



## / How the Quality of Long-Term Care Services Impacts Caring Relatives' Well-Being in Austria

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### Abstract

*In a family-centered care regime like the Austrian one, informal caregivers' well-being is central, especially in times of increased pressure due to the COVID-19 pandemic. This paper analyzes the connection between the quality of long-term care (LTC) services and informal caregivers' well-being in Austria using a mixed methods approach. First, looking at data from the 2016 European Quality of Life Survey (EQLS), an OLS model shows that where the quality of LTC services is rated higher, individuals report higher life satisfaction, independent of their caring responsibilities. The most important explanatory factor for caregivers' well-being is the usage of such services. However, it does not offer conclusive insights into how well-being is influenced. Therefore, I undertake a qualitative analysis via an online questionnaire in which 20 informal caregivers participated between March and April 2020. The survey was created using the capabilities approach and evaluated by means of thematic analysis. The main findings show that low-quality LTC services mainly reduce well-being due to the irregularity of said services, which disrupts the daily routine. High-quality LTC services, on the other hand, improve well-being allowing caregivers to share responsibilities.*

**Keywords:** long-term care, caring relatives, well-being, mixed methods

### Wie die Qualität von Langzeitpflegediensten das Wohlbefinden von pflegenden Angehörigen beeinflusst

#### Zusammenfassung

*In einem familienzentrierten Pflegesystem wie dem österreichischen ist das Wohlbefinden von pflegenden Angehörigen von zentraler Bedeutung, insbesondere in Zeiten der COVID-19-Pandemie. In diesem Beitrag analysiere ich, mit Hilfe eines Mixed-Methods-Ansatzes, den Zusammenhang zwischen der Qualität von Langzeitpflegedienstleistungen und dem Wohlbefinden von pflegenden Angehörigen in Österreich. Zunächst zeigt ein OLS-Modell anhand von Daten aus dem European Quality of Life Survey (EQLS) 2016, dass Personen, die die Qualität von Langzeitpflegedienstleistungen höher einschätzen, eine höhere Lebenszufriedenheit angeben, unabhängig von ihren Betreuungspflichten. Der wichtigste Erklärungsfaktor für das Wohlbefinden der Pflegenden ist die Inanspruchnahme solcher Pflegedienste. Die Regressionsanalyse bietet jedoch keine genaueren Einblicke darin, wie Wohlbefinden beeinflusst wird. Daher führe ich eine qualitative Analyse mittels eines Online-Fragebogens durch, an dem 20 pflegende Angehörige zwischen März und April 2020 teilnahmen. Der Fragebogen wurde anhand des Capabilities-Ansatzes erstellt und mit Hilfe thematischer Analyse ausgewertet. Die Haupteergebnisse zeigen, dass qualitativ niedrige Pflegedienstleistungen das Wohlbefinden vor allem aufgrund der Unregelmäßigkeit dieser Dienstleistungen, die den Tagesablauf stören, verringern. Qualitativ hochwertige Pflegedienstleistungen hingegen verbessern das Wohlbefinden, besonders durch die Möglichkeit Verantwortung zu teilen.*

**Schlagwörter:** Langzeitpflege, Pflegenden Angehörige, Wohlbefinden, Mixed Methods



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*Danksagung: I want to thank two anonymous referees whose insightful comments greatly improved the quality of this paper. I also want to thank Alyssa Schneebaum, who supervised my master's thesis which this paper is based on, and my current supervisor Miriam Rehm, for their help and guidance.*



## 1. Introduction

The increasing importance of care work in modern, aging societies motivates this paper. By the year 2030, roughly 76,000 additional formal care workers will be needed to cover the care needs of an ever-aging Austrian population, with 42,000 of them replacing retiring care workers (Rappold/Juraszovich 2019: 5). Under these circumstances, informal care arrangements, where relatives make up for the lack of professional care services available, are set to further increase. As the COVID-19 pandemic began to unfold in early 2020, this already precarious system of informal caregiving entered the public debate with renewed urgency. Lockdowns and social distancing measures, implemented in order to contain the spread of the virus, amplified structural problems in the long-term care (LTC) sector such as poor working conditions (OECD 2020). Informal caregivers experienced additional strain due to complications with accessing other care services for the elderly such as day care and rehabilitation centers. A possible solution to relieve informal caregivers, as well as the LTC sector as a whole, which the province of Burgenland had already implemented prior to the pandemic—hiring informal caregivers as public sector employees—started to be discussed as a potential remedy (Land Burgenland/FH Burgenland 2018). Aside from the positive effect of securing employment and corresponding benefits, e.g., social insurance for the informal caregiver, this policy shifts even more caring responsibilities to family members and relatives. Hence, caring relatives and their well-being present a pressing issue.

Consequently, I aim to investigate the connection between the quality of LTC services and informal caregivers' well-being in this paper. The existing literature has found positive and negative links between the availability of such services and caring relatives' well-being (Hawranik/Strain 2007; Di Novi et al. 2015; Eom et al. 2017; van den Broek/Grundy 2018; Wagner/Brandt 2015, 2018). I extend this research field by investigating the quality of LTC services as an important factor for relieving the strain on informal caregivers, regardless of them using these services. To achieve this, I chose a mixed method approach that includes a regression analysis using the European Quality of Life Survey (EQLS) and a qualitative analysis of responses to an online questionnaire. In creating this questionnaire I relied on the capabilities approach, first coined by Sen (1985, 1993), then extended for investigating gender inequali-

ties by Robeyns (2003). Thematic analysis as developed by Braun and Clarke (2006) informed my evaluation of the questionnaire responses.

One of the main contributions of this paper is the collection of primary data through an online survey. Twenty informal caregivers from all over Austria offered an insight into the connection between their care responsibilities and well-being. The main limitation of caregiving to overall well-being that I identify, is the reduced ability to freely allocate time according to one's wishes. However, support from other caring relatives and the simplification of administrative tasks could relieve this strain. The quality of LTC services in particular can have positive as well as negative effects. On the one hand, professional caregivers' irregular working hours and frequently changing personnel can potentially disrupt daily routines. On the other hand, high-quality care services ease the burden due to the availability of professional advice and the sharing of responsibilities.

