scharlach and colleagues (2013) discussed, the way forward towards an age-friendly Sliema, is the formulation of an action plan which would include adequate general physical and social infrastructures, minimal age-related barriers, compensatory and enabling features that responds to the residents’ needs and mechanisms for engaging older Sliema residents as valued contributors to their community.
CONCLUSION

In 2015 the White House Conference on ageing (WHCoA) addressed age-friendly community initiatives under the issue of healthy ageing. Correspondingly in his citation on the conference Greenfield (2015) quoted:

“Creating and supporting communities that are age-friendly can allow older adults to age-in-place in the community as well as assist in supporting their health and vitality. Bringing together enhanced partnerships among health care services, ageing services and housing can help support older Americans thriving in their communities as they age”. (U.S Department of Health and Human Services 2015 cited by Greenfield, 2015, p. 196).

Through this case study, the researcher studied the degree of age-friendliness in the town of Sliema. The results have confirmed that a high level of interest exists among senior residents to enhance Sliema’s age-friendliness, and they have provided a source of baseline data to identify key areas of concern.

Given the interest in perceptions and the experience of ageing in Sliema, a questionnaire was deemed an appropriate data collection tool. In this quantitative case study the researcher has taken the 8 domains from the WHO’s checklist, as the fundamental areas for the questionnaire. The WHO’s checklist together with the modified CASOA tool were used and the American Association Of Retired Persons (AARP) liveable communities evaluation guidelines was used as the basis of the checklist presented to the local council. In both tools some of the checklists were chosen depending on local priorities. Gerontologists using the Vancouver Protocol have sought to determine the extent to which
the eight domains are supported by empirical research on the environmental and social factors assisted with well-being in older age. With some slight divergences, these reviewers have confirmed the consistency of the domains with gerontological research.

The researcher worked with senior residents as well as the local council. The study concluded that in Sliema the main stake holders working towards an age-friendly Sliema are primarily the local council, the parishes and other NGOs. A total of 181 senior residents participated in the study. Participants were almost evenly split between males and females, 48% were females and 52% were males. 83% of participants pertained to the 60-80 age group. There was a remarkable result, when participants were asked to rate Sliema as a place to live in Sliema and Sliema as a place to retire in. 24.3% scored Sliema to be an excellent town to live in while 27% described it as excellent to retire in. This finding shows that notwithstanding the fact that the overall score for age-friendliness in Sliema, was of 2.11/4, older Sliema residents still perceive Sliema as an ideal town to retire in. The study concluded that the domain which ranked the highest age-friendly score was the social participation domain, followed by community and health services. Communication and information came in third place, followed by outdoor spaces, transportation and housing. The last two places with the least age-friendly scores were civic participation and employment in the 7th place and respect and social inclusion in 8th place. A very positive aspect which should be highlighted was the correlation of the hypothesis. Out of the 6 tested hypothesis, 5 hypothesis tested alternative. Perceived quality of life, perceived physical and mental health, gender and level of education in correlation with age-friendliness were all tested positive whilst only one hypothesis was null namely correlation between age and age-friendliness.

The study showed that the concept of age-friendliness is a very complex one. Its complexity has to be seen in the light of two separate pillars. Firstly as has been argued throughout the study, age-friendly measures across the 8 domains are interrelated and therefore should be tackled from a holistic point of view and not in individual interventions. Secondly all the stake holders need to work towards an age-friendly Sliema to achieve results. The main stake holders are the central government who provides the
services and resources for initiatives for age-friendly measures and the local council who is the link between the senior residents and the central government. As seen from the results, the parishes play a very important role in the everyday lives of senior residents in Sliema. Whilst the local council is working hard on the physical infrastructure for its’ senior residents, the parishes should be targeting their resources not just as a solidarity output for the most vulnerable but targeting initiatives towards the senior citizens by being knowledgeable on the concept of age-friendliness and how this effects all the community. The parishes underestimate the strength of the church in working with other stakeholders in making a more age-friendly Sliema through its input in the social infrastructure.

The study concluded that the ideal scenario would be if an entity is set up, being made up of representatives from the local council, a representative from all the 5 parishes, a representative from University of third age, a representative from the physical infrastructure domain, a representative from the health sector and representative from local businesses and a representative from NGOs working in the field of senior representatives and most important representatives from the different age cohorts among senior residents. Such a body can join all the resources and knowledge and expertise and work towards implementation of initiatives rather than duplicating services and having vacuum in some important areas. From the study it was concluded that senior residents want to be heard however they lack the resources to do so and lack the knowledge on where they can get information on initiatives. Thus having a common body and further more a space where these initiatives can be discussed and addressed would be the first milestone in promoting ageing-in-place and improving initiatives for a more age-friendly Sliema.

Finally providing a strong cross national evidence base body will help to stimulate other communities to incorporate age-friendly measures. Promoting a dialogue between towns and villages across Malta, together with the different stake holders could drive the age-friendly agenda forward in a number of ways. It could provide knowledge of best practises scenarios, which would increase the understanding of initiatives that work and what does not work in particular policy areas. Example of this is the data extrapolated on the circular
transport around Sliema. Whilst the local council stopped the initiative and substituted it with a dial a ride service, the majority of participants recommended that the circular service is implemented again. This body could support the development and implementation of smart and innovative solutions that other communities are engaging in. Different communities would be able to share methodologies and indicators to monitor and evaluate the wider socio-economic impact of investing in innovative services for living environments.

Keeping the above in mind and considering the study results and conclusions, we are left with a famous community building dictum “Alone it goes faster, together it goes further”.
REFERENCES


Research Ethics Proposal

and FREC Forms
### UNIVERSITY OF MALTA

**UNIVERSITY RESEARCH ETHICS COMMITTEE**

**Check list to be included with UREC Proposal Form**

Please make sure to tick **ALL** the items. Incomplete forms will not be accepted.

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NOT APP.</th>
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<tbody>
<tr>
<td>1a.</td>
<td>Recruitment letter/ information sheet for subjects, in English</td>
<td>x</td>
</tr>
<tr>
<td>1b.</td>
<td>Recruitment letter/ information sheet for subjects, in Maltese</td>
<td>x</td>
</tr>
<tr>
<td>2a.</td>
<td>Consent form, in English, signed by supervisor, and including your contact details</td>
<td>x</td>
</tr>
<tr>
<td>2b.</td>
<td>Consent form, in Maltese, signed by supervisor and including your contact details</td>
<td>x</td>
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<tr>
<td>3a.</td>
<td>In the case of children or other vulnerable groups, consent forms for parents/guardians, in English</td>
<td>x</td>
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<tr>
<td>3b.</td>
<td>In the case of children or other vulnerable groups, consent forms for parents/guardians, in Maltese</td>
<td>x</td>
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<tr>
<td>4a.</td>
<td>Tests, questionnaires, interview or focus group questions, etc in English</td>
<td>x</td>
</tr>
<tr>
<td>4b.</td>
<td>Tests, questionnaires, interview or focus group questions, etc in Maltese</td>
<td>x</td>
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<tr>
<td>5a.</td>
<td>Other institutional approval for access to subjects: Health Division, Directorate for Quality and Standards in Education, Department of Public Health, Curia...</td>
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</tr>
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<td>5d.</td>
<td>Other institutional approval for access of data: Registrar, Data Protection Officer, Health Division/ Hospital, Directorate for Quality and Standards in Education, Department of Public Health...</td>
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</tr>
<tr>
<td>5c.</td>
<td>Approval from Person Directly responsible for subjects: Medical Consultants, Nursing Officers, Head of School</td>
<td>x</td>
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Received by Faculty Office on: 06/09/2017
Discussed by Faculty Research Ethics Committee on: 15/09/2017
Discussed by University Research Ethics Committee on: 

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131
UNIVERSITY OF MALTA

Request for Approval of Human Subjects Research

Please type. Handwritten forms will not be accepted.

<table>
<thead>
<tr>
<th>FROM: (name, address for correspondence)</th>
<th>PROJECT TITLE:</th>
</tr>
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<tbody>
<tr>
<td>8/11 Windsor Towers, Windsor Terrace, Sliema. SLM 1857</td>
<td></td>
</tr>
</tbody>
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<table>
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<th>TELEPHONE: 21322414/99450380</th>
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<tbody>
<tr>
<td>EMAIL: <a href="mailto:claudette@vivendo.com.mt">claudette@vivendo.com.mt</a></td>
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<tr>
<th>COURSE AND YEAR:</th>
<th>FACULTY SUPERVISOR’S NAME AND EMAIL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Gerontology and Geriatrics, 2017-2018</td>
<td>Prof. Marvin Formosa</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:marvin.formosa@um.edu.mt">marvin.formosa@um.edu.mt</a></td>
</tr>
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<tr>
<td>From October 2017</td>
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<td>To May 2018</td>
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<th>ANTICIPATED FUNDING SOURCE:</th>
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<tr>
<td>(Include grant or contact number if known)</td>
<td></td>
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<tr>
<td>Not applicable</td>
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</table>

1. Please give a brief summary of the purpose of the research, in non-technical language.

The study aims to assess the degree of age-friendliness that the town of Sliema offers to its’ senior citizens. Hence, evaluating the possibilities and limitations of age-friendliness in the locality. The questionnaire to be used shall cover the 8 main domains of ‘age-friendly cities’ as presented by the World Health Organization (2007). These include outdoor spaces and buildings, transportation, housing, social participation, respect and social inclusion, civic participation and employment, communication and information and community support and health services.

