



Comparing the Quality of Life of the Elderly Rural and Urban Population of Sweden

Hannah Werling

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Demography Unit, Department of Sociology, Stockholm University

Supervisor: Ann-Zofie Duvander, Demography Unit, Department of Sociology, Stockholm University

Abstract

Sweden, like many European countries, has an ageing population as well as more and more urbanization, which includes the elderly population. Therefore it is important to get an idea of how the elderly population in both the urban and rural areas of Sweden live and view their lives to determine if there are any large differences between their quality of life. In this case, focusing on independence, finance, social, and subjective variables such as health, meaningfulness, and loneliness. The purpose of this thesis is to determine whether the quality of life for the elderly population (75 and older) differs between the urban and rural areas of Sweden by using survey data from the SWEOLD panel study 2011. There were also comparisons regarding gender. The results go on to show that there are no major differences in the quality of life based on whether one lives in the urban or rural areas of Sweden. This is most likely due to the welfare system in place in Sweden. When it came to gender there were more differences yet they to were slight which led to the conclusion that the quality of life between the urban and rural areas of Sweden differ very slightly.

Key Words: Sweden, quality of life, urban, rural, ageing population, gender, male, female

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INTRODUCTION

This paper aims to look at the elderly population in Sweden and whether the quality of life differs between those living in the urban areas and those residing in the rural areas. When referring to the elderly population the focus will be on those over the age of 75. There is an ongoing increase in the urbanization process in Sweden, which also includes the ageing population; this, however, does not mean that those residing in the urban areas of Sweden have a better quality of life than those in the rural areas even though more people are moving to more urban areas. It is easy to think that one may have a higher quality of life in the urban areas as many are now choosing to live there as opposed to the more rural areas. Another possible assumption is that as one is closer to amenities and have easier access to things like healthcare, this would perhaps mean one would have a better quality of life in the urban areas of Sweden. Yet, this would not definitively show a higher quality of life for those living in more metropolitan areas. As previously mentioned, more people across the globe now live in urban areas as opposed to rural areas, but it has only been since 2007 that the urban population has exceeded the rural population (UN, 2008:1). Whereas before the most urbanized places were located in the more developed areas of the world, today it is the global south that is home to the largest cities (UN, 2008:1). It is worth noting that there are cities that have experienced population decline in the past few years and that these tend to be those located in countries that are experiencing overall population decline, or stagnation, mostly located in Europe and Asia (UN, 2008:1).

In general there is a pattern of worldwide urbanization and this can also be seen within the elderly population who are now becoming more concentrated in the urban areas (Kinsella, 2001:315). Urbanization can be defined as, “the process whereby large numbers of people congregate and settle in an area, eventually developing social institutions...and government to support themselves (Orum, 853:2011).” With the increase and growth of many cities one can understand the flux of those moving into more urban environments, as there are more opportunities, in particular when it comes to work opportunities.

In developed countries there was an estimated 73% of the elderly population that lived in the

urban areas, which was predicted to increase to 80% in 2015 (Kinsella, 2001:315). Although many more of the elderly population now resides in the larger cities this does not automatically mean that it is a better place to live. Where the rural communities were once seen as being connected with the idea of negative socioeconomic consequences, recent research suggests that there is now a more positive view developing as there are now more affluent elderly living in the rural communities than there previously had been (Kinsella 2001:321). Therefore it is interesting to look at whether there is a difference in quality of life between those living in the rural areas compared to those in the urban areas. Sweden, known for being a welfare state, provides care for the elderly population so perhaps the differences between the urban and rural population should not be so great. Yet accessibility to certain things, like shops, could play a large role in ones quality of life. This will be an area that will be further explored in this paper while keeping in mind that a reason that one should be concentrating on the elderly population in terms of whether they live in urban or rural areas is because as one ages most of ones daily activities, occur near one's home and could effect ones quality of life (Mahmood & Keating 2012:145). With more and more of the population, elderly included, moving into the cities it presumes that there are more benefits to living there as more of the population are choosing to live there. Just because this is the case it does not mean that ones quality of life will be better, hence the need to look into and compare the quality of life between the rural and urban elderly populations. Furthermore it will be also interesting to compare the elderly population and gender to see if there are differences between males and females in general but also in regards to where they live and to see the role that location has.

I] Aim

The aim of this paper is to look at the differences in the quality of life between the elderly populations in the urban areas of Sweden and those residing in the rural areas of Sweden. A sub question and therefore a sub aim of this paper, is to also investigate whether there are gender differences in the quality of life in urban and rural areas.

II] Definition of Quality of Life

When it comes to defining quality of life (QoL) there are a variety of ways to do so, from a more medical point of view to a more social one. Quality of life was a term that was popularized in the US after WWII, and at that time it was mainly used to reference material goods such as a house,

money to travel, or appliances. (Farquhar, 1995:1439). In the 1960's it started to encompass more personal freedoms such as leisure and enjoyment (Farquhar, 1995:1439). It has also been used in a more health related aspect, often by health professionals, such as doctors and nurses, using a health scale. This is considered a more quantifiable way of measuring quality of life.

As time went on it became clear that QoL was more subjective and it was argued that, "...because people's subjective responses are real and people act on the basis of them, one should take account of these subjective responses when assessing quality of life (Farquhar, 1995:1439)." Often the basis for the definition of QoL has been Abraham Maslow's hierarchy of human needs (1954), which looks at QoL from a more subjective perspective. One definition of QoL that is often used is that of George and Bearon who use four dimensions, which are then divided, into two areas, objective and subjective. The four dimensions are: general health status, socioeconomic status, life satisfaction and self-esteem. Although they do not call this a definitive measure of quality of life they are very central when it comes to defining QoL (Farquhar, 1995:1440). Haas, in 1999, argued that quality of life is "primarily a subjective sense of well-being (Costanza, et. al., 2007:269)." Maslow has argued that human needs make up some of what defines quality of life and has his human needs pyramids (Bowling, pg. 1995:1448). This is the basis for much of the social indicators research that has been done, where QoL encompasses circumstances in a variety of life aspects including; housing, income, and ones environment (Bowling, 1995:1448).

Criticisms of this approach have been addressed by Kahneman, Diener, and Schwarz who have discussed in their paper the fact that ones life experiences and well being are based on the idea that they remain constant (1999:61). In the same paper the authors also discuss the idea of comparing oneself with some one else, for example, being around someone who is less well off makes one feel better about oneself and vice versa.

Another way that quality of life is measured is through a more gerontological perspective in which the focus is on "life satisfaction" in the context of, the extent of pleasure and satisfaction one has obtained (Bowling, 1995:1448).

The two authors Gabriel and Bowling from the perspective of the ageing population, 65 and older, viewed a national survey done in Britain that looked at quality of life. Here they could see that there were certain factors that were mentioned as indicators of quality of life and seen as important by the respondents. The top three responses when looking at QoL were social relationships, home and neighborhood, and psychological wellbeing (Gabriel & Bowling, 1999:679).

PART 1: THEORY and HYPOTHESES

1] Quality of Life Theory

This theory looks at the well being of a person based on a variety of factors. Research done on QOL has focused on two methodologies, one that is more quantifiable and uses social or economic indicators and the other that uses self-rated indicators such as happiness, which have come to be known as “subjective well-being (Costanza et al., 2006:268).” Assessment of QOL is done with both objective and subjective indicators where the objective tends to be about social status and the fulfillment of societal and cultural demands for material wealth and is more related to the society and are assessed by amount and frequency rate (Susniene and Jurkauskas, 2009:59). The subjective is more about the individual and his/hers consciousness and what he/she regards as important, when looking at QOL on this subjective/objective spectrum it is called the integrative quality-of-life theory (Susniene & Jurkauskas, 2009:59).

Abraham Maslow has described a hierarchy of needs which he has ranked from lower to higher-order needs which are as follows; The first are biological needs such as food and water. Then safety which includes security, this is followed by social needs such as friendship, then there are esteem needs which encompasses the need for achievement as well as recognition. Finally there are self-actualization needs, which include the need for expression and self-fulfillment. Lower order needs tend to be satisfied before higher order needs (Sirgy, 1986:331). Taking this from Maslow a Quality of Life (QOL) theory has been put forth that QOL can be defined as a “...hierarchical level of need satisfaction of the aggregate members of society. The greater the needs satisfaction (from lower-order to higher-order needs) the greater the QOL of that society (Sirgy, 1986:341).” Once the fundamental needs are met people then tend to pursue their higher needs.

Hyde, Wiggins, Higgs, and Blane have developed a theory based on Maslow’s hierarchy of needs which also focuses on four dimensions; control, which is the ability to actively intervene in

ones environment, autonomy which is the right to not have others interfere, self-realization, and pleasure both encapsulate the active and reflexive process of being human beings (2010:187). What differs from Maslow's approach here is that all four parts are considered equal and inseparable as opposed to Maslow's hierarchy. With more members of the elderly population living longer and also healthier lives there has been an increase in participation in a variety of leisure activities as well as an interest in developing new hobbies. This means that quality of life can be assessed by the degree at which all four dimensions are satisfied (Hyde et al., 2010 188).

II] Hypotheses

My hypothesis is that the quality of life amongst the elderly population will be better in the rural areas of Sweden as opposed to the urban.

When looking at quality of life I am specifically looking at the subjective variables of health, how the respondents themselves rate their own health, meaningfulness, how meaningful the respondents find their lives to be, loneliness, how lonely the respondents feel they are, and finally satisfaction, how satisfied the respondents are. The objective variables looked at are homeownership, ability to buy food, and participation in leisure activities. These variables cover a good range of topics often used to measure quality of life. These variables, when analyzed will give a clearer view, on which area, the urban or the rural, has a better quality of life,

A reason that I believe ones QoL can be better in the rural areas is that there is more of a community spirit making it easier to socialize than in the These factors seem to be more accessible in the rural parts of Sweden than in the urban areas. Also, previous studies suggest that one has a larger social circle if one resides in the rural areas The integrative quality of life theory points out how important the objective/subjective aspect is and when judging ones quality based on others I believe that the quality of life could be viewed as better in the rural areas as there are fewer people to compare with. Also the

When one looks at gender I would assume that it is men that have a higher quality of life, as they are more likely to receive care from their partner and with females outliving males, they may also experience less loneliness. Therefore I believe that rural males would have the best quality of life compared to any other group, as they would have the benefits mentioned above of residing in the rural areas as well as the pluses gained by being a male.