## 2. Literature Review & Austria's Care Regime

Scholars from various disciplines have done extensive research on the well-being, quality of life (QoL), and health of informal caregivers since the 1980s. Kieninger et al. (2019) provide a very detailed overview including different dimensions of QoL and various methodologies. While most of the research around informal caregiving started out with a focus on the "caregiver burden," more recent publications include caring relatives' QoL. This offers two advantages: First, the experience of caregiving is not solely a negative one, which the term "burden" does not capture (Chappell/Reid 2002). Second, focusing on well-being or QoL allows for comparison with non-caregivers (Stull et al. 1994).

Existing scholarship established that caring relatives experience more loneliness (Wagner/Brandt 2015), more stress, and are less psychologically and physically healthy (Deeken et al. 2003). Ho et al. (2009) find that primary informal caregivers are at higher risk of experiencing weight loss, anxiety, and a lower QoL. Do et al. (2013) confirm these findings for South Korean informal caregivers. Using an instrumental variable approach, they find causal effects of caregiving on health, including experiencing daily pain and self-reported poor or only fair health. This "caregiver burden" could be lowered by reducing the hours of care or by proactively seeking help (van Groenou et al. 2013). Van Groenou et al. (2013) also find that caregivers' subjective burden

is lower when the care recipient is not a close relative. Caregivers' well-being is also directly linked to the number of hours spent on caregiving (Verbakel et al. 2018).

However, there are also positive effects associated with caregiving. These encompass the feeling of doing something good and developing a closer relationship with the care recipient (van Groenou et al. 2013). As stated by Chappell and Dujela (2008), caregivers can experience burden and still have high life satisfaction. Roth et al. (2015) find decreased mortality rates for informal caregivers compared to non-caregiving reference groups. They also point out that the media tends to focus on the negative rather than the positive aspects of caregiving.

Kieninger et al. (2019) point out that most research around informal caregiving is quantitative, even though qualitative studies are more comprehensive, better at explaining caring relatives' well-being, and paint a more nuanced picture. Kieninger et al. (2019: 29) state that “[m]ixed method approaches could build upon the strength of each method and would allow both QoL and well-being to be understood as sensitizing concepts rather than concrete entities.”

The literature is less comprehensive when it comes to the link between LTC services and informal caregivers' well-being. In a study on multidimensional effects on female informal caregivers' QoL, Di Novi et al. (2015) first describe a connection regarding the provision of formal care. They find a positive connection between informal caregivers' QoL, their health, and the degree of formal care available in their region of residency. Using a difference-in-differences approach and data from Denmark and Sweden, van den Broek and Grundy (2018) show that the availability of LTC services influences informal caregivers' well-being. In regions where more LTC services are available, the difference in happiness between caregivers and non-caregivers is significantly smaller. Finally, Wagner and Brandt (2018) explore the connection between spousal caregivers' well-being and the availability of LTC services across Europe. They find that merely knowing about available professional care services has a positive effect on life satisfaction, loneliness, and depression, as it adds to caring relatives' feeling of control.

In contrast, Eom et al. (2017) find that LTC services lower informal caregivers' QoL in Singapore, as “caregivers' daily schedules need to be altered to accommodate healthcare providers, and caregivers might feel uncom-

fortable with the provider in their home” (Eom et al. 2017: 1720). Hawranik and Strain (2007) find similar results for Canadian caregivers, who express additional burden due to the frequent rotation of professional care workers:

*For some caregivers, use of home-care services meant being late for work because they needed to orient each new person, while other caregivers cited increased anxiety and agitation in the care recipient. The staffing situation did not change until they persistently demanded continuity. (Hawranik/Strain 2007: 167)*

Since these studies report ambiguous effects of LTC availability, the question arises how the quality of such services influences informal caregivers' well-being. This issue is at the center of this paper, which aims to answer the following research questions: (1) What is the link between the quality of long-term care (LTC) services in Austria and informal caregivers' well-being? (2) How does the quality of LTC services influence caring relatives? Through which dimensions (i.e., capabilities) does this affect informal caregivers?

There is no uniform definition of LTC services as different countries offer different forms of LTC. In a recent publication, the OECD describes the LTC sector as:

*a highly labour-intensive sector, which consists of a range of medical, personal care and assistance services that are provided with the primary goal of alleviating pain and reducing or managing the deterioration in health status for people with a degree of long-term dependency, assisting them with their personal care [...] and assisting them to live independently [...]. (OECD 2020).*

Austria has a very family-oriented LTC system, where families and NGOs provide most of the LTC and the state in turn funds these NGOs (Österle/Bauer 2012). LTC services encompass mobile care services, semi-residential care, case management, inpatient care, and 24-hour care (*24-Stunden-Betreuung*). The Austrian government undertook one of the most comprehensive overhauls of the care sector in 1993, with a universal cash-for-care system (*Pflegegeld*) at its core (Österle/Bauer 2012). A peculiarity of the Austrian care system is 24-hour care, which was regularized in 2007 but already existed well before that and is mainly provided by Eastern European women. The COVID-19 pandemic put the Austrian LTC sector under immense pressure, with informal caregivers again being overlooked, according to Leichsenring et al. (2021). Travel restrictions made 24-hour care arrangements nearly impossible as the system relies on migrant caregivers

whose shifts alternate biweekly.<sup>1</sup> Additionally, closures of day care centers and restricted access to health facilities gravely impacted caregivers and care recipients alike:

*[...] four out of ten informal caregivers in lower socio-economic groups stopped receiving help from other family members, and 20 percent no longer received help from neighbours. The reduced support within informal caregivers' networks led to higher intensity of care, and in 16 percent of cases resulted in a reduction of paid work.*" (Volkshilfe 2020 in Leichsenring et al. 2021: 35)