2. Give details of procedures that relate to subjects’ participation (a) How are subjects recruited? What inducement is offered? (Append copy of letter or advertisement or poster, if any.)

The study will be carried out through the postal survey method. Senior citizens residing in Sliema shall be recruited by stratified sampling, according to gender, from the Electoral Register carried out in 2011 by the National Statistics Office and published in 2012. The Electoral Register is sectioned according to locality. Thus all the Sliema residents (over the age of 60), having their Identity Card number ending with 57 or less, are eligible for the study. A participant information letter, consent form and questionnaire, in both the English and Maltese languages, shall be locally mailed to the sample together with a self-addressed and stamped envelope. Kindly refer to attached forms.
(b) Salient characteristics of subjects – number who will participate, age range, sex, institutional affiliation, other special criteria:

The inclusion criteria are: persons aged 60+ who reside in Sliema.

(c) Describe how permission has been obtained from cooperating institution(s) – school, hospital, organization, prison, or other relevant organization (append letters). Is the approval of another Research Ethics Committee required?

Not applicable

(d) What do subjects do, or what is done to them, or what information is gathered? (Append copies of instructions or tests or questionnaires) How many times will observations, test, etc., be conducted? How long will their participation take?

Subjects are asked to fill in a questionnaire. The questionnaire, attached, covers the 8 World Health Organization domains on age-friendliness recommendations. The participants will be mailed a recruitment letter, consent form, and questionnaire - in both the English and Maltese languages – plus a self-addressed and stamped envelope. The subjects will complete the questionnaire in the comfort of their own homes. The survey instrument will allow participants full confidentiality and anonymity.

(e) Which of the following data categories are collected? Please tick where appropriate.

Data that reveals:

<table>
<thead>
<tr>
<th>Data Category</th>
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<tr>
<td>Race and ethnic origin</td>
<td>☐</td>
</tr>
<tr>
<td>Political opinions</td>
<td>☐</td>
</tr>
<tr>
<td>Religious and philosophical beliefs</td>
<td>☐</td>
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<tr>
<td>Trade union memberships</td>
<td>☐</td>
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<tr>
<td>Health</td>
<td>☐</td>
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<tr>
<td>Sex life</td>
<td>☐</td>
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<tr>
<td>Genetic information</td>
<td>☐</td>
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</tbody>
</table>
3. How do you explain the research to subjects and obtain their informed consent to participate? *(If in writing, append a copy of consent form.)* If subjects are minors, mentally infirm, or otherwise not legally competent to consent to participation, how is their assent obtained and from whom is proxy consent obtained? How is it made clear to subjects that they can quit the study at any time?

Participants are sent a recruitment letter as attached. Participation in the study is voluntary and anonymous. Participants may refuse to participate and even refuse to answer any question in the survey. Any publishing of the study, as a dissertation or chapter/article will give participants full confidentiality and anonymity.

4. Do subjects risk any harm – physical/ psychological/ legal/ social – by participating in the research? Are the risks necessary? What safeguards do you take to minimize the risks?

There are no known or anticipated risks or discomforts associated with participation in the study.

5. Are subjects deliberately deceived in any way? If so, what is the nature of the deception? Is it likely to be significant to subjects? Is there any other way to conduct the research that would not involve deception, and, if so, why have you not chosen that alternative? What explanation for the deception do you give to subjects following their participation?

The subjects will not in any way be deceived.

6. How will participation in this research benefit subjects? If subjects will be ‘debriefed’ or receive information about the research project following its conclusion, how do you ensure the educational value of the process? *(Include copies of any debriefing or educational materials)*

The participants may not directly benefit from the study but information provided. However, there will be indirect benefits as conclusions withdrawn and recommendations will be presented to the Sliema local council. The study will advance knowledge about the needs and priorities of older people living in Sliema and improve future age friendly policies and programs in Sliema which happens to be the second most elderly populated town in Malta.
TERMS AND CONDITIONS FOR APPROVAL IN TERMS OF THE DATA PROTECTION ACT

- Personal data shall only be collected and processed for the specific research purpose.
- The data shall be adequate, relevant and not excessive in relation to the processing purpose.
- All reasonable measures shall be taken to ensure the correctness of personal data
- Personal data shall not be disclosed to third parties and may only be required by the University or the Supervisor for verification purposes. All necessary measures shall be implemented to ensure confidentiality and where possible, data shall be anonymized.
- Unless otherwise authorized by the University Research Ethics Committee, the researcher shall obtain the consent from the data subject (respondent) and provide him with the following information: The researcher's identity and habitual residence, the purpose of processing and the recipients to whom personal data may be disclosed. The data subject shall also be informed about his rights to access, rectify, and where applicable erase the data concerning him.

I, the undersigned hereby undertake to abide by the terms and conditions for approval as attached to this application.

I, the undersigned, also give my consent to the University of Malta's Research Ethics Committee to process my personal data for the purpose of evaluating my request and other matters related to this application. I also understand that, I can request in writing a copy of my personal information. I shall also request rectification, blocking or erasure of such personal data that has not been processed in accordance with the Act.

Signature:

APPLICANT'S SIGNATURE:
I hereby declare that I will not start my research on human subjects before UREC approval

DATE 6/9/17

FACULTY SUPERVISOR'S SIGNATURE
I have reviewed this completed application and I am satisfied with the adequacy of the proposed research design and the measures proposed for the protection of human subjects.

DATE 6/9/17
To be completed by Faculty Research Ethics Committee

We have examined the above proposal and advise

Acceptance  Refusal  Conditional Acceptance

For the following reason/s:

All is order.

Considering the methodology does not put student in contact with survey participants

there is no need for UREC approval.

Signature:  
Date: 15/9/17

To be completed by University Research Ethics Committee

We have examined the above proposal and advise

Acceptance  Refusal  Conditional Acceptance

For the following reason/s:

Signature:  
Date:
COVERING LETTER
FOR
QUESTIONNAIRE
APPENDIX B.1

Recruitment Letter

Dear Sliema resident

You have been randomly selected to participate in a study about the needs of older adults in Sliema. The study is being carried out as part of a Master Degree in Geriatrics and Gerontology at the University Of Malta. The title of the study is ‘Towards age-friendly cities and communities: A case study of the Sliema Locality’. The purpose of this letter is to provide you with information required to make informal decisions or not to complete this survey.

The aim of the study is to assess how age friendly Sliema is to its’ senior citizens. By answering this simple questionnaire you will be helping the researcher to evaluate the strengths and weaknesses of our community. The study will help the researcher understand the needs of current and future senior citizens living in Sliema. In order to conduct such study the researcher shall be needing participants to kindly answer the attached questionnaire. The inclusion criteria for this study include being as resident in Sliema and being over the age of 60. Please note that no personal questions will be asked other than age and gender. No personal information, data collection and results will be shared to any media. Participation in the study is voluntary. You may refuse to participate. If the results of the survey are published the information you provided will only be reported in group form. There are no known or anticipated risks or discomforts associated with participating in this study.

Thus, if you are interested in participating in the study, kindly complete the online survey attached with this email in your preferred language. Once you complete the survey it will be sent to the researcher automatically. The survey would only take a few minutes to complete. We look forward to your participation. You may not directly benefit from participating in this study but information provided in the form of recommendations and conclusions will be passed over to the Sliema local council. Thank you for your time and interest towards a better Sliema for senior citizens. If you require any further information, kindly contact the researcher Claudette Gauci on 99450380.

Thanking you in advance.

Regards,

Mrs. Claudette Gauci B.Sc.(Hons.), Dip. Ger.
APPENDIX B.2

Ittra ta’ Partecipazzjonijon

Għażż żpartecipant


L-ghan ta’ dan l-istudju huwa sabiex jara kemm Tas-Sliema toffri opportunitajiet lilll-anzjani residenti sabiex dawn ikollhom kwalita’ ta’ ħajja aħjar. Dan l-istudju jgħin lir-riċerkatrriċi tifhem aktar il-bżonnijiet tal-anzjani li jgħixu Tas-Sliema.

Din l-ittra ser tantiċipa t-termini u kundizzjonijiet li japlikaw għall-partecipanti.


Nirringrazjajk bil-quddiem.

Dejjem tieghek,

Mrs. Claudette Gauci B.Sc.(Hons.), Dip. Ger.
APPENDIX C

C.1 MODIFIED CASOA TOOL

C.2 WHO GLOBAL AGE-FRIENDLY CITIES CHECKLIST
### APPENDIX C.1

**Appendix C Modified CASOA**

Please complete this questionnaire if you are the resident age 55 or older in the household who most recently had a birthday. The year of birth of the 55+ age resident does not matter. Please circle the response that most closely represents your opinion for each question. Your responses are anonymous and will be reported in group form only.

