

Unpaid care work: A comparison between older adults in urban and rural areas of South Africa

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Mini-dissertation accepted in partial fulfilment of the requirements for the degree *Master of Art in Medical Sociology* at the North-West University

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COMMENTS

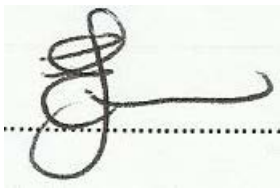
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DECLARATION

I, Estelle Louw, hereby declare that 'Unpaid care work: A comparison between older adults in urban and rural areas of South Africa' is my own work and that the views and opinions expressed in this mini-dissertation are my own and those of the authors referenced both in the text and in the reference lists.

I further declare that this work will not be submitted to any other academic institution for qualification purposes.

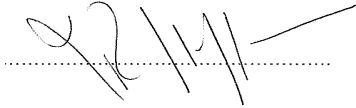
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Estelle Louw

March 2019

PERMISSION TO SUBMIT ARTICLE FOR EXAMINATION PURPOSES

Ms E Louw (20473818) elected to write an article in partial fulfilment of the degree Magister Artium in Medical Sociology. As her supervisor, I hereby grant permission for her to submit this article for examination purposes.

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J.R Hoffman (D.Phil, Oxon)

DECLARATION BY LANGUAGE EDITOR

Declaration by Language Editor

I hereby declare that I have language edited

*Unpaid care work: A comparison between older adults
in urban and rural areas of South Africa*

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Mini-dissertation submitted in partial fulfilment of the requirements for the degree

Master of Arts in Medical Sociology

At the North-West University

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BA (UCT), BA (Hons.) (UCT), MA (Oxford)

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ABSTRACT

Title: Unpaid care work: A comparison between older adults in urban and rural areas of South Africa

Key words: Unpaid care work, unpaid work, older adults, Time Use Survey, urban, rural, South Africa.

The time older adults spend on unpaid care work in urban and rural areas of South Africa has been neglected in research, along with their time use more widely. This is happening when the effects of HIV/Aids as well as non-communicable diseases have a detrimental impact on the provision of care work within the family and society. Moreover, the demands of the burden of care work on older adults can lead to persistent health issues in old age. The care work that older adults take on is their contribution to the family and society in general. This research aims to determine the scope and nature of older adults' unpaid care work. Comparisons were made with unpaid care work for the household and its members, for non-household members and for the community. Secondary analysis was performed on data collected by Statistics South Africa during the South African Time Use Survey (TUS) in 2010. This was done from an age and gendered perspective to determine what unpaid care entails and who does it. As this work is generally associated with women's activities, unpaid general work activities obtained from the South African TUS 2010 were also included to determine the role of older men and the time they devote to unpaid care work.

This study is quantitative in nature and encompasses a cross-sectional research design. The sample used consisted of 4 387 participants aged ≥ 60 years and living in South Africa. Data from the South African TUS 2010 were obtained from an individual questionnaire that collected participants' demographic data, a diary in which they had to record their activities every 30 minutes for a period of 24 hours, and follow-up interviews with survey officers.

The main finding of this study concluded that older adults reported the most time spent on unpaid care work for the household and its members. Geographical location of participants did not significantly differ between urban and rural areas in South Africa. Furthermore, younger older adults (60-69 years) performed most of the unpaid care work of all age cohorts in this study. The comparison of older adults' time spent on unpaid care work and unpaid work yielded no significant differences. Women spent time on unpaid care work activities while older men spent time on

unpaid work in general. This has led to the conclusion that while feminists are advocating equal participation from men and women in unpaid care work, fresh thought should be given to how men care and that unpaid work might be their way of caring. Interestingly, while geographical area did not yield significant differences in older adults' time spent on unpaid care work, this study found that significant differences occurred at provincial, metropolitan and non-metropolitan levels in South Africa.

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CHAPTER 1

INTRODUCTION

The theme pursued in this study deals with older adults' time spent on unpaid care work in urban and rural areas of South Africa. This research is necessary to better understand the scope and nature of older adults' performance of unpaid care work, an area in the literature that has not received due attention to date. It is essential to explore older adults' time spent on unpaid care work to shed light on the care burden that falls on them and to focus on their contributions within the family unit and broader communities. In this research, embedded within the South African context, comparisons are made between unpaid care work by older adults according to geographical area and age from a gendered perspective. As unpaid care work ultimately forms part of unpaid work, attention is also paid to older adults' time spent on unpaid general work. This serves to determine whether differences can be identified in older adults' time spent on unpaid care work and unpaid work according to rural and urban areas of South Africa. The study sets out to provide an evidence-based descriptive overview of both the generative role of the older population and the constraints of unpaid care work faced by older adults in South Africa.

This chapter will address the problem statement dealing with the current issues faced in Long Term Care (LTC) by and for older adults in South Africa. The research approach and design followed in conducting the study will be presented, and in conclusion, the chapter division will outline the operationalisation of the study.

1.1 Problem Statement

Older adults' 'work' in relation to caregiving responsibilities is an emerging research area in the field of gerontology (Aboderin & Hoffman, 2017; Economic and Social Rights Centre, 2016; United Nations Research Institute for Social Development [UNRISD], 2016), to the extent that a special edition was published in 2017 on older workers and caregiving in a global context. (Phillips & O'Loughlin, 2017). Although there has been global interest by policymakers who support the call for the development and enforcement of care policies by governments throughout the world, to date the African region has not drawn up adequate care policies for people entering old age and their LTC management. Such care policies are not embedded in any one institution and will,

therefore, require government intervention to establish a collaborative approach in formulating those policies among a variety of institutions, including health, education, labour and social protection (UNRISD, 2016).

Particular interest surrounds the national allocation of resources – providing financial compensation for unpaid care workers for their time spent caring for others. This comes at a time when unpaid care work has received attention largely as a result of gender-based advocacy. This has been prompted by existing disparities between women and men in the division of unpaid care work as well as the resources and power within the household (UNRISD, 2016). As part of this advocacy the Sustainable Development Goal 5, Target 4 aims to:

Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate (United Nations [UN], 2016, para.5).

In relation to unpaid care and domestic work, the African Union's (African Union [AU], 2009) Social Policy Framework advocates the enactment of the AU Policy Framework and Plan of Action on Ageing (HelpAge International, 2002) to protect the rights of older persons. This is also embedded in the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Older Persons in Africa, adopted in January 2016 (AU, 2016). It comes at a time when the provision of unpaid care work is recognised as being focused around the family, government, society and the private sector.

In addition to policy advocacy in relation to care work, a demographic and epidemiological imperative underscores an analysis of unpaid care work.

According to the demographic background of South Africa, the current older population of 4.8 million is projected to exceed 11.6 million people by 2050 (UN, 2017). As well as increasing in number, older adults are living longer as well. This extended lifespan is not necessarily matched by improved living conditions; the majority of older adults do not have access to adequate access to care services. The situation of older people has further deteriorated as a result of the HIV/Aids epidemic in South Africa, whose recorded incidence is the highest in the world. This has resulted in an increased burden of care for the younger generation (intergenerational care). Importantly, the

literature points to the role of grandparents as *care providers* for their family members, traditionally performed according to African family norms, especially against the backdrop the HIV/Aids epidemic in South Africa (Aboderin & Hoffman, 2017).

To date, attention has been paid to care provision by older adults for the younger generations (intergenerational care) while relatively little is known about intra-generational care (older adults providing care for other older adults) (Van Eeuwijk, 2016). In addition, non-communicable diseases (NCD's) create a further care burden on older people as longevity is accompanied by the three most prevalent of these: high blood pressure, diabetes and arthritis mean that older people have to provide ongoing care for their counterparts (intra-generational care) (Bradshaw et al., 2011).

Unpaid care work is a collective term used to describe the engagement in work without receiving any compensation or having monetary value (Budlender, 2004). Razavi (2007) states that unpaid care work is performed and received mainly by family members within the family unit and includes activities such as cooking and cleaning, and caring for children, older adults and sick people. To that end, unpaid care work is performed continuously and becomes a time-consuming undertaking. In view of the concept of time, unpaid care work is mostly accounted for inaccurately as we rely on people's recollection of events rather than on real-time activities that are timed and recorded. Hence time use diaries as part of time use surveys (TUSs) are instrumentally valuable for measuring time spent on unpaid care work on a particular day for a specific time period, and can therefore provide a more accurate accord of event sequences than simple recollection (Centre for Time Use Research [CTUR], 2017).

TUSs also distinguish between the division of labour of men and women in the household, with reference both to paid (work remunerated by monetary value) and unpaid care work (Esquivel, Budlender, Folbre, & Hirway, 2008). South Africa is one of the first few African countries to have completed a Time Use Survey. The first survey was conducted in 2001, followed by the second and most recent TUS in 2010 by Statistics South Africa (StatsSA) (StatsSA, 2013). Time Use data are essential for any country to determine where to invest its resources and how its citizens contribute to social, economic and political activity because it identifies the time people spend on different activities, during a specific time period. In particular, a TUS is able to accurately measure time spent on paid work and on unpaid work. This provides insight primarily into the differences of time spent on particular activities by different groups of people and is instrumental in setting up

care policy and programmatic development and planning (Chen et al., 2005; National Research Council, 2000).

As a result of conducting TUSs, South Africa is well-positioned to determine who performs unpaid care work. This is stereotypically still seen as a gendered (feminised) and expected activity and as such has been largely overlooked due to cultural norms and patriarchal views relating to the question of who is responsible for performing these kinds of activities (Folbre, 2014).

Furthermore, older adults as care providers should be examined within the context of household structure. The majority of South African families live in extended households, usually encompassing a three-generation family living together with or without other relatives. Rural-urban migration has resulted in younger generations leaving their rural areas in search of employment in urban areas (Amoateng, Heaton & Sabiti, 2007; Makiwane, 2011). As urban areas have inadequate care infrastructure, the children of these migrants remain in, or are sent back to, rural areas to be raised by their grandparents. This trend of children being left with grandparents while the parents looked for work or worked in urban areas was further intensified by the Apartheid era in South Africa and continues to remain (Mokone, 2006).

The Apartheid era and the persistent effects of these policies of segregation on the basis of race not only affected the absorption of care provision within the family unit and specifically by its older members but ultimately also the reception of care by older people. It was taken for granted that Black older persons in need would be cared for within the family system. The Apartheid government spent money on care facilities exclusively for the white population, with the focus around institutionalisation. Despite the abolition of Apartheid and the realisation that institutionalisation is not sustainable, the current government now faces the challenge of simultaneously improving current care facilities and reorienting LTC from institutionalisation to care in the community (Budlender, 2004).

In the absence of an implemented reorienting strategy, the only viable alternative for the South African government is to encourage the absorption of care within communities and families, so that community and family members care for one another. This has placed a further burden on poorer communities who are already struggling as a result of inadequate resources. It thus comes as no surprise that the Women's Budget Initiative in South Africa has called on government to provide assistance by any means necessary to reduce the burden faced by community carers

(Budlender, 2004) – and in the process this needs to be embedded in the composition and adoption of care policies in South Africa.