Nagl-Cupal et al. (2018) provide the most recent study on informal caregivers in Austria. They estimate that 947,000 individuals are involved in providing care for another person—care recipients range from family members or friends to neighbors, living within or outside their own household. Informal caregiving encompasses tasks like grocery shopping, running errands, preparing meals, or simply spending time with the person being cared for. However, caring relatives might also perform heavier duties, such as personal hygiene. The workload hinges on care recipients' needs and can include a multitude of chores not listed here. In 2016, 42 percent of people with care needs (defined as those who receive the *Pflegegeld* benefit) were solely cared for by relatives, while 32 percent used mobile care services, 16 percent were in inpatient care, five percent used 24-hour care, and the rest relied on other care services (Famira-Mühlberger 2019). In line with previous studies, Nagl-Cupal et al. (2018) show that most informal caregivers are female, with a share of 73 percent. Children (biological, stepchildren, or in-laws) are the biggest group within the different relations to care recipients with a share of 41 percent, followed by spouses or partners at 35 percent. Individuals between 51 and 60 years old make up the largest age group of informal caregivers with a share of 29 percent. Three quarters of caring relatives are married or in a long-term relationship. Regarding education, more than half of informal caregivers have completed an apprenticeship at most. Only four percent have a university degree. While 53 percent are retired, one third is employed. Caregiving also affects individuals' ability to participate in the labor market. Over a quarter of caring relatives stated that they reduced their working hours or dropped out of paid employment altogether due to their caring

responsibilities. This raises the risk of old-age poverty, since pension payments depend on market income. Nagl-Cupal et al. (2018) also report that individuals who care for someone in their own home, live in that same household 61 percent of the time. 40 percent of those who do not live in the same household need less than five minutes to reach the person who they care for. In this paper, caring relatives and informal caregivers encompass individuals who in some form and intensity care for a family member, friend, relative, or neighbor.

### 3. Theoretical Background

Before continuing with the methodology and data used in this paper, this section provides the theoretical underpinnings of this analysis. First, I discuss terminology, followed by an overview of the capabilities approach and its concrete application in this paper, namely the creation of a specific capabilities list for the analysis of informal caregivers' well-being.

Researchers use a variety of different concepts and terminologies to describe how well a person fares in life—ranging from quality of life to happiness to well-being. This paper focuses on well-being. Kieninger et al. (2019) outline the connection between QoL and well-being for research on care work as follows:

*As there is no conceptual agreement on well-being and quality of life, there is also no consensus on their relationship to each other. Some authors use the term synonymously with QoL, referring to different domains of well-being, whereas others consider it a component of the overarching concept of QoL. (Camfield/Skevington 2008; Makai et al. 2014; as in Kieninger et al. 2019: 4)*

I will use the term synonymously with the overarching concept of QoL, as the capabilities approach largely revolves around questions of well-being. The quantitative analysis uses a variable that ranks life satisfaction from one to ten and therefore a “global definition” of well-being. Farquhar (1995) has described this kind of definition as being “all-encompassing, but because of their generality they tell us little about the possible components of QoL or how the concept could be operationalized” (Farquhar 1995: 503). Kieninger et al. (2019) circumscribe three main domains of QoL and well-being, namely physical, psychological, and social. The qualitative part highlights the domains of informal caregivers' lives that might be affected most by the quality of LTC services through the capabilities approach. Hence, in this part I use so-called “component definitions” of well-being (Farquhar 1995).

<sup>1</sup> Solutions offered by the government and federal provinces often resulted in highly precarious outcomes, especially for migrant caregivers (Moment Magazin 2020).

Table 1. Comparison of Capabilities Lists

Author	Nussbaum (2001)	Robeyns (2003)	This Paper
<b>Aim</b>	Universal	Gender Equality in Western Societies	Informal Care Work in Austria
<b>Capabilities</b>	1. Life	1. Life and physical health	1. Physical and mental health
	2. Bodily health	2. Mental well-being	2. Shelter and possibility for retreat
	3. Bodily integrity	3. Bodily integrity and safety	3. Financial safety and independence
	4. Senses, imagination, and thought	4. Social relations	4. Social relations and respect
	5. Emotions	5. Political empowerment	5. Paid work and other projects
	6. Practical reason	6. Education and knowledge	6. Time autonomy
	7. Affiliation	7. Domestic work and nonmarket care	7. Engagement
	8. Other species	8. Paid work and other projects	8. Leisure time
	9. Play	9. Shelter and environment	9. Personal liabilities
	10. Control over one's environment	10. Mobility	10. Outlook on own future
		11. Leisure activities	
		12. Time-autonomy	
		13. Respect	
		14. Religion	

Source: Nussbaum (2001), Robeyns (2003), own contribution

Robeyns (2003) very aptly outlines why the capabilities approach, coined by Amartya Sen (1985, 1993), is so compelling regarding informal caregivers' well-being and thus preferred over a utilitarian evaluation:

*A utilitarian evaluation will only assess her satisfaction and will not differentiate between a happy, healthy, well-sheltered person, and an equally happy, but unhealthy and badly sheltered person who has mentally adapted to her situation. (Robeyns 2003: 63)*

Moreover, the capabilities approach does not present a coherent theory that is readily applicable to a problem; rather it is a general framework for thinking about well-being and personal freedom. Sen (1985) outlined the main idea of capabilities as the amount and combinations of functionings that are available to an individual. Functionings are "the various things that he or she manages to do or be in leading a life" (Sen 1993: 31). Hence, well-being is determined by the ability to achieve different, valuable functionings—Sen calls them capabilities. Using fasting as an example, Sen illustrates the differentiation between functionings and capabilities. If a person fasts, they choose not to eat. If a person starves, they cannot eat. While both have the functioning of "not eating," the former has the capability to eat, the latter does not. Well-being in the realm of the capabilities approach means asking "how well people are able to function with the resources they have at their disposal. Consequently, social and

economic inequalities that stand in the way of people and their opportunity to function must be taken into account" (Miles 2014: 1044). For the choice of relevant capabilities, Robeyns (2003) provides a framework to apply the capabilities approach to gender inequality. Since women conduct most of the paid and unpaid care work, I use four steps as outlined by Robeyns (2003: 72) to create a list of capabilities:

1. Unconstrained brainstorming
2. Reading existing literature
3. Engaging with other lists of capabilities
4. Debating the list with other people.