1. Please circle the number that comes closest to your opinion for each of the following questions:

<table>
<thead>
<tr>
<th>Question</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you rate London as a place to live?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>How do you rate London as a place to retire?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2. Please rate each of the following characteristics as they relate to adults age 55 or older in London:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities to volunteer</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Employment opportunities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Opportunities to enrol in skill-building or personal enrichment classes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Recreation opportunities (including games, arts, library services, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Fitness opportunities (including exercise classes, &amp; paths or trails, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Opportunities to attend social events or activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Opportunities to attend religious or spiritual activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Opportunities to attend or participate in meetings about local government or community matters</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Availability of affordable quality housing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Variety of housing options</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Availability of information about resources for older adults</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
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<td>Availability of financial or legal planning services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Availability of affordable quality physical health care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Availability of affordable quality mental health care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Availability of preventive health services (e.g., health screenings, flu shots, educational workshops)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Availability of affordable quality food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Sense of community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Openness and acceptance of the community towards older residents of diverse backgrounds</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ease of bus travel in London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ease of car travel in London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ease of walking in London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ease of getting to the places you usually have to visit (e.g., grocery store, doctor's office, pharmacy, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Overall feeling of safety in London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Valuing older residents in London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Neighbourliness of London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
3. How would you rate the overall services provided to older adults in London?
   □ Excellent
   □ Good
   □ Fair
   □ Poor
   □ Don’t know

4. In general, how informed or uninformed do you feel about services and activities available to older adults in London?
   □ Very informed
   □ Somewhat informed
   □ Somewhat uninformed
   □ Very uninformed

5. Please circle the number that comes closest to your opinion for each of the following questions:

<table>
<thead>
<tr>
<th>Question</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you rate your overall physical health?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>How do you rate your overall mental health/emotional well being?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>How do you rate your overall quality of life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

6a. The following questions list a number of problems that older adults may or may not face. Thinking back over the last 12 months, how much of a problem, if at all, has each of the following been for you?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not a problem</th>
<th>Minor problem</th>
<th>Moderate problem</th>
<th>Major problem</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having housing to suit your needs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Your physical health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Performing regular activities, including walking, eating and preparing meals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Having enough food to eat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Doing heavy or intense housework</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Having safe and affordable transportation available</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>No longer being able to drive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Feeling depressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Experiencing confusion or forgetfulness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Maintaining your home</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Maintaining your yard</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Finding productive or meaningful activities to do</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Having friends or family you can rely on</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Falling or injuring yourself in your home</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Finding affordable health insurance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Getting the health care you need</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Problem</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Affording the medications you need</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting the oral health care you need</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having tooth or mouth problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having enough money to meet daily expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having enough money to pay your property taxes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6b. The following questions list a number of other problems that older adults may or may not face. Thinking back over the last 12 months, how much of a problem, if at all, has each of the following been for you? (Not a problem, Minor problem, Moderate problem, Major problem, Don't know)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not a problem</th>
<th>Minor problem</th>
<th>Moderate problem</th>
<th>Major problem</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staying physically fit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Maintaining a healthy diet</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Having interesting recreational or cultural activities to attend</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Having interesting social events or activities to attend</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Feeling bored</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Feeling like your voice is heard in the community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Finding meaningful volunteer work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Providing care for another person</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Dealing with legal issues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Having adequate information for dealing with public programs such as Canadian Pension Plan</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Finding work in retirement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Building skills for paid or unpaid work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Not knowing what services are available to older adults in London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Feeling lonely or isolated</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Dealing with the loss of a close family member or friend</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Being a victim of crime</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Being a victim of fraud or a scam</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Being physically or emotionally abused</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Dealing with financial planning issues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

7. Thinking back over the past 12 months, how many days did you spend...

As a patient in a hospital? ______ number of days

In a nursing home or in-patient rehabilitation facility? ______ number of days

8. Thinking back over the past 12 months, how many times have you fallen and injured yourself? Was it...

- Never
- Once or twice
- 3-5 times
- More than 5 times
- Don't know
9. How likely or unlikely are you to recommend living in London to older adults?
- Very likely
- Somewhat likely
- Somewhat unlikely
- Very unlikely
- Don't know

10. How likely or unlikely are you to remain in London throughout your retirement?
- Very likely
- Somewhat likely
- Somewhat unlikely
- Very unlikely
- Don't know

11. In the last 12 months, about how many times, if ever, have you participated in or done each of the following?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Once or twice</th>
<th>3 to 12 times</th>
<th>13 to 26 times</th>
<th>More than 26 times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used a senior center in your community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Used a recreation center in your community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Used a public library in your community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Attended a meeting of your community’s local elected officials or other local public meeting</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Watched a meeting of your community’s local elected officials or other public meeting on cable television, the Internet or other media</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Used public transit (e.g., bus) within your community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Visited a neighbourhood park</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

12. During a typical week, how many hours, if any, do you spend doing the following?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never (no hours)</th>
<th>1 to 3 hours</th>
<th>4 to 5 hours</th>
<th>6 to 10 hours</th>
<th>11 or more hours</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating in a club (including book, dance, game and other social)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Participating in a civic group (including Kinsmen, Lions, Over 55, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Communicating/visiting with friends and/or family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Participating in religious or spiritual activities with others</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Participating in a recreation program or group activity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Providing help to friends or relatives</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Volunteering your time to some group/activity in London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
13. During a typical week, how many hours do you spend providing care for one or more individuals with whom you have a significant personal relationship (such as a spouse, other relative, partner, friend, neighbour or child), whether or not they live with you?

<table>
<thead>
<tr>
<th></th>
<th>Never (no hours)</th>
<th>1 to 3 hours</th>
<th>4 to 5 hours</th>
<th>6 to 10 hours</th>
<th>11 to 19 hours</th>
<th>20 or more hours</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or more individuals age 60 or older</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>One or more individuals age 18 to 59</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>One or more individuals under age 18</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

14. Whether or not they live with you, does someone provide assistance to you almost every day?
- Yes
- No

Our next questions are about you and your household. Again, all of your responses to this survey are completely anonymous and will be reported in group form only.

D1. How many years have you lived in London?
- Less than 1 year
- 1-5 years
- 6-10 years
- 11-20 years
- More than 20 years

D2. Which best describes the building you live in?
- Single family home
- Townhouse, condominium, duplex or apartment
- Mobile home
- Assisted living residence
- Nursing home
- Other

D3. Do you currently rent or own your home?
- Rent
- Own (with a mortgage payment)
- Own (free and clear; no mortgage)

D4. About how much is your monthly housing cost for the place you live (including rent, mortgage payment, property tax, property insurance and homeowners' fees)?
- Less than $300 per month
- $300 to $599 per month
- $600 to $999 per month
- $1,000 to $1,499 per month
- $1,500 to $2,499 per month
- $2,500 or more per month

D5. How many people, including yourself, live in your household? _______ members

D6. How many of these people, including yourself, are 55 or older? _______ members

D7. What is your employment status?
- Fully retired → Go to Question D9
- Working full time for pay
- Working part time for pay
- Unemployed, looking for paid work
- Other ________________
D8. [IF NOT YET FULLY RETIRED] At what age do you expect to retire completely and not work for pay at all? ________ years old

D9. How much do you anticipate your household’s total income before taxes will be for the current year? (Please include in your total income money from all sources for all persons living in your household.)

- [ ] Less than $15,000
- [ ] $15,000 to $24,999
- [ ] $25,000 to $49,999
- [ ] $50,000 to $74,999
- [ ] $75,000 to $99,999
- [ ] $100,000 or more
- [ ] Choose not to answer

D10. Are you French Canadian?

- [ ] Yes
- [ ] No

D11. What is your ethnic origin or visible minority? (Mark one or more that apply)

- [ ] Arab
- [ ] Black
- [ ] Chinese
- [ ] Filipino
- [ ] Japanese
- [ ] Korean
- [ ] Latin American
- [ ] South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
- [ ] Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, etc.)
- [ ] Status Indian (Registered or Treaty)
- [ ] West Asian (e.g., Iranian, Afghan, etc.)
- [ ] White
- [ ] Other

D12. In which category is your age?

- [ ] 55-59 years
- [ ] 60-64 years
- [ ] 65-69 years
- [ ] 70-74 years
- [ ] 75-79 years
- [ ] 80-84 years
- [ ] 85-89 years
- [ ] 90-94 years
- [ ] 95-99 years
- [ ] 100 years or older

D13. What is your gender?

- [ ] Female
- [ ] Male

D14. What is your sexual orientation?

- [ ] Heterosexual
- [ ] Lesbian
- [ ] Gay
- [ ] Bi-sexual
- [ ] Choose not to answer

D15. Are you registered to vote in municipal elections?

- [ ] Yes
- [ ] No
- [ ] Ineligible to vote
- [ ] Don’t know
D16. Many people don't have time to vote in elections. Did you vote in the last municipal, OR provincial, OR federal election?