The feminist perspective should be applied when care policies are drafted. At present unpaid care work is yet to receive the necessary attention in social welfare programmes nationally. A clear distinction is needed to determine the roles and breaching the gap in gender inequality as unpaid care work in households is still very much unequally shared among women and men (Ngomane, 2016). Furthermore, Ferrant, Pesando and Nowacka (2014) emphasise the discussion surrounding the provision of care that is essential to a country's economic growth. Looking at women, in particular, they are carrying majority of the burden to perform care work across the life course and it is evident in their lower levels of participation in the labour force. While it is expected that older adults no longer form part of the labour force they – especially older women – continue to perform care work within the family unit.

It is therefore essential in the social, economic and political context to determine who is responsible for providing care, its nature and to what extent it is performed, for current and future planning as well as for policy implementation. Unpaid care work needs to be unpacked in order to determine its worth and to what extent society deems as necessary (Floro, 2018). On the basis of these challenges governments and societies need to implement policies that lead to shared care provision, and in particular, to a reduced burden of unpaid care work done by women. Furthermore, inequalities in performing care work have a direct human impact, in particular on women's ageing, chronic illnesses and quality of life.

To this end, more efforts are required to develop a sustainable care economy in South Africa. Remarkable progress on the part of the South African government has resulted in payment of a means-tested old-age pension for all persons aged ≥ 60 years. To some extent, this has lessened the financial burden on the family unit. Despite this achievement, however, evidence-based efforts are needed to determine the role of work fulfilled by older adults. Thus far, this has not received the necessary attention in gerontology in Africa.

Another crucial aspect to be determined is the division of labour in the household and the extent to which it is shared between older female and older male adults from rural and urban areas of South Africa.

Against this background, the research engages with the following aims:

1.2 Research Aims

This research sets out generally to analyse the nature and extent of unpaid care work of older persons in South Africa. More specifically, it aims to ascertain, on the basis of geographical area, age and gender, the representation of older adults who are performing unpaid care work. From this analysis, the study will determine the extent to which geographical area, age and gender influence older adults' time spent on unpaid care work. More pertinently and given the global feminisation of care, this analysis aims specifically to provide evidence of the scope and nature of unpaid care work performed by older women and the extent of the care burden women have to carry.

To this end, role-theoretical and feminist approaches within the broad field of sociology and, more focused, medical sociology will provide a conceptual framework within which gender and age may be explained in terms of care issues.

1.3 Theoretical Framework

First, it is necessary to examine the scope of sociology. Pope and Nauright (2009) describe sociology as “the study of development, structure and functioning of society” (p. 99). Hence sociologists examine the social structure of people in society in order to understand its functioning as a whole. Role theory best explains that people occupy different social positions in the form of statuses and roles. This, in turn, guides how they direct their own behaviour and anticipate the behaviour of others. Each status encompasses a set of roles to be performed on a daily basis. For the purposes of this study status and the roles associated with older adults will be focused on, with reference to their performance of unpaid care work, as *care providers*.

In contributing to role theory, the feminist perspective has made a significant contribution both to the field of sociology and the subset of medical sociology. It is important to note that the key focus of the feminist perspective examines gender inequality with the underlying question of the position of women.

In addressing this inequality, feminists rely on the development of two important distinctions with regard to gender. The first is biological traits distinguishing between male and female, and second,

socially learned behaviours connoting masculinity and femininity (Mikkola, 2017; Ritzer, 2008). Despite the progress made by feminists, in a significant gender gap still remains in the concept of 'care', with reference made to *caring about* and *caring for*. *Caring about* refers to the disposition towards children and kin most commonly associated with men. In contrast, *caring for* encompasses the burden of care and the daily activities of unpaid care work assumed by, and considered to be, the role of women in the household (Ferrant, Pesando & Nowacka, 2014; Ritzer, 2008).

Feminist social policy writers maintain that the effectiveness of care policies is influenced by the belief that women's performance of daily care activities is subordinate in terms of economic development. In the private sphere, they are deprived of financial remuneration to compensate them for their labour and in the public sphere they are subjected to the public patriarchy of the paid care sector, which means they earn less than their male counterparts. Feminists do not propose that women should abandon their role as caregivers to assume a masculine style of independence and freedom from their responsibilities but seek to lessen the burden of care that is placed upon them (Rummery & Fine, 2012).

Nevertheless, feminist researchers accept that women and men have different roles and responsibilities in the household and society and that this should be acknowledged when drafting care policies. They hold that resources and power within households should be shared equally among women and men (Stewart & Zaaiman, 2015). This is supported by Tronto (1993) who sees care as a universal activity shared among all the members of the human race¹:

On the most general level, we suggest caring to be viewed as a species activity that includes everything that we do to maintain, continue and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, ourselves, and our environment, all of which we seek to interweave in a complex, life-sustaining web (p.3).

With these approaches and heuristic concepts as departure point, the research is positioned and operationalised as follows.

¹In Chapter 3 the conceptual contribution of this study regarding Tronto's definition of care will be elaborated on.

1.4 Research Approach

A quantitative research design is used in this study. Within this design, a cross-sectional research approach is used. This approach requires data to be collected at a specific time to investigate current differences among population groups (De Vos, Strydom, Fouché, & Delpont, 2011; Maree, 2011). Secondary data obtained from the South African Time Use Survey (TUS) (2010) by StatsSA were used. It is important to note that previous studies² were conducted on the same data set although a comparison between geographical areas and unpaid care work among older adults from urban and rural areas in South Africa was not among them (Grapsa & Posel, 2016).

1.5 Research Design

The research method consists of a literature review, followed by secondary empirical analysis of an existing data set, namely the South African TUS of 2010. After completion of the analysis, the researcher compiled a research article on the research, findings and limitations of this study (Chapter 2) as well as recommendations for future research (Chapter 3).

1.5.1 Literature Review

A literature review of unpaid care work of older adults was conducted. This sought to establish what is presently known about unpaid care work, the issues faced by older adults as care providers in South Africa and to determine – from a gendered and age perspective – whether differences exist between older adults' time spent on unpaid care work in urban and in rural areas in South Africa. A variety of scientific sources, including working papers, reports from different sources, books and journal articles published between 1990 and 2018 were used for the purposes of this study. A range of databases were consulted and included Academic Search Premier, Ebscohost, JSTOR, SAePublications, Sage Publications online, Science Direct and SosIndex. The journals relevant to this study have primarily included *Annals of General Psychiatry*, *Canadian Journal on Aging*, *Demographic Research*, *Development Southern Africa*, *Feminist Economics*, *Global Ageing*, *Global Public Health*, *International Journal of Ageing and Human Development*, *Journal of African Economies*, *Journal of Cross-Cultural Gerontology*, *Public Health Reviews*, *Social Policy & Administration*, *Society in Transition*, and *World Development*.

² Previous studies were conducted by Connely and Kongar (2017); Grapsa and Posel (2016; 2017)

1.5.2 Primary Data Source

Existing data obtained from the South African TUS of 2010 by StatsSA (2013), were used in this study. The primary data for the South African TUS 2010 were collected from 30 000 households, representing a total population of 39.9 million, by using an individual questionnaire, a diary and follow-up interviews conducted by survey officers and will be discussed below.

Individual questionnaire

The individual questionnaire of the South African TUS 2010 was employed to obtain information about demographical features of the participants (age and gender) as well as the geographical location of households. From this primary collected data the geographical area, province, metropolitan and non-metropolitan area were able to be accessed.

Geographical areas used in the South African TUS 2010 included urban formal, urban informal, tribal and rural informal areas. All 4 geographical areas were used in the secondary data analysis³.

Moreover, the South Africa TUS 2010 covered all the provinces of South Africa, namely Western Cape, Eastern Cape, Northern Cape, Free State, KwaZulu-Natal, North-West, Gauteng, Mpumalanga and Limpopo. In addition, metropolitan areas included Cape Town, e-Thekwini, Ekurhuleni, Johannesburg, Nelson Mandela Metro and Tshwane.

Participants' diaries

Participants were required to document their daily activities in the form of a diary for a period of 24 hours. The beginning of the diary entries started at 4 am in the morning until the next day at 4 pm, followed by the interview of the survey officer. This actual primary collected Time Use data in the South African TUS 2010 was used to construct older adults' time spent on unpaid care work and unpaid work in the secondary data set for this study⁴.

Follow-up interviews

Survey officers conducted follow-up interviews to collect overlooked information and to clarify participants' time spent on activities recorded during the administration of the South African TUS

³ See footnote 1

⁴ See footnote 1

2010. Both, participant diaries and follow-up interviews were used by StatsSA to confirm the reliability of the data.

The framework of a general-purpose household survey served as the basis for the design of the 2010 South Africa TUS. The advantage of this is that it is universally applicable to any household survey, regardless of the requirements or the size of the sample. StatsSA generally use a master sample for all household surveys, as was the case with the 2010 South African TUS. The sample draws on information obtained by StatsSA during the 2001 Population Census in which primary sampling units (PSUs) and enumeration areas (EA) were established nationally (StatsSA, 2013).

The sample generated covered the non-institutionalised population and included households in urban as well as in rural areas (within the different provinces and also in metropolitan and non-metropolitan areas) in South Africa. Nationally 80 787 EAs were established in South Africa, with a sample size of 3 080 PSUs, which was then further split into four subgroups, referred to as rotation groups. The reason for the design of the rotation groups was the similarity between the distribution pattern of these groups and the larger sample. The following paragraph will outline the way the rotation groups were formulated as set out by StatsSA (2016):

The rotation groups are numbered from one to four and these numbers also correspond to the quarters of the year in which the sample will be rotated for the particular group. The sample for the Time Use Survey is based on a stratified two-stage design with probability proportional to size (PPS) sampling of PSUs in the first stage, and sampling of dwelling units (DUs) with systematic sampling in the second stage (p.4).

During the data collection process, the survey officers from StatsSA allocated a unique household number to each household and not a particular participant. For example, two people selected from each household will have the same household number but information pertaining to each participant was recorded according to the person number assigned to each participant in the household. This also included participants' gender, age and other demographic data (StatsSA, 2016). Altogether, the South African TUS 2010 surveyed a sample of 83 818 participants. Of these, 7776 participants were ≥ 60 years.

1.5.3 Secondary Data Composition

For this study, the researcher constructed a secondary data set, based on the primary collected data of the South African TUS 2010 (StatsSA, 2016). The sample used in the secondary data set included households with at least one household member older than 60 years, in urban and rural areas covering all the provinces as well as metropolitan and non-metropolitan areas in South Africa. Geographical areas were further characterised into four broader categories, namely urban formal, urban informal, rural formal and tribal areas. The total sample of participants in the secondary data set amounted to 4387 older adults, all of whom had reported that they had spent time on unpaid care work and unpaid work activities during the day in question.