The resulting list contains ten capabilities that are specifically designed with care work in mind. The capabilities list closely resembles the one Robeyns (2003) provides for topics surrounding gender inequality. Literature on informal care (as outlined in the literature but especially based on Nagl-Cupal et al. 2018 and Wagner/Brandt 2018) and conversations with people working in the care sector informed the creation of this list. Table 1 shows a comparison of the lists by Robeyns (2003), Nussbaum (2001), as she was the first to compile such a list of capabilities, and the list applied in this paper.

As suggested by Robeyns (2003), I describe and defend each of the included capabilities:

*Physical and mental health:* being able to lead a physically and mentally healthy life. As mentioned above, research has shown that informal caregivers are



exposed to additional stress and at higher risk of experiencing anxiety (Deeken et al. 2003; Ho et al. 2009). Due to heavy lifting and other physically taxing responsibilities, caregivers also experience additional physical distress.

*Shelter and possibility for retreat:* being able to be sheltered and to have personal space. This capability is important since 61 percent of caring relatives live in the same household as the person who they care for (Nagl-Cupal et al. 2018). This significantly reduces personal space and the possibility to retreat from the care recipient.

*Financial safety and independence:* being able to be financially independent and to feel financially secure. Individuals who perform intensive care work, meaning more hours and heavier tasks, tend to have lower incomes and lower education levels (Schmidt et al. 2016). Nagl-Cupal et al. (2018) report that 28 percent of caregivers reduced their working time due to their care responsibilities. In Austria, care recipients receive the *Pflegegeld* benefit, not those providing the care work. It is likely that caring relatives pay some of the care-related expenses with their own income and therefore take on some additional financial responsibility.<sup>2</sup>

*Social relations and respect:* being able to command respect and form meaningful social relations. Informal care work can have positive impacts—an intensified relationship between caregiver and care recipient—as well as negative ones—increasing isolation—on social relations (Nagl-Cupal et al. 2018).

*Paid work and other projects:* being able to participate in paid work and partake in projects including artistic ones. Caregiving significantly reduces labor market participation—around 28 percent of caring relatives in Austria reduced their working hours or stopped working altogether (Nagl-Cupal et al. 2018). In order not to limit the capabilities approach to the market economy, projects such as artistic ones are included in this capability.

*Time autonomy:* being able to allocate time they way one wants to. Caregiving limits the time available and reduces the flexibility with which it can be allocated. Social norms impact the capability of allocating one's time, as Robeyns (2003: 83) describes: “For example,

women are often expected to spend more time keeping their elder parents' company than their male relatives. Or they are expected to be on a constant stand-by in case a relative needs help or falls ill, or to take care of their grandchildren.”

*Personal engagement:* being able to engage in political activities or to actively participate in one's (religious) community. Political participation and engagement shape a person's surroundings. The ability to be part of these processes might be fundamentally reduced by care responsibilities.

*Leisure time:* being able to partake in leisure activities. This might be closely related to *time autonomy*. However, allocation of time is not the issue, but actual activities. These activities might include traveling, going out, or spontaneous activities. Care work might significantly limit the activities that the caregiver is able to engage in.

*Personal liabilities:* being able to take care of one's own household and raise children. Other tasks within a household, such as childcare or cleaning, might be limited by caring responsibilities.

*Outlook on own future:* being able to freely shape one's future and to pursue one's own aspirations. The way a person assesses their own future significantly impacts their well-being (Gulyas 2015).

## 4. Empirical Analysis

### 4.1 Data and Methodology

For the quantitative analysis, I use the European Quality of Life Survey (EQLS, European Foundation for the Improvement of Living and Working Conditions 2018). This pan-European survey is carried out every four years. The variables used are from the fourth edition that was conducted in 2016. For Austria, there are 1,181 observations in this sample, of which 115 respondents are frequent caregivers as they stated that they cared for “disabled or infirm family members, neighbors, or friends” at least once a week.<sup>3</sup> The rest stated that they

<sup>2</sup> Though it could be argued that this is rather a functioning than a capability, it is especially important for caring relatives as the task is not only physically and mentally strenuous but also carries additional financial risk, which reduces general well-being (Kieninger et al. 2019; Nagl-Cupal et al. 2018; Stull et al. 1994).

<sup>3</sup> The exact wording in the Austrian questionnaire was “Wie häufig sind Sie außerhalb Ihrer bezahlten Berufstätigkeit in die folgenden Aktivitäten eingebunden?” and the answering categories included are “Betreuung behinderter oder chronisch kranker und pflegebedürftiger Familienmitglieder, Nachbarn oder Freunde, die unter 75 Jahre alt sind” and “Betreuung behinderter oder chronisch kranker und pflegebedürftiger Familienmitglieder, Nachbarn oder Freunde, die über 75 Jahre alt sind.”