☐ Yes  ☐ Ineligible to vote
☐ No  ☐ Don't know

Our final questions are related specifically to the London Age Friendly Initiative:

17. Please rate each of the following characteristics as they relate to adults age 55 or older in London:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility of public buildings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Accessibility of businesses</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Places to sit or rest in the parks</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Places to sit or rest downtown</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Availability of public washrooms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ease of entering or exiting public buildings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Accessibility of public buildings for people with disabilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ease of walking on sidewalks and in public places</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

18. Are you aware of transportation options available to Londoners other than the London Transit Commission buses?

☐ Very aware  ☐ Somewhat aware  ☐ Somewhat unaware  ☐ Very unaware

19. Please indicate which of the following transportation options you use on a regular basis. Check all that apply.

☐ Car – I drive myself  ☐ Car – Someone else drives me  ☐ London Transit Bus  ☐ ParaTransit  ☐ Taxi  ☐ Volunteer transportation services (e.g. Boys' and Girls' Club of London, Seniors' Transit, etc.)  ☐ None of the above  ☐ Other

20. How affordable is London public transit for you personally?

☐ Very affordable  ☐ Very unaffordable  ☐ Somewhat affordable  ☐ Don't know  ☐ Somewhat unaffordable  ☐ I don't use public transit
21. Do you agree or disagree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Don’t know</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>All city areas and services are accessible by public transport</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Information for bus routes and schedules is available and easily accessible</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Buses are accessible to people with disabilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Bus drivers are courteous to older people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

22. Please rate each of the following characteristics as they relate to adults age 55 or older in London:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of affordable housing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Variety of housing options for older people</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Availability of housing for low income seniors</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Housing options that are safe and accessible</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

23. How do you currently get information on programs and services for older adults in London? Check all that apply.

- Advertisement at community centre or library bulletin board
- Church newsletters or bulletins
- Community associations
- Email newsletters
- Free newspapers (Londoner, Community News, Metro)
- Friend, neighbour, or family member
- Internet on a personal computer
- Internet on a public computer
- London Free Press
- Senior’s Helpline
- Yellow Pages or phone book
- 211 Phone Line
- Other __________

24. Please circle the number that comes closest to your opinion for each of the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Don’t know</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information in public areas (e.g., posters, brochures) is available in a format that I can take home with me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Information from public areas is clear and readable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am well-informed about community events in London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am well-informed about public services available to me in London</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

25. What are the first three digits of your postal code (write here): __________

Please take a moment to check that you have answered all questions and return the survey in the provided postage paid envelope. Thank you for completing this survey.
APPENDIX C.2

Checklist of Essential Features of Age-friendly Cities

This checklist of essential age-friendly city features is based on the results of the WHO Global Age-Friendly Cities project consultation in 33 cities in 22 countries. The checklist is a tool for a city's self-assessment and a map for charting progress. More detailed checklists of age-friendly city features are to be found in the WHO Global Age-Friendly Cities Guide.

This checklist is intended to be used by individuals and groups interested in making their city more age-friendly. For the checklist to be effective, older people must be involved as full partners. In assessing a city's strengths and deficiencies, older people will describe how the checklist of features matches their own experience of the city's positive characteristics and barriers. They should play a role in suggesting changes and in implementing and monitoring improvements.

Outdoor spaces and buildings

- Public areas are clean and pleasant.
- Green spaces and outdoor seating are sufficient in number, well-maintained and safe.
- Pavements are well-maintained, free of obstructions and reserved for pedestrians.
- Pavements are non-slip, are wide enough for wheelchairs and have dropped curbs to road level.
- Pedestrian crossings are sufficient in number and safe for people with different levels and types of disability, with non-slip markings, visual and audio cues and adequate crossing times.
- Drivers give way to pedestrians at intersections and pedestrian crossings.
- Cycle paths are separate from pavements and other pedestrian walkways.
- Outdoor safety is promoted by good street lighting, police patrols and community education.
- Services are situated together and are accessible.
- Special customer service arrangements are provided, such as separate queues or service counters for older people.
- Buildings are well-signed outside and inside, with sufficient seating and toilets, accessible elevators, ramps, railings and stairs, and non-slip floors.
- Public toilets outdoors and indoors are sufficient in number, clean, well-maintained and accessible.

Transportation

- Public transportation costs are consistent, clearly displayed and affordable.
- Public transportation is reliable and frequent, including at night and on weekends and holidays.
- All city areas and services are accessible by public transport, with good connections and well-marked routes and vehicles.
■ Vehicles are clean, well-maintained, accessible, not overcrowded and have priority seating that is respected.

■ Specialized transportation is available for disabled people.

■ Drivers stop at designated stops and beside the curb to facilitate boarding and wait for passengers to be seated before driving off.

■ Transport stops and stations are conveniently located, accessible, safe, clean, well-lit and well-marked, with adequate seating and shelter.

■ Complete and accessible information is provided to users about routes, schedules and special needs facilities.

■ A voluntary transport service is available where public transportation is too limited.

■ Taxis are accessible and affordable, and drivers are courteous and helpful.

■ Roads are well-maintained, with covered drains and good lighting.

■ Traffic flow is well-regulated.

■ Roadways are free of obstructions that block drivers’ vision.

■ Traffic signs and intersections are visible and well-placed.

■ Driver education and refresher courses are promoted for all drivers.

■ Parking and drop-off areas are safe, sufficient in number and conveniently located.

■ Priority parking and drop-off spots for people with special needs are available and respected.

**Housing**

■ Sufficient, affordable housing is available in areas that are safe and close to services and the rest of the community.

■ Sufficient and affordable home maintenance and support services are available.

■ Housing is well-constructed and provides safe and comfortable shelter from the weather.

■ Interior spaces and level surfaces allow freedom of movement in all rooms and passageways.

■ Home modification options and supplies are available and affordable, and providers understand the needs of older people.

■ Public and commercial rental housing is clean, well-maintained and safe.

■ Sufficient and affordable housing for frail and disabled older people, with appropriate services, is provided locally.

**Social participation**

■ Venues for events and activities are conveniently located, accessible, well-lit and easily reached by public transport.

■ Events are held at times convenient for older people.

■ Activities and events can be attended alone or with a companion.

■ Activities and attractions are affordable, with no hidden or additional participation costs.
Good information about activities and events is provided, including details about accessibility of facilities and transportation options for older people.

A wide variety of activities is offered to appeal to a diverse population of older people.

Gatherings including older people are held in various local community spots, such as recreation centres, schools, libraries, community centres and parks.

There is consistent outreach to include people at risk of social isolation.

**Respect and social inclusion**

Older people are regularly consulted by public, voluntary and commercial services on how to serve them better.

Services and products to suit varying needs and preferences are provided by public and commercial services.

Service staff are courteous and helpful.

Older people are visible in the media, and are depicted positively and without stereotyping.

Community-wide settings, activities and events attract all generations by accommodating age-specific needs and preferences.

Older people are specifically included in community activities for “families”.

Schools provide opportunities to learn about ageing and older people, and involve older people in school activities.

Older people are recognized by the community for their past as well as their present contributions.

Older people who are less well-off have good access to public, voluntary and private services.

**Civic participation and employment**

A range of flexible options for older volunteers is available, with training, recognition, guidance and compensation for personal costs.

The qualities of older employees are well-promoted.

A range of flexible and appropriately paid opportunities for older people to work is promoted.

Discrimination on the basis of age alone is forbidden in the hiring, retention, promotion and training of employees.

Workplaces are adapted to meet the needs of disabled people.

Self-employment options for older people are promoted and supported.

Training in post-retirement options is provided for older workers.

Decision-making bodies in public, private and voluntary sectors encourage and facilitate membership of older people.

**Communication and information**

A basic, effective communication system reaches community residents of all ages.

Regular and widespread distribution of information is assured and a coordinated, centralized access is provided.
☐ Regular information and broadcasts of interest to older people are offered.

☐ Oral communication accessible to older people is promoted.

☐ People at risk of social isolation get one-to-one information from trusted individuals.

☐ Public and commercial services provide friendly, person-to-person service on request.

☐ Printed information – including official forms, television captions and text on visual displays – has large lettering and the main ideas are shown by clear headings and bold-face type.

☐ Print and spoken communication uses simple, familiar words in short, straightforward sentences.

☐ Telephone answering services give instructions slowly and clearly and tell callers how to repeat the message at any time.

☐ Electronic equipment, such as mobile telephones, radios, televisions, and bank and ticket machines, has large buttons and big lettering.

☐ There is wide public access to computers and the Internet, at no or minimal charge, in public places such as government offices, community centres and libraries.

**Community and health services**

☐ An adequate range of health and community support services is offered for promoting, maintaining and restoring health.

☐ Home care services include health and personal care and housekeeping.

☐ Health and social services are conveniently located and accessible by all means of transport.

☐ Residential care facilities and designated older people’s housing are located close to services and the rest of the community.

☐ Health and community service facilities are safely constructed and fully accessible.

☐ Clear and accessible information is provided about health and social services for older people.

☐ Delivery of services is coordinated and administratively simple.

☐ All staff are respectful, helpful and trained to serve older people.

☐ Economic barriers impeding access to health and community support services are minimized.

☐ Voluntary services by people of all ages are encouraged and supported.

☐ There are sufficient and accessible burial sites.

☐ Community emergency planning takes into account the vulnerabilities and capacities of older people.
QUESTIONNAIRE USED IN THE STUDY

D.1 ENGLISH VERSION

D.2 MALTESE VERSION
APPENDIX D.1 ENGLISH VERSION

Research Questionnaire

Please circle the response that most closely represents your opinion for each question. Your responses are anonymous and will be reported in group form only.

