

**A Qualitative Analysis of How Older Adults Experience That Their Need for Autonomy has
Changed Throughout Their Life and During COVID-19 Pandemic**

Master's Thesis

Jannike Hachmeister

s1876619

Department of Behavioural, Management and Social Science

University of Twente, Enschede

Positive Psychology and Technology (PPT)

1st supervisor: Dr. Noortje Kloos

2nd supervisor: Dr. Mark van Vuuren

July 22, 2020

**UNIVERSITY
OF TWENTE.**

Abstract

According to the self-determination theory (SDT), the satisfaction of the basic psychological need for autonomy, together with competence and relatedness is essential in order to experience well-being. However, throughout life people's autonomy satisfaction can alter due to changed life situations such as the retirement or a crisis. The COVID-19 pandemic challenged peoples' autonomy as governments imposed rules of conduct in order to slow down the spread of the virus. To explore how older adults living at home experience that their need for and satisfaction of autonomy has changed throughout their life and in the COVID-19 pandemic, five semi-structured interviews were conducted. Participants were male, living at home and ages ranged from 63 - 84 years. Questions were focused on participants personal experiences and understanding of autonomy in their current life, in their past and in times of the COVID-19 pandemic. Questions about expectations and hopes for the future were also added. A content analysis which included an inductive approach was used for data analysis. Results were structured around five main codes: autonomy satisfaction, autonomous situations throughout life, guidelines, influence of other people and requirements. Results showed that older adults' autonomy and autonomy satisfaction changed throughout life. Participants described experiencing both greater autonomy and greater autonomy satisfaction in their current life compared to other times in their lives. Reasons for that are experiencing fewer obligations from outside and having more available time to engage in self-chosen activities compared to other times in their life due to retirement. In the COVID-19 pandemic participants felt limited in their autonomy due to governmental restrictions. Still, this did not result in a lowered autonomy satisfaction. For the future, participants reported hoping that their autonomy remains the same, as they experienced a great autonomy satisfaction in times of retirement. However, they mentioned health to be a prerequisite. Supporting older adults' health by motivating them to engage in physical activities may therefore be a central topic of future interventions. Future research should focus on longitudinal designs following participants over a longer period of time in order to understand autonomy changes in transition phases. Findings are in line with previous research which showed that both autonomy as well as autonomy satisfaction increase with age.

Keywords: Self-determination theory (SDT), Basic psychological need, Autonomy, COVID-19, Older adults, Retirement, Living at home, Interview study

OLDER ADULTS AND THE NEED FOR AUTONOMY

People living in our society are increasingly getting older and birth rates are declining, resulting in a phenomenon called *population aging* that is occurring all over the world (United Nations, 2017). By 2050, it is expected that approximately 25% of the population in Europe will be above the age of 65 (United Nations, 2019). However, especially in current times, older adults are at risk of developing severe illness due to the coronavirus disease (COVID-19) (World Health Organization, 2020c). COVID-19 is a new viral disease that has spread quickly internationally and was declared as an international public health emergency by the World Health Organization (WHO) (2020a). In addition to various somatic consequences such as pneumonia, fever and in severe cases, death (Robert Koch Institut, 2020b), the COVID-19 pandemic can lead to psychological diseases such as depression or anxiety (Meng et al., 2020). Hence, attention should be drawn to the individuals' mental health and psychological well-being during this international pandemic (Meng et al., 2020).

The COVID-19 pandemic is affecting peoples' lives as well as placing new challenges for society (Sun et al., 2020). One challenge that older people might face in times of the pandemic is satisfying their basic psychological *need for autonomy* that is defined by having a sense of choice and will in the regulation of behaviour (Ryan, Huta, & Deci, 2008). In order to weaken the rapid spread of COVID-19, governments made individual overarching decisions and imposed rules of conduct, such as prohibiting social gatherings and imposing travel restrictions (WHO, 2020b). As older adults are at risk of a severe course of the disease (WHO, 2020c), members of this risk group are especially advised to follow the rules (Robert Koch Institut, 2020a). This might influence peoples' feeling of autonomy, as the mere existence of governmental rules and restrictions can already limit the individuals' autonomy in decision making (Winick, 1992). However, until now there is only limited research concerning the corona pandemic and its influence on peoples' autonomy because of its novelty. A recent study found that satisfaction of the need for autonomy was not consistently correlated to the individual's well-being during the COVID-19 pandemic (Cantarero, van Tilburg, & Smoktunowicz, 2020). These findings need further attention. Thus, this study will explore how older adults experience that the COVID-19 pandemic has affected their need for autonomy.

The satisfaction of the need for autonomy, together with the needs for relatedness and competence is essential for peoples' well-being as outlined by Ryan and Deci's self-determination theory (SDT) (2000). Hence, in order to understand older adults' mental health, it is necessary to consider the basic psychological needs. It has been supported in different cultures and contexts that autonomy, relatedness and competence have a significant influence on human well-being (e.g. Chen, Van Assche, Vansteenkiste, Soenens, & Beyers, 2015; Kloos, Trompetter, Bohlmeijer, &

OLDER ADULTS AND THE NEED FOR AUTONOMY

Westerhof, 2019). Furthermore, the basic psychological needs were found to be essential across one's whole life (e.g. Hahn & Oishi, 2006). However, the satisfaction and expression of these needs can alter due to changed life situations such as the phase of retirement in the lives of older adults (Henning, Stenling et al., 2019; Ryan & La Guardia, 2000).