Part 2: BACKGROUND

The following section will focus on current global trends, then on Sweden and its current population, how urban and rural is divided, within Sweden finally followed by a section that looks at the welfare system in Sweden and how that plays a role within the ageing population and also the care of the elderly

I] Current Population Status in Sweden

Population

As of December 31, 2015 the population of Sweden according to Statistics Sweden (SCB) is 9,851,017 (SCB). Of those, 4, 930, 966 were male and 4, 920, 051 were female. As you can see in the population pyramid below as the population ages there are more females than males as in generally women tend to outlive men (SCB: 2015). . The population in Sweden is growing and it is predicted that the population will grow to an estimated 12 million in 2040 (SCB). The trend of urbanization is predicted to continue with more people continuing to leave the rural areas in favor of urban areas. In 2050 it is predicted that 90% of the population will be living in an urban area (UN, 2008:23). In 2015, the latest data that is available from SCB, reveals that the number of those aged 75 and over totaled 857,260. Out of those, with the available data, we can see that 354,527 are males and 492,60 are females

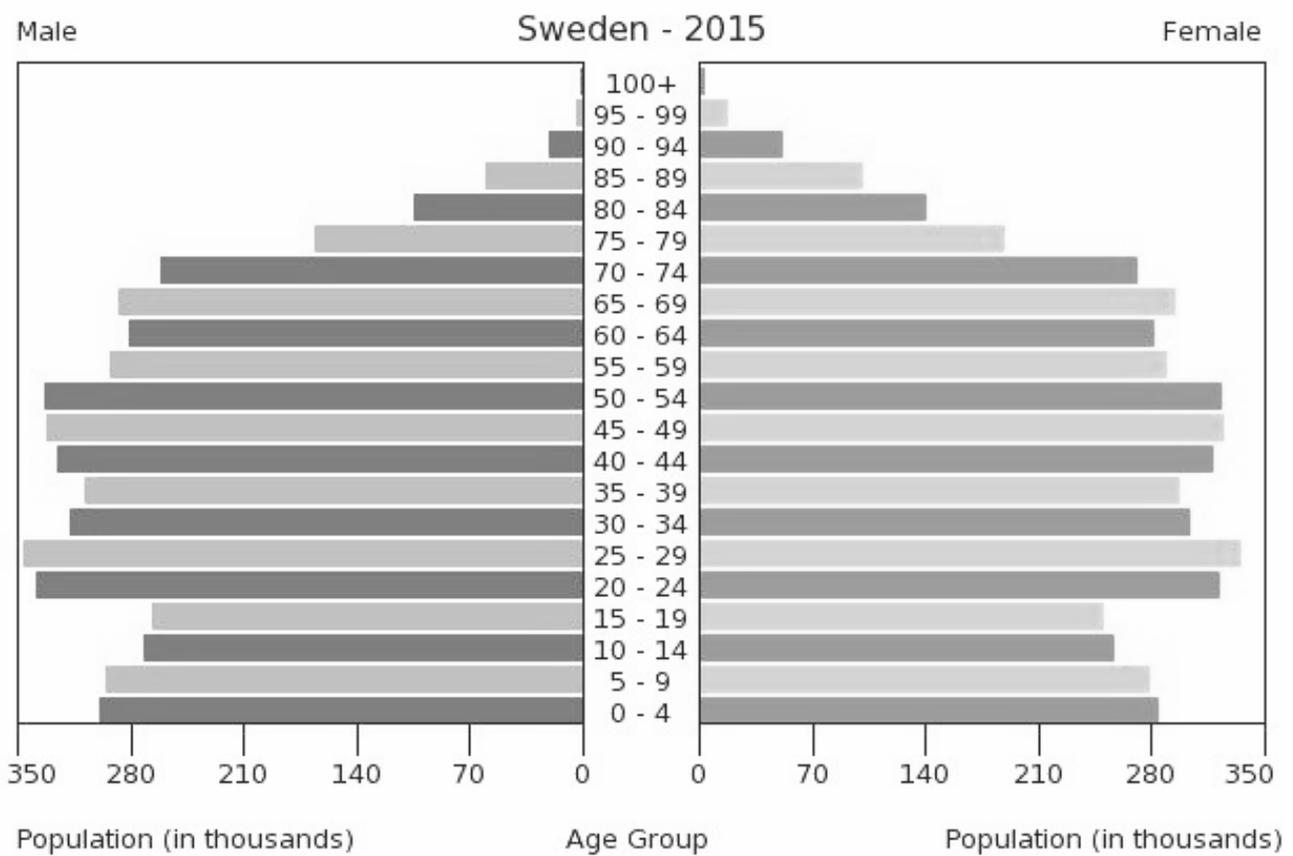


Figure 1: Population Pyramid of Sweden (CIA World Factbook).

Urban/rural divide: population breakdown

In Sweden there are three major cities, Stockholm, Gothenburg, and Malmö. They are all located in the more southern area of Sweden and the view is that the southern part is more urbanized than the northern part. The communities surrounding the major cities are also fairly densely populated and besides the three major cities previously mentioned, are the second most populated areas according to the Swedish Department of Enterprise. The definition for urban and rural that is commonly used in Sweden, as defined by the Swedish Agency for Agriculture and the Agency for Rural Development is as follows; where three zones can be identified;

*Urban areas with more than 3000 inhabitants and with a hinterland within 5 minutes travel time.

*Rural areas within 5 – 45 minutes travel time from urban areas with more than 3000 inhabitants.

*Remote rural areas more than 45 minutes travel time away from urban areas with more than 3000 inhabitants and islands without fixed connections to the mainland.

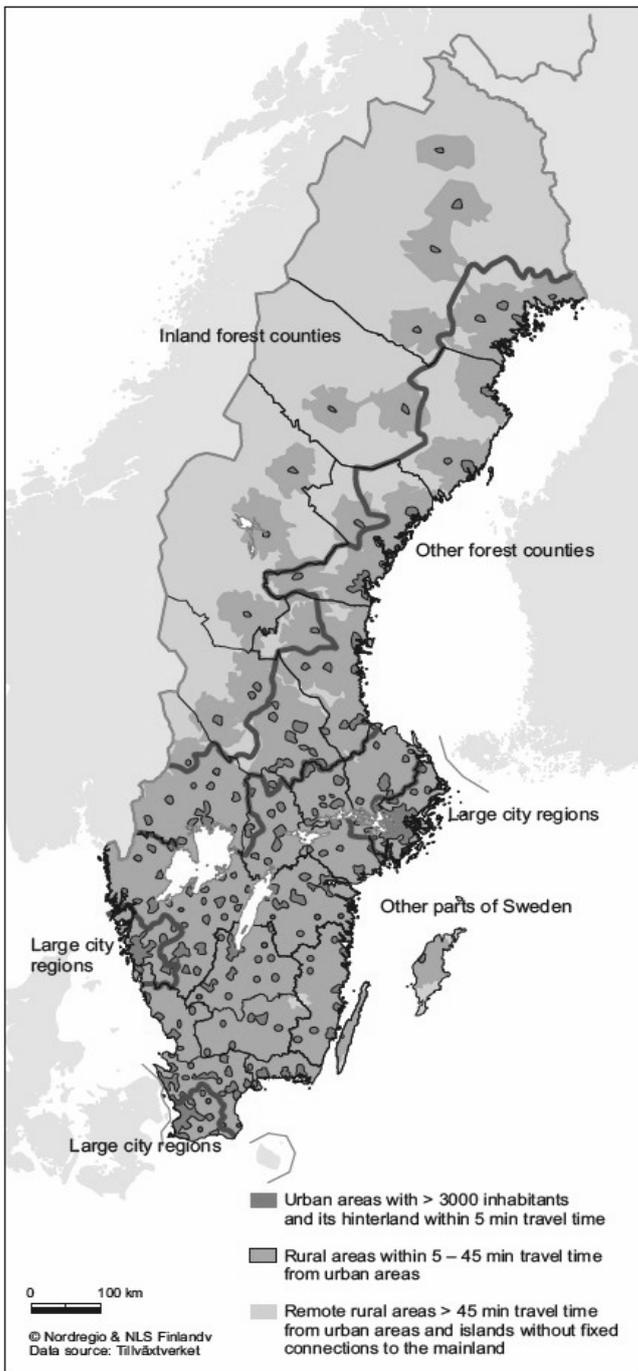


Figure 2: Map Of Sweden depicting population density.
 (Source: Nordregio).

The map below shows how Sweden is broken up into the various definitions described above as well as showing how much of the population is concentrated in the southern part of Sweden.

II] Sweden and the Welfare System

When discussing the subject of the elderly population in Sweden one also has to discuss the welfare system. In Sweden one is looked after by the welfare system. By paying taxes the Swedish people are, in return, provided with a broad range of benefits that guarantee a minimum standard of living as well as service and care (The National Board of Health and Welfare, 2009:7). National policy in Sweden states that care should be publicly provided for all, and not dependent on ones financial means (Ullmanen & Szebehely, 2014:82) there are state supported pensions and there is also help available to the elderly population in the form of home help as well as residential care facilities (Bengtson et. al., 2009:630).

It is the municipalities in Sweden that are tasked with providing care for the elderly population and this

includes home help services . The Health and Medical

Services Act requires municipalities to offer health and medical care services for the elderly and this should include housing accommodation (Lagergren,:2002). The Health and Medical Services Act requires municipalities to offer health and medical care services for the elderly and this should include housing accommodation (Lagergren, 2002:254).

Much of the welfare system care given to the elderly population is done to move the burden from the family, away from women especially. It has, in fact, been said that the welfare state has in part been built on the idea that women should have less responsibility when it comes to caring for children and taking care of the elderly thereby making it easier for women to participate in the labor force (Bengtson, et al., 2009:635). This could be compared to the United States where it is assumed that the family has the largest role to play when it comes to caring for ones elders (Bengtson et al., 2009:631). It has been found that the Swedish elderly population have more of their needs met, and that the vulnerable elderly population who are in institutional care, are better taken care of than their counterparts in many other nations such as the United States (Bengtson et al., 2008:631).

In Sweden there is a lot of focus on having the elderly be taken care of at home therefore there is an emphasis on home care services. This is due to wanting to maintain the well-being, as well as ,the dignity of the frail (Bengtson et. al.,2008:637). Sweden uses a principle of “ageing in place,” which means that there are a lot of services that provide the ageing with home care help that makes it possible for the elderly to stay at home (Lennartson, et al., 2011:339). Official material from the Swedish Ministry of health states that “...elderly people should be able to continue living in their own homes for as long as possible...An accessible society, good housing, transport services, and home help services are example of important measures to realize that principle (Lagergren, 2002:253).” This however raises the question, what kind of help and services are and should be provided for those living at home? It also raises a further question regarding whether the decrease in certain services such as retirement homes and old people’s homes are to encourage growing old at home or for purely financial reasons.