1. Indicate your age

1  60 – 69
2  70 – 79
3  80 – 89
4  90 +

2. Level of Education

1  Primary
2  Secondary
3  Tertiary

3. Gender

1  Male
2  Female

4. Please circle the number that comes closest to your opinion for each of the following questions:

<table>
<thead>
<tr>
<th>How do you rate Sliema as a place to live?</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
5. Please circle the number that comes closest to your opinion for each of the following questions:

<table>
<thead>
<tr>
<th>How do you rate Sliema as a place to retire?</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Please circle the number that comes closest to your opinion for each of the following questions:

<table>
<thead>
<tr>
<th>6</th>
<th>How do you rate your physical health?</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7</th>
<th>How do you rate your mental well being?</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8</th>
<th>How do you rate your quality of life?</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
**Outdoor Spaces in Sliema**

Please rate each of the following characteristics as they relate to adults age 60 and over in Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Accessibility of public buildings.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Accessibility of businesses</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Places to sit or rest in the parks.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>Places to sit or rest in the town’s centre.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Availability of public washrooms.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Ease of entering and exiting public buildings.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>Ease of walking on pavements and in public places.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>Cleanliness of public spaces.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
Transportation in Sliema:

Please rate each of the following characteristics as they relate to adults age 60 and over in Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Ease to travel by car in Sliema.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>Ease to get to the places you frequently visit.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>Ease to use public transport.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Availability of information provided to older people on bus routes and schedules.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>Accessibility of public services by public transport.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>Reliability of public transport.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>Accessibility of buses by older people.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>Affordability of taxis.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>Availability of priority parking bays for older people.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
## Housing in Sliema:

Please rate each of the following characteristics as they relate to adults age 60 and over in Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Availability of affordable housing in Sliema.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>27</td>
<td>Choice of housing options in Sliema.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>28</td>
<td>Presence of housing with appropriate equipment to meet environmental conditions (e.g. appropriate air-conditioning or heating).</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>29</td>
<td>Availability of equipment for housing modifications.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>Affordability of services provided to enable older people to remain at home, to “age in place”.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>31</td>
<td>Adequate information to older people to help them age in place.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>32</td>
<td>Feeling of safety in the environment around older people.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
Social participation in Sliema:

Please rate each of the following characteristics as they relate to adults age 60 and over in Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Opportunities to attend social activities.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>34</td>
<td>Opportunities to attend Religious and spiritual activities.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>35</td>
<td>Service offered by the public library.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>36</td>
<td>Opportunities to attend public local council meetings</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>37</td>
<td>Good communication with older people, about social activities.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>38</td>
<td>Affordability of social activities and local attractions.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
Respect and social inclusion in Sliema:

Please rate each of the following characteristics as they relate to adults age 60 and over in Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>Consultation by public, voluntary and commercial services on ways to serve older people better.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>40</td>
<td>Involvement of older people in local school activities with children and teachers.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Civic participation and employment in Sliema:

Please rate each of the following characteristics as they relate to adults age 60 and over in Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Opportunities for older people to volunteer in Sliema.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>42</td>
<td>Opportunities for older people to work.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>43</td>
<td>Opportunities for Training in post-retirement for older workers.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
**Communication and information in Sliema:**

Please rate each of the following characteristics as they relate to adults age 60 and over in Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Information about services organised for older adults by the local council.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>45</td>
<td>Information about services and activities organised for older adults by voluntary organisations.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>46</td>
<td>Information about services and activities organised for older adults by the government.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>47</td>
<td>Information about services and activities organised for older adults by the church.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>48</td>
<td>Information about resources of older adults.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>49</td>
<td>Availability of financial or legal planning services.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>50</td>
<td>Availability of affordable quality physical health care.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>51</td>
<td>Availability of affordable quality mental health care.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
52 How do you currently get information on programmes and services for older adults in Sliema?

Check the ones that apply most.

- Advertisements at community centre or library bulletin board
- Church newsletters or bulletins
- Community associations
- Email newsletters
- Free newspapers
- Friends, neighbour or family member
- Internet on a personal computer
- Internet on public computer
- Senior’s helpline
- Yellow pages or phone book

**Community and Health services in Sliema**

Please rate each of the following characteristics as they relate to adults aged 60 and over in Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>53</strong> Distribution of Health services throughout Sliema.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>54</strong> Distribution of Social services throughout Sliema.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

55 Mention at least one age friendly recommendation, activity or service which you would implement in the locality of Sliema for older adults.
APPENDIX D.2 MALTESE VERSION

Kwestjonarju


6. Indika l-eta’ tieghek

   1 60 – 69
   2 70 – 79
   3 80 – 89
   4 90+

7. Sess

   1 Mara
   2 Raġel

8. Livell ta’ Edukazzjoni

   1 Livell Primarju
   2 Livell Sekondarju
   3 Livell Terzjarju

9. Immarka n-numru li l-aktar li jaqbel mal-opinjoni tiegħek fuq dawn il-mistoqsijiet:

<table>
<thead>
<tr>
<th>Eċċellenti</th>
<th>Tajjeb</th>
<th>Mhux hażin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kif tara lil Tas-sliema bħala post biex tgħix fih?</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
10. Immarka n-numru li l-aktar li jaqbel mal-opinjoni tiegħek fuq dawn il-mistoqsijiet:

<table>
<thead>
<tr>
<th></th>
<th>Eccellenti</th>
<th>Tajjeb</th>
<th>Mhux hażin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kif tara lil Tas-Sliema bħala post li fih tista’ tirtira.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Immarka n-numru li l-aktar li jaqbel mal-opinjoni tiegħek fuq dawn il-mistoqsijiet:

<table>
<thead>
<tr>
<th></th>
<th>Eccellenti</th>
<th>Tajjeb</th>
<th>Mhux hażin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Kemm taħseb li inti b’saħħtek fiżikament?</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Kemm taħseb li inti b’saħħtek mentalment?</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Kemm taħseb li għandek kwalita’ ta’ ħajja tajba?</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
Il-Madwar

Agħżel l-aktar deskirzzjoni li tirrelata mal-anzjani li jgħixu f’ Tas-Sliema:

<table>
<thead>
<tr>
<th>Nr</th>
<th>Ħalin bista għall-binjet pubblici.</th>
<th>Eccellenti</th>
<th>Tajjeb</th>
<th>Mhux ħazin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Aċċessibilita’ għan-negożji.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Postijiet fejn tista’ tistrieħ jew tpoğgi fil-ġonna.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Postijiet fejn tistrieħ jew tpoğgi fiċ-ċentru ta’ Tas-Sliema.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Disponibbilita’ ta’ toilets.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Aċċess komdu ta’ hruġ u dħul f'postijiet pubblici.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>Faċilta’ biex timxi fuq bankini.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>Indafa ta’ postijiet pubblici.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
## Trasport f’Tas Sliema

Kemm taqbel jew ma taqbilx ma dawn l-opinjonijiet:

<table>
<thead>
<tr>
<th></th>
<th>Eċċellenti</th>
<th>Tajjeb</th>
<th>Mhux ġazin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Faċilita’ biex tuża l-karozza.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>Faċilita’ biex tasal fil-postijiet li żżur ta’ spiss.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>Faċilita’ biex tuża t-transport publiku.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>Informazzjoni għall-anzjani fuq rotot u ħinijiet ta’ tal-linja.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>Aċċessibilita’ għall-servizzi pubbliċi bit-transport publiku.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>Serħan il-moħħ meta tuża t-trasport publiku.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>Aċċessibilita’ biex tuża t-transport publiku.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>Prezz biex tuża ‘taxi’.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>Aċċesibilita’ ta’ spazji ta’ parrkeġġ apposta għall-anzjani.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
‘Housing’

Agħżel l-aktar deskrizjoni li tirrelata mal-anzjani li jgħixu f’ Tas-Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Eccellenti</th>
<th>Tajjeb</th>
<th>Mhux ħażin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>‘Housing’ disponibbli bi prezziziet raġonevoli.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>27</td>
<td>Għażla ta’ varjeta’ ta’ ‘housing’ għall-anzjani</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>28</td>
<td>Tagħmir ġewwa id-djar li jikkonformaw mal-ambjent ta’ Malta( bħal sistema ta’ arja kundizzjonata u tagħmir biex iżżomm id-dar sħuna.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>29</td>
<td>Disponibilta’ ta appartat biex timmodifika id-dar.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>Kapacita’ biex thallas għall- servizzi biex jgħinu lill-anzjani jibqgħu jgħixu id-dar.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>31</td>
<td>Informazzjoni meħtiega biex tghin lill-anzjani jibqgħu jgħixi ġewwa darhom.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>32</td>
<td>Serħan il-mohħ bħala sigurta’ għall- anzjani.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
Partecipazzjoni Soċjali f’ Tas-Sliema

Aghżel l-aktar deskizzjoni li tirrelata mal-anzjani li jgħixu f’Tas-Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Eċċellenti</th>
<th>Tajjeb</th>
<th>Mhux hażin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Opportunitajiet biex tattendi attivitajiet soċjali.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>34</td>
<td>Opportunitajiet biex tattendi attivitajiet religjużi u spiritwali</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>35</td>
<td>Servizz offrut mill-librerija pubblika.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>36</td>
<td>Opportunita’ sabiex tattendi laqghat tal- kunsilli lokali.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>37</td>
<td>Informazzjoni meħtiega fuq attivitajiet soċjali.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>38</td>
<td>Prezz ragonevoli biex tattendi attivitajiet soċjali u attrazzjonijiet lokali.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
## Rispett u Inklużjoni Socjali f’ Tas- Sliema

Agħżel l-aktar deskriżzjoni li tirrelata mal-anzjani li jgħixu f’ Tas-Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Eċċelenti</th>
<th>tajjeb</th>
<th>Mhux ħazin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>Kunsultazzjoni mill-kunsill, għaqdiet volontarji u servizzi kummercjali, fuq modi kif dawn jistgħu iservu lil-anzjani ahjar.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>40</td>
<td>Involviment tal-anzjani f’iskejjel lokali , mat-tfal u l-ġhalliema.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