Various studies have already shown that autonomy changes with age (e.g. Ryff, 1995; Sheldon, Houser-Marko, & Kasser, 2006). A positive relation between the feeling of autonomy and age has already been found (e.g. Ryff, 1995; Sheldon et al., 2006) despite evidence that with increasing age people have to deal with challenges and losses (Mroczek & Kolarz, 1998). In a study by Henning, Bjälkebring et al., (2019) it was found that in retirement, older adults experienced a higher satisfaction of the need for autonomy compared to their work life. The researchers suggest that feeling autonomous might become more important after retirement as the daily routines and stress at work fall away. Hence, not only the satisfaction of the need for autonomy but also *the need* for experiencing autonomy itself might rise after retirement. In the study by Henning, Bjälkebring et al. (2019) no data about the need for autonomy in participants' earlier years in life were collected.

In other recent studies however, it has been found that older adults also experienced more autonomy compared to younger and middle-aged adults (Mackenzie, Karaoylas, and Starzyk, 2018) as well as their college-aged children (Sheldon et al., 2006). According to Mackenzie et al. (2018) older adults experienced more autonomy as they experienced less control from others and had more available time compared to younger and middle-aged adults. Further, Sheldon and Kasser (2001) argued that it appears that throughout their life individuals learn to act with more autonomous and self-determined intentions. To date most studies were dealing with between-subject comparisons of two generations such as parents and their children (e.g. Mackenzie et al., 2018; Sheldon et al., 2006). Limited attention has been drawn to the development of the need for and satisfaction of autonomy on the intrapersonal level. Thus, research exploring the development of the need for autonomy throughout the whole life span on the intrapersonal level is missing. The question arises how the need for autonomy changes throughout life. The current study will explore this topic from the perspective of older adults living at home.

The aim of this study is to explore whether peoples' age may have an influence on the basic psychological need for autonomy. Additionally, the topic of the COVID-19 pandemic will be incorporated into this study as it might influence participants' autonomy. The main research question of this study is: "How do older adults (60+) living at home experience that their need for and satisfaction of the basic psychological need *autonomy* has changed throughout their life?". Sub-questions are "How do older adults hope that their experience of *autonomy* will develop in the

OLDER ADULTS AND THE NEED FOR AUTONOMY

future?”, and “How is older adult experience of *autonomy* influenced by the coronavirus disease (COVID-19) pandemic?”

Methods

Design

This study used a semi-structured interview approach in order to gain a deep understanding of how older adults experienced their need for autonomy throughout their life.

Sample

Five male older adults were selected from the researchers own network by convenience sampling. Inclusion criteria were that participants had to be over the age of 60, were German and were living at home either with or without a partner. Exclusion criteria were having severe mental, hearing, speaking or cognitive impairments. All participants were living in medium-sized towns in rural regions in North Rhine-Westphalia or Lower Saxony. The age ranged from 63 to 84 with a mean age of 73.8 years ($SD = 7.4$). Four participants were retired and one participant was working in part-time retirement.

Table 1

Demographic Data of the Participants

	Age	Living situation ¹	Marital status ²	Level of education ³	Last job before pension	Physical disabilities	Additional information
Mr. S	72	P	M	TCD	construction official	none	voluntary work
Mr. N	70	P	M	UD	teacher	two artificial hips	voluntary work
Mr. J	80	P	M	TCD	public administration specialist	two artificial hips, two stents	/
Mr. K	84	A	W	MC	self-employed craftsman	two artificial hips	/
Mr. M	63	A	S	UD	reverend	none	part-time retirement for older employees

Note. 1. P = with partner, A = alone. 2. M= married, W= widowed, S= single. 3. TCD = technical college degree, UD= university degree, MC= master certification

OLDER ADULTS AND THE NEED FOR AUTONOMY

Procedure

A pilot test showed that questions concerning the future were too hypothetical. Afterwards, the interview was slightly adjusted. Instead of asking four questions about specific situations in the future, two more general questions concerning the future were asked. Participants were reached via telephone or at home with keeping 2 m distance due to the COVID-19 provisions during one week at the beginning of April 2020. Participants were informed about the purpose of the study and a written informed consent form was delivered to and signed by them. Participants were informed about their right to withdrawal from the interviews at any time and without consequences. The interviews were recorded via audiotape. All interviews were conducted in German language. The interviews duration was 20 to 120 minutes. The study was approved by the BMS ethics committee of the University of Twente (no. 200270).

Interview

The interview included questions about demographic characteristics, and open-ended questions focusing on participants' current life, their past (childhood/youth/adulthood), future and the times of COVID-19 pandemic. Participants were asked about their personal understanding of autonomy e.g. *"What do you think when you think about autonomy?"*, about their personal experiences with autonomy e.g. *"Can you tell me about your own experiences with autonomy in your current life?"*, about specific moments in which they experienced a sense of autonomy *"Can you tell me something about a moment when you felt you were having a sense of autonomy in your childhood/youth/adulthood?"*, and about specific moments in which they lacked a sense of autonomy *"Can you tell me something about a moment when you were NOT having a sense of autonomy in the current corona situation?"*. These questions were asked for each of the time spans during their lives except participants' future. Questions about the future dealt with hopes and expectations concerning the individuals' autonomy e.g. *"What do you hope regarding autonomy for your future?"*. The definition of the need for autonomy as stated in Ryan et al. (2008) was delivered to participants because they were not familiar with the term autonomy: "the need for autonomy refers to a sense of choice and volition in the regulation of behavior" (p.153).