As the aim of this study is to compare older adults' time spent on unpaid care work among urban and rural areas in South Africa, the mentioning of the broader areas – urban and rural areas are used. *Urban areas* refer to urban formal and urban informal areas (in other words areas with better infrastructure) and *rural areas* include tribal and rural informal areas. The provinces, metropolitan and non-metropolitan areas were available from the primary collected data and were subsequently also used for the secondary data analysis.

Below, we look at the 'unpaid work' and 'unpaid care work' categories formulated for the secondary data set and based on some of the activities listed in the South African TUS 2010. The researcher applied this clustering process secondary data analysis to determine and compare older adults' time spent on unpaid work and unpaid care work respectively.

Unpaid work

From the South Africa TUS 2010 a range of activities relating to the up keeping of the household were clustered together to formulate the 'unpaid work' category in the secondary data set. These activities include crop farming; tending to animals and fish farming; hunting and gathering wild products; digging, stone cutting and carving; collecting water and fuel; primary production not elsewhere classified; food processing and preservation; building and extending the dwelling; and fitting and maintaining tools and machinery.

Unpaid care work

The category 'unpaid care work' in this study includes some of the activities listed in the South African TUS 2010 that relate to the care of an individual or individuals. A further distinction was

made to determine the scope of unpaid care work performed by older adults. Accordingly, the researcher applied additional clustering. From this, three sub-categories were constructed, namely unpaid care for: (a) household members – this would involve activities performed by an individual to another individual living in their household; (b) non-household members – these activities also related to unpaid care work by participants for individuals who did not reside in their respective households; and (c) the community – unpaid care work activities not performed for any individual(s) but for society in general.

- ***Unpaid care work for household members***

In the secondary data set, ‘unpaid care work for household members’ includes some of the activities as set out in the South African TUS 2010. These include: preparing food and drink; cleaning and upkeep of dwelling; care of textile; shopping for personal and household goods; accessing government services; waiting to access government services; household management; do-it-yourself (DIY) home improvements; pet care; travel related to household maintenance; household maintenance; physical care of children: spontaneous and prompted; teaching household children: spontaneous and prompted; accompanying children: spontaneous and prompted; physical care of non-child household members; accompanying adults; supervising those needing care: spontaneous and prompted; travel related to care; care of household members not elsewhere classified.

- ***Unpaid care work for non-household members***

‘Unpaid care for non-household members’ in the secondary data set is based on some of the activities from the South African TUS 2010 and includes the following: caring for non-household children: spontaneous and prompted; caring for non-household adults; other informal help to other households.

- ***Unpaid care work for the community***

Unpaid care for the community in the secondary data set is based on activities from the South African TUS 2010 and includes the following: community organised construction; cleaning classrooms; community organised work; organisational volunteering; participation in meetings; involvement in civic responsibility; travel related to community services; community services not elsewhere classified.

1.5.4 Statistical Analysis

Secondary data analysis was conducted using SPSS Version 25 (IBM Corporation, 2018). The data were expected to be non-normally distributed and accordingly, non-parametric analyses were applied. As a result, the skewness and kurtosis values were first calculated; and second, the Kolmogorov-Smirnov test was performed to ensure that the data were indeed non-normally distributed. The Kruskal-Wallis test was performed to determine the differences in older adults' time spent on unpaid care work and unpaid work among the determinant's geographical area, age and gender (Field, 2018). Moreover, differences pertaining to provinces and metropolitan areas were also included. As this study encompassed a large sample size, the Monte Carlo method was used to further investigate the significance of the differences identified. *Post hoc* tests were also conducted and included the Bonferonni correction to compensate for Type 1 errors (Field, 2009; Field, 2018).

1.5.5 Ethical Considerations

All research is required to adhere to ethical guidelines primarily to add value to the field of study and to ensure that no harm will be done to anyone participating in the study. The data used in this study were previously obtained by StatsSA during a national survey of Time Use research in South Africa. The researcher was granted permission to use the dataset ZAF-STATSSA-TUS-2010-V1.2 for educational purposes, provided that StatsSA were acknowledged for their contribution to the study (See Addendum A). The research proposal was approved by the Optentia Research Focus Area's Scientific Committee (See Appendix B). Following approval by the Basic and Social Sciences Research Ethics Committee (BaSSREC), ethical approval (NWU-HS-2017-0104) was obtained from the North-West University Research Ethics Regulatory Committee (NWU-RERC) (See Appendix B).

1.6 Chapter Organisation

The mini-dissertation will, in addition to the preceding Introduction, further be organised as follows:

Chapter 2: A comparative quantitative study of unpaid care by older adults in urban and rural areas of South Africa. In this section, the analysis will be reported in article format. This chapter also presents the findings as well as the limitations of the study.

Chapter 3: This chapter will be conclusions, limitations and recommendations for future research and policy initiatives as they develop in this study.

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CHAPTER 2

RESEARCH ARTICLE

A comparative, quantitative study of unpaid care work by older adults in urban and rural areas of South Africa

ABSTRACT

Older adults are living longer and at the same time facing an increasing burden of providing care to others. This is especially the case in (South) Africa, due to the lack of formal long-term care (LTC) systems. In considering the scope and nature of the care contribution/burden of older people, the way they spend their days has been largely overlooked in South African Time Use research. The primary data that will provide insight into the nature and extent of unpaid care work provided by older adults and used in this study were collected during the national South African Time Use Survey (TUS) of 2010. The objective of this study is to apply secondary data analysis to this survey to compare older adults' time spent on unpaid care work in urban and in rural areas of South Africa sample ($n = 4387$) from an age and gendered perspective. Data were analysed by a variety of non-parametric testing. The main findings in this study confirm that differences exist in older adults' time spent on unpaid care work activities between urban and rural areas, but that the calculated effect sizes of these differences are small. More significant than the urban/rural comparison are provincial differences, which revealed that unpaid work and unpaid care work are more or less performed in nine provinces as well as the six metropolitan areas in South Africa. As expected, younger older adults (60-65 years) spent more time on unpaid care work activities than their older counterparts. Lastly, older women spent more time on unpaid care work (activities regarded as feminine), while older men spent more time on unpaid general work activities associated with masculine roles. These findings are discussed from a role/gendered perspective in order to contextualise the role of older adults in South Africa in performing unpaid care work and unpaid work.

Key words: Unpaid care work, unpaid work, older adults, Time Use Survey, urban, rural, South Africa.

INTRODUCTION

This article aims to quantitatively assess the scope and nature of unpaid care work performed by older adults in South Africa by urban-rural comparison by drawing on Time-Use data. The study centres on the unpaid care work done by older adults for the household and its members, non-household members and the community. From this, comparisons of unpaid care work according to the geographical area are made from an age and gendered perspective. The rationale for an analysis of older adults' time spent on unpaid care work and unpaid work is two-fold: first, to determine whether differences exist in older adults' time spent on unpaid care work and unpaid work in South Africa; second, to identify where they may be found; and third, to discover whether these differences had a significant effect on older adults' time spent on unpaid care work and unpaid work.

Background

The current older population in Sub-Saharan Africa (SSA) faces a daily struggle of caring for themselves and depend on others to provide these services (World Health Organization [WHO], 2015a). In recent years SSA has, and continues to, accommodate a fast-growing older population group despite being the youngest of all world regions (Hoffman & Pype, 2016; United Nations Development Programme [UNDP], 2015). Older adults aged ≥ 60 years make up 44 million of the current total population and it is estimated that their numbers will rise to 161 million by 2050, more than in all of Europe (Aboderin, 2010; UNDP, 2015). South Africa is no exception: older adults ≥ 60 years make up 4.8 million of the total current population of 52 million and their numbers are expected to rise to 11.6 million by 2050 (Statistics South Africa [StatsSA], 2017; United Nations, Department of Economic and Social Affairs, Population Division [UN], 2017).

With the increasing older population in SSA, the challenge of completing everyday tasks for self-care for and caring for others is exacerbated by the prevalence of chronic diseases that lead to general disabled longevity (Aboderin & Beard, 2015; Naghavi & Forouzanfar, 2013; WHO, 2015b). The prevalence of functional impairment among SSA's older people is high and rising. Yet the provision of LTC for older adults in this region of Africa remains overwhelmingly the province of unpaid family carers in the absence of organized LTC services and support structures (Aboderin & Hoffman, 2017; WHO, 2015a).

The most important trends driving the increasing interest in care management, specifically in South Africa, are the following:

South Africa is facing a quadruple burden of disease that is severely impacting the quality of life of people and ramping up the annual mortality rate. This includes the current HIV/Aids epidemic, high maternal and child mortality rates, high levels of violence and injuries, and the prevalence of non-communicable diseases (NCDs) (Bradshaw et al, 2011; Naidoo, 2012). For the purposes of this research, the two most detrimental conditions are HIV/Aids and NCDs, which impact directly on the future of care management.

HIV/Aids has now infected more than 6 million people in South Africa, affected a substantial number of households and led to over 1.2 million children being abandoned (some infected with HIV/Aids themselves). Approximately 60 per cent of them have been absorbed into multi-generational households in which grandparents have had to become primary care providers of both paid and unpaid care work (Hoffman & Pype, 2016).

Much of the current debate surrounding ageing and care in Africa has to do with the fact that older adults are performing a great deal of chronic care work, especially against the backdrop of high prevalence of HIV/Aids (Chepngeno-Langat, 2014; HelpAge International, 2006; Schatz & Seeley, 2015). Older adults therefore not only fulfil the role of grandparents but also of *care providers* to their family members, especially to the younger population (Makiwane, Schneider, & Gopane, 2004; United Nations Children's Fund, 2007). This role is traditionally performed according to African family norms (Aboderin & Hoffman, 2015).

Previous studies have focused predominantly on the perception of older adults as care providers against the HIV/Aids backdrop, and subsequently, the ascending care-relationships that resulted (Chepngeno-Langat, 2014; Ferreira, Keikelame, & Mosaval, 2001). Research pertaining to South Africa has focused on older adults performing unpaid care work to the younger generations and consequently paid special attention to the experiences of older adults and the constraints under which they provide this downward care (Hoffman, 2014, Schatz & Seeley, 2015).

Following HIV/Aids, NCDs are among the top ten leading causes of death in South Africa and are anticipated to increase substantially during the following two decades. It is estimated that almost two thirds or 64 per cent of NCD-related deaths occur after the age of 60 years. Apart from high

mortality, NCDs dramatically affect the quality of life of the individual and the household (Bradshaw et al., 2011).

At present, the predominant NCDs in South Africa are cardiovascular diseases, diabetes, cancers, chronic respiratory diseases and mental illness (Hoffman, 2014; Kenge & Sayed, 2017). The detrimental effects of NCDs add to the already heavy burden of care on individuals and households. Care management in future can also be expected to be subject to overwhelming pressure as the older population and their families or others close to them require more care.

Care work continues to be performed within the family unit due to insufficient infrastructure to develop LTC in SSA and in South Africa specifically (Scheil-Adlung, 2015; WHO, 2015b). This care work is performed by unskilled family members, who assume the responsibility because of infrastructural gaps in government provision (Aboderin & Hoffman, 2015).