## Parteċippazzjoni Ċivika u Impjieg f’ Tas-Sliema

Agħżel l-aktar deskriżzjoni li tirrelata mal-anzjani li jgħixu f’ Tas-Sliema:

<table>
<thead>
<tr>
<th></th>
<th>Eċċelenti</th>
<th>tajjeb</th>
<th>Mhux ħazin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Opportunita’ għall-anzjani biex jagħmlu xogħol volontarju.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>42</td>
<td>Opportunitajiet għall-anzjani biex isibu impjieg.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>43</td>
<td>Opportunitajiet għall-tahrig wara l-irtirar mix-xogħol.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
## Kummunikazzjoni u Informazzjoni għall-anzjani

Aġħżel l-aktar deskrizzjoni li tirrelata mal-anzjani li jgħixu f’ Tas-Sliema

<table>
<thead>
<tr>
<th></th>
<th>Eċċelenti</th>
<th>tajjeb</th>
<th>Mhux ħazin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Informazzjini fuq servizzi u attivitajiet organizzati għall-anzjani f’ Tas – Sliema mill-kunsill lokali.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>45</td>
<td>Informazzjoni fuq servizzi u attivitajiet organizzati għall-anzjani f’ Tas – Sliema mill-għaqdiet volontarji.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>46</td>
<td>Informazzjoni fuq servizzi u attivitajiet organizzati għall-anzjani f’ Tas-Sliema mill-għaqdiet tal-gvern.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>47</td>
<td>Informazzjoni fuq servizzi u attivitajiet organizzati għall-anzjani f’ Tas-Sliema mill-għaqdiet religjużi.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>48</td>
<td>Informazzjoni fuq riżorsi</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
52. Bħal-issa, kif tikseb informazzjoni fuq attivitalkiet u servizzi għall-anzjani f’Tas-Sliema. Aghżel dawk kollha li japplikaw.

   - Riklami fiċ-ċentri tal-komunita’ jew libreriji
   - Fuljetti tal-knisja
   - Assoċjazzjonijiet fil-Komunita’
   - Emails
   - Gazzetti
   - Ġirien, ħbieb jew familjari
   - Internet personali
   - Internet minn post publiku
   - Helpline għall-anzjani
   - Yellow pages jew diretta torju
   - Mezz iehor

<table>
<thead>
<tr>
<th></th>
<th>Informazzjoni fuq servizzi finanzjarji jew legali.</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Informazzjoni fuq servizzi mogħtija biex itejbu is-saħħa fiżika.</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Informazzjoni fuq servizzi mogħtija biex itejbu is-saħħa mentali.</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Servizzi Kummunitarji u tas-saħħa

Aġħżel l-aktar deskrizzjoni li tirrelata mal-anzjani li jgħixu f’ Tas-Sliema

<table>
<thead>
<tr>
<th></th>
<th>Eċċelenti</th>
<th>tajjeb</th>
<th>Mhux ġażin</th>
<th>Mhux tajjeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>53 Mod ta’ kif inhuma imqassma is-servizzi tas-saħħa f’Tas-Sliema</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>54 Mod ta’ kif inhuma imqassma is-servizzi socjali f’ Tas-Sliema.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

55. Semmi xi suġġerimenti rigward attivitajiet jew servizzi li tirrakomanda biex ittejjeb il-kwalita’ tal-ħajja tal-anzjani ġewwa Tas-Sliema.
Liveable Communities: Evaluation Guide
2005: Published by the American Association
of Retired People.
Survey answered by Sliema Local Council Mayor: Mr. Anthony Chircop.

Kindly fill in as appropriate:

**A. Transportation**

Public transportation

1. Does your community have a regularly scheduled bus or other public transportation service that picks up passengers at established stops?
   
   o YES
   o NO

2. If there is regularly scheduled bus or other services, are stops located within a 10-minute walk of residences in the sections of town with older residents
   
   YES
   NO

Note particularly sections of the community that are NOT served.

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

3. Are the sidewalks that serve bus stops maintained? Is shade available? Are street crossings safe?

   o YES
   o NO

Note areas that need attention.

____________________________________________________________________________________

____________________________________________________________________________________
4. Does this system serve hospitals, clinics, shopping facilities, and other routine destinations of interest to older persons?
   
   o YES
   o NO

   If not, note which key destinations are NOT served?

   _______________________________________________________
   _______________________________________________________
   _______________________________________________________

5. When is this service available? (Every day? Monday through Friday only? Saturdays? Sundays? Holidays? Hours of service?)

   _______________________________________________________
   _______________________________________________________
   _______________________________________________________

6. Would other service times help older residents?
   
   o YES
   o NO

   If so, which times?

   _______________________________________________________
   _______________________________________________________
   _______________________________________________________

7. 
   a. Are schedules and route maps easy to read

   o YES
   o NO
b. Are they readily available in libraries
   - YES
   - NO

c. Senior centres
   - YES
   - NO

d. Medical facilities?
   - YES
   - NO

e. Shopping centres
   - YES
   - NO

f. Transit stops?
   - YES
   - NO

Note other places where public transportation schedules are available or should be made available.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
8.
   a. Is it possible to call the transportation company for route and schedule information?
      o YES
      o NO
   
   b. Is information available for those who have difficulty hearing?
      o YES
      o NO
   
   c. Is transportation information available in languages other than English? If so, note what languages and whether this meets the language needs of the community.
      o YES
      o NO

9. Is it relatively easy to transfer between two buses or other forms of public transportation?
   o YES
   o NO

10. Does the driver provide information about transfers when you board, and are you informed about transfer points?
    o YES
    o NO
    
    Note how much time you need to wait for a transfer bus at several major transfer points.
    
    _______________________________________________________
    _______________________________________________________
11. Are reduced public transportation fares available for older residents?
   - YES
   - NO

**Quality of transit stops**

12. Are the transit stops well marked?
   - YES
   - NO

13. Do most of the transit stops offer shade, seats, and shelter from the weather?
   - YES
   - NO

14. Is there adequate room for a wheelchair?
   - YES
   - NO

15. Are routes and schedules served by each stop clearly posted?
   - YES
   - NO

16. Is information also available for those with limited sight?
   - YES
   - NO
17. Are the transit shelters well lighted in the evening?
   - YES
   - NO

Note stops that need particular attention.

18. Quality of Public Vehicles

   18. Is preferred seating available near the door for those who have difficulty walking or standing?
   - YES
   - NO

19. Are upcoming stops announced?
   - YES
   - NO

20. Does your community have a dial a rise service
   - YES
   - NO

21. Taxi

   21. Is taxi service available in the community?
   - YES
   - NO
22. Does it serve the whole community?
   - YES
   - NO

23. Do older residents express concerns about the cost or reliability of taxis?
   - YES
   - NO

**Specialised Services**

24. Do local organizations (such as senior centres, churches, or other groups) offer van service to meal sites, doctor's appointments, or special recreational excursions?
   - YES
   - NO

25. Is this service well advertised?
   - YES
   - NO

26. Who is eligible for this type of trip?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

27. Do medical centres offer their own transportation service for dialysis and other regular medical needs?
   - YES
   - NO
28. Do leisure communities have their own van to take residents shopping, to the doctor, and to cultural activities?

   - YES
   - NO

29. Is there an organized volunteer driver program in your community?

   - YES
   - NO

30. For what purposes is that program available?

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

31. Is it available to all older residents?

   - YES
   - NO

32. How is it advertised?

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
Drivability Service

33. Does your community have street signs with large enough letters to be seen at a distance?
   - YES
   - NO

34. Are those street signs readable at night?
   - YES
   - NO

35. Are there streetlamps at regular intervals?
   - YES
   - NO

36. Do your streets have turning arrows at intersections and dedicated left-turn lanes?
   - YES
   - NO

37. Do the dedicated left-turn lanes start at the middle of the block?
   - YES
   - NO

38. If your community has streets with a heavy volume of traffic, are there medians or other devices to minimize the glare from opposing traffic at night?
   - YES
   - NO

39. Are the lane markings clear?
   - YES
   - NO

40. Are they reinforced by reflectors?
   - YES
   - NO
41. Do parking lots have clear travel patterns?
   - YES
   - NO

42. Do lots have an ample number of parking places that are easy to use?
   - YES
   - NO

43. Are there well-marked parking spaces for individuals with disabilities?
   - YES
   - NO

44. Is proper use of these spaces monitored and enforced?
   - YES
   - NO

45. Are there safe walkways to get to the stores from the parking lots?
   - YES
   - NO

**Walkability**

**Sidewalks and their Maintenance**

46. Are there sidewalks throughout your community?
   - YES
   - NO

47. Are the sidewalks well maintained? (Surfaces should be flat with only minor cracks and minimal separation between slabs.)
   - YES
   - NO
48. Are curb-cuts visible? Would it be difficult for those with visual impairments to detect them or those with wheelchairs or walkers to negotiate them?

- YES
- NO

Useful Terms to Know
Curb-cut: The area cut out of the edge of a sidewalk at an intersection. Curb cuts allow people with wheelchairs, bicycles, and strollers to move easily from the sidewalks.

49. Are any sidewalks obstructed by bushes or overhanging tree branches? Note the location of problem sidewalks.

- YES
- NO
50. Does the community have a regulation regarding snow removal from sidewalks? (Your local public works department or city/county manager's office should have this information.)