Data analysis

Interview data were transcribed verbatim and anonymised before analysis. Afterwards, the audio recordings were deleted. The program ATLAS.ti 8.4 was used for analysing the content. To obtain a sense of the content, full transcripts were read before coding. In the following, a content analysis was used for analysing the data which included an inductive approach. Inductive codes

OLDER ADULTS AND THE NEED FOR AUTONOMY

and sub-codes were created by reading the interviews and attached to participants' answers relevant to the research questions (Thomas, 2006). After analysing all interviews, codes were compared, summarised, and adjusted and a first coding scheme was established. Inter-rater comparison was conducted in form of exchanging and discussing the coding scheme with another researcher until consensus was reached. In this phase, additional codes were identified and codes and sub-codes were summarised and renamed. In the end, each interview was reanalysed using the final coding scheme. Quotes that were used in the analysis were translated into English.

Results

To answer the research questions “How do older adults (60+) living at home experience that their need for and satisfaction of the basic psychological need *autonomy* has changed throughout their life”, “How do older adults hope that their experience of *autonomy* will develop in the future?”, and “How is older adult experience of *autonomy* influenced by the coronavirus disease (COVID-19) pandemic?” five themes were identified in the interviews. These five themes are summarised and presented in Table 2.

OLDER ADULTS AND THE NEED FOR AUTONOMY

Table 2

Overview of Identified Themes in the Interviews

Code	Sub-code	Definition	Example
Autonomy Satisfaction		Level of satisfaction with the basic psychological need for autonomy	
	Childhood/Youth	Autonomy satisfaction in childhood and youth	“I do not want that time back, because I was restricted in my autonomy”.
	Adulthood	Autonomy satisfaction in adulthood	“At work, I sometimes felt limited, but not in private life, because I could do what I want.”
	Older Adulthood (Retirement)	Autonomy satisfaction in current life (retirement)	“I live in such a way that I see practically no problems, that the autonomy in any way is not available or could be restricted. I feel good, I do what I want.”
	COVID-19	Autonomy satisfaction in the corona pandemic	“I am satisfied with my autonomy in the current times, because I can still skype with my grandchildren and call my friends and I can also do the rest.”
Autonomous Situations Throughout Life		Activities or situations in life that gave a feeling of autonomy	
	Childhood/Youth	Situations in childhood / youth giving a feeling of autonomy such as leisure activities	“Our home was the forest, outside like Tom Sawyer, Huckleberry Finn. That was our world. Feeling this autonomy. Absolutely playful but.. say nothing at home.”
	Adulthood	Situations in adulthood giving a feeling of autonomy such as voluntary work or work	“Yes, of course I have my obligations, I have my appointments, but I have great opportunities to make appointments, I have to make home visits, but I can arrange when and how to do them.”
	Older Adulthood (Retirement)	Situations in current life (retirement) giving a feeling of autonomy such as daily activities, leisure activities or voluntary work	“I can actually do everything normally. I can cook, I go shopping, I can walk normally.”

OLDER ADULTS AND THE NEED FOR AUTONOMY

	COVID-19	Situations that give a feeling of autonomy despite the restrictions of the corona pandemic	“And we're still lucky that you can move more or less freely. You can cycle back and forth everywhere.”
Guidelines		Regulations for behaviours hindering the individual's feeling of autonomy	
	School/University	Regulations at school or university	“It is a really subjective review; my childhood and youth were limited by the school's guidelines. I don't have a negative memory of that, but I wouldn't want this phase again because the time was structured and predefined.”
	Work	Regulations at work such as laws	“I was incredibly reluctant to approve arcades because it puts many people into financial ruin, but if it's the law, I have to approve it even though I would have heartily refused.”
	COVID-19	Regulations in the corona pandemic such as governmental restrictions	“Of course, we find ourselves restricted with children or in other groups of friends that you can no longer meet with anyone. “
Influence of Other People		People hindering the individual's feeling of autonomy either by exerting pressure or by having to take them into account	
	Childhood/Youth	People that had an influence on autonomy in childhood/youth such as parents or teachers	“I studied very well during my studies. Then I noticed this dependence on professors. Since you want to have grades, you want to have the degree.”
	Adulthood	People that had an influence on autonomy in adulthood such as family or superiors	“When we were younger, it was a difficult time with the children, we were not free in our decisions, because there was still an ex-partner, where the children lived.”
	Older Adulthood (Retirement)	People that had an influence on autonomy in older adulthood such as partners	“My autonomy has been somewhat limited for five or six or seven years, because I feel obliged to look out for my wife.”

OLDER ADULTS AND THE NEED FOR AUTONOMY

Requirements

Requirements that are needed in order to have the opportunity to experience a feeling of autonomy

Health	Having the physical and cognitive conditions that are needed in order to be autonomous	“For example, a restriction of my mobility would be very stressful and not only mobility with regard to driving, but also running and walking, i.e. doing sports. “
Time	Having enough time to be autonomous	“I am retired and have the freedom to do things in retirement that you otherwise cannot do when you are at work.”
Finances	Having the financial resources in order to be autonomous	“For me, autonomy is also part of saying that I have the financial means to pay someone to do it for me. I don't have to do it myself, someone else can do it for me, but I also have to have the possibilities.”