It is thus of concern to note that the role older persons are playing in households remains largely unacknowledged (Makiwane, 2011). This failure is especially significant in view of Grapsa and Posel's (2016) finding, based on the 2011 Population Census Data for South Africa, that 13 per cent of older adults live alone, while a further 13 per cent co-reside with another older adult. This leaves the remaining older adults living in multi-generational households, which is the most common household composition in South Africa (Makiwane, 2011). Against this background, it is evident that older adults' function in the household is expected to become increasingly vital in years to come, especially in relation to unpaid care work.

Nhongo (2004) further examined the role of older adults in Africa and found that their involvement remained essential to society. The roles associated with old age include those of community counsellors, ceremonial leaders inside the household unit at the community level. However, significant changes have occurred within the household structure because of the problems that accompanied urbanisation as a result of the migrant labour system during Apartheid. Its toxic effect on household structure are still evident after two decades. Economic inequality continues to be one of the major issues, particularly among rural households. Collectively, with HIV/Aids responsible for a substantial proportion of deaths among the younger generations, older adults have become responsible, not only financially but specifically for the unpaid care of those left behind (Jones, 1993; Makiwane, 2011). Hence older adults are deprived of being cared for at a time when they need it most.

Van Eeuwijk (2016) has drawn attention to the fact that intra-generational care provision, by which older people (mainly women) provide care for other older people, is still largely under-researched. For this reason, it is essential to explore older adults' time spent on a range of different activities daily to be able to determine the status, nature and the extent of their care activities.

Existing research in the field of African gerontology has been less concerned with older people's work. This, in turn, produces an unclear picture of the role of older adults – both as individuals and within the confines of society. This together with the ageing patterns in Africa deserve more research attention because the vast majority of the ageing discourses are found within a broader informal scope within public or policy advocacy initiatives.

From the above discussion, it is clear that efforts towards formulating a care economy that embraces care work among and by older carers in Africa widely and South Africa more specifically are needed. To this end, three factors need to be examined. The first is the determination of the scope of older adults' unpaid care work. This will require steps to establish a profile of older adults who are performing unpaid care work, based on the determinants of geographical area, age and gender. Particular attention should be paid to establishing whether gender plays a role in patterns of older work and LTC provision at older ages. Second, the concept of work needs to be examined from older adults' perspective. This should clearly present their work in all social aspects pertaining to their caregiving roles and beyond. Lastly, older people's labour should be measured in order to establish its effects on society and to find out if it is valued by economic sector. Such an investigation should focus on closing the first gap in current knowledge –namely the scope and nature of care provided by older persons.

To this end, this article will analyse rural and urban older adults' time spent on unpaid care work, particularly to household members but also to non-household members as well as to the community, through an age and gendered perspective. Furthermore, a comparison will be made of older adults' time spent on unpaid work in terms of geographical area, age and gender. It was expected that comparison, particularly concerning gender, might reveal significant findings from gender-based unpaid activities. In examining these determinants, the aim was, first, to provide an analysis of older adults' contribution to the family and the broader community as well as the burden of care they experience. Second, as a starting point for future policy development and planning, it is essential to determine to what extent older adults are performing unpaid care work in South Africa and whether the assumption holds true that urban areas are better serviced with

care infrastructure than rural areas and thus provide a more supportive environment for older carers.

RESEARCH METHODOLOGY

This article draws on Time Use Survey (TUS) data for secondary analysis with the aim to explore the nature and extent of older adults' time spent on unpaid care work. For the purposes of this study, a quantitative, cross-sectional survey design was used as it uses data collected at a specific point in time from a population group (De Vos, Strydom, Fouché, & Delpont, 2011; Maree, 2011). This was done by StatsSA in 2010 by administering the TUS to the South African population.

Primary Data Source

The data of the second South African TUS conducted by StatsSA in 2010 were collected from October to December in 2010. Data collection took place in two stages. The first required survey officers to gather data about participants' labour market activities for the Quarterly Labour Force Survey [QLFS] (StatsSA, 2016).

For the purposes of this study, however, the focus is mainly on the second stage, which involved the administration of the South African TUS 2010 in the last week of each month (October to December 2010). Subsequently, the South African TUS 2010 comprised an individual questionnaire, the administration of a diary, a detailed written record of the participant's activities at 30-minute intervals on a particular day (24 hours) in question, recorded by survey officer. In conclusion, face-to-face interviews were held (StatsSA, 2016).

Individual questionnaire

The individual questionnaire of the South African TUS 2010 was distributed and completed to create a profile of the participants. Their demographical information was recorded, including gender, age and household location, from which geographical location could be determined (StatsSA, 2016). For the purposes of this study the focus is on gender, divided into male and female, age grouped into 5-year cohorts from the age ≥ 60 years, and geographical area – urban and rural, province, metropolitan and non-metropolitan area.

Four distinct geographical areas from the South African TUS 2010 were used. In this study, however, reference was made to urban (areas expected to consist of better infrastructure) and rural (areas expected to consist of fewer resources and poorer infrastructure) as this study aims to explore older adults' time spent on unpaid care work activities in the (geographical) urban and rural areas of South Africa. *Urban areas* therefore included urban formal and urban informal areas and *rural areas* included rural formal and tribal areas.

Further analysis was also performed on unpaid care work of participants from all the provinces, and metropolitan and non-metropolitan areas in South Africa. These were available data and useful in providing an account of how older adults spend their time daily – especially how much time they spend on unpaid care work activities every day. The provinces included Western Cape, Eastern Cape, Northern Cape, Free State, KwaZulu-Natal, North-West, Gauteng, Mpumalanga and Limpopo. Metropolitan areas included Cape Town, e-Thekweni, Ekurhuleni, Johannesburg, Nelson Mandela Metro and Tshwane.

Participants' diary

Every participant was required to complete a diary that covered a period of 24 hours during the South African TUS 2010. Starting from 4 am, participants were required to document their time spent every 30 minutes for 24 hours until 4 am the following day. To ensure that all information from the South African TUS 2010 was recorded accurately, a follow-up interview took place with the survey officer. As participants at times performed several activities simultaneously, it was essential to ensure that all information pertaining to their time spent was included in the survey (StatsSA, 2016).

Follow-up interviews

Follow-up interviews by survey officers and made up the final stage of the South African TUS 2010. These interviews were held to rectify any incorrect information or subsequently to add information that was not recorded previously (StatsSA, 2016).

Secondary data analysis

Based on the primary data set of the South African TUS (2010), a secondary data set was constructed specifically for data analysis for this study. The research participants used were aged ≥ 60 years, male and female, resided in urban and rural areas in South Africa and had also reported

time spent on both unpaid care work and unpaid work activities. The sample included the participants' province, and metropolitan and non-metropolitan areas for further analysis. A summary of the participants' demographical data is given in Table 1.

Table 1
Demographic data of participants (n = 4387)

Item	Category	Frequency	Percentage %
Gender*	Male	1465	33.4
	Female	2917	66.6
Age**	60-64 years	1406	32.0
	65-69 years	1127	25.7
	70-74 years	872	19.9
	75-79 years	502	11.4
	80-84 years	285	6.5
	85-89 years	125	2.8
	90-94 years	54	1.2
	95-99 years	12	0.3
	100-104 years	4	0.1
Geographical area	Urban formal	2208	50.3
	Urban informal	134	3.1
	Tribal areas	1908	43.5
	Rural informal	137	3.1
Province**	Western Cape	455	10.4
	Eastern Cape	672	15.3
	Northern Cape	296	6.7
	Free State	352	8.0
	KwaZulu-Natal	718	16.4
	North-West	415	9.5
	Gauteng	428	9.8
	Mpumalanga	437	10.0
	Limpopo	614	14.0
Metro**	Non-metro	3443	78.5
	Cape Town	257	5.9
	e-Thekwini	214	4.9
	Ekurhuleni	110	2.5
	Johannesburg	114	2.6
	Nelson Mandela Metro	134	3.1
	Tshwane	115	2.6

*Number of participants for each category may differ due to missing values

**Percentages may not total 100% due to rounding

The data from the 2010 South African TUS were collected from a sample of 83818 participants, out of a national population of approximately 39.9 million people. Of this sample, 7776 people were aged ≥ 60 years. Table 1 shows the sample used in this study⁵ which consisted of 4387 participants aged ≥ 60 years who performed activities relating to unpaid care work and unpaid

⁵ Unpaid care work: A comparison between older adults in urban and rural areas of South Africa

work. Two thirds of the sample consisted of females (66.6%). The cohort of 60-64 years had more participants (32.0%) than any other age group, and was followed by the 65-69 cohort (25.7%). The majority of participants resided in urban areas (53.4%) in comparison to those in rural areas (46.6%). Furthermore, the sample included participants from all nine provinces, of which and the most representative province was KwaZulu-Natal (16.4%), followed by Eastern Cape (15.3%).

The following section sets out to clearly identify activities extracted from the South African TUS 2010 which was used for the secondary analysis. In order to answer the research question and objectives posed in this study, the categories for *unpaid work* and *unpaid care work* were constructed in the secondary data set that contains activities taken from the primary collected data obtained by StatsSA during the South African TUS of 2010.

Unpaid work

Time spent on unpaid work activities by participants aged ≥ 60 years was extracted from the primary data set obtained through the South African TUS 2010. The researcher constructed the *unpaid work* category to compile the secondary data set and included all the activities as set out in the primary collected data. These activities are not paid, yet participants engaged in them in order to sustain their livelihoods. Activities included crop farming; tending to animals and fish farming; hunting and gathering wild products; digging, stone cutting and carving; collecting water and fuel; primary production not elsewhere classified; food processing and preservation; building and extension of the dwelling; fitting, maintaining tools and machinery; and finally unpaid care work.

Unpaid care work

As for the *unpaid work* category, a range of activities were clustered together to compile the secondary data into the *unpaid care work* category. This category could subsequently be subdivided into three sections to comprise the activities performed by each subcategory, namely unpaid care work for: (a) the household and its members, (b) non-household members, and (c) the community.

- ***Unpaid care work for the household***

Unpaid care work as categorised by the researcher in the secondary data set is derived from the general activities listed in the South African TUS 2010 and includes the following: preparing food and drink; cleaning and upkeep of dwelling; care of textile; shopping for personal and household goods; accessing government services; waiting to access government services; household

management; do-it-yourself (DIY) home improvements; pet care; travel related to household maintenance; household maintenance; physical care of children: spontaneous and prompted; teaching household children: spontaneous and prompted; accompanying children: spontaneous and prompted; physical care of non-child household members; accompanying adults; supervising those needing care: spontaneous and prompted; travel related to care; care of household members not elsewhere classified. The focus centres mainly on participants' time spent on unpaid care work of household members as this accounted for most of the unpaid care work.

- ***Unpaid care work for non-household***

In the secondary data set the category 'unpaid care work for non-household' was formulated to distinguish unpaid care work performed by older adults for people who reside outside their household – irrespective of the existing relationship between the *care providers* (older adults) and *care recipients*. The activities in the secondary data set for 'unpaid care work for non-household members' include the following: caring for non-household children: spontaneous and prompted; caring for non-household adults; other informal help to other households as set out by the South African TUS 2010.