The other side of this discussion is that perhaps the reason for the encouragement of healthcare at home is due to economic reasons rather than for the betterment of the elderly population. Access to housing is given through a needs based assessment on a municipal level (The National Board of Health and Welfare, 2009:8). Primary care doctors and health nurses decide on the health services that should be provided and often there is no case management, one criticism that has arisen is that there is a lack of coordination between the different types of services provided (Lagergren, 2002: 255). Since 2000 there has been a decrease in the number of beds available at residential care facilities, a decrease of about 1/4th (Ullmanen & Szebehely, 2014:81). Although the amount of elderly using home care services has somewhat decreased over the past decade the amount in residential facilities has, comparatively, decreased much more this can be seen in the graph below. Those that are receiving care at home were not compensated in the amount of hours

spent on them, receiving approximately 30 hours per month as compared to 100 hours per month someone living in a facility would receive (Ullmanen and Szebehely, 2014:83). Those that have been affected by these cutbacks, often those with lower pensions, have generally had to rely on relatives for help and those with the means have looked to the private sector for help. Perhaps this is a reason why private health service providers have increased although this service is most beneficial for those with higher pensions (Ullmanen & Szebehely, 2014:83).

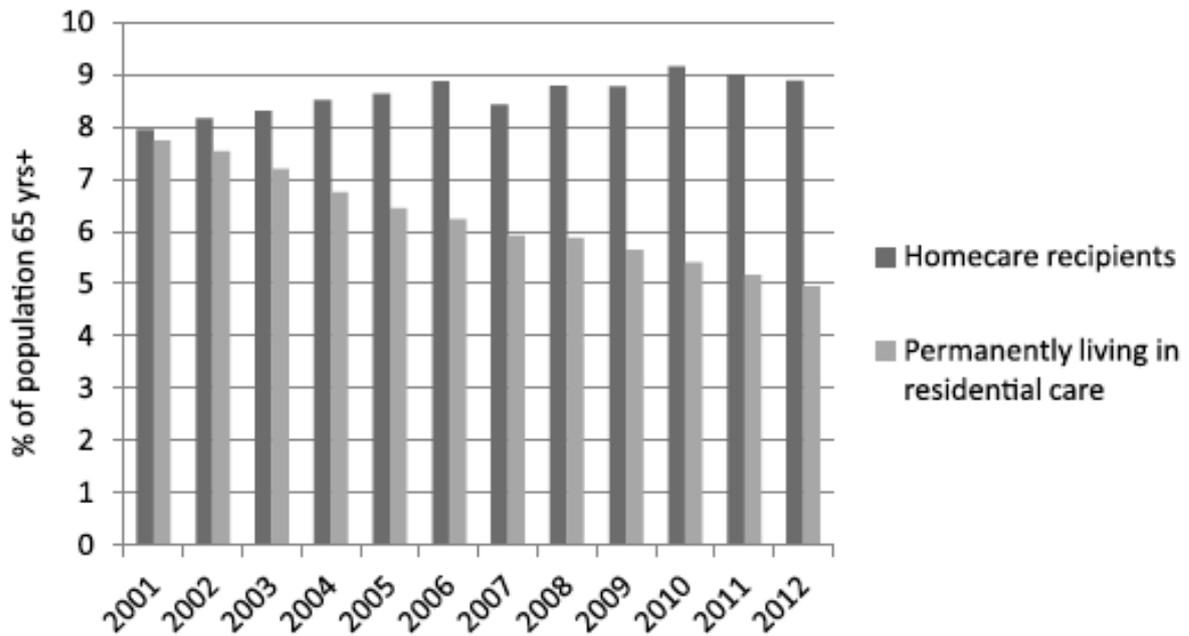


Figure 3: Recipients of homecare services and residential care among older persons by year, 2001-2012 of population 65+ (Source Ullmanen & Szebehely 2014).

Part 2: PREVIOUS RESEARCH

There has been some research done concerning the differences regarding the elderly population in the urban and rural setting. There has however been very little done that compares the quality of life between the two. In some cases there have been certain factors such as health, which have been measured. The following section will look at previous research, literature and studies that

focus on the rural and urban elderly population, the definition of quality of life, followed by looking at quality of life from the urban and rural angle followed by a section on ageing and gender.

1] Rural & Urban Ageing

As one grows older one tends to become less physically capable, thereby often reducing ones physical spaces to much more localized areas and communities (Milbourne, 2012:315). In Australia a report was produced by National Seniors Australia, which highlighted how those living in rural areas felt more social connectivity, felt safer, and also have more social interaction than the elderly living in more urban areas (Milbourne, 2012:315). If you do, however, have a lower income the rural experience can be different as economic crises and rising food and energy costs can affect the rural elderly as it cuts into their savings (Milbourne, 2012:315).

One factor that is often mentioned is that there is a level of isolation when living in rural areas. In Ireland, for example, it has been noted that loneliness is “particularly acute (Milbourne, 2012:35).” Some reasons for this are the cutting down on certain services for example the post office as well as the reduction of public services such as public transport (Milbourne, 2012:315) This leaves the elderly population more isolated as they have less opportunity to leave their homes as well as fewer places to visit and socialize. On the other side it has been said by Warnes and Law (1984) that with the improvement of public utilities and telecommunication rural areas have become more attractive and can be viewed as potential new retirement areas (Burholt & Dobbs, 2012:434). In a place like Sweden, with a developed social care system as well as health care, the expectation is that there should be no large differences between the quality and quantity of services available although it is generally known that the cost can be greater in the rural areas due to the distances one needs to travel and the problem of keeping staff (Burholt & Dobbs, 2012:436). Loneliness is a measure that has been looked at for both the urban and rural elderly population and it has been said by Tönnies (1957) that those living in the rural areas are less lonely as that setting fosters more social integration. Although it has been said by Halfacree (1995), that loneliness is perhaps able to pass by unnoticed in the rural areas (Burholt & Dobbs, 2012:437). In general there has not been too much research done comparing the differences in loneliness between the urban and rural populations (Burholt & Dobbs, 2012:437). Various studies that have been done have shown different outcomes in regards to loneliness. In the Netherlands a study done by Broese van Groenou et al. showed that those in the urban areas are lonelier, whereas a study done in Portugal by Paul et

al. showed that the levels were found to be similar (Burholt & Dobbs, 2012:437). In a study by the World Health Organization (WHO, 2007) it was mentioned that accessibility was very important and that many older people do not walk around in the city unless they have to which can lead to isolation and loneliness (WHO, 2007:15).

Previous research has been done discussing both how “age-friendly” urban cities currently are and also how to make them more so. An “age-friendly” model for urban cities was an idea initiated by the World Health Organization in a 2005 conference in Brazil. They view an age-friendly city is one that “...adapts its structures and services to be accessible and inclusive of older people with varying needs and capacities (WHO 2007:1).” Active ageing is seen as key in the WHO’s framework for age-friendly cities, this increases and better health opportunities, as well as participation and security, to better the quality of life in the elderly population (WHO, 2007: 5). In New York a report by the New York Academy of Medicine, 2008, found that although the elderly population make up about 13% of New York’s total population they account for 33% of pedestrian fatalities (Buffel, et al., 2012:602). In Dublin a study showed that one of the major hazards for older, more frail people, is the insufficient period of time given for them to cross the road at urban intersections (Buffel, et al., 2012:602). Another point the WHO study makes is that the location that one lives in relates to how much they feel a part of the local community (WHO, 2005:34). This however is a point that has been raised both in the urban and rural ageing literature. This particular factor also relates to whether or not one evaluates ones own neighborhood positively or negatively (Buffel, et al., 2012:602).

Participation in various activities has also previously been written about. Participation in this case refers to a variety of activities from paid work to voluntary work to day-to-day tasks such as housekeeping (Burholt, 2012:438). As one ages these tasks may perhaps move away from paid work to more day-to-day tasks within the home. In many papers these sorts of activities were viewed as ways of keeping busy and followed more of an “activity theory” line, which is further discussed in the theory section (Burholt & Dobbs, 2012:438). In a study done in the UK in 2002, 600 people over the age of 60 living in Liverpool, London, and Manchester found that older people felt “excluded” from organizations that influence the quality of life in their own neighborhoods, this included being excluded from formal social relationships and civic activities in their own neighborhoods (Buffel, et al.,2012:602). In general it has been shown that participating in leisure and productive activities is beneficial in terms of health (Lennartson & Silverstein, 2001:336) In a study done in Sweden in 2001 by Lennartson and Silverstein they came to the conclusion that being

active reduces mortality risks.

Women and men experience ageing in different ways. As has previously been mentioned and shown in the population pyramid, women often outlive men and therefore making a larger number of the oldest old population. Widowhood for females is seen as commonplace for women and more women than men reside alone (Borowski, et al. 2007: 107). One thing that can be taken from this is, that as women are outliving men, widowhood can at sometimes even be considered freeing as many traditional roles that the women had previously experienced cease to exist and women can have more freedom (Ghazanfareon Karlsson & Borrell 2004:24).

In a study done in Minnesota in 1987 focusing on older women in rural areas it was found that for these women the majority of their relationships were to be found in their community with mobility being the main reason for this (Shenk,1991 :349). It has consistently been found that men have less of a social network and therefore spend more time on their own (Borowski et al., 2007:108). In a survey done in Italy from 2012 it was found that men were sensitive to urban/ rural residence than women and that younger men live better in the urban areas whereas rural men fare better in the rural areas (Carta, et al., 2012:172). The latter finding is somewhat explained as being due to the idea that elderly men probably benefit from strong ties found in the rural areas (Carta et al., 2012:173). This differs from what was found in the Minnesota study and is perhaps due to cultural differences. Another finding from the Italian study shows that there was a more positive effect on the subjective well being of the elderly population living in the rural areas when it came to visiting with friends, neighbors, or relatives as compared to those in the urban area (Carta et al., pg. 2012:173).

In general if women suffer from health problems they are less likely to have a partner look after them as compared to males. In the case of women they tend to receive care from their adult children (Borowski et al., 2007:107). Many of the women in the Minnesota study also found that they felt a level of shame when asking for assistance (Shenk, 1991:356).

III] Quality of Life & Urban/Rural

There are a variety of factors that can affect ones quality of life (QoL) and these can also vary over time. For example there is a link between self rated health and QoL, it was shown in a report in 1997 that the older one became the more important health was (Borglin, et al.,2006:137).

Yet there was another study conducted in 1994 that found that social and leisure activities was the most important factor with health coming in second (Borglin et al., 2006:137). Therefore one can conclude that health is one of the most important factors but one has to be aware that there are other factors that also contribute to QoL.