OLDER ADULTS AND THE NEED FOR AUTONOMY

Autonomy Satisfaction

Answers for the code *autonomy satisfaction* were structured around the sub-codes: *childhood/youth, adulthood, older adulthood (retirement), and COVID-19.*

Childhood/Youth. Participants described that in general they were not satisfied with their autonomy in their childhood and youth even though they mentioned having difficulties remembering these times accurately. However, they described that they did not have a great feeling of autonomy during these times. Only Mr. J described that he was satisfied with his autonomy in his childhood and youth because his parents left him great freedom during these times.

Mr. J: *“In retrospect, of course I was satisfied with my autonomy, but I didn’t know anything other than that, because my parents never prescribed anything for me. For others in my age this was different I think.”*

Adulthood. The interviews showed that participants made differences between their work and their private life in their adulthood. In work life, participants were not always satisfied with their autonomy as they were limited by laws and regulations as well as their superiors. However, they reported that with increasing age and work experience, their autonomy and thus, also their autonomy satisfaction at work increased. Participants had to involve their superiors less and were able to make more decisions on their own. Still, due to certain rules and restrictions, it was not always possible to make autonomous decisions which limited their satisfaction of autonomy at their workplace.

Participants described that in their private life, they had a greater feeling of autonomy as they were able to make decisions on their own or with their partner. Nevertheless, participants had to consider their family, which participants described as a barrier to their autonomy. It was reported that being limited in one’s autonomy due to one’s children or partner did not result in a lowered need satisfaction as it was not perceived as negative. Hence, they were more satisfied with their autonomy compared to their job life.

Older adulthood (Retirement). All participants described that they are satisfied with their autonomy in their current life, which is the phase of retirement. They described that at first, the retirement was a difficult phase because the structured working life as well as the obligations at work fell apart. However, when getting used to the new situation, the retirement offered a great possibility to act autonomously and satisfy one’s need for autonomy. Further, they described that autonomy is important to them and they are grateful to have satisfactory autonomy even at their age.

OLDER ADULTS AND THE NEED FOR AUTONOMY

Mr. S: *“In my decisions I am now much more autonomous than I was in my previous life. After I had no longer go to work, I do not have to do things that limit the autonomy. So, I am satisfied.”*

COVID-19. Interviews showed that participants were satisfied with their autonomy during the COVID-19 pandemic. Even though participants described that they experienced limitations to autonomy in their daily life, all of them thought that the restrictions are reasonable as these exist to protect the population. Hence, they did not perceive a change in need satisfaction of autonomy.

Mr. J: *“I think the regulations make sense. I don’t want to have much contact with others at the moment. I can still go outside and that is enough for me.”*

Mr. S: *“There are limitations to autonomy, but I don’t feel very limited in my personal autonomy. The rules serve the cause and must be accepted. That is not a bad intent from the government.”*

Looking at the phases in participants’ lives, it can be seen that with increasing age, also participants autonomy satisfaction increased. One reason seemed to be that participants experienced less dependence on and control from other people as they grew older. The COVID-19 pandemic appeared to be an exceptional situation as participants reported to be satisfied with their autonomy during that times even though the time was associated with many restrictions and rules limiting their autonomy. It seemed that participants adapted their behaviour to the situation in order to protect themselves. Based on that, it can be assumed that participants felt that they still had a choice in the regulation of their behaviour as the restrictions were in line with their own volition.

Autonomous situations throughout life

Four sub-codes were established for the code *autonomous situations throughout life: childhood/youth, adulthood, older adulthood (retirement) and COVID-19.*

Childhood/Youth. In participants’ childhood and youth being outside in nature gave them a feeling of autonomy as they had the feeling to be free and independent and no legal guardians were watching them. Hence, they could do whatever they wanted and nothing was prescribed from authorities.

Mr. N: *“Our home was the forest, outside like Tom Sawyer, Huckleberry Finn. That was our world. Feeling this autonomy. Absolutely playful but tell nothing at home.”*

Adulthood. The interviews showed two main situations in participants’ adulthood in which they felt autonomous: voluntary work and work. Participants mentioned that they felt autonomous when engaging in voluntary work as, compared to their place of employment, in voluntary work

OLDER ADULTS AND THE NEED FOR AUTONOMY

they had more liberties to choose what to do and when to do it. Even though they also had obligations, there were fewer or no rules which they had to follow. Further, they were not dependent on superiors.

Mr. J: *“I had practically no superiors. There was of course a senior boss and he just let you do. There was no superordinate or subordinate relationship. I did what I thought and that was fine.”*

Also, at work participants described that in general they had a feeling of autonomy. However, participants mentioned that at work laws and regulations from e.g. the government or superiors applied. Hence, their autonomy was limited to the area within these regulations. With increasing age and experience participants mentioned having greater autonomy at work. Participants reported they felt autonomous when they could plan their working time themselves or had freedom in how to execute work-related tasks such as planning lessons in school. Further, working independently without being controlled facilitated a great feeling of autonomy. All participants but one experienced feeling autonomous at work as positive. Only Mr R. mentioned that sometimes he felt overwhelmed with his decisional power as he was under time and financial pressure. Hence, he did not always experience autonomy at work as positive.