- ***Unpaid care work for the community***

Unpaid care for the community in the secondary data set is based on the activities from the South African TUS 2010 and includes the following: community organised construction; cleaning classrooms; community organised work; organisational volunteering; participation in meetings; involvement in civic responsibility; travel related to community services; community services not elsewhere classified.

Ethical considerations

The primary data from StatsSA adhered to strict ethical guidelines (StatsSA, n.d.). The researcher obtained approval from StatsSA to use the primary data collected during the second South Africa TUS in 2010 (see Addendum A). Following approval by the Basic and Social Sciences and Research Ethics Committee (BaSSREC) of the North-West University Vaal Triangle Campus, this study (ethics number NWU-HS-2017-0104) obtained ethical approval from the North-West University Research Ethics Regulatory Committee (NWU-RERC) in October 2017 (see Addendum B).

Statistical analysis

SPSS 25 (IBM Corporation, 2018) was used for data analysis. The data were found to be non-normally distributed by calculating skewness and kurtosis values, as well as by conducting the Kolmogorov-Smirnov test. The p -values were found to be significant, indicating non-normality of the data, and therefore non-parametric statistical calculations were used for further data analysis. In order to determine whether there were differences regarding unpaid care work and unpaid work care between participants' geographical areas, gender, age groups, provinces, and metropolitan areas, the Kruskal-Wallis test was applied (Field, 2009). Possible significance of differences found were also calculated, using the Monte Carlo method due to the rather large sample size.

To calculate the effect sizes of possible differences, non-parametric *post hoc* tests were carried out using a Bonferroni correction to compensate for Type I errors. These consisted of comparing calculated mean rank differences to the critical differences calculated for the specific groups (Field, 2009; 2018). *Post hoc* tests were used to determine where significant differences were located⁶. The left-hand side of the inequality consists of the calculation of the difference in mean rank between the compared groups. The right-hand side, or *critical difference*, has to be calculated individually per group comparison when sample sizes differ. If the difference in mean ranks is larger than the critical difference, it means that the difference between the compared groups is significant.

If, however, the critical difference is bigger than the mean rank difference, the possible difference originally indicated is not significant. Table 4 provides information on the location of significant differences found, as well as their respective effect sizes. Once the significant differences became clear, it was possible to calculate each effect size with the equation⁷, where Z is the associated value from the table of the standard mean distribution and N equals the total number of participants comprising the concerned groups (Field, 2018). Using the significant differences as reference, the mean ranks of compared groups were used to interpret the final reported effect sizes.

Results

⁶ The procedure employed was described by Siegel and Castellan (1988) (in Field, 2009), using the following inequality:

$$|\bar{R}_u - \bar{R}_v| \geq Z_{\alpha/k(k-1)} \sqrt{\frac{N(N+1)}{12} \left[\frac{1}{n_u} + \frac{1}{n_v} \right]}$$

⁷ $r_{\text{group1 vs group2}} = \frac{Z}{\sqrt{N}}$

The focus of the study is on the unpaid care work activities of older adults related to the determinants of geographical area, age and gender. The analysis of unpaid care work has been complemented by an analysis of older adults' unpaid work. It should be noted that the total time spent on unpaid activities consists of unpaid work and unpaid care work clustered by the researcher for secondary analysis. The cluster of unpaid care work was subdivided into unpaid care work for household members, unpaid care work for non-household members, and unpaid care work for the community.

An overview of the results of the analysis follows:

Finding 1: Unpaid care work focuses around the household and its members

The first important result, as illustrated in Table 2, points to the majority (94.3%) of the sample of 4387 participants, who reported time spent on unpaid care work for the household. This indicates a distinct disparity compared to participants who reported time spent on unpaid work (24.8%), unpaid care work for non-household members (1.4%) and unpaid care work for the community (4.2%). Furthermore, the sample reported at least 0.1 – 2 hours spent on unpaid care work for household members (32.4%), followed by unpaid work (14.5%), unpaid care work for non-household members (0.9%), and unpaid care work for the community (2.8%). It appears that the same trend persisted throughout the reported time spent on unpaid activities even though the number of participants for each category decreased as the hours spent on unpaid activities increased.

Table 2

Distribution of time spent on unpaid work and care (n = 4387)

Time	Unpaid work		Unpaid care work: Household		Unpaid care work: Non-Household		Unpaid care work: Community	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
None	3301	75.2	251	5.7	4324	98.6	4204	95.8
0.1 - 2 hours	636	14.5	1420	32.4	39	0.9	121	2.8
2.1 - 4 hours	210	4.8	1150	26.2	13	0.3	40	0.9
4.1 - 6 hours	124	2.8	871	19.9	6	0.1	13	0.3
6.1 - 8 hours	84	1.9	456	10.4	3	0.1	5	0.1
8.1 - 10 hours	24	0.5	180	4.1	2	0.0	2	0.0
10.1 - 12 hours	8	0.2	52	1.2	0	0.0	2	0.0
12.1 - 14 hours	0	0.0	5	0.1	0	0.0	0	0.0
14.1 - 16 hours	0	0.0	2	0.0	0	0.0	0	0.0

Table 3
Descriptive statistics and correlations

Variable	M	SD	1	2	3
1. Unpaid work	37.76	96.63	-		
2. Unpaid care: Household	204.84	155.80	-.21**	-	
3. Unpaid care: Non-household	2.13	23.61	-.02	-.03	-
4. Unpaid care: Community	4.84	33.65	-.04*	-.07**	.18**

* $p < 0.05$

** $p < 0.01$

H = Kruskal-Wallis test statistic

Descriptive statistics from the secondary data set for older adults' time spent on unpaid care work towards household members, non-household members, and the community are provided in Table 3. Negative significant relationships were indicated between unpaid work and unpaid care work for the household and within the community; also between unpaid household care and unpaid community care. A positive significant relationship was found between unpaid care work outside the household and within the community. There did not seem to be any significant relationships between unpaid care work for non-household members, and unpaid work or unpaid care work for the household and its members.

Distribution of the data was tested: the Kolmogorov-Smirnov test (Field, 2018) was applied and results showed that the data were not normally distributed for the total time spent on unpaid activities, $D(4387) = 0.07$, $p = 0.00$. Therefore, non-parametric procedures were followed for further analyses. To test for differences between groups in non-normal distributions, the Kruskal-Wallis test (Field, 2018) was applied. Its test statistic H has a chi-square distribution with one value for its associated degrees of freedom: $k - 1$ (where k equals the number of groups involved). The consequent Monte Carlo estimate of significance for each comparison indicated possible differences; however, it did not indicate where the differences might lie. The data were also ranked as part of the calculation and these mean rankings could be used to interpret eventual effect sizes. It was found that time spent on unpaid work and unpaid care work was influenced by geographical area (significantly in relation to provinces), and significantly by gender and by age group as shown in Table 4.

Table 4
Kruskal-Wallis test

	Geographical area	Gender	Age group	Province	Metropole
	<i>H</i> (4)	<i>H</i> (2)	<i>H</i> (9)	<i>H</i> (9)	<i>H</i> (7)
Unpaid work	620.88**	40.41**	6.07	363.85**	188.65**
Household	30.70**	331.33**	100.12**	46.56**	20.72**
Non-household	1.48	0.31	3.91	41.52**	22.00**
Community	<i>H</i> (4)	<i>H</i> (2)	<i>H</i> (9)	<i>H</i> (9)	<i>H</i> (7)

* $p < 0.05$

** $p < 0.01$

H = Kruskal-Wallis test statistic

The geographical area comparisons consisted of urban – formal ($n = 2208$), urban – informal ($n = 134$), rural – tribal ($n = 1908$), and rural – formal ($n = 137$) groups. Males ($n = 1465$) and females ($n = 2917$) were compared, as well as seven age groups: 60-64 years ($n = 1406$); 65-69 years ($n = 1127$); 70-74 years ($n = 872$); 75-79 years ($n = 502$); 80-84 years ($n = 285$); 85-89 years ($n = 125$); and 90-94 years ($n = 54$). Comparisons were also done for the nine South African provinces (Western Cape, $n = 455$; Eastern Cape, $n = 672$; Northern Cape, $n = 296$; Free State, $n = 352$; KwaZulu Natal, $n = 718$; North-West, $n = 415$; Gauteng, $n = 428$; Mpumalanga, $n = 437$; and Limpopo, $n = 614$), as well as for seven metropolitan and non-metropolitan areas (Non-metropolitan areas, $n = 3443$; Cape Town, $n = 257$; e-Thekwini, $n = 214$; Ekurhuleni, $n = 110$; Johannesburg, $n = 114$; Nelson Mandela Metro, $n = 134$; and Tshwane, $n = 115$). The Kruskal-Wallis test results indicated differences for all group comparisons, with the lowest influence on unpaid care for the community, followed by unpaid care work for non-household members. Unpaid care work for the household and its members showed differences for all compared groups, yet it remains by far the most significant.

Finding 2: With exception, geographical area did not significantly influence unpaid care work and unpaid work

Comparisons of older adults' time spent on unpaid care work and unpaid work in urban and rural areas in South Africa revealed no significant differences. An exception emerged when provinces and metropolitan areas were compared within urban areas.

Finding 2.1: No significant differences in unpaid care work and unpaid work across urban and rural areas

Negligible differences were found in older adults' time spent on unpaid care work for the household and its members, and unpaid work across urban and rural areas. First, possible differences in older adults' time spent on unpaid care work towards the household were indicated between urban formal, rural tribal and urban formal and rural informal areas. Second, insignificant differences in older adults' time spent on unpaid work were also found between urban formal, rural tribal and urban formal and rural informal areas as well as urban informal and rural tribal areas.

To determine the significance of these differences, the effect sizes that resulted from the comparison of these areas were examined. As such the effects sizes were small (see Table 5, Addendum C), the differences were regarded as being negligible. Older adults were therefore not split into groups of older adults in urban and older adults in rural areas as there were no noteworthy differences to report.

Finding 2.2: Significant geographical differences related to provinces in unpaid care work and unpaid work

The exception of geographical differences relates to the provinces. Differences were reported in older adults' time spent on unpaid care work for the household and its members, and unpaid work between provinces in South Africa. Hence the focus was only on the differences considered to be significant, based on a noteworthy effect size. It can be inferred from the effect size (see Table 5, Addendum C) that older adults in Limpopo spent more time on unpaid work than those living in Mpumalanga, North-West, the Free State, the Northern Cape, the Western Cape, and Gauteng (in descending order). KwaZulu-Natal follows with the same descending order (with the exception of the Western Cape). Those from the Eastern Cape spent more unpaid work hours than residents from North-West, the Free State, the Northern Cape, and Gauteng; people living in Mpumalanga spent more time on unpaid work than residents of Gauteng and the Western Cape. Those from the Free State provided more unpaid care in their households than KwaZulu-Natal and Limpopo residents; and in the Western Cape and North-West more time was also devoted to unpaid household care than in Limpopo. Thus, to summarise: older people spent more time on unpaid work in Limpopo and Kwa-Zulu Natal, and more unpaid care work for the household and its members in the Free State.