As has been previously mentioned, social networks as well as environmental factors play a role in measuring QoL and as a person ages the smaller those networks tend to get. This can in part be due to friends and family passing on, as one gets older.

A study that took place in Sweden in 1994 among urban 76 year olds showed that the areas that they found relevant regarding QoL included health, independent living, good economy, and having someone nearby. Problems with impaired mobility was one of the biggest issues that faced the elderly population (Grimby & Wiklund1994:22).

The differences in rural/urban contact with their children, found that rural informal systems involved more people than for those living in urban areas but that did not necessarily mean that they had more contact with their kin (Krout, 1988:198). A variety of authors have pointed out how geographical and residential proximity can be an important factor when it comes to interaction behavior (Krout, 1998:198)

Part 3: DATA & METHOD

1] Description of Data Set

The data that I will be using comes from the *Swedish Panel Study of Living Conditions of the Oldest Old* (SWEOLD) and I will be using data from the SWEOLD 2010/2011 survey. It is a panel study of living conditions of the oldest old. The data provided by this survey is considered to be nationally representative with the aim of describing, as well as, analyzing the living conditions of the elderly population of Sweden. The data was firstly collected by sending an information letter to the sample before they were contacted by professional interviewers for their face-to-face interviews. If the respondent was unable to participate in a face-to-face interview, indirect interviews by telephone or postal questionnaires were conducted. This data is survey data and covers a variety of

areas related to elderly people including mobility, day-to-day activities, and financial issues. There are also tests that measure cognitive and physical ability but for the purpose of this research paper the focus will be on quality of life variables. The quality of life variables used will relate to finances, independence, as well as self-rated variables including loneliness and health.

III] Description of Variables

Main Variable of Interest

The variable used by SWEOLD of “municipality” is used to identify whether someone is *urban* or *rural*. For this I used the Sweold data’s classification and then combined the categories; metropolitan municipalities, suburban municipalities, large cities, suburban municipalities to large cities, commuter municipalities, and manufacturing municipalities to create the *urban* category. To create the *rural* category I combined commuter municipalities, tourism and travel industry municipalities, and sparsely populated municipalities. The data used comes from The Swedish Association of Local Authorities and Regions (SALAR), which is an organization that all county councils and regions are members of and advocates for local government.. The classification of these municipalities have been done since 1987 with the latest one being done in 2011, which is the classification being used for this study. The groupings SALAR have come up with are recognized by the authorities as well as universities and Statistics Sweden (SCB).

Dependent Variables

When looking at the variable *homeowner* I am looking at two things, financial independence (homeowners) and also how many people live in a facility. It should be noted that there are variables that I am using that do not apply to those living in facilities and in those cases they are not a part of that particular sample. This category was under economic resources of the SWEOLD questionnaire and answered the question, “do you own the house/apartment or are you renting?” Financial independence is an aspect of QoL therefore I believe it is a useful measurement.

The variable *buying food* is used to look at independence and how capable someone is of independently getting food for themselves which is an aspect of quality of life. For this the

questions asked was, “do you usually buy food yourself?” and there were three possible answers, “‘yes, completely by myself’, ‘yes with help’, and ‘no, not at all’.” Those living in institutions were excluded from this question.

The variable *leisure activities* is used to see how active and social people are. This is a category that can reveal how much interaction the respondents have with others and also how active they are both physically and mentally. For outdoor activities I am using the variable *walking* which includes Nordic walking as well as regular walks. Then for a solitary variable I used reading and finally I looked at the social activity of having relatives to visit. This relates to the self fulfillment and part of the quality of life theory.

I have also included four subjective variables *self-rated health*, *self-rated loneliness*, *satisfaction* and *meaningfulness*. “How would you assess your own general state of health?” was the question asked for *self-rated health* the question asked with the option of responding “good, bad, or neither good nor bad.” The question asked for self-rated *loneliness* was “are you ever bothered by feelings of loneliness?” with the possibility of responding on a scale of 1-4, “nearly always” to “almost never”. In regards to satisfaction the question asked was “Do you usually feel that your daily life is a source of personal satisfaction?.” The possible responses were on a scale from “completely dissatisfied” to “completely satisfied,” with a total of 11 levels. The question for *meaningfulness* was, “do you usually feel that your daily life is a source of personal satisfaction.” The answers here were also on a scale, with the possible responses being “no,” yes, sometimes,” and “yes, often.”

The questionnaire here asked, as much of quality of life has to do with ones own feelings, experiences, and views on ones own situation.

When there were “no answers” to the questions I have removed them from the data as there were no question with a significant amount of “no answer” responses.

II] Sample of Study

In total there were 710 participants between the ages of 75-101, with the 80-84 year old category being the largest. There were 587 (82.7%) respondents in urban areas and 123 (17.3%) in the rural areas. 324 (45.6%) of the respondents were men and 386 (54.3%) were women. The response rate for this survey was 86.2%.

Age 5 Years	Urban Male	Urban Female	Rural Male	Rural Female
75-79	25,3%	24,8%	28,8%	26,6%
80-84	20,4%	35,1%	27,1%	34,4%
85-89	21,1%	17,4%	15,3%	17,2%
90-94	21,9%	13,4%	17,0%	12,5%
95-99	11,3%	8,7%	11,9%	7,8%
100+	0,0%	0,6%	0,0%	1,6%

Figure 4: Age/sex Breakdown of the interview population (Source: Sweold).

III] Method

For this paper I have looked at the data set using descriptive statistics and I am also concentrating on the data set as a whole, to organize and describe the results. After that I used a bivariate analysis, in particular a chi-square test. This is relevant to see whether the dependent variables are independent of location, in this case urban or rural, or the main variable of interest and to see if there is a relationship between the two, and whether or not this is just by chance (Salkind, 2013:287). I am using a chi-square test to determine whether there is a statistically significant relationship between my main variable of interest, urban/rural and my dependent variables, which are my quality of life indicators.

Part 4: RESULTS & DISCUSSION

In this section I will be presenting the results of the analyses. I have broken this into seven different categories, which relate to quality of life. These are whether you own your own home, self-rated health, self-rated satisfaction, buying food, loneliness, meaningfulness, and leisure activities. All of these are divided by rural and urban and then gender for further information. I have also included

the p-values garnered from the chi-2 tests, all tables can be found in the appendix.

I] Results

Homeowner

I have looked at the variable homeowner as it gives a good sense of financial stability as it shows who owns and who rents property. In this case more people in the rural area own their own homes as well as rents property. More than twice as many of those in the urban areas live in an institution, at 28.45% compared to 8.94% in the rural areas. In general it is females that rent the most and it is males that own the most property. Rural males are also least likely to reside in an institution.

The P-value here is 0.004 when looking at urban/rural making this statistically significant. The p-values for urban/rural and males is 0.017 and for females it is 0.048, making these two results statistically significant.

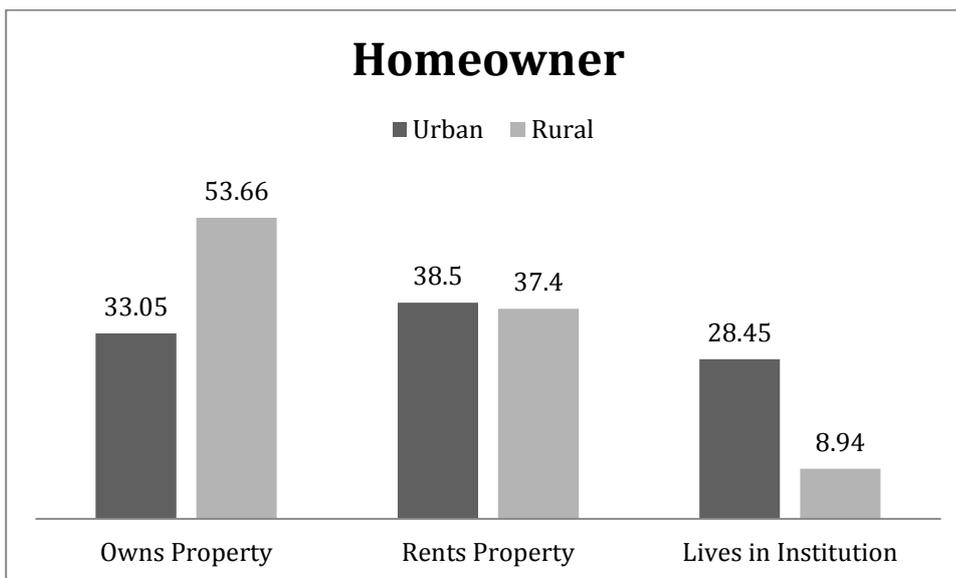


Figure 5: Homeowner Urban/Rural division

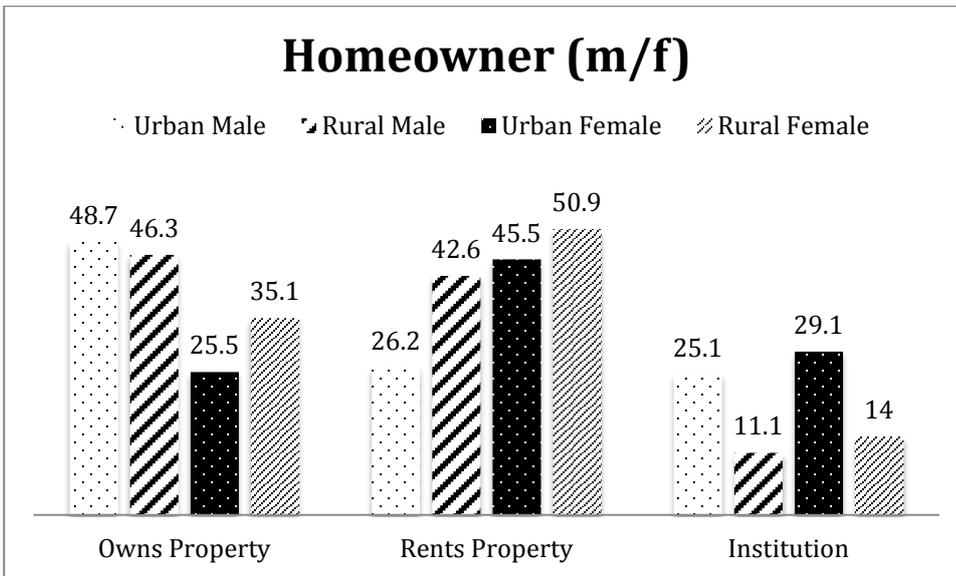


Figure 6: Homeowner

urban/rural and male/female.