Mr. S: *“The job put stress on me, because I had great autonomy, however my decisions had consequences, and mistakes implicated time pressure and monetary loss.”*

Older adulthood (retirement). The interviews showed three themes of situations in which participants experienced a feeling of autonomy in their current life: daily activities, leisure activities, and voluntary work. Participants stated that being able to engage in daily activities such as cooking, shopping, driving with the car and taking care of oneself gives a feeling of autonomy because participants are able to do and decide these things themselves. They reported that especially not needing help from outside facilitates their feeling of autonomy as other people at their age need help for these kinds of activities. In both leisure activities and voluntary work, participants experienced a great feeling of autonomy as they can decide on their own what they do without being forced by others. Participants reported engaging more often in leisure activities in their current life compared to their young and middle-aged adulthood as they have more available time.

COVID-19. The interviews showed that even though there were strict restrictions caused by the COVID-19 pandemic, participants still experienced a feeling of autonomy in some areas of their lives. Participants mentioned that they were still able to do some leisure activities outside like going for a walk, riding the bike, or doing sports. Further, all participants reported having a garden

OLDER ADULTS AND THE NEED FOR AUTONOMY

and living in a rural area, which gave them the possibility to go outside without being greatly restricted by governmental rules. Participants found ways to stay in contact with different people through the internet. This gave them a feeling of autonomy as other older people do not have the possibility to stay in contact with their family and friends as they have no access to the internet. Also, it was mentioned that participants felt autonomous when it came to shopping, both in their decision to shop, as in their decision whether to accept assistance from others (e.g. brother-in-law, daughter-in-law). Participants mentioned that they did not experience all of the restrictions as negatively even though they are limiting their autonomy.

Mr. N: *“On the other hand, I would have had two choir weekends in these 14 days we were at home, I would have had two readings, I would have had R. [voluntary work]. These two weeks were on schedule for me. I have never had the last two and a half weeks in my life as unscheduled as now. I could now see that as an impairment but have found that I can live this way in the day without having an appointment, it also has its charms without me having it in the long run. In this respect, as an answer I have never experienced this negatively.”*

When considering the situations giving a feeling of autonomy, it appeared that throughout the life of participants leisure activities remained actions that gave a feeling of autonomy. The main reason was that participants were free in their decision what they do when having leisure time. Nevertheless, in adulthood, participants had less time for leisure activities and focused on work-related activities when talking about autonomy in adulthood. Thus, it may be that participants in this study used other activities giving a feeling of autonomy such as work-related activities in order to satisfy their need for autonomy in adulthood.

Guidelines

The interviews showed three main themes of *guidelines* that hindered participants' autonomy throughout their life: *school/university*, *work* and the *COVID-19* pandemic.

School/University. Participants mentioned that in school and university they did not have a great feeling of autonomy. Rather they had the feeling that life in school and university was structured and they had to conform. Further, parents, teachers and professors made decisions and participants had to accept those. Participants were not able to reproduce specific examples of situations, rather they described this as the general situation in school and university.

Mr K.: *“As a small child I am not completely independent, because a lot is prescribed from home or at school.”*

OLDER ADULTS AND THE NEED FOR AUTONOMY

Work. Also, at work when participants were in young and middle-aged adulthood participants experienced limitation to their feeling of autonomy. Their feeling of autonomy was mainly hindered by overriding rules such as laws and guidelines. Mr. N mentioned that with the introduction of the centralised A-levels, much was prescribed by the governments, implying limitations to his autonomy that he did not have previously. As an example, he mentioned that he could not choose the topics for the final examinations anymore. Mr. K mentioned that he had to adhere to certain requirements from governmental authorities even though he was self-employed. Mr. S and Mr. J who worked in different governmental authorities also mentioned that there were many barriers to their autonomy as they were subject to central instructions. Hence, even though participants reported that they worked independently, some of their decisions were always based on prescribed rules.

Mr. S: *“There were decisions that I didn’t think were good, but I still had to make such like amusements arcades. I was incredibly reluctant to approve arcades because it puts many people into financial ruin, but if it’s the law, I have to approve it even though I would have heartily refused.”*

COVID-19. In times of the COVID-19 pandemic various governmental restrictions applied. The main reason participants gave for feeling limited in their autonomy during the pandemic were different governmental guidelines and restrictions. Participants reported that they felt limited in their autonomy because social events were cancelled and prohibited. Participants described that they could not see their friends or relatives anymore and had to cancel other social activities like vacation or sports events. Especially not being able to see one’s grandchildren or friends was described as a big limitation to one’s feeling of autonomy.

Mr. M: *“I have limitations when it comes to social contacts. We have to limit ourselves, which is sometimes difficult for me, because especially with the nice weather, when I am not at work to say, I want to sit down with others, drink and talk. This is not possible now, this is a limitation.”*

Also, participants mentioned being limited in their autonomy due to regulations and recommendations for shopping such as having to keep distance to other customers and as a result, only being able to shop alone or the advice to shop only once a week. Participants described that they could not do the shopping as usual, causing them to plan the shopping differently than they normally do.