Table 2. Summary Statistics for Frequent Caregivers and Non-Caregivers in the EQLS 2016

	Full Sample	Frequent Caregiver	Non-Caregiver
<b>Life Satisfaction</b>			
Mean	7.94	7.60	7.89
Median	8.00	8.00	8.00
SD	1.94	2.5	1.85
<b>LTC Quality</b>			
Mean	7.48	7.55	7.47
Median	8	8	8
SD	2.00	2.18	1.97
<b>Female (in %)</b>	51.7	59.3	50.7
<b>Education (in %)</b>			
Below Secondary	11.3	9.2	11.4
Secondary	46.9	42.9	47.1
Tertiary	41.8	47.9	41.5
<b>Employment Status (in %)</b>			
Employed	53.3	37.7	55.3
Unemployed	4.8	7.6	4.4
Retired	41.9	54.7	40.3
<b>Has Partner (in %)</b>	64.1	57.5	64.9
<b>Has Child (in %)</b>	62.8	62.1	62.9
<b>Urban (in %)</b>	36.7	42.5	36.0
<b>Used Care Services (in %)</b>		45.1	
<b>Care Intensity (in hours per week)</b>			
Mean		22.3	
Median		10.0	
SD		29.4	
<b>N</b>	965	106	859

Source: own calculations, data: EQLS (2016)

cared less frequently, did not do any care work at all, or did not respond. The EQLS data set offers the best available data encompassing care responsibilities and well-being for individuals over 18.<sup>4</sup> The most central variables for the analysis in this paper are “life satisfaction” and “quality of long-term care services” (LTC quality). Individuals who did not respond to either of these questions are excluded from the sample.<sup>5</sup> The data set only includes LTC quality starting in 2016; there-

4 The Survey of Health, Ageing and Retirement in Europe (SHARE) data set might have better data on informal care work as a whole but the respondents are over 50 years old. Since I am interested in a broader effect of LTC services on informal caregivers, I chose the EQLS data.

5 Summary statistics do not change after deleting the missing variables.

fore, a longitudinal analysis cannot be performed. I do not control for income as this drastically reduces the sample size. However, I add education and employment status as controls for socioeconomic status. The main variables, life satisfaction as well as LTC quality, range from one to ten and are subjectively chosen by each respondent. Life satisfaction is slightly higher in individuals without regular caring responsibilities with an average of 7.89 compared to 7.60 for caregivers. This is reversed for LTC quality; caregivers rate it slightly higher than non-caregivers. While the full sample is almost evenly split between women and men, frequent caregivers tend to be female in a majority of cases. Frequent caregivers also have a higher education than their non-caring counterparts. However, they tend to be unemployed or retired more often than individu-

als without caring responsibilities. Caregivers are less likely to have a partner in the household (58 percent for caregivers versus 65 percent for non-caregivers) but more likely to live in urban areas (43 percent versus 36 percent respectively). Almost half of caregivers (45 percent) report that the relative they care for used care services within the last year. On average, informal caregivers spend over 22 hours per week on their caring responsibilities.

Even though life satisfaction and LTC quality are count variables that range from one to ten, they will be treated as continuous variables in this analysis, which is twofold. First, I conduct an OLS regression using the full sample:

$$y_{WB} = \beta_0 + \beta_1 \text{LTC quality} + \beta_2 \text{Caregiver} + \beta_3 \text{LTC Quality} \times \text{Caregiver} + \delta_1 X + \epsilon, \quad (1)$$

where the dependent variable  $y_{WB}$  is the well-being (measured by life satisfaction), LTC quality is the perceived quality of LTC services, and Caregiver is a dummy variable indicating frequent care responsibilities.  $X$  is a control vector containing the binary dummy variables sex, whether a partner lives in the same household, whether a child under 18 lives in the same household, whether the individual lives in an urban area, and categorical dummy variables for education as well as employment status.<sup>6</sup> The interaction term LTC Quality  $\times$  Caregiver measures the difference of perceived quality of LTC services between caregivers and non-caregivers. This analysis does not imply causal relations but rather intends to give a first insight into possible relationships.

Next, I only use the sample containing caregivers and estimate the following OLS regression:

$$y_{WB} = \beta_0 + \beta_1 \text{LTC quality} + \beta_2 \text{Care Service} + \beta_3 \text{LTC Quality} \times \text{Care Service} + \delta_1 X + \epsilon, \quad (2)$$

where the dependent variable is again  $y_{WB}$  and the description of the explanatory variables remains the same as in equation (1); however, I now add a binary control dummy indicating whether care services were used. The control vector  $X$  is also extended by the care intensity, measured in weekly hours of care provided. The interaction term LTC Quality  $\times$  Care Service measures the difference of perceived quality of LTC services

between individuals who used care services and those who did not.

The qualitative portion of this paper makes use of thematic analysis (TA). Outlined by Braun and Clarke (2006), thematic analysis is one of the most widely used methods in qualitative research. TA can be used to address a variety of problems independent of theory and epistemology, as Braun and Clarke (2006: 78) describe: “Through its theoretical freedom, thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex, account of data.” The main goal of this method is to analyze and describe patterns within data. When discovering themes in data, one must be aware that these patterns do not reside within the data but rather are informed by the researcher’s views and internalized values. TA entails a number of decisions that need to be made explicit in order to inform a rigid analysis (Braun/Clarke 2006). One of them is how to determine what exactly a *theme* encompasses. For this paper, themes are chosen by the proximity in which they relate to the research question, but also by topics that are found repeatedly in the data:

*A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set. (Braun/Clarke 2006: 82)*

Another crucial decision is the width and depth with which one wants to describe the data at hand. For this analysis, I encompass as many themes as possible in order to give a holistic view and capture as many effects on informal caregivers’ well-being as possible. I provide a rich thematic overview that aims to give a sense of the themes for the entire data set. Furthermore, I use a theoretical approach rather than an inductive one, as I code the data with a specific research question, as outlined in section 2, and theory in mind.

Once these fundamental issues are set, one can begin the actual analysis, which is conducted following Braun and Clarke (2006): first, one must familiarize oneself with the data, by either transcribing it or rereading it multiple times. In a second step one generates initial codes, which, thirdly, are collected into themes and subthemes in the next step. The fourth step is to create a “thematic map” by revisiting the themes. In a fifth step, themes are named and defined. Lastly, one finishes the analysis with the “[s]election of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research

<sup>6</sup> Base categories are non-caregivers, male, individuals without a partner in the household, individuals without children in the household, living in a rural region, less than high school education, and employed individuals.



question and literature, producing a scholarly report of the analysis” (Braun/Clarke 2006: 87).