Finding 2.3: Insignificant metropolitan differences in unpaid work.

The results further indicated differences in older adults' time spent on unpaid work between non-metropolitan and metropolitan areas in South Africa. Differences were detected between non-metropolitan areas and all the metropolitan areas. However, the only significant difference to report was that older adults spent more time on unpaid work in non-metropolitan areas than in Tshwane. The effect sizes (see Table 5, Addendum C) of the non-metropolitan and other metropolitan areas were too small and were therefore considered to be irrelevant for comparison.

Finding 3: Unpaid care work is negatively influenced by age cohorts

More important than geographical area are the determinants of age and gender, which are also determining contributors to the division of labour within households. To date, unpaid care work has been predominantly associated with the domain of women throughout their lifetime.

It is important to note that older adults from age cohort 95-104 were purposely excluded from comparison based on inadequate sample size, and it could not be established whether conclusive results would be obtained by comparing this age group. Interestingly, no differences were found in older adults' time spent on unpaid work in comparing all age groups.

With reference to the age groups compared, differences were found in older adults' time spent on unpaid care work for the household. From these differences, only those with high enough effect sizes to report were taken into consideration. They included the age groups 65-69 and 85-89 years, which indicated a small effect size (see Table 5, Addendum C). As expected and concluded, older adults from the 65-69 age group spent more time on unpaid care work in the household than the 85-89 age group. Similarly, the comparison between older adults in the age group 70-74 years and the age group 80-89 years also revealed a small effect size (see Table 5, Addendum C), in that the latter, older group spent less time on unpaid care work for the household and its members than the age group 70-74 years.

Finding 4: Unpaid care work and unpaid work are disproportionately gender-based.

It was expected that women spend proportionately more time than men on unpaid care work based on gender roles. Although men's contribution to unpaid care work is significantly less than

women's, their involvement with unpaid work needs further investigation. Accordingly, the study looked at older males' time spent on unpaid work, which involves more masculine activities, whereas unpaid care work is regarded to be a feminine activity (Ferrant, Pesando & Nowacka, 2014).

The actual comparison of older adults' time spent on unpaid care work in their household and on unpaid work indicated gender differences: females spent more time than men on unpaid care work activities and similarly on unpaid work. To determine whether these differences are significant, the effect size (see Table 5, Addendum C) was further explored. A small effect size was reported and therefore the difference in time spent on unpaid care work and unpaid work is insignificant.

Discussion

The field of medical sociology focuses on the social components of health and wellbeing of people in society, ranging from the individual to the wider society (Cockerham, 2012; Scambler, 2014). Accordingly, this study falls within the parameters of medical sociology because older adults' unpaid care work is a social factor that can contribute to illness and disability given the burden of care management. Medical sociologists face a double challenge of developing disease prevention strategies and of maintaining the health and well-being of individuals, groups and ultimately society. Additionally, older adults are living longer in their homes without institutional care, despite poor health (Karvonen, Kestilä & Mäki-Opas, 2018). From a medical sociological perspective, it is thus essential to determine the scope and nature of unpaid care work performed by older adults to reduce the care burden and identify to what extent this care is provided for determining where care support is needed.

The scope of older adults' unpaid care work

The feminisation of care had been anticipated, but the significance of an urban-rural divide was unexpected. Findings from the urban and rural comparison indicated that geographical area could not be a determining factor that influences older time spent on unpaid care work. It was thus concluded that the rural-urban migration of South Africa, as initially expected, did not influence older adults' time spent on unpaid care work. Furthermore, the assumption that infrastructure in urban and rural care seem to be equally strained in terms of infrastructural development and support services. Urbanisation is often described as the urbanisation of poverty and an extension

of rural stagnation and lack of infrastructure (Ravallion, Chen & Sangraula, 2007; Von Braun, 2007). Older adults are filling the role of care providers to the younger generations (intergenerational care) and to other older people (intra-generational care) against the backdrop of HIV/Aids epidemic and NCDs in South Africa, across the urban and rural divide.

Interestingly, the results of this study pointed to differences in older adults' time spent on unpaid care work between provinces, and between metropolitan and non-metropolitan areas in South Africa and should be further explored (see *Care contribution at policy level* below).

The nature of older adults' unpaid care work

In looking at the nature of older adults' unpaid care work, this article draws on role-theoretical approach and a feminist perspective as well as heuristics concepts related to care. The role-theoretical perspective encompasses the roles and status associated with care provision, while the feminist perspective focuses on the inequalities of care work faced by older women. Hence, attention is paid to the relevant concepts of “*caring about*”, which is mostly associated with unpaid activities resulting from roles fulfilled by men, while “*caring for*” relates to unpaid activities and care work in particular performed by women (Ferrant, Pesando & Nowacka, 2014; Ritzer, 2008). Taken from the activities encompassing unpaid care work of the household and its members related to the concept “*caring for*” themselves and others within the household. An important finding (Finding 3) also revealed that younger older adults (60-69 years) “*cared for*” (intergenerational and intra-generational care) household members than any other age cohort in this study.

From a role-theoretical approach and a feminist perspective that the burden of care work falls on women predominantly, this study further revealed a noteworthy finding. This entailed that during comparison of unpaid care work and unpaid work it found that older men had spent significant amounts of time on unpaid general work. As such, older men “*cared about*” other household members by completing these unpaid work activities.

Men's contribution to care work has been neglected in research thus far. Their performance of unpaid work is often not seen as care work, which is regarded as opposing the gender role of men. Nevertheless, men do provide care, not necessarily in the conventional way in which unpaid care work is depicted. Therefore, men's time spent on unpaid activities should be reconsidered and further investigated to see whether this is their contribution to caring about others.

Implications of the Study

This study adds to the body of knowledge of care work performed by older adults in South Africa. First, it has presented the scope and nature of older adults' performance of unpaid care work activities in urban and rural areas in South Africa. The findings indicated that there are geographical differences between older adults' time spent on unpaid care work and unpaid work across the urban and rural areas of South Africa. However, these differences were considered negligible, hence geographical areas with reference to urban and rural should not be considered as a determinant of care for older adults when planning for a care economy in South Africa.

In considering gender and age, there are both conceptual and methodological implications. First, this study shows that unpaid care work is disproportionately gender-based and reveals insights into the gender divide: that men are caring about others, thus undertaking masculine activities embedded in unpaid work activities. Women are caring for others and report more time spent on unpaid care work. Second, unpaid care work is negatively influenced by age cohort, as the older people become, the less time they spend on unpaid care work and unpaid work activities. The implications of these findings are now discussed on three levels, namely conceptual, methodological and policy.

Towards a deeper and broader conceptualisation of care work

In the conceptualisation of care, the emphasis, especially on the part of feminist theorists, tend towards the role and burden of women who carry out most of these activities on a daily basis (Ferrant, Pesando & Nowacka, 2014; Ritzer, 2008; Tronto, 1993). However, Tronto's definition of unpaid care work refers to universal activities shared among the human race. These are not confined to any particular gender or activities associated with any group of people (Tronto, 1993). The comparison between older adults' time spent on unpaid care work and unpaid work yielded no significant difference, hence it is inferred that the time older women spent doing unpaid care work is similar to older men's time devoted to unpaid work activities. An interesting area in need of further exploration is men's interpretation of care in view of their unpaid work activities and whether these activities in some way relate to unpaid care work.

In other words, there should be an extension, deepening and broadening of our conceptualisation of care work (Boddy, Cameron & Moss, 2006). The understanding and operationalisation of care has been receiving interest globally (Njuki, 2016). Older men in the present study have spent time on unpaid work activities, which, in their role as care providers, would be considered masculine activities based on stereotypical gender roles, while older women have devoted similar amounts of time on unpaid care work activities regarded as feminine activities within the household.

Methodological contribution

Limited research has been undertaken to date on older adults' use of time in South African Time Use research (Grapsa & Posel, 2016). Unpaid activities by older adults were clustered according to two important distinctions. First, they had to be activities done for daily survival and which did not receive any remuneration (Tronto, 1993). Second, the aspects of “*caring for*” or “*caring about*” the individual and/or others confirmed the distinction between unpaid care work (*caring for*) and unpaid work activities (*caring about*). Following the proposed conceptual deepening and broadening of care, this study contributed to future clustering of unpaid care work, which should include activities of unpaid work because these also contribute to survival.

Care contribution at policy level

The findings of this study suggest that future care policies developed by government or the private sector should not be focused on geographical area (urban-rural divide) as no significant differences emerged from this study. This would indicate that the challenges older people in South Africa face regarding infrastructure, HIV/Aids, NCDs and the rural-urban migration are encountered both in urban and rural areas, which seem to be equally under pressure. The findings indicated that differences existed between provinces in South Africa and should be further explored to determine the extent and nature of these differences in older adults' time spent on unpaid care work, possibly as a result of cultural traditions of older adults living in different regions (within different provinces, metropolitan and non-metropolitan areas).

Limitations of the Study and Recommendation for Future Research

The study had some limitations that should be considered when interpreting the results. A cross-sectional design was used. To this end, the data collected from the South African TUS 2010 allowed for comparisons to be made and for determining the existing differences in older people's time spent on unpaid care work and subsequently also unpaid work between urban and rural areas

of South Africa. Longitudinal data should be used in future to establish a more accurate account of the same older adult group and their time spent on unpaid care work over a period. It has to be taken into consideration that people do not spend the same amount of time on unpaid activities throughout the year. Looking particularly at the last week of the month, the waiting time for accessing services, for example, is longer and schedules are more demanding before the festive season and the end of the calendar year than in the rest of the year.

The findings of this study related to unpaid activities of work and care. From the data used, it could not be established whether older adults were employed when they completed the South African TUS in 2010. Therefore, older adults' time spent on paid work might have had an effect on the amount of time they spent on unpaid activities, whether it was towards unpaid work or unpaid care work. Further research should include older adults' time spent on paid work as well as the influence on older adults age groups would be of significant value. This will assist in determining the extent of unpaid work and care work provided by older adults who are employed and those who are not employed.

Another limitation concerned the household members chosen to be surveyed for the South African TUS. The selection was limited to two members for each household. No distinction was made between members surveyed as primary care providers or simply as household members. Future research could thus usefully explore older adults' activities as regular household members. This will contribute to a more comprehensive account of older adults' time spent on unpaid care work and on unpaid work in addition to the households where older adults were the selected members surveyed.

The data collected from participants about their time spent on activities pertaining to unpaid care work for non-household members and the community were not sufficient to provide any conclusive findings. However, the findings did show that older adults' time spent on unpaid care work for the household and its members was much more than their time spent on unpaid care work of non-household members and the community.