Mr. S: *“You always go with a bit of guilty conscience or careful conscience and I go either early in the morning or late in the evening when there aren’t that many people in the shop,*

OLDER ADULTS AND THE NEED FOR AUTONOMY

that's what I am doing. My wife is no longer doing the shopping. [...] Therefore, shopping habits have already changed."

Other governmental restrictions were not mentioned to limit participants feeling of autonomy.

Participants in this study seemed to feel limited in their autonomy whenever certain guidelines, rules or laws applied, which was mainly the case in their professional life, but also during the COVID-19 pandemic. Participants' retirement marked a phase in which comparable rules and laws were no longer existent. Hence, it seemed that in general there were fewer obstacles to autonomy in participants' retirement compared to other phases in their lives.

Influence of other people

The interviews showed that depending on the phase in life (*childhood/youth, adulthood, older adulthood (retirement)*), the people that had an influence on the individual's autonomy changed.

Childhood/Youth. The interviews revealed two groups of people limiting participants' autonomy in their childhood and youth: parents and teachers. It was mentioned that both parents as well as teachers imposed rules that participants had to accept. Mr. N described that he grew up in a family that was *"not autonomous at all. It was a very tight parental home, very very simple"*. Also, other participants described that their parents had a great influence on their autonomy as they prescribed a lot in their life such as the choice of school or the job selection. Participants also described that they were punished if they did not listen to their parents, which put a barrier to their feeling of autonomy as they were not able to make decisions themselves.

Adulthood. Participants described that in adulthood mainly superiors such as professors or bosses, but also the family put barriers to their autonomy. It was mentioned that participants felt limited in their autonomy when it came to their professional life because they felt dependent on their superiors as well as pressured and controlled by them. As a result, they did not feel free in their decisions.

Participants mentioned that their family also limited their feeling of autonomy. Mr. S described that he lived together with his parents-in-law and thus, felt limited in his autonomy as he always had to take them into account, e.g. when using the shared kitchen. He described this as difficult as *"young and old cannot always have the same opinion"*. The same participant described that he also felt limited in his autonomy because he had to consider his ex-partner and children and as a result could not make autonomous decisions regarding his family. He described that a barrier to his feeling of autonomy was that his ex-partner took over the child caring and he had to accept it, even though he had different opinions.

OLDER ADULTS AND THE NEED FOR AUTONOMY

Mr. S: *“When we were younger, it was a difficult time with the children, we were not free in our decisions, because there was still an ex-partner, where the children lived.”*

Other participants reported that when being married and having children, it is normal to be limited in one’s autonomy as one has to consider the family. Participants did not experience this as negative. Rather they thought that this is part of family life.

Older adulthood (Retirement). Concerning participants’ current life, all but one participant stated that they do not feel limited in their autonomy due to other people. Only Mr. J reported sometimes feeling limited in his autonomy because he has to look after his wife. He mentioned that he cannot always leave the house or go on holiday because he feels responsible for her. Nevertheless, he also reported that he does not experience this as negative.

It seemed that in this study other people’s influence on participants’ autonomy changed with age as also participants’ roles changed with age. When participants were younger they were more dependent on others such as parents or teachers, which were barriers to their feeling of autonomy. However, with increasing age this dependency changed, and participants were no longer dependent on their parents but responsible for their own children, which seemed to be another barrier for their autonomy. Also, circumstances changed with age. When being in school or at work, participants were dependent on their superiors. In retirement, this dependency was no longer applicable. As a result, participants seemed to feel more autonomous in retirement.

Requirements

For the code *requirements* three sub-codes were established: *health*, *time* and *finances*. These requirements were identified as being important in both participants’ adulthood as well as in older adulthood. Participants did not mention that these aspects were important in their childhood and youth.

Health. Participants mentioned that health contributes a large part to their feeling of autonomy. They described both physical as well as cognitive health as being important for feeling autonomous as they think that health impairments could put barriers to their autonomy. For example, not being able to make one’s own decisions because of dementia or not being able to move properly were mentioned as possible health issues limiting the individual’s autonomy.

Mr H: *“But it is also clear to me that, if I get a stroke, you will be sent to a home that will reduce the autonomy, but not by anybody but by health impairment and you can't do anything about it. [...] Of course, you want to stay healthy and fit.”*

OLDER ADULTS AND THE NEED FOR AUTONOMY

Mr. N reported that whenever he experienced major health problems in his life, he also experienced limitations to his autonomy. After his hip replacement surgery, he was in a rehabilitation facility. During this time, he felt limited in his autonomy as he could stay in one room only and was not able to move properly. In current times, all participants reported that health is not a barrier to their feeling of autonomy as they feel both physically and mentally healthy. Even though three participants had medical implants, they stated experiencing no limitations to their feeling of autonomy as they have learned to deal with these circumstances by adapting their sports behaviour. All participants reported the hope of staying healthy in order to maintain their feeling of autonomy in the future.

Mr N.: *“This is the change when, for example, mental dementia is added. You notice this process, then in the context of autonomy. No. Then it contracts more and more, I'm not there yet. I am grateful for that. “*

Time. Also, participants mentioned that time is an important aspect in order to feel autonomous because having more free time implicated having a greater feeling of autonomy in their life. Participants described using their available free time in order to engage in activities that they like, resulting in a feeling of autonomy. Mr. N described that from his adult life on until today he had a lot of freedom because his wife took care of the children, and so he had enough time to engage in leisure activities and voluntary work, which gave him a great feeling of autonomy. Other participants described that in their adulthood they had less available time to do leisure activities caused by work as well as family commitments. In contrast, they reported that in their current life, the phase of retirement, they are autonomous in a great sense as they do not have that many obligations anymore and hence, more time available to act autonomously compared to the time they were still working.