- YES
- NO

Note locations where sidewalks are not cleared, if applicable.

_____________________________________________________
_____________________________________________________
_____________________________________________________

51. Does the community have a program to help older persons clear snow from the sidewalk in front of their home?

- YES
- NO

52. Are the sidewalks wide enough for at least two people to walk together? (A minimum width of 4 feet is needed for two people to walk together.)

- YES
- NO

Note the location of substandard sidewalks on the survey map.

_____________________________________________________
_____________________________________________________
_____________________________________________________

53. Do bicyclists, skateboarders, roller skaters, and other non pedestrian users make walking difficult?

If this is a problem in specific areas, locate those areas on the survey map.

_____________________________________________________
_____________________________________________________

185
54. Are there other problems that affect use of the sidewalks, such as animal waste or unleashed dogs that threaten pedestrians?

   ○ YES
   ○ NO

If this is a problem in specific areas, locate the areas on the survey map.

_______________________________________________________

_______________________________________________________

_______________________________________________________

Traffic Signals

55. Are traffic signals located at pedestrian crossings?

   ○ YES
   ○ NO

Note on the survey map where you think additional traffic signals are needed.

_____________________________________________________

_____________________________________________________

_____________________________________________________

56. Do the traffic signals provide adequate time for pedestrians to cross the street without feeling rushed?

   ○ YES
   ○ NO
Note on the survey map the location of signals that do not provide adequate time for crossing.

57. Do signals have push-to-walk buttons to help stop traffic on a busy street?

- YES
- NO

Note location of signals without push-to-walk buttons on the survey map.

_____________________________________________________

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Traffic signals generally provide a safe method for pedestrians to cross a street. However, non signalized crosswalks can create a false sense of security that could result in a pedestrian fatality. The Federal Highway Administration Highway Design Handbook for Older Drivers and Pedestrians: Recommendations and Guidelines (December 2000) suggests that the shorter stride and slower gait of less agile older pedestrians requires that pedestrian control signal timing should be based on an assumed walking speed of .85 meters or 2.8 feet per second.

58. Do any long streets with no intersections have midblock crosswalks?

- YES
- NO

Note location on the survey map.

_____________________________________________________

_____________________________________________________

_____________________________________________________
59. Are crosswalks well marked? (This could include striping, signage for pedestrians and vehicles, caution lights.)

- YES
- NO

Note locations of crosswalks that are not well marked.

______________________________________________________
______________________________________________________
______________________________________________________

60. Do all crosswalks have curb-cuts to provide a transition from the sidewalk to the roadway?

- YES
- NO

Note locations on the survey map of crosswalks that do not have curb-cuts or curb-ramps.

______________________________________________________
______________________________________________________
______________________________________________________

61. Are curb-cuts textured to alert persons with visual impairments that they are about to enter the street?

- YES
- NO
Pedestrian Amenities

62. Are the sidewalks in your community shaded by trees?

- YES
- NO

Note on the survey map where there are no shade trees.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

63. Are there resting places (e.g., benches, low walls) for pedestrians along the sidewalks?

- YES
- NO

Note on the survey map where resting places are located, especially in areas of the community with many older residents.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

64. Are there enough resting places?

- YES
- NO
Note on the survey map where you think additional resting places are needed.

________________________________________________________________________

________________________________________________________________________

65. Are resting places shaded adequately from the sun?

  o  YES
  o  NO

Note on the survey map the location of seating places that are not shaded.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

66. Do the community's signs provide clear directions for pedestrians?

  o  YES
  o  NO

Note on the survey map where you think signs are needed or should be improved.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Safety and Security

Lighting

1. Do the streets in your neighbourhood have adequate street lighting?

   - YES
   - NO

2. Are the sidewalks adequately lighted at night?

   - YES
   - NO

3. If your neighbourhood has alleys, are they well lighted?

   - YES
   - NO

4. 
   a. Are public areas well lighted?

      - YES
      - NO

   b. Are private areas (e.g., yards near public sidewalks) well lighted?

      - YES
      - NO

Note which areas, if any, are not well lighted.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

191
5. Does the neighbourhood have signs that designate it as a neighbourhood watch area?

- YES
- NO

**Sight Lines**

6. Are there areas with overgrown vegetation and limited lighting along the sidewalks where someone could hide or where pedestrians would feel unsafe?

- YES
- NO

Note these locations.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

**Ear /Eye Isolation**

7. Are there locations in your neighbourhood where a pedestrian would be isolated and out of the earshot of other residents? Would anyone hear if a person called out for help? (Consider how this answer might be different during the day and during the evening/night time)

- YES
- NO

Note these locations.

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**Entrapment Areas**

8. Are there areas along a pedestrian route that might become locations for entrapment (small, confined areas adjacent to a pedestrian route that are shielded on three sides, such as walls around dumpsters or insets or bumpouts in buildings)?

   - YES
   - NO

   If yes, note locations.

   ____________________________________________________________

   ____________________________________________________________

**Escape Route**

9. Do you see routes that criminals could use to escape easily from your neighbourhood onto a major street?

   - YES
   - NO

   If so, note these routes.

   ____________________________________________________________

   ____________________________________________________________

   ____________________________________________________________

**Sense of Ownership/Maintenance**

10. Are there locations in your neighbourhood that are not properly maintained?

    - YES
    - NO
If so, note these locations.

_____________________________________________________

_____________________________________________________

_____________________________________________________

**Police Services**

11. Are there call boxes that are well marked in case of emergency?
   - YES
   - NO

12. Do police patrol the area routinely?
   - YES
   - NO

**Shopping**

13. Does your community have grocery stores within a safe, convenient walking distance (¼ mile) of clusters of residences of older adults?
   - YES
   - NO

If so, note which neighbourhoods have and do not have grocery stores and briefly describe the type of store (e.g., large chain store, "mom and pop").

_____________________________________________________

_____________________________________________________

_____________________________________________________
14. If your community has a large supermarket or retail store, does it provide wheeled mobility aids to help shoppers?
   o  YES
   o  NO

15. Is it relatively easy in the nearest grocery store to find items?
   o  YES
   o  NO

Include any notes about the mix of merchandise and layout of the store (e.g., how easy is it for older shoppers to find and reach merchandise?).

_____________________________________________________
_____________________________________________________

16. Does the large supermarket have clear, legible signs in high-contrast lettering, indicating the location of key grocery items?
   o  YES
   o  NO

17. Do grocery stores in the area offer home delivery service?
   o  YES
   o  NO

18. Do drugstores/pharmacies in the area offer home delivery service?
   o  YES
   o  NO

19. Are other shops that meet the needs of older residents located within walking distance?
   o  YES
   o  NO
If so, note which neighbourhoods have and do not have other shops, and briefly describe the type of store.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

20. Are the stores laid out in such a way that older residents can easily find and reach what they need?
   o YES
   o NO

Include any notes about layout.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

21. Is there a sidewalk and a safe crossing between residences and shops?
   o YES
   o NO

Note whether the sidewalk is in good repair, whether traffic signals allow enough time for pedestrians to cross the street, and whether the crosswalks are well marked. (See the Walkability survey for more questions about street crossings.)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
22. Is there a public transportation connection between residential areas and shops?
   - YES
   - NO

23. Is public transportation to stores available at times that are convenient to older residents?
   - YES
   - NO

24. Does your community’s zoning code permit mixed-use development?
   - YES
   - NO

25. If so, are there mixed-use developments with shops and a mix of residential units that would appeal to older residents?
   - YES
   - NO

26. Are there active community efforts to encourage replacement of grocery stores and other retail stores by redeveloping vacant properties near clusters of residences of older adults?
   - YES
   - NO

What additional types of stores do you think older residents need the most?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
**B. Housing**

**Available Housing**

1. Is each of these types of housing available within your community?
   
   - Single-family homes? **YES** **NO**
   - Multifamily homes? **YES** **NO**
   - Accessory dwelling units? **YES** **NO**
   - Assisted living facilities? **YES** **NO**
   - Continuing care retirement communities? **YES** **NO**
   - Nursing homes? **YES** **NO**

2. Is affordable housing available in each of these housing types?
   
   - Single-family homes? **YES** **NO**
   - Multifamily homes? **YES** **NO**
   - Accessory dwelling units? **YES** **NO**
   - Assisted living facilities? **YES** **NO**
   - Continuing care retirement communities? **YES** **NO**
   - Nursing homes? **YES** **NO**

3. Are affordable housing options located near basic shopping opportunities or near a regular transit route?
   
   - **YES**
   - **NO**
4. Are affordable housing options located near recreational opportunities?
   - YES
   - NO

5. Do the legal requirements in your community permit shared housing among a group of older residents?
   - YES
   - NO

6. Does your community permit accessory dwelling units in an area zoned as a single-family district?
   - YES
   - NO

7. Does your community encourage or require visitability standards for new housing units?
   - YES
   - NO

8. Are there multifamily housing units that are accessible to people with varying or changing physical abilities?
   - YES
   - NO

9. Are there any special housing complexes or apartment buildings especially for older people in your community?
   - YES
   - NO

10. Do public transit routes serve areas of town that offer accessible and affordable housing?
    - YES
    - NO
11. Does the land-use plan or zoning ordinance allow multifamily housing to be developed in your community? If so, in which locations in your community?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