Conclusion

The results of this study did not support the initial expectation that older adults' time spent on unpaid care work is influenced by geographical areas (urban and rural divide). Hence future policy

and programmatic reconsideration regarding the urban-rural divide in terms of provincial, metropolitan and non-metropolitan areas is needed. On the other hand, the results further indicated that age and gender influenced older adults' time spent on unpaid care work and unpaid work activities respectively. Younger older adults (60 – 69 years) spent more time on unpaid care work and unpaid work than older-older adults' (≥ 80 years). Gender, revealed differences as well. Older women performed more unpaid care work while older men performed more unpaid general work. Older adults are indeed important contributors to care management at the very same time they themselves are carrying the burden of providing care.

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CHAPTER 3

CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

This chapter summarises the conclusions of this study to determine the scope and nature of older adults' unpaid care work. This is followed by a discussion of the limitations of the investigation in order to suggest possible recommendations for future research and for policy development.

3.1 Summary and Conclusions

The South African TUS 2010 was administered to a sample representing the overall South African population (Chapter 2), but the Time Use of older adults has thus far been neglected in South African Time Use research (Grapsa & Posel, 2016). Previous studies, where they exist, explored unpaid care work and found that most unpaid care work was performed by women who were consequently spending less time on activities relating to SNA (System of National Accounts) work from which a country's gross domestic product (GDP) is calculated annually (StatsSA, 2013). However, no single study focused on older adults' time spent on unpaid care work alone but focused on older adults' time spent on paid work activities. For this reason, the present study aimed to not only confirm what is known regarding the gendered division of labour within households but also to determine the scope and nature of older adults performing unpaid care work in South Africa.

This study followed a quantitative research design which encompassed a cross-sectional approach (Uhlenberg, 2009) This required collection of data from participants during the administration of the South African TUS. From the 7776 older adults who participated in the South African TUS 2010 only the data from the 4387 older adult participants who reported time spent on unpaid care work were used for this study. In addition, time spent on unpaid work activities reported by the sample group used in this study was also included for further comparison. As such, the original sample of the South Africa TUS 2010 was representative at provincial level and therefore the participants (whose data was used) in this study resided in urban and rural areas in all nine provinces, and metropolitan and non-metropolitan areas in South Africa. All participants used in this study were male or female and aged ≥ 60 years.

The statistical analysis for this study was conducted using SPSS 25 (IBM Corporation, 2018). This was done first to determine the distribution of time spent on unpaid work and care according to participants. Second, the descriptive statistics were determined as well as the possible relationships between unpaid care work and unpaid work. Lastly, non-parametric testing was applied for comparisons of older adults' time spent on unpaid care work and on unpaid work in South Africa and to determine whether differences exist among the determinants of geographical area, age and gender. Where differences were found they tested to determine whether the differences based on their respective effect sizes could be considered significant.

Comparison was made between older adults' time spent on unpaid care work for the household, non-household and the community and unpaid work. The below section relates to the background, supported by the literature and the empirical findings of this study that led to the following conclusions

Geographical impact

In order to assess the of the scope and nature of older adults performing unpaid care work it was essential to control the determinants of geographical area, age and gender of older adults. This was done to create a profile of older adults who are performing unpaid care work daily. Comparison of the means from the Kruskal Wallis H test indicated the following findings. First, unpaid care work revolves around the household and its members. Second, while urban and rural areas did not present any noteworthy differences, it was determined that older adults' in urban areas spent slightly more time on unpaid care work activities than older adults in rural areas; while older adults in rural areas spent slightly more time on unpaid work activities.

According to cultural conventions, South Africa's older adult-headed households generally consist of five or more household members living together, across the majority of the provinces. A distinctive discrepancy in this pattern is found among urban provinces, where older adult-headed households consist of only two members residing in the Western Cape (30,8%) and Gauteng (26,2%). Suffice to say, household structure in South Africa accompanies disparities between different racial groups (StatsSA, 2017).

The majority of the white older adult population group lives in two-member households or on their own. Of this group, 48.2% live in two-headed household and perform unpaid care work activities for the household – specifically for another older adult. In addition, almost 30% were single-

headed households whose unpaid care work activities involve the older adults themselves. Of the remainder of the white older population group it is believed that more than half (10.2%) have been placed into care facilities as they are unable to care for themselves on their own. A small section of these are living with extended family members who care for them (Lehohla, 2011).

By contrast, older adult headed-households in the black African population consist of five or more household members and make up 40% of its total South African population size. From this, it is evident that black African older adult-headed households are facing a greater burden of unpaid care work for the household and its members (Lehohla, 2011). Given this, two possible explanations arose to account for older adults' time spent on unpaid care work. First, based possibly on the fact that because people live longer, these older adults are looking after their parents at home. Second, in households where there are no younger women, the responsibility of doing unpaid care work is shifted to older adults, especially given rural-urban migration and the HIV/Aids epidemic in South Africa which has been responsible for a generation of young adults' dying.

Investigation into the geographical area's influence on older adults' time spent on unpaid care work in South Africa was needed. In a previous study, Grapsa and Posel (2016) compared older adults' time spent doing a combination of paid and unpaid activities and found differences in unpaid work done among urban and rural areas. This revealed that older adults in rural areas spent more time on unpaid work in comparison with to urban areas – the results of this study also supports this finding. Similarly, it was anticipated that there might be differences in older adults' time spent on unpaid care work among urban and rural areas of South Africa.

This assumption was based on the view that South African infrastructure is geographically skewed and poses significant challenges to service providers and especially to families who are performing the bulk of unpaid care work (Budlender, 2004). Yet there is a global perception that urban areas provide a higher standard of living (Lohnert & Steinbrink, 2005); and South Africa over the past two decades has experienced rapid growth in urbanisation. In addition, the influx of people moving to cities is further putting pressure on the frail urban infrastructure. The post-Apartheid government has had and continues to face significant challenges in improving and expanding the infrastructure due to financial constraints since the abolishment of the Apartheid system. Most care facilities in South African had been built during the Apartheid years in urban areas and were

segregated for the White population at the time. The practice of placing older adults is still predominantly followed by White people in South Africa.

On the other hand, the legacy of the Apartheid system and infrastructural inconsistencies in both urban and rural areas continues to encourage the cultural conventions among the black population group, especially, that care work is restricted and performed within the family unit. The findings of this study do support the initial expectation that differences exist in older adults' time spent on unpaid care work between rural areas and especially in urban areas where there is a lack of infrastructure.

The study concluded, however, that these differences had a negligible effect and therefore it cannot be inferred that infrastructure is a determining factor when comparing older adults' time spent on unpaid care work and unpaid care work in urban and rural areas of South Africa. It thus has to be considered that cultural conventions play an instrumental role in the performance of daily unpaid care work and unpaid work activities.

Demographical impact (age and gender)

The older adults from age cohort 60 – 64 years reportedly spent more time on unpaid care work activities. A pattern emerged of the younger the older adults, the more time was spent on unpaid care than compared with older ages.

An investigation into whether age influences older adults' time spent on unpaid care work in South Africa was also conducted. The findings of this study indicated that the younger adult age group 65 – 69 years, spent more time on unpaid care work activities for the household than the age group 85 – 89 years; and that and the middle older adult group 70 – 74 years spent more time on unpaid care work for the household than the older-older adult age group 80 – 89 years. Demographically, the largest group of participants was aged 60-64 years (32%) and subsequently it was also reported that this group spent the most time on unpaid care work activities. It might be that the reason is grounded in the South African household structure – and subsequently the age and gender of household participants. It can be inferred that the younger adults (especially women) have to provide the most care as they could be providing intergenerational as well as intra-generational care.

The last objective was to determine whether gender influenced older adults' time spent on unpaid care work in South Africa. It has been stated in the literature that there are disparities in time spent on unpaid care work according to gender. In the present study, women from all age groups spent proportionally more time daily than men on unpaid care work for the household, and caring for household members (Bianchi, Robinson, and Milkie 2006; Gerstel, 2000). The pattern seems to continue even in old age. This happens despite the fact that when older adults reach retirement the dynamics of family life and its accompanying responsibilities are different. Interestingly, research shows older males' time spent on unpaid care work actually increased during retirement (Leopold and Skopek 2014).

The patriarchal system in South Africa is still dominant and continues to deprive women of opportunities compared with their male counterparts (Kambarami, 2006). Unpaid care work has been, and continues to be, associated with the role of women. When compared with men, women are receiving less compensation for their work in the paid sector and they are employed in positions inferior to those of men. Moreover, unpaid care work is not considered in the overall GDP of any country because it cannot be measured in terms of monetary value. Consequently, women, who bear the largest bulk of the burden of unpaid care work, are deprived of receiving compensation (monetary or otherwise) for their labour.

This is confirmed by the findings of this study. It was anticipated that there would be differences between older male and older female adults. However, the differences were not considered to be significant and the effect size indicated that it was negligible for comparison. This may be the result of a larger amount of reported time spent by older male adults on unpaid work activities while older female adults reported more time spent on unpaid care work. The findings are thus consistent with the literature and it can be assumed that unpaid activities are gender based in that different sets of roles exist for men and women. Care work is considered to be feminine and therefore undertaken by women while unpaid work activities are portrayed as masculine (for example household maintenance) and performed by men. This is also supported by feminist theorists, who have advocated and continue to advocate gender equality, especially in the division of labour in unpaid care work.

3.2 Limitations of the Study

This study has several limitations. Studies of older adults' Time Use research is mostly conducted in developed countries, whereas studies of older adults' Time Use research are the exception in South Africa, and where they do exist they accompany a cross-sectional research design. Hence the focus is primarily on older adults' Time Use of paid work and unpaid work and on whether older adults are receiving the older person's grant for labour market analysis (Grapsa & Posel, 2016; Ranchhod, 2006). South Africa has made remarkable progress with the successful completion of two time use surveys – the first was conducted nationally in 2001, followed by a second national TUS in 2010 (StatsSA, 2016). Cross-sectional studies based on the data from these have to consider that different sample groups were selected during each of the surveys and that that the demographic profile of South Africa has changed during the 10 years between the completion of the first and second TUS. It is reasonable to expect that more changes will have taken place since then and up until the current year, 2019. This indicates that longitudinal studies in Time Use research of older adults, focusing particularly on unpaid care work, are needed for developing a care economy in South Africa (Folbre, 2014).

This study encompassed a large sample size ($n = 4387$). The reported time spent by older adults on unpaid care work for the household significantly outweighed that of unpaid care work to non-household and to the community. As such, the focus was more on unpaid care work for the household as the data for unpaid care work to non-household and the community was too little to conclude any significant findings. The reason for this might be that unpaid care to non-household and unpaid care work for the community comprised significantly fewer activities than those surrounding unpaid care work for the household. In addition, the Time Use diary of the South African TUS 2010 allowed for simultaneous activities to be reported and participants might have lacked the understanding of what activities pertained to unpaid care work for non-household and the community and consequently reported to a lesser extent their actual time spent on these.