Mr. J: *“I am retired and have the freedom to do things in retirement that you otherwise cannot do when you are in professional life.”*

Mr. K: *“Yes, something changes with every age step. [...] All of life changes a bit. Now, of course, I'm freer than before because I don't work anymore and have the time.”*

Finances. A third requirement that was mentioned was having enough financial means. Participants described that in order to feel autonomous money is needed as otherwise some things that give a feeling of autonomy are not possible. Examples that were mentioned were buying a new e-bike or going on vacation. Mr. M and Mr. K mentioned that they get help in the household to have more time for enjoyable things such as meeting friends. Having the possibility to allow oneself this help gives them a feeling of autonomy.

OLDER ADULTS AND THE NEED FOR AUTONOMY

Mr M.: *“For me, autonomy is also part of saying that I have the financial means to pay someone to do it for me. I don't have to do it myself, someone else can do it for me, but I also have to have the possibilities. “*

Even though health, time and finances were identified as important requirements for autonomy throughout adulthood as well as older adulthood of participants, it seemed that especially in older adulthood, health is an important aspect for feeling autonomous because participants noticed that health problems are increasing and are limiting their feeling of autonomy. Further, it seemed that especially in adulthood, participants lacked time to engage in activities giving them a feeling of autonomy. Thus, it can be assumed that in older adulthood participants valued their available time to engage in activities giving a feeling of autonomy. It seemed that when being younger, health, time and finances played a different role in participants lives and therefore, may have been less important.

Discussion

The aim of the research was to explore how older adults living at home experience that their need for and satisfaction of autonomy has changed throughout their life. Semi-structured interviews revealed that older adults' autonomy and autonomy satisfaction changed throughout life. In line with previous research it has been found that participants ascribed this to changing life situations (Ryan & La Guardia, 2000). Results show that participants experienced both greater autonomy and greater autonomy satisfaction in their current life compared to other times in their lives. This finding is consistent with Sheldon et al. (2006) who found that older adults had a greater feeling of autonomy compared to their children as well as compared to when they were their child's age. Further, this study is also in line with previous research showing a positive relation between retirement and autonomy satisfaction (Henning, Bjälkebring, et al., 2019; Lindwall et al., 2017).

This study revealed that for participants the retirement phase offered new possibilities to experience and satisfy the need for autonomy. Participants described that due to their retirement, they have more available time to act autonomously and have less obligation that could hinder their autonomy compared to their childhood/youth and adulthood. This replicates the finding from Mackenzie et al. (2018) who found that older adults had more available time to act autonomous compared to other age groups. Participants had difficulties to come up with situation in their current life in which they did not feel autonomous. This finding adds support that older adults in general feel more autonomous in retirement compared to other times in their lives (Henning, Bjälkebring, et al., 2019; Lindwall et al., 2017).

OLDER ADULTS AND THE NEED FOR AUTONOMY

Concerning participants' past life, this study found that participants' childhood, youth and adulthood implicated phases of barriers to participants' autonomy. Situations in the childhood of participants in which they did not have a feeling of autonomy were mainly dealing with other people limiting their autonomy resulting in a low need satisfaction. This finding is consistent with previous research showing that parental and teachers control limited children's and adolescents' autonomy satisfaction and well-being (Costa, Cuzzocrea, Gugliandolo, & Larcan, 2016; van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017). Participants described that also in their adulthood, they were not always satisfied with their autonomy at work. These findings are consistent with past research showing that peoples' autonomy (Ryan, Bernstein, & Brown, 2010) as well as autonomy satisfaction were higher in free time and during non-work activities compared to work (Walker, 2016). Results might be explained by the fact that during work people feel pressured and controlled, whereas in private life people are more relaxed and have more possibilities to express their own ideas.

This study found that during all phases of life participants experienced a great feeling of autonomy when conducting leisure activities. This might show that leisure time is a time where people are detached from obligations hindering their autonomy. This is in line with previous research. Researchers found that the feeling of autonomy increased for various age groups when having free time e.g. on weekends when people can independently choose activities based on personal interests (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000).

With regard to how older adults hope that their experience of autonomy will develop in the future, health was identified as a central topic for future autonomy in the participants' answers. As all participants reported having a great feeling of autonomy in their current life, they mentioned that they hope it stays the same in the future. Thus, they described that mental and physical health will be important to maintain their autonomy. This finding is consistent with Wallin, Talvitie, Cattan, and Karppi (2007) who found that physical health is needed in order to be able to make decisions on one's own. Past research showed that high physical activity was related to a high level of autonomy in older adults as it contributed to maintaining people's health (Parra-Rizo & Sanchis-Soler, 2020). Therefore, in order to maintain older adults' autonomy and, subsequently both their physical and mental health, future interventions may want to focus on supporting and motivating older people to regularly perform physical training.