Buying Food

This category was pretty even on all fronts, the majority of people regardless of where they lived, bought groceries completely by themselves. With those living in the rural areas being slightly more independent in terms of being able to go out and buy food themselves at 58.5%, as compared to 57.2%. Those in the rural areas are also the least independent with just over 2% more being completely unable to buy food themselves. Again, there was not a large difference between the two. When running the chi-2 test none of the results were statistically significant.

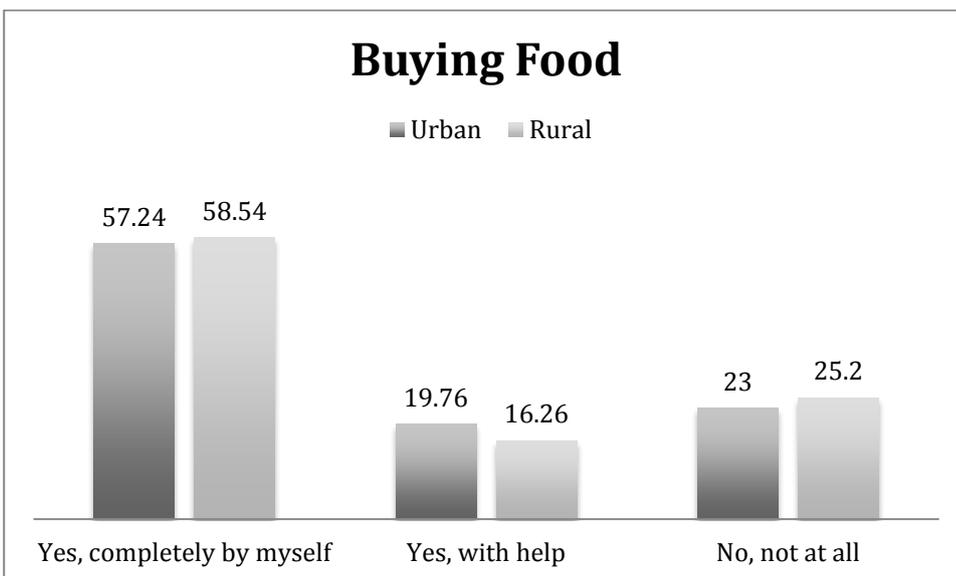


Figure 7: Buying food urban/rural.

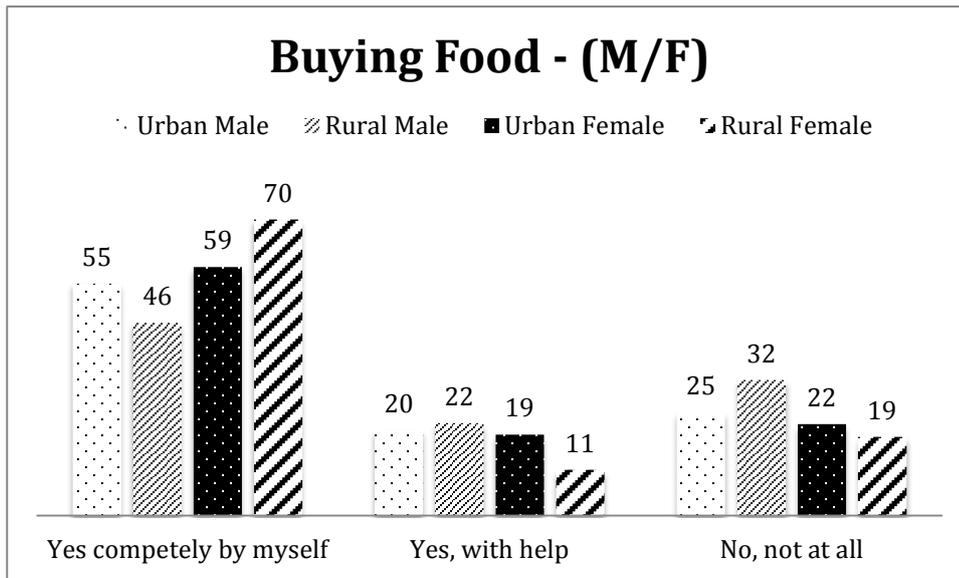


Figure 8: Buying Food urban/rural and male/female

Self-reported Health

When looking at health the majority of people self-reported themselves in the category “good,” with just over half (51.61%) being those residing in the rural area as compared to 45.96 % in the urban areas. In the category of “neither good nor bad” the figures were 3% apart with the urban at 40.9% and the rural at 37.9% respectively. This leaves those residing in the urban areas as the largest group in the “bad” category with 13.1% but again there is not such a large difference with the rural at 10.5%

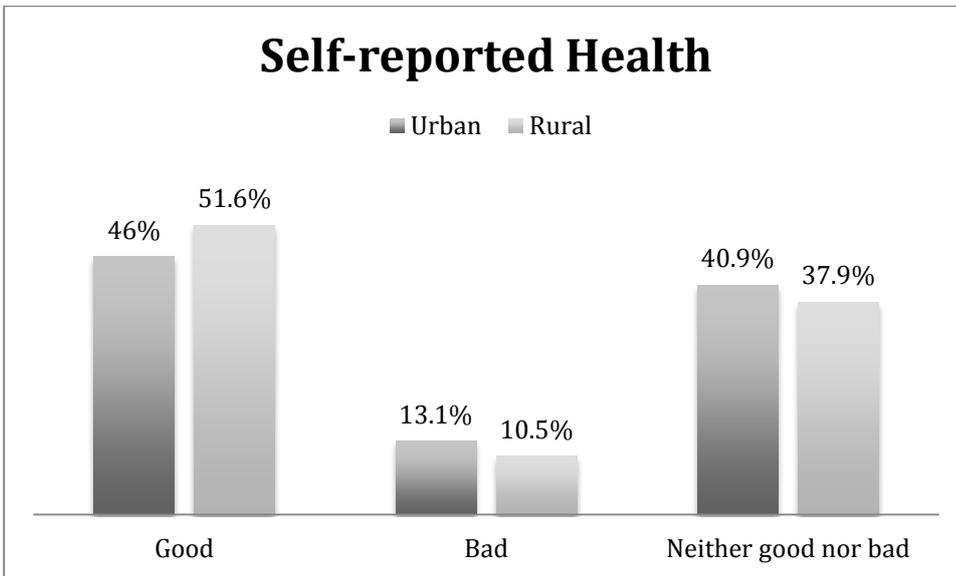


Figure 9: Self-rated health urban/rural.

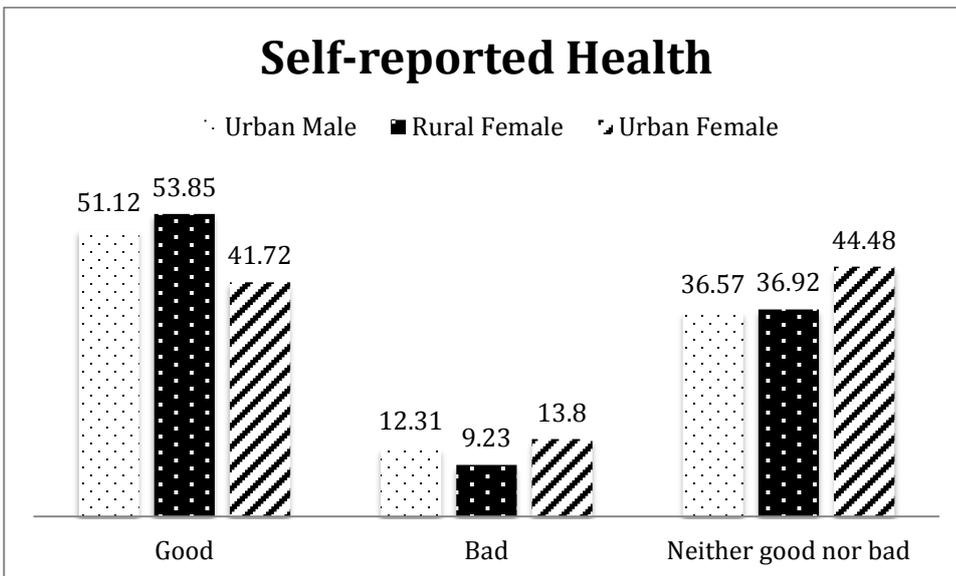


Figure 10: Self-rated health urban/rural and male/female

Self-rated Satisfaction

For this category there were 11 categories that the respondents could answer starting with “completely dissatisfied”, a neutral option in the middle, and “completely satisfied” at number 11. The tables below show the average responses for all the categories when looking at it from a scale of 1-11. When looking at the analysis for the subjective variable satisfaction we can see that most

people, urban and rural, are completely satisfied with their lives, 28.57% in the urban areas and 31.68% in the rural areas, there is not a big difference between the two areas although those in the rural areas are slightly more satisfied with their lives, with an average of 7.63 as compared to 7.3. When you look at the “completely dissatisfied” category when comparing satisfaction to gender. No males were completely dissatisfied with their lives as compared to females, even though only a tiny percentage, there were at least a few women completely dissatisfied with their lives. Below we can see that all categories were in the 7 ranges with rural females being the most satisfied but only by a small margin those least satisfied were urban females.

Average Self-Rated Satisfaction

Urban	7.3
Rural	7.6

Figure 11: Average self-rated satisfaction between urban/rural.

Average Self Rated Satisfaction Males

Urban	7.6
Rural	7.5

Figure 12: Average self-rated satisfaction urban/rural and males.

Average Self Rated Satisfaction Females

Urban	7.1
Rural	7.8

Figure 13: Average self-rated satisfaction, urban rural and females

When looking at “satisfaction” and where you live, urban or rural, the p-value is 0.872 meaning that it is statistically insignificant.

The statistical significance between “satisfaction” and “sex” has a p-value of 0.018, therefore we

can say that there is a statistical significance between satisfaction and gender but not between male and female and where one lives as both of those results were statistically insignificant

Loneliness

The graphs below show a few interesting things in terms of the differences between urban and rural and also between males and females. First off, we can see that the majority of the respondents were “rarely” lonely both urban and rural falling around the 83% category. When looking at the variable loneliness and breaking it down by gender the outcomes are more diverse. The differences for rural males and females is particularly interesting as 0% of males said they were “nearly always” lonely as compared to 6.45% of the rural females which is the highest number in that category. Similarly 89.19% rural males “rarely” felt loneliness, which was the highest percentage. Here the lowest group was rural females with 77.42.% “rarely” experiencing loneliness. In general we can see that women experience more loneliness than males and that the largest differences are between men and women in rural areas.