12. Are these locations within walking distance of basic shopping and recreational activities?
   o YES
   o NO

13. Are you aware of individuals who are unable to find appropriate housing within your community? For example, do affordable, accessible multifamily housing or assisted living facilities have long waiting lists?
   o YES
   o NO

If so, which types?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

**Property Tax Relief**

14. Does your community offer any property tax reductions for homeowners over age 65?
   o YES
   o NO

15. If so, are such programs limited to individuals whose income is below a specific threshold
   o YES
   o NO
16. Is this program well publicized?
   - YES
   - NO

17. Is the application process easy to complete?
   - YES
   - NO

**Repairing and Modifying Homes**

18. Do lending agencies in your community offer reverse mortgages to homeowners over age 62?
   - YES
   - NO

19. Does your community offer a weatherization assistance program?
   - YES
   - NO

20. Does your community offer a financial assistance program for home modifications?
   - YES
   - NO

21. Does your community offer a financial assistance program for maintenance and repairs?
   - YES
   - NO

22. Does your community offer tips on finding appropriate financing through conventional lenders?
   - YES
   - NO
23. Does your community offer a list of agencies or qualified individuals that specialize in affordable, reliable repairs for older residents?
   - YES
   - NO

24. In addition to assistance with these activities, does your community have a program that helps older persons evaluate the need for home repair, modification, weatherization, etc.?
   - YES
   - NO

25. Does your community have a program to assist with routine or seasonal home maintenance chores (snow removal, yard work, gutter cleaning)
   - YES
   - NO

C. **Health Services**

1. Does your community have a health clinic or hospital outpatient service that meets the needs of older residents?
   - YES
   - NO

2. Is that clinic available to people with varying incomes?
   - YES
   - NO

3. Is that clinic on a bus route, or is it available through a special service van?
   - YES
   - NO
4. Are there doctors and dentists who are particularly responsive to the needs of older residents?
   - YES
   - NO

4. Are there medical offices that are easily accessible by public transportation?
   - YES
   - NO

5. Do medical offices provide information about transportation alternatives for accessing their services?
   - YES
   - NO

6. Is access to health care an issue for those in your community with limited incomes?
   - YES
   - NO

7. Are there Continuing Care Retirement Communities (CCRCs) in the community that provide a range of supportive services options for residents?
   - YES
   - NO

8. Are home health care services available in the community?
   - YES
   - NO

9. Are home health care services readily available to those needing help to maintain independent living?
   - YES
   - NO

10. Are there adequate mental health services?
    - YES
    - NO
11. Are there adult day services and other facilities designed especially to respond to the needs of those with dementia or Alzheimer’s disease?
   - YES
   - NO

12. Is adequate public information available about health care and Medicare benefits, for instance, through discussion groups and opportunities to talk with professionals?
   - YES
   - NO

13. Is information about these sessions broadly distributed?
   - YES
   - NO

14. Does your community offer programs for preventative health care, such as flu shots, support groups, nutrition classes?
   - YES
   - NO

D. Recreational and Cultural Activities

1. Do the parks in your community offer walkways and benches in an atmosphere that is safe and inviting?
   - YES
   - NO

2. Do public parks provide trails and picnic facilities that are accessible to older people and people with disabilities?
   - YES
   - NO

3. Is there a public swimming pool with water warm enough to be comfortable for older residents?
   - YES
   - NO
4. Are there public golf courses with golf carts?
   - YES
   - NO

5. Are there public tennis courts?
   - YES
   - NO

6. Are there safe walking and jogging trails?
   - YES
   - NO

7. Are there safe recreational bicycle trails?
   - YES
   - NO

8. Does your community have a senior centre or other recreational centre with a variety of active and passive recreational and leisure activities for older residents?
   - YES
   - NO

9. If your community does not have a dedicated senior centre, do its recreation centres have space or programs designed for older people?
   - YES
   - NO

10. Is there a mall or other facility that offers comfortable indoor walking for exercise?
    - YES
    - NOT

11. Is there a bowling alley with older adult bowling leagues?
    - YES
    - NO
12.
   a. Does your community have a public library?
      - YES
      - NO

   b. Does the library offer community-based programs, such as book discussion groups or speakers’ programs?
      - YES
      - NO

   c. Does the library have audio books or other services that can assist those with limited sight?
      - YES
      - NO

   d. Is the library fully accessible?
      - YES
      - NO

   e. Is the library's lighting adequate for the needs of older persons with visual impairments?
      - YES
      - NO

   f. Are the acoustics suitable for those with hearing impairments?
      - YES
      - NO

13. Does your community have additional facilities for recreation, cultural events, and intellectual stimulation in your community?
    - YES
    - NO
Note the additional facilities available

__________________________________________

__________________________________________

__________________________________________

What type of additional recreational and cultural facilities do you think are needed in your community?

__________________________________________

__________________________________________

E. The Caring Community

1. Does your community have an information hotline or a directory of services for older persons?
   - YES
   - NO

2. Are programs that are offered for the older adult population well publicized?
   - YES
   - NO

3.
   a. Does the community offer a meals-on-wheels program?
      - YES
      - NO
b. How do people in need get access to that service?

_____________________________________________________

_____________________________________________________

_____________________________________________________

c. How do people find out about opportunities to volunteer?

________________________________________________________

________________________________________________________

________________________________________________________

4. 
   a. Are there opportunities for congregate meals for older residents in the community?
      o YES
      o NO
   
   b. Are they widely publicized?
      o YES
      o NO

5. 
   a. Is there a reliable source of information about home care, cleaning services, and maintenance services for older adults?
      o YES
      o NO
b. Where is this information available?

_____________________________________________________

_____________________________________________________

_____________________________________________________

c. Is it widely publicized and updated regularly?

_____________________________________________________

_____________________________________________________

_____________________________________________________

6.

a. Does the community have specialized support groups for older residents and their caregivers?

   o YES
   o NO

b. How is information about those groups shared?

   __________________________________________
   __________________________________________
   __________________________________________

7.

a. Are there easily accessible opportunities for informal sharing and social interaction that would appeal to older residents (e.g., cafés, bookstores)?

   o YES
   o NO
b. How do new people in the community find out about these and get involved?

_____________________________________________________

_____________________________________________________

_____________________________________________________

8.

a. Is there a hotline or other communication system to help potential volunteers learn about the type of services needed?

   o YES
   o NO

b. Where is this information available?

_____________________________________________________

_____________________________________________________

_____________________________________________________

9.

a. Does the community offer intergenerational programs?

   o YES
   o NO

b. How do residents find out about them and get involved?

_____________________________________________________

_____________________________________________________

_____________________________________________________

10. Is there a legal services program for older persons in the community?

   o YES
   o NO
11. Is a listing of elder law attorneys available from the local or state bar association?

   Does the senior centre, library, or other group in your community offer programs or seminars on legal issues of interest to older populations?

   o YES
   o NO

12. Is there a hotline to report abuse or neglect of older individuals?

   o YES
   o NO

F. General Questions

1. Are older residents involved in decision making?

   o YES
   o NO

2. No of accessible public washrooms

   ______________________

3. Number of rest places and instance in between

   ______________________

4. Availability of recreational and learning programmes specifically for seniors.
5. Availability of intergenerational recreational activity and social programme
   - YES
   - NO

6. Availability of support for volunteers (e.g. training, transportation, reimbursement of expenses, methods of appreciation.)
   - YES
   - NO

7. Availability of assistance to seniors to fill out forms.
   - YES
   - NO

8. Availability of prevention programmes related to health issues
   - YES
   - NO

9. Availability of low cost food programmes (e.g. meals on wheels, wheels to meals, food bank)
   - YES
   - NO
10. Is there a night shelter for senior residents in Sliema?
   - YES
   - NO

11. How many parishes are there in Sliema?

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Useful Terms

Single-Family Homes: These homes offer an individualized living environment; however, they are often not designed to meet the unique needs of older residents. Some single-family homes are located in age-restricted retirement communities.

Multifamily Housing: These units, including apartments or condominiums, are several connected homes that also offer independent living situations. Some of these facilities are age restricted (e.g., "seniors apartments").

Shared Housing: This involves a group of unrelated, independent older individuals living together and sharing household duties and companionship. In some communities, zoning restrictions in single-family neighborhoods may pose difficulties for these living arrangements.

Accessory Dwelling Units: These take several forms, including independent 600- to 700-square-foot cottages in the backyards of single-family homes. Some elder cottages (ECHO units) are modular units that can be located temporarily in a backyard. Other units can be attached to a home or located over a garage. Accessory units are frequently associated with the home of a relative, offering independence along with nearby care when needed.

Congregate Care: This type of older resident apartment typically offers hospitality services, such as group meals, light housekeeping, social and recreational opportunities, and scheduled transportation to shopping and cultural activities.

Assisted Living Facilities: These facilities offer housing that allows direct personal care along with independence. Residents live in private apartments that include supportive services to help individuals with basic living needs such as personal care and medication management. These facilities also offer the hospitality services found in congregate care facilities. Continuing Care

Retirement Communities: These three-stage facilities provide for life care in a managed community. They provide separate homes or cottages with optional hospitality services, assisted living, and nursing care. Residents can use the services that they need as their lives change. An initial down payment and regular monthly charges pay for the possible use of more costly nursing home care.

Nursing Homes: Nursing homes offer the least amount of independence; their residents often require 24-hour care and need assistance with most or all activities.