To collect qualitative data on informal caregivers' well-being in Austria, I designed an online survey. I made this choice first and foremost because of the limited interview possibilities caused by the COVID-19 pandemic. Braun et al. (2021) outline why online surveys are an underused methodological tool in qualitative research. According to the authors, online surveys offer a wide variety of potential topics and various advantages for researchers and participants alike, especially for unfunded and student projects. Although some limitations occur, e.g., the possibility to ask follow-up questions, the online survey is able to reach informal caregivers all over Austria, which widens and thus enriches the insights. Furthermore, Braun et al. (2021: 4) have found that “survey data tend to be densely packed with relevant information, more focused and ‘on target’ than interview data.” Also, online surveys might reach individuals who would not participate in face-to-face interviews, which is a real possibility for informal caregivers in crisis situations. March through April 2020, the timeframe in which I collected the data for this paper, represents such a crisis. Following Braun and Clarke (2013), the survey is structured as follows: It starts off with pre-participation information, including who is eligible to answer the survey and what the data will be used for. This is followed by two questions for each of the ten defined capabilities, assessing the participant's overall well-being. Then, open questions regarding the quality of LTC services and mobile care services follow. Finally, I collect demographic data and more detailed data on the individual's care work. The survey was conducted in German, since Austria is the country of interest. Before sending out the questionnaire, it was piloted and filled out by several individuals (fellow scholars, people who work with informal caregivers, and friends) in order to check for comprehensibility and to minimize misunderstandings. The full survey can be found in the Appendix. In order to reach a large enough group of relevant individuals and to guarantee credibility, the questionnaire was shared via a Facebook group for caring relatives by Hilfswerk, an organization that provides social services, and via a newsletter by an organization for caring relatives in Vorarlberg. Overall, 61 individuals answered some of the questions and 20 completed the full survey. I only include fully answered questionnaires in the analysis. Of these respondents, 19 are female, one is male. Their ages range from 32 to 80 with an average of 50

years. The respondents are from seven out of the nine federal provinces in Austria, with Tirol and Salzburg not being represented. Five participants do not use any professional care services, providing all the care themselves. More than half answered that the quality of LTC services influences their well-being “quite” or “very much.” An overview of all respondents including their ID numbers, which will be indicated in the extract examples in the results section, can be found in table 6 in the Appendix.

#### 4.2 Results

The results in table 3 indicate that on average higher perceived quality of LTC services is connected to higher well-being, for caregivers and non-caregivers alike. This variable might capture the effects of better overall social services in certain regions. Meaning, that if all social services, including LTC services, are of higher quality, well-being in turn might also be higher. However, to control for this, I added regional dummies, as well as a dummy on the subjective urbanization of the region an individual lives in, and the connection between the higher perceived quality of LTC services and well-being is still statistically significant and positive. Caregiving itself has a statistically significant, negative effect on well-being, but there is no difference in the influence of perceived LTC quality on life satisfaction between individuals with caring responsibilities and those without. Being retired has a negative effect on well-being in contrast to being employed. However, the control variables have the expected signs and unemployment is especially negatively related to well-being.

Table 4 shows the results for the estimation of equation (2). The perceived quality of LTC services again has a statistically significant, positive effect on well-being. Making use of care services (for the care recipient) has a very large, positive, and statistically significant impact on the life satisfaction of informal caregivers. There is no difference in the influence of the perceived LTC quality on life satisfaction between those caregivers who used care services and those who did not. This might indicate that high-quality care services can enhance informal caregivers' well-being independent of the uptake of such services. However, the availability of professional help is of even greater importance. If care intensity is higher, on average the well-being is lower. All other control variables are statistically insignificant except for the subjective urbanization of the area an individual lives in, which is negative.

Table 3. The Effect of Caregiving and the Quality of LTC Services on Life Satisfaction (OLS)

Dependent Variable:	
	Life Satisfaction
LTC Quality	0.117*** (0.041)
Caregiver	-1.879* (1.104)
LTC Quality × Caregiver	0.197 (0.137)
Female	0.018 (0.147)
High School Education	0.373 (0.273)
University Education	0.704** (0.293)
Retired	-0.370** (0.175)
Unemployed	-1.624*** (0.346)
Has Partner	0.050 (0.168)
Has Child	-0.254 (0.161)
Urban	-0.941 (0.280)
Constant	7.401*** (0.578)
Regional Dummies	Yes
Observations	965
R <sup>2</sup>	0.179
Adjusted R <sup>2</sup>	0.140

Notes: This table shows the results of an OLS regression with life satisfaction as the dependent variable. Robust standard errors in brackets. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. Base categories are non-caregivers, male, less than high school education, employed individuals, person without a partner in the household, person without children in the household, rural region. The regional dummies are at the NUTS-3 level and the baseline is Vienna.

Source: own calculations; data: EQLS 2016

Table 4. The Effect of Using Care Services and the Quality of LTC Services on Informal Caregivers' Life Satisfaction (OLS)

Dependent Variable:	
	Life Satisfaction
LTC Quality	0.566** (0.245)
Care Service	4.170* (2.254)
LTC Quality × Care Service	-0.433 (0.287)
Care Intensity	-0.029*** (0.009)
Female	-0.787 (0.734)
High School	-0.339 (0.835)
University	0.739 (0.937)
Retired	-0.324 (0.601)
Unemployed	-1.166 (1.081)
Has Partner	-0.606 (0.556)
Has Child	0.168 (0.514)
Urban	-1.220* (0.665)
Constant	5.839*** (2.244)
Regional Dummies	Yes
Observations	97
R <sup>2</sup>	0.595
Adjusted R <sup>2</sup>	0.319

Notes: This table shows the results of an OLS regression with life satisfaction as the dependent variable. Robust standard errors in brackets. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. Base categories are persons who do not use care services, male, less than high school education, employed individuals, person without a partner in the household, person without children in the household, rural region. The regional dummies are at the NUTS-3 level and the baseline is Vienna. One observation was omitted as no answer was provided for the use of care services, nine more were omitted as no answer was provided on the care intensity.