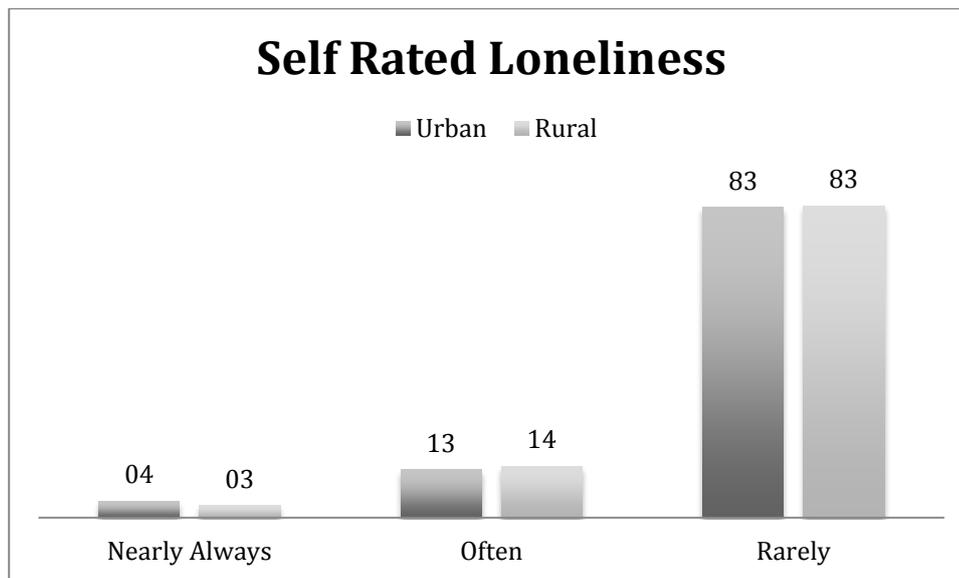


Figure 15: Self-rated loneliness urban/rural.

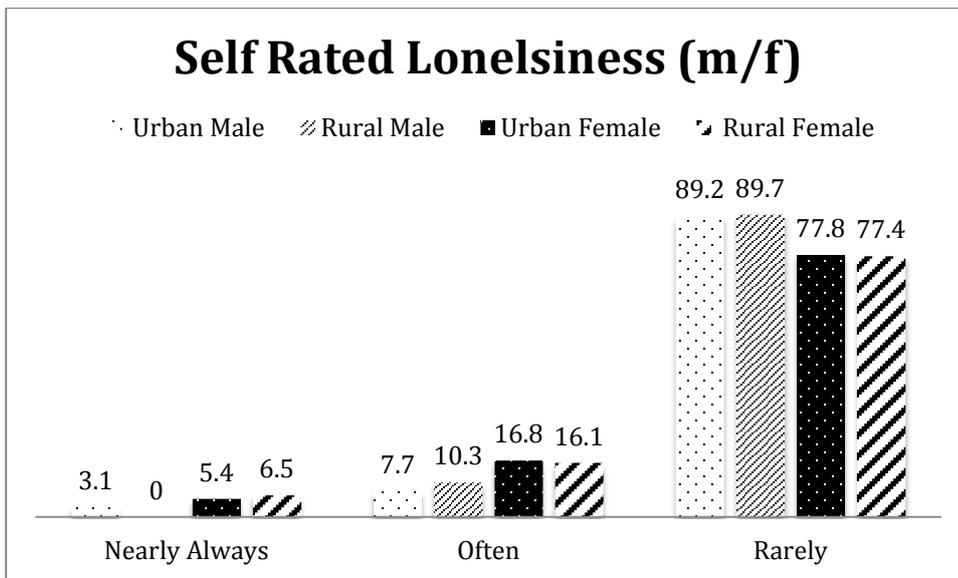


Figure 16: Self-rated loneliness urban/rural and male/female.

When looking at the Chi-square test results we can see that the results show that comparing self-rated loneliness to urban/rural garners a statistically insignificant response (0.87). The same can be said when looking at it with males as well giving a p-value of 0.335 and also for females with a p-value of 0.942. When comparing self rated loneliness to sex as a whole there is a p-value of 0 making it statistically significant.

Meaningfulness

For this category the question that was asked was “Do you usually feel that your daily life is a source of personal satisfaction?” Here we can see that majority of people often see their lives as meaningful with those in the rural areas viewing their lives as slightly more so with 62.1% compared to 60.49%. For this category those that find the least meaningfulness is females, with those in the rural area being the highest with 13%. On the other side of this it is urban males that find most meaningfulness in their lives with 65.7% followed by rural females at 64.8%.

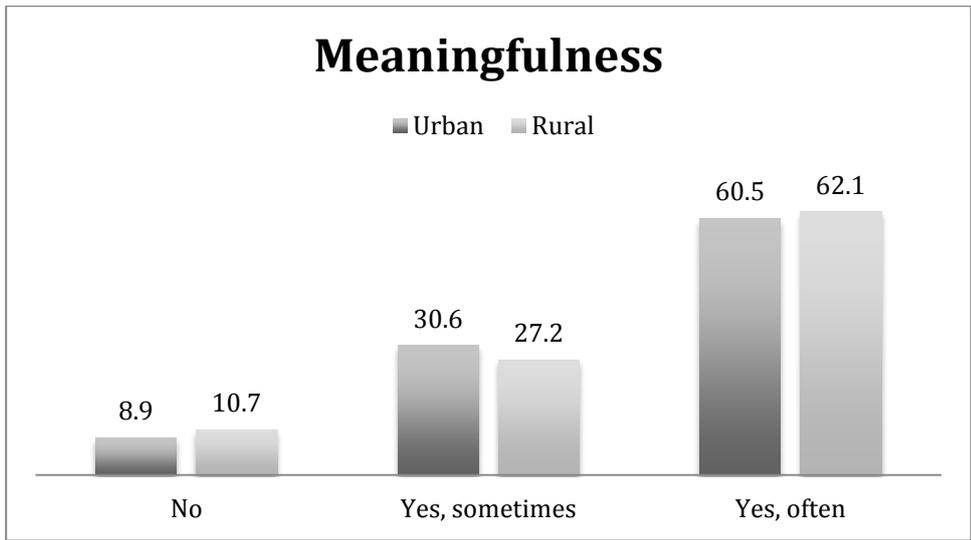


Figure 17: Meaningfulness urban/rural.

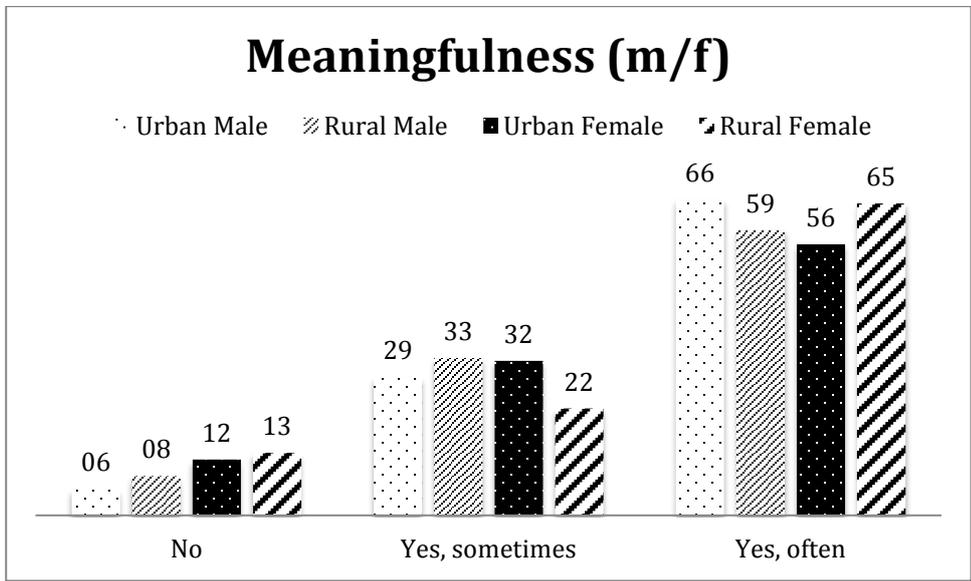


Figure 18: Meaningfulness urban/rural and male/female.

When calculating the p-values we can see that the results are statistically insignificant except for when looking at meaningfulness and sex where the p-value is 0.028.

Leisure Activities

For the category of leisure activities I have looked at a variety of variables and divided them

into sub section. The first one I have is what I consider an “active” variable, *Nordic walking and walks*. This is followed by a more “still” variable, *reading books*. Finally, there is the “social” variable of having relatives to visit.

The first results we can see is when it comes to walking the number is higher in the urban areas. When this is broken down into male/female we can see that it is the men in the urban areas who are the most active with half “often” going for walks. The least active category is the rural males with majority of that category responding “no” or “sometimes.”

For the more still type of activity I have looked at reading books. There was no great difference between urban and rural yet it was the urban elderly population who read the most (39%) and when it comes to the least it was the rural area but again these results were very close 36.3% and 37.4% respectively

Finally I focused on the social aspect of people’s lives *with has relatives come to visit* In general it seems like both the urban and rural have relatives visit “often” with about a quarter of the respondents for each group answering this. Rural males have the highest “often” response rate and urban females having the highest percentage of “no” responses.

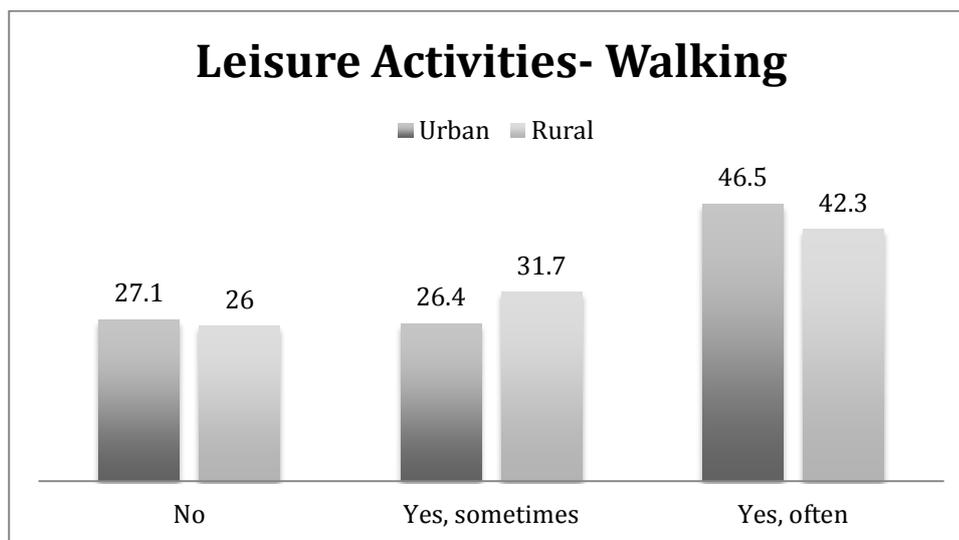


Figure 19: Leisure activities-Walking urban/rural.