This study compared unpaid care work and unpaid work of older adults between urban and rural areas. As such, a number of components were not included in the study as it was not expected to carry any significant weight during the early stages of the research. The ethnicity of participants was not included – the target group was older adults which was not confined to any ethnic group. It was however expected that differences exist in older adults' time spent on unpaid care work among urban and rural areas in South Africa and that it could possibly be a result of urban areas

having better care infrastructure as opposed to rural areas. Based on the findings of this study ethnicity might provide insight as to why the older-older adults spent significantly less time on unpaid care work than their younger counterparts. In addition, the household structure may have also supported the latter point. Finally, employment was not considered to be a determining factor and was excluded from the study – yet it might explain that some older adults spent less time on unpaid care work as they may have been at work on the day that the South African TUS 2010 was administered.

Lastly the two members from each household were selected by the survey officers to take part in the South African TUS 2010. It was not restricted to the persons selected to be the heads of the household or ordinary household members. The members of the household reported time spent on unpaid care work and unpaid work. However, the TUS accounted for the collection of data of older adults who performed unpaid care work but many of the questions were restricted to the provision of care for children, the sick and disabled and the elderly. As such, the distinction as to who receives this care remains unclear. In addition, the TUS only focused on those participants performing unpaid care work and unpaid work activities but do not focus on older adults who are receiving unpaid care from other household members, whether it is intra-generational or intergenerational care.

3.3 Conclusive Recommendations

This study is the first step towards determining the scope and nature of unpaid care work performed by older persons in South Africa. The data from the South African TUS 2010 that was clustered into the subcategory unpaid care work for the household and its members outweighed those of activities for care to non-households and the community. Accordingly, it is suggested that future research into unpaid care work by older adults might focus on developing a qualitative exploration in order to have a more accurate depiction of activities classified as unpaid care work for non-household members and the community.

In establishing a care economy in South Africa, more efforts are needed to determine the position of older adults in terms of their unpaid and paid care work. This study has, as a result of the South Africa TUS, been able first to identify the older adults who are undertaking unpaid care work – *care providers*– and further research is needed to determine, second, who the people are who require unpaid care work undertaken by others – *care receivers*.

Further qualitative work of what is perceived as care work according to gender – towards a broadening and deepening of the concept of care work to understand the position of males in care management. This study revealed that older men reported more time spent on unpaid general work, that has not been considered ‘care work’. As such, it has to be considered that men, in their way, perform unpaid work and by doing so, it might be their way of caring for others.

The conclusion presented in this study could provide essential information for further exploration of the development of a care economy in South Africa. The research was the starting point for identifying differences in older adults’ time spent on unpaid care work and unpaid work in urban and rural areas in South Africa. However, these differences were not considered significant, as initially expected, and subsequent research could usefully focus on differences between provinces and metropolitan and non-metropolitan areas as raised in this study. Point is: Older adults are indeed important contributors to care management while at the very same time they themselves are carrying the burden of providing care.

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ADDENDUM A

From: "Lufimo Ntshitomboni" <lufimon@statsa.gov.za>
To: "User Information Services Stats SA" <Info@statsa.gov.za>, "Feroza Mohideen" <FerozaM@statsa.gov.za>, "Louw Estelle" <Estelle.Louw@msu.ac.za>
CC: "Isabel Schmidt" <IsabelSc@statsa.gov.za>
Date: 2017/07/21 03:50 PM
Subject: Re: Request for permission to use dataset

Dear Estelle

Please note that you are allowed to use Statistics South Africa data. You are however urged to please note the following: That data from any of Stats SA publications may be reproduced, applied or processed, provided Stats SA is acknowledged as the original source of data; that it is specified that the application and analysis is the result of the user's independent processing of the data; and that neither basic data nor any reprocessed version or application thereof may be sold or offered for sale in any form whatsoever without the prior permission of Stats SA.

Regards

Lufimo Ntshitomboni
Manager: Publishing Services
Statistics South Africa
Tel: (012) 310 8641
Fax: 086 636 8383
Cell: 082 853 8284
Email: lufimon@statsa.gov.za

>>> Feroza Mohideen 7/21/2017 3:11 PM >>>

Dear Estelle,

Your request is escalated to Lufimo Ntshitomboni who may assist you with your request.

Please view the Copyright and Disclaimer link: http://www.statsa.gov.za/?page_id=425

CAS-05782-Y3JHL5

Regards

Feroza Mohideen
Statistics South Africa
Senior Information Officer

>>> User Information Services Stats SA 2017/07/21 3:02 PM >>>

Good day

Thank you for your request and your interest in Stats SA's data. Your request has been assigned to an Information Officer/Information Clerk who will reply to you.

Kind regards,

User Information Services

Statistics South Africa - Email: Info@statsa.gov.za

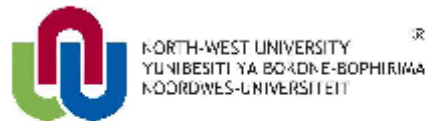
>>> "Estelle Louw" <Estelle.Louw@msu.ac.za> 2017/07/21 2:40 PM >>>

To whom it may concern

I have been granted access to the following dataset towards completing my research project (Masters dissertation)

South Africa - Time Use Survey 2010
Reference ID: saf-statsa-tus-2010-v1.2
Year: 2010
Country: South Africa
Producer: Statistics South Africa

ADDENDUM B



KORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
KOORDWES-UNIVERSITEIT

Private Bag X6001, Potchefstroom,
South Africa, 2520

Tel: (018) 299-4900
Faks: (018) 299-4910
Web: <http://www.nwu.ac.za>

Research Ethics Regulatory Committee

Tel: +27 18 299 4849
Email : Ethics@nwu.ac.za

ETHICS APPROVAL CERTIFICATE OF STUDY

Based on approval by the Basic and Social Sciences Research Ethics Committee (BaSSREC) on 19/10/2017 after being ratified at the virtual meeting held on 17/10/2017, the North-West University Research Ethics Regulatory Committee (NWU-RERC) hereby approves your study as indicated below. This implies that the NWU-RERC grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Project title: Unpaid care work: A comparison between older adults in urban and rural areas of South Africa																												
Project Leader/Supervisor: Prof JR Hoffman																												
Student: Ms Estelle Louw																												
Ethics number:	<table border="1"><tr><td>N</td><td>W</td><td>U</td><td>-</td><td>HS</td><td>-</td><td>2</td><td>0</td><td>1</td><td>7</td><td>-</td><td>0</td><td>1</td><td>0</td><td>4</td></tr><tr><td colspan="4">Institution</td><td colspan="4">Year</td><td colspan="4">Project Number</td></tr></table>	N	W	U	-	HS	-	2	0	1	7	-	0	1	0	4	Institution				Year				Project Number			
N	W	U	-	HS	-	2	0	1	7	-	0	1	0	4														
Institution				Year				Project Number																				
Application Type: Single study (MA)																												
Commencement date: 2017-10-17	Expiry date: 2020-10-18																											
Risk:	Low																											

Special conditions of the approval (if applicable):

- Translation of the Informed consent document to the languages applicable to the study participants should be submitted to the BaSSREC (if applicable).
- Any research at governmental or private institutions, permission must still be obtained from relevant authorities and provided to the BaSSREC. Ethics approval is required BEFORE approval can be obtained from these authorities.

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:

- The project leader (principle investigator) must report in the prescribed format to the NWU-RERC via BaSSREC:
 - annually (or as otherwise requested) on the progress of the study, and upon completion of the project
 - without any delay in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.
 - Annually a number of projects may be randomly selected for an external audit.
- The approval applies strictly to the proposal as stipulated in the application form. Would any changes to the proposal be deemed necessary during the course of the study, the study leader must apply for approval of these changes at the BaSSREC. Would there be deviated from the study proposal without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.
- The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date, a new application must be made to the NWU-RERC via BaSSREC and new approval received before or on the expiry date.
- In the interest of ethical responsibility the NWU-RERC and BaSSREC retains the right to:
 - request access to any information or data at any time during the course or after completion of the study;
 - to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process.
 - withdraw or postpone approval if:
 - any unethical principles or practices of the project are revealed or suspected,
 - it becomes apparent that any relevant information was withheld from the BaSSREC or that information has been false or misrepresented,
 - the required annual report and reporting of adverse events was not done timely and accurately,
 - new institutional rules, national legislation or international conventions deem it necessary.
- BaSSREC can be contacted for further information or any report templates via Daleen.Claassens@nwu.ac.za or 018 210 3483.

The RERC would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the RERC or BaSSREC for any further enquiries or requests for assistance.

Yours sincerely,

Prof Refilwe Phaswana-Mafuya
Chair NWU Research Ethics Regulatory Committee (RERC)

ADDENDUM C

Table 5
Significant differences and associated effect sizes

Groups compared			Result of <i>post hoc</i> test		Effect size
			Unpaid work	Unpaid care: Household	
Geographical area	Urban - Formal	Rural - Tribal	634.90	92.10	0.04
		Rural - Informal	245.23	8.18	0.05
	Urban - Informal	Rural - Tribal	252.24		0.06
Gender	Male	Female	114.93	634.89	0.03
Age group	60-64 years	70-74 years		16.93	0.05
		75-79 years		69.48	0.07
		80-84 years		282.52	0.07
		85-89 years		296.47	0.20
		90-94 years		93.89	0.07
	65-69 years	80-84 years		164.64	0.09
		85-89 years		180.29	0.10
	70-74 years	80-84 years		74.46	0.10
85-89 years			92.43	0.10	
Province	Western Cape	Eastern Cape	381.99		0.01
		KwaZulu-Natal	419.35	42.49	0.01
		Mpumalanga	115.19		0.11
		Limpopo	443.33	94.22	0.10
	Eastern Cape	Northern Cape	218.39		0.10
		Free State	189.63		0.10
		North-West	191.58		0.10
		Gauteng	351.49		0.10
	Northern Cape	KwaZulu-Natal	255.31		0.10
		Limpopo	280.33		0.11

Table 5 (cont.)

Significant differences and associated effect sizes

Groups compared			Result of <i>post hoc</i> test		Effect size
			Unpaid work	Unpaid care: Household	
Province	Free State	KwaZulu-Natal	226.73	68.22	0.10
		Limpopo	251.33	120.57	0.11
	KwaZulu-Natal	North-West	228.84		0.10
		Gauteng	388.45		0.10
		Mpumalanga	25.27		0.10
	North-West	Limpopo	253.04	40.94	0.10
		Gauteng	85.08		0.11
	Mpumalanga	Limpopo	412.58		0.10
		Limpopo	49.35		0.10
		Limpopo	49.35		0.10
Metropolitan area	Non-Metro	Cape Town	249.85		0.05
		e-Thekwini	187.84		0.05
		Ekurhuleni	90.49		0.05
		Johannesburg	124.40		0.05
		Nelson Mandela Metro	206.16		0.05
		Tshwane	88.38		0.16
		Tshwane	88.38		0.16

Note. Post hoc test⁸:

$$^8 |\bar{R}_u - \bar{R}_v| \geq Z_{\alpha/k(k-1)} \sqrt{\frac{N(N+1)}{12} \left[\frac{1}{n_u} + \frac{1}{n_v} \right]}$$