Source: own calculations; data: EQLS 2016

Table 5. Overview of Themes and Subthemes for Informal Caregivers' Well-Being

Sphere	Themes	Subthemes
Well-Being	Limitation of free time	Restriction of non-domestic activities
		Reduces ability to be spontaneous
Care Work in General	Bureaucracy around care services	Wish for less bureaucracy
		Lack of support doing paperwork
	Dealing with experience regarding one's own care work	Duty or wish to do care work for relative/friend
		Exchange with others and understanding
Quality of Care Services	Inconsistency in care services	Having to redo work due to bad quality
		Bad remuneration of professional caregivers
	Support received from professional caregivers	Sharing responsibility with someone Professional advice and assistance, contact person

Source: Online survey, own contribution

So, caregivers in cities have a lower life satisfaction than those in rural areas.

Conducting the qualitative analysis, along the lines of TA, I coded themes and subthemes through the data that I gathered from the online survey. Again, it is crucial to emphasize that this analysis does not display comprehensive or causal relations. However, additionally to the OLS regression model discussed above, the TA aims to deepen the insight into informal caregivers' well-being and its connection to the quality of LTC services. Not only does it add depth to the overall analysis, but it also allows the inclusion of the voices and opinions of affected individuals, thus presenting a valuable insight.<sup>7</sup> The themes are divided into three spheres: well-being, quality of care services, and care work in general.

In the sphere of overall well-being, the theme that emerges in almost all respondents' answers is the *limitation of free time* and the inability to allocate one's time freely. This arises from the requirement to always be available for the care recipient:

*Vacations are only possible with a lot of planning effort around the care responsibilities. Basically, during all leisure activities, there is the thought of how it will work out together with the caregiving. (Respondent 14, 2020)*

<sup>7</sup> I started the analysis after the quantitative part and review of the literature. It is therefore already informed by existing research around care work, as well as conversations with individuals who work with caring relatives that I had during the creation of the questionnaire. While some might contend that this could limit my analytic field of vision for the TA, I would argue that this prior involvement with the topic was necessary to gain understanding as I am not directly affected by or involved in the care of a family member or friend (Braun & Clarke, 2006).

Within this theme, two subthemes are identified, namely the *restriction of non-domestic activities*, which is attributed to the *leisure time* capability, and the *reduced ability to be spontaneous*, which is connected to *time allocation*. Both capabilities are significantly restricted for most of the respondents because of care recipients' need for supervision and the planning efforts that are connected to care responsibilities. When asked which leisure activities are especially affected by caregiving, a respondent said:

*Spontaneous and independent activities on weekends, but also evenings during the week—[just doing something] when one feels like it. (Respondent 15, 2020)*

Additionally, there is the sphere of *care work in general*. This domain encompasses patterns that emerged in the data outside of the specific field of well-being but appear to be of significance to a number of respondents. The *bureaucracy around care work* and how to *deal with the experience regarding one's own care work* present two major themes:

*There are a lot of appointments with authorities [Amtswege] that have to be managed, a lot of administrative things that have to be handled every month, parallel to the caring responsibilities. (Respondent 29, 2020)*

However, according to the survey and previous literature, the experience of care work is not solely negative. Some respondents state that they feel like giving something back or they felt it their duty to care for their parents. An intensified relationship with the care recipient is also described as a positive side effect, enhancing the capability of *social relations and respect*. The feeling of being understood not only arises through interacting with professional caregivers; some respondents also appreciate the exchange with people who also provide informal care:

*I consider it my duty to take care of my parents as much as possible. (Respondent 22, 2020)*

*A great help in our region is the possibility to exchange information at the Pflegestammtisch [regular informal meetings with other caregivers]. (Respondent 27, 2020)*

The sphere that is related the closest to the research question of this paper is the *quality of LTC services*. 14 out of 20 respondents state that the quality of LTC services influences their well-being “quite” or “very much,” independent of their usage of it.<sup>8</sup> This is also reflected in the answers to the open questions, where two main themes connected to the quality of LTC services emerge—the *inconsistency of care services* on the one hand and the *support received from professional caregivers* on the other. When asked how the quality of LTC services influences well-being, one respondent said:

*Rather negatively; one has to redo the work often. The care recipient is often not satisfied. The daily routine is additionally constrained as the external caregivers do not always visit at the same time. (Respondent 25, 2020)*

Within the theme of *inconsistency of care services*, this reflects the capabilities *time allocation*, as the daily routine is disrupted by irregular working hours, and *physical & mental health*, due to the work that has to be redone. This can be physically exhausting, but also psychologically stressful as the care recipients’ dissatisfaction most likely influences the caring relative:

*[There is] no consistent standard when it comes to long-term care services or other care services; this influences the relief of strain [such a service enables]. (Respondent 58, 2020)*

Some respondents connect this bad quality to the *bad remuneration of professional caregivers*, which is therefore identified as a subtheme. Caring relatives are aware that fair wages would increase quality. However, as they themselves are under increased financial pressure due to the costs associated with caregiving, this subtheme rather addresses the need for a strong public care sector:

*Highly qualified caregivers will not be willing to do the job without reasonable remuneration. If they are not healthy, they will not be able to take care of the care recipient adequately. (Respondent 47, 2020)*

<sup>8</sup> The original wording from the survey is “Würden Sie sagen, die Qualität von 24-Stunden-Pflege und mobilen Pflegedienstleistungen beeinflusst Ihr Wohlbefinden (selbst wenn Sie diese nicht in Anspruch nehmen)?” I am aware that this does not include all LTC services, yet from the subsequent open questions, I infer that participants answered this question having care services in general in mind.