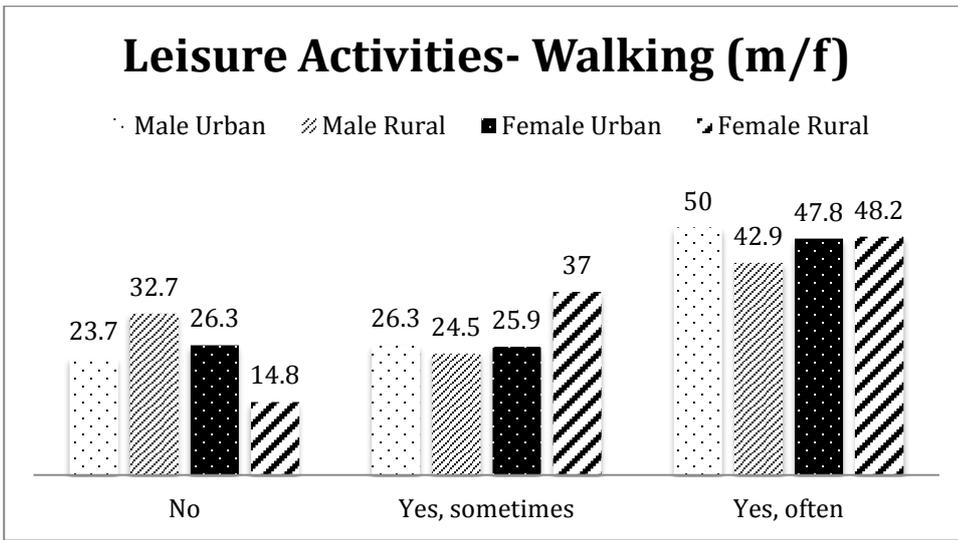


Figure 20: Leisure activities-walking, urban/rural.

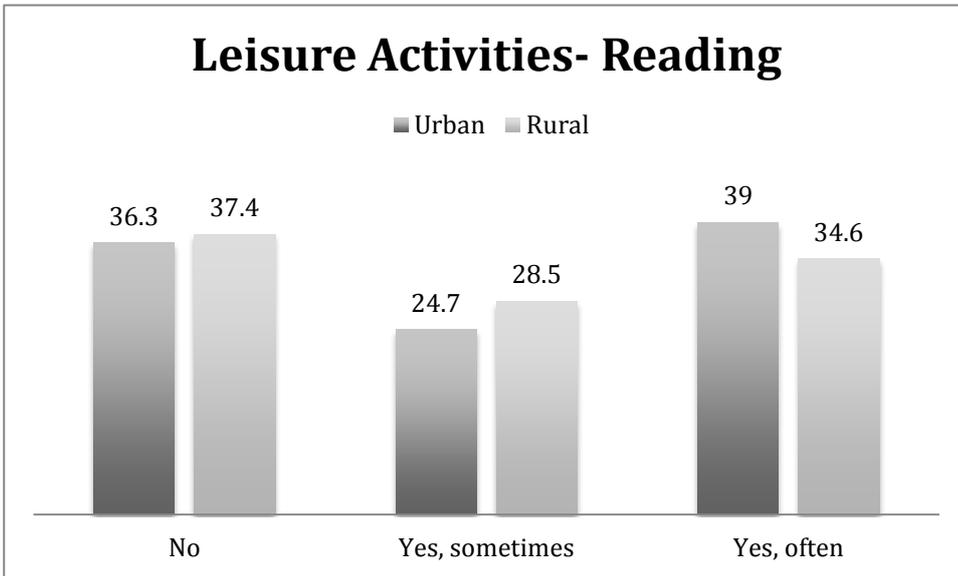


Figure 21: Leisure activities- reading, urban/rural.

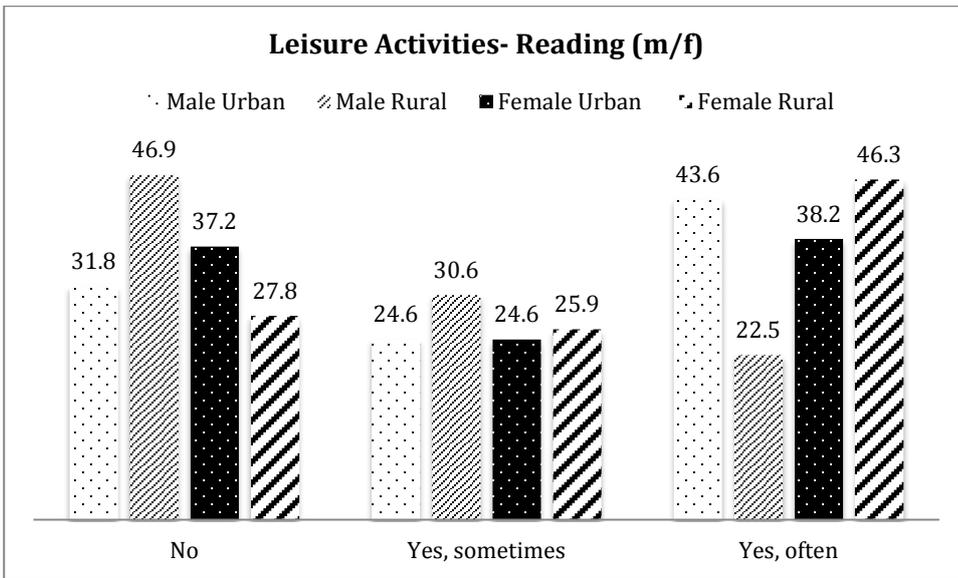


Figure 22: Leisure activities- reading, urban/rural and male/female.

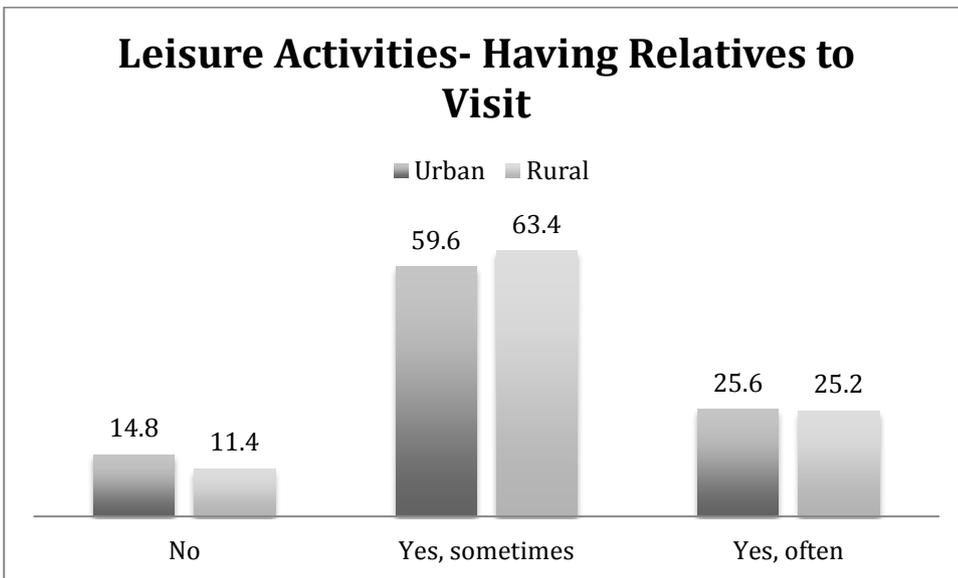


Figure 23: Leisure activities- having relatives to visit urban/rural.

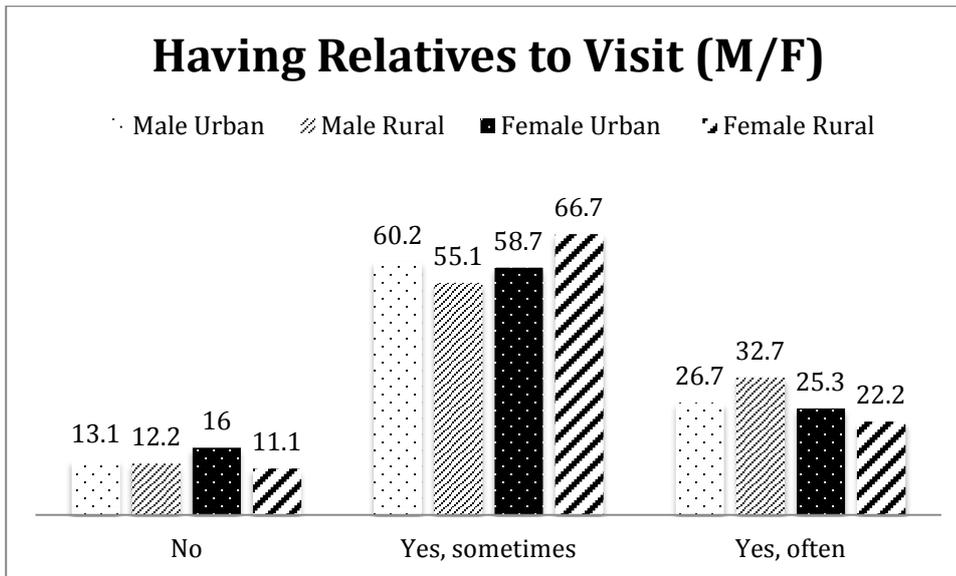


Figure 24: Having relatives to visit, urban/rural and male/female.

II] Discussion

When looking at the results the most striking thing was how few of the results were statistically significant, those that were tended to be ones between sex and the quality of life indicators. Therefore my hypothesis was disproved and there is no significant difference between the elderly population of those living in the rural and those living in urban areas of Sweden. The most likely reason that there were so few differences between the urban and rural quality of life is because of Sweden's welfare state. The differences, or lack thereof, are so few because of the options and services afforded to those living in Sweden, like home care facilities, regardless of where they are located geographically. It is important to note that when one looks at the percentiles between the urban and rural population that there are, however, some interesting results. The

theories that are more subjective and based on individual choice are the most fitting ones here as although the results can be similar they are not uniform, thereby suggesting quality of life theory is the most suitable when discussing the results.