*The support received from caregivers is most frequently addressed when it comes to the quality of LTC services. Caregivers seek support either in the form of professional advice around medication and care work in general or just by being able to share the mental load and responsibility. When asked how the quality of care services influences well-being, one respondent stated:*

*Difficult and heavier tasks are taken over, e.g., bodily hygiene. There is a safety net in case I cannot be there. There is understanding for my situation. (Respondent 44, 2020)*

When asked how the quality of care services influences well-being, another respondent said:

*It’s relieving as the care work can be shared. The know-how of professional caregivers is a great help. When insecurities around the care work or medication arise, an exchange of experiences is possible. [...] Responsibility can be shared. (Respondent 29, 2020)*

In one way or another, each respondent incorporates sharing responsibility into their answers. The fact that one has to worry less if someone competent cares for their relative provides immense relief for caregivers according to the TA’s findings.

The TA’s main takeaways regarding the research questions are that engaging in care work itself limits certain capabilities and therefore well-being. This is mainly due to limitations in the ability to allocate one’s time. Another important factor is the bureaucracy around care work, which informal caregivers often take on as well. Simplifying these administrative tasks could significantly relieve caring relatives. Facilitating exchange between informal caregivers presents a meaningful way for some caregivers to reduce stress. The quality of LTC services also influences well-being—in both positive and negative ways, supporting the existing literature. It seems that high-quality care services increase well-being as they extend certain capabilities such as *physical and mental health*. They also enable relief since responsibility can be shared. Nonetheless, if these care services are of bad quality they can limit well-being, especially the capability of *time allocation*. This stems mostly from professional caregivers’ irregular working hours, which disrupt daily routines. According to these findings, high-quality LTC could significantly relieve caring relatives in Austria.

#### 4.3 Limitations

Apart from hurdles regarding data collection, the COVID-19 pandemic put informal caregivers under

immense pressure. It affected not only the time they could spend completing surveys but also their overall well-being. The pandemic potentially influenced the quality of care services as well as informal caregivers' perception of it. However, since the survey was conducted right at the pandemic's onset, respondents answered the questions with their history of caregiving in mind, primarily referencing bygone experiences. Aside from the limitations due to the COVID-19 pandemic, some other restraints might bias the analysis. One pitfall that complicates the thematic analysis is that one of the capabilities (*time allocation*) was accidentally not listed in question K3 of the survey (see Appendix) that asked which dimensions were influenced by the quality of LTC services. Therefore, I disregard this question completely and rather infer time allocations' influence on capabilities by solely relying on open questions. Some respondents misread or misinterpreted the question regarding the *quality* of LTC services and answered with respect to the *availability* of LTC services. I excluded the answers wherein these misunderstandings were obvious. Had the question been described more clearly or face-to-face interviews been conducted, this might have been avoided.

## 5. Discussion

This paper evaluates the connection between the quality of LTC services and the well-being of informal caregivers in Austria. The findings of the quantitative part indicate that where the quality of LTC services is rated higher, individuals report higher life satisfaction, independent of their caring responsibilities. Analyzing only the sample comprising caregivers, this effect is even larger. The most important explanatory variable for caregivers' well-being, however, is the usage of such services. So, while quality plays an important role, accepting professional help is even more impactful.

Using a capabilities list developed specifically with care work in mind, I created an online survey that contains both open and closed questions. Informal caregivers from all over Austria offered an insight into their well-being. The thematic analysis confirms that the quality of LTC services has an important impact on caring relatives' well-being. While low-quality care might decrease it, high-quality LTC services increase it. Sharing responsibilities in particular benefits caregivers and provides relief. These results build on the existing evidence and are in line with studies that suggest both positive and negative effects. Therefore, these findings

emphasize the need to expand the analysis, taking into account outcomes that both enhance and potentially limit caregivers' well-being.

While these findings call for a more holistic view of caregiver well-being in future research, they also have clear policy implications. Relieving informal caregivers by no means reduces the state's responsibility to provide public care services. Inconsistencies in the quality of service that professional caregivers provide, as well as in their timing, severely limit caring relatives' well-being. One way to offer additional relief would be a well-funded public service to provide consistency. Higher wages for professional care workers present another important pillar to improve informal and professional caregivers' well-being. Survey participants identified higher pay as a potential incentive not only to increase the quality of care provided, but also to elevate appreciation for care work in general. Increasing informal caregivers' visibility and reducing bureaucracy around financial support for care recipients pose additional important fields of action.

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## Appendix

Table 6. Overview of Survey Respondents

ID Number <sup>10</sup>	Sex	Age	Federal Province	Care Recipient is the Caregivers'...	Only Caregiver	Employed
1	Female	60	Vienna	Parent	No	Yes
6	Female	32	Lower Austria	Parent	No	No
7	Female	56	Upper Austria	Parent	No	Yes
13	Female	44	Vienna	Parent	No	Yes
14	Female	33	Vienna	Grandparent	No	Yes
15	Female	52	Vorarlberg	Child	No	Yes
22	Female	46	Burgenland	Parent	No	Yes
25	Female	40	Vienna	Parent	No	Yes
27	Female	32	Styria	Grandparent	Yes	Yes
28	Female	62	Upper Austria	Other	Yes	Yes
29	Female	60	Carinthia	Parent	No	No
33	Female	51	Lower Austria	Parent	No	Yes
35	Female	58	Burgenland	Child	No	No
39	Female	56	Vienna	Parent	Yes	Yes
40	Female	56	Lower Austria	Parent	Yes	No
44	Female	80	Styria	Spouse	No	No
47	Female	35	Vienna	Parent	Yes	No
58	Female	54	Vorarlberg	Grandparent	No	No
59	Male	54	Vorarlberg	Parent	No	Yes
61	Female	46	Vorarlberg	Parent	No	Yes

10 Since 61 individuals took part in the survey, but only the 20 who fully answered it are included, the ID numbers range from 1 to 61.