When using *home ownership* as a way to determine financial independence we can see that there are significantly more who own their own property, by about 20%, in the rural than in the urban areas. As we saw, for rental properties it is fairly even. A reason why more may own their properties in the rural areas is that the property prices are more reasonable making it easier for more people to purchase homes. As we also saw more than a quarter of the urban population interviewed live in institutions. I believe that this is because there are more institutions in the urban areas, as previously mentioned in this paper institutions are beginning to close and those that have closed may be those in rural areas as there are fewer people there so perhaps it is not economically feasible to keep those institutions open. Urban males however were the group most likely to own property with almost half of them doing so. Perhaps this is due to having jobs in the city that pay better thereby affording them with the opportunity to buy more easily. On the other side of this urban females made up the smallest group of those who own property which may be due to being more confined to typical gender roles where the males is the bread winner and thereby also the homeowner. Those residing in the rural areas seem to have more economic stability as the results indicate that they are more likely to own their own homes. Rural males seem to have it the best as many of them are able to own their own homes and they also have the lowest numbers that reside in institutions which supports my hypothesis. It should be noted that homeownership and urban/rural as well as, homeownership and urban/rural and gender were all statistically significant results

When it comes to the variable *buying food*, which was used as a way to measure independence, we can see that the p-value rates this as significantly insignificant. When looking at the percentage differences we can see that there is not a lot of difference between the urban and rural category even when one includes gender. Majority of respondents are capable of buying groceries completely by themselves. For those that need assistance or are incapable of buying groceries on their own there are services available to help them get groceries such as home care services and perhaps having a family member or friend bring groceries. Those that are most independent are the rural females with a significantly higher number being able to buy groceries completely by themselves. Rural males, however, are the least independent needing the most assistance or being completely incapable of buying groceries on their own.

The next four results are for the self rated variables, *loneliness, meaningfulness, satisfaction,*

and *health*. It is important to remember that these are subjective and therefore more related to personal feelings and life experience.

The results for self-rated *loneliness* showed no statistical significance when it came to comparing it to the urban/rural. When looking at the percentages we can see that it is pretty even amongst both groups, with “rarely” being the largest group for both with 82.9% and 83.3% respectively. This is similar to the findings in Portugal where there was no great difference between the urban and rural when it came to loneliness. When dividing it by gender women in general are lonelier than men. Of those men, all of those who felt that way live in the urban areas as 0% of rural males felt that way. 6.45% of rural females felt that way which is interesting as that was the highest percentage for that category. Rural males also had the highest numbers when it came to almost never feeling lonely which was the same as the findings of the Italian study. This result supports my hypothesis and in particular that men are less lonely than females.

Self-rated meaningfulness answered the question, “do you usually feel that your daily life is a source of personal satisfaction?” From the responses garnered one can see that it is fairly even between the urban and rural populations. When looking at male/female differences we can see that those who find most meaning in their lives are urban males and rural females with almost a 10% percent difference between urban males and females. Yes those that said that they found the least amount of meaningfulness was also rural females. This shows that they fluctuate between the most extremes as they also have the lowest response for “yes, sometimes.” The p-values for this variable were all statistically insignificant except for meaningfulness and sex, without the urban/rural divide, which had a p-value of 0.03 (p-values can be found in the appendix). Why this is the case is unclear, and previous research does not give any straightforward answer. Although the majority of the results were statistically insignificant it does not mean the results were insignificant. My hypothesis regarding males and females was in this case proved to be correct but not when comparing them to urban/rural as we can see that it is urban males who have the most meaningfulness in their lives.

When looking at self-rated *satisfaction* the results show that those living in the rural areas are more satisfied with their lives but the greatest differences, and what is considered statistically significant, is between men and women when viewing it without considering an urban-rural divide. When just looking at the percentages, there are some interesting things to consider. For example urban males and rural females are the most satisfied with their lives as they have the highest percentages when looking at categories 6 through to completely satisfied, with just under a 1% difference (81.2% urban males, 82.3% rural females). Without this control variable however there is

no great difference and in this case my hypothesis is not supported. This was slightly unexpected as, for example, in Italy it was rural males who were the most satisfied with their lives. A reason for this may be that people make the best of their surroundings and will make sure that they have the best life possible. Also as this is a subjective variable it is important to keep in mind that how people rate themselves tends to vary from person to person as everyone has a different understanding of “satisfied”.

Self reported *health* was an interesting variable to look at as in general it was fairly even although we can see that those in the rural areas consider themselves slightly more healthy as they had higher numbers in the “good” category and the least in the “bad” category. Although this result was statistically insignificant I do not believe this is an insignificant result as it shows that those living in the rural area consider themselves as being in better health, which can be seen as a positive reflection of how they view their quality of life. Health is an important indicator of ones quality of life, both physical health and ones subjective health which was indicated both by Maslow’s hierarchy of need and also Hyde et. al four dimensions (2003 & Sirgy,1986). This is somewhat reflected in gender where one can see that the urban females have the worst self-rated health with the lowest numbers in the “good” category and the highest in the “bad” on the other side of this rural females have the best self rated health with the highest numbers in the “good” and lowest in the “bad “categories. For females whether they reside in the urban or rural seems to make a larger difference than it does for the males.

When looking at the variable *leisure activities* and specifically the active one, we can see that those residing in the urban areas are slightly more active than those in the rural areas. Perhaps this is because this is a leisure activity that is easy to participate in in the urban areas whereas if one lives in the rural areas there are more outdoor activities that one could engage in such as fishing and mushroom picking. This was, however, unexpected, as previous research has said that many elderly in the city feel that there are not enough resources in the city that make them “age-friendly.” This is somewhat reflected when looking at the urban females as the majority of the respondents who answered “no” and “sometimes”. When looking at the results from the male/female perspective we can see that half of the urban men “often” go for walks and those that least often go walking are rural males. This was also somewhat unexpected as an assumption one could make would be that males would be more active on average as they are younger than the females and therefore would be more active.

The variable *leisure activities* also included the still variable of reading. The results here

reveal that the majority of the rural population (37.4%) does not read. When this is broken down into male/female it is interesting to note that in all categories “no” and “often” were the two biggest groups with “often” being slightly higher. The anomaly here is rural males where “no” is the clear majority and a steady decline down to “often” with the lowest percentage. Previous research gives no clear indication as to why this would be the case specifically for this group. Although the expectation would be that perhaps those in the rural areas would be outside more given they have more space and activities to engage in.

The final leisure activity looked at was having relatives to visit. The majority of participants responded “yes, sometimes,” regardless of where they lived. The results indicate that those in the rural areas have slightly more visits from their relatives than the urban population. This perhaps indicates that those living in the rural areas have more family near them, as it was pointed out earlier, proximity plays a role in the amount of contact one has with family. Rural communities are also considered more close-knit so perhaps this is also another reason for more visits. After running the chi2 test it was determined that none of the results were statistically significant. Rural males have relatives visit the most often, followed by urban males. In the “sometimes category rural females receive the most visits. Urban females seem to receive the least amount of visitors which could possibly relate to the study done in Minnesota, albeit from an urban perspective, that women are less likely to ask for help. Another reason could be that they are living in institutions so family do not have to visit as often to help out as would be wont in the rural areas. Quality of life assessment says that the pursuit of leisure activities is a way to increase ones quality of life the analysis indicates that those in the rural areas engage in more leisure activities than those in the rural areas signifying that in this area those in the rural area have a slightly higher quality of life.

The results generally revealed that there is not a large difference between the elderly population in the urban and rural areas of Sweden, which could most easily be explained by the welfare system Sweden has in place thereby giving the elderly population a good quality of life regardless of where they reside. The differences found between the genders and where one resides were more suggestive, as they were larger, and more statistically significant, especially when further broken down to where one resides, either urban or rural.

III] Future Research

As previously mentioned the largest differences were in regards to sex and I believe that in

the future more research should be done looking into the urban/rural divide and sex as a general topic but also keeping in mind the urban rural aspect as urbanization continues.

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APPENDIX I

Chi Square test: Results

Homeowner

Pearson chi2(2) = 11.0927 Pr = 0.004	Homeowner & urban/rural
Pearson chi2(2) = 8.1036 Pr = 0.017	Homeowner & Urban/rural (male)
Pearson chi2(2) = 6.0872 Pr = 0.048	Homeowner & urban/rural (female)

Buying Food

Pearson chi2(2) = 0.8920 Pr = 0.640	Buying food & urban/rural
Pearson chi2(2) = 1.9475 Pr = 0.378	Buying food & urban/rural (male)
Pearson chi2(2) = 3.4116 Pr = 0.182	Buying food & urban/rural (female)
Pearson chi2(2) = 4.0922 Pr = 0.129	Buying food & sex

Self Rated Health

Pearson chi2(2) = 1.4953 Pr = 0.473	Self-rated health & urban/rural
Pearson chi2(2) = 0.1211 Pr = 0.941	Self-rated health urban/rural (male)
Pearson chi2(2) = 3.4074 Pr = 0.182	Self-rated health & urban/rural (female)
Pearson chi2(2) = 3.6964 Pr = 0.158	Self-rated health & sex

Self Rated Satisfaction

Pearson chi2(11) = 5.2966 Pr = 0.872	Self-rated satisfaction & urban/ rural
Pearson chi2(9) = 6.4355 Pr = 0.609	Self-rated satisfaction & urban/rural (male)
Pearson chi2(11) = 6.4730 Pr = 0.789	Self-rated satisfaction &urban/rural (female)
Pearson chi2(11) = 21.4337 Pr = 0.018	Self-rated satisfaction & sex

Self Rated Loneliness

Pearson chi2(2) = 0.8920 Pr = 0.640	Buying food & urban/rural
Pearson chi2(2) = 1.9475 Pr = 0.378	Buying food & urban/rural (male)
Pearson chi2(2) = 3.4116 Pr = 0.182	Buying food & urban/rural (female)
Pearson chi2(2) = 4.0922 Pr = 0.129	Buying food & sex

Meaningfulness

Pearson chi2(3) = 6.7088 Pr = 0.712	Meaningfulness & urban/rural
Pearson chi2(3) = 2.8404 Pr = 0.623	Meaningfulness & urban/rural (male)
Pearson chi2(3) = 6.7869 Pr = 0.351	Meaningfulness & urban/rural (female)
Pearson chi2(3) = 8.7389 Pr = 0.028	Meaningfulness & sex

Leisure Activities

Active- Walking	
Pearson chi2(2) = 2.9785 Pr = 0.58	Leisure walk & urban/rural
Pearson chi2(2) = 1.4872 Pr = 0.89	Leisure walk MF
Still-Reading	
Pearson chi2(2) = 1.2303 Pr = 0.535	Leisure reading & urban/rural
Pr=935	Leisure reading (MF)
Social-Having relatives visit	
Pearson chi2(2) = 4.0402 Pr = 0.133	Leisure visiting relatives & urban/rural
Pearson chi2(2) = 1.0926 Pr = 0.579	Leisure relatives to visit & urban/rural