Participants mentioned that in some areas of their life there are limitations to their autonomy due to the COVID-19 pandemic. However, they emphasised that this did not result in a lowered need satisfaction. The results found coincide with the findings of Cantarero et al. (2020) who found

OLDER ADULTS AND THE NEED FOR AUTONOMY

that autonomy satisfaction did not consistently correlate with well-being during the COVID-19 pandemic. This might have different reasons. One possible explanation might be that participants were more concerned about their physical health and well-being than about their feeling of autonomy, especially as participants belong to the risk group. Hence, it may be that participants felt that they had a choice in the regulation of their behaviour as the restrictions were in line with their own volition. Another explanation might be that despite the governmental restrictions, participants were able to perform various leisure activities in form of physical activities. Not only did participants describe that performing leisure activities made a large contribution to feeling autonomous during all life spans, but also in recent studies the importance of physical activity for mental health during COVID-19 has been described (e.g. Chen et al., 2020). Hence, participants might also still have a feeling of autonomy as they were able to pursue physical activities. Moreover, as all participants live in rural areas and have a garden, it seems that participants were not affected by the restrictions as much as others such as nursing home residents or people living in small apartments. Future studies should further examine how other probably more affected people such as nursing home residents, or people living in countries where the governmental restrictions were more extreme such as Spain or Italy, experienced the influence of the COVID-19 pandemic on their need for and satisfaction of autonomy.

The current study contributed to existing literature about the self-determination theory (e.g. Ryan & Deci, 2001). This study was the first one exploring how older adults living at home experience that their need for and satisfaction of autonomy changed throughout their life. In previous research support for the universal importance of the basic psychological needs across one's whole life has been found (e.g. Hahn & Oishi, 2006). This study adds support that the need for autonomy as mentioned in the SDT however changes across one's life due to changed life situations (Ryan & La Guardia, 2000). Hence, even though the need for autonomy is universal across life, both the level of autonomy and the level of satisfaction with autonomy seems to change throughout life. In this study it became apparent that participants compared themselves with their peers, especially in their current life and in times of COVID19. Hence, participants defined their autonomy relative to their peers. Because peers change over time and people have to deal with different challenges throughout their life, also people's understanding of autonomy might change. Future researches should focus on longitudinal designs following participants over a longer period of time and including transitions phases such as from work life to retirement or from living at home to living in a residential home in order to explore how people experience that these changes in life affect their need for autonomy.

OLDER ADULTS AND THE NEED FOR AUTONOMY

There are some strengths and limitations to this study. A strength of this research is that all participants were interviewed during one week. Thus, the restrictions of the COVID-19 pandemic were the same for all participants. However, the guidelines such as the restriction of social contacts only applied since mid-March 2020 (Presse- und Informationsamt der Bundesregierung, 2020a, 2020b). The results concerning COVID-19 however only refer to the date up to April 8, 2020. It might be that participants' experiences and opinions concerning their autonomy in the situation of COVID-19 changed due to longer lasting restrictions and changed guidelines. Hence, future research should further examine how the target group experienced that their need for and satisfaction of autonomy changed when the governmental restrictions lasted for a longer period of time.

Due to translation difficulties another limitation occurred. The English word *autonomy* as stated in the SDT and the term *independence* have different meanings (Ryan & Lynch, 1989). However, both words can be translated into the German word "Selbstständigkeit". Although the term "Autonomie" exist in the German language, this word is not very common. As a result, participants had difficulties giving meaning to it. Hence, a definition of the word had to be given to participants. However, this can also be seen as a strength as the answers of all participants were based on the same definition given by Ryan and colleagues (2008).

Also, when interpreting the results, it must be considered that participants answers might be biased as participants were not able to remember their past lives in detail. Especially their childhood/youth is up to 80 years ago, making it difficult to remember. This became apparent when asking about the different life spans. Participants talked more about their current life and adulthood compared to their childhood and youth, which might have to do with remembering less about it. Some participants explicitly stated that it is hard for them to remember their childhood and youth. Still, in order to gain a complete picture of the need for autonomy throughout life from the perspective of older adults, questions about the past were included. In order to prevent bias, studies using a longitudinal design with data collection at multiple points in time should be conducted.

Another implication that has to be considered when interpreting the results is that in this study, the group of participants was largely homogenous. All participants described being satisfied with their autonomy in their current situation. A possible explanation for this might be that participants reported being relatively healthy and independent for their age. None of the participants had to nurse their partner or other relatives or had to be cared for themselves, which can limit an individual's feeling of autonomy as found in the nursing home context (Custers, Westerhof, Kuin, Gerritsen, & Riksen-Walraven, 2012). Only one participant described to look

OLDER ADULTS AND THE NEED FOR AUTONOMY

after his wife, which already limits his autonomy to some extent. When being even more responsible for one's partner, it might be that this results in a lower satisfaction of one's autonomy as one has to consider another person and hence, activities giving a feeling of autonomy such as going on vacation might be no longer possible. Moreover, limitations to the individual's health in form of restricted mobility often led to a limited autonomy as described in past research (e.g. Schüz et al., 2016), which has not been the case for participants in this study. Future studies should thus explore how the care for relatives and individual's health problems affect older adults' need for autonomy.

Conclusion

To conclude, the present study provided insights into how older adults experience that their need for autonomy has developed throughout their life and in the coronavirus disease (COVID-19) pandemic. The participants described having greater autonomy satisfaction in their current life compared to adulthood and their childhood/youth. In times of the COVID-19 pandemic participants reported feeling less autonomous, however they described that this did not result in a lowered satisfaction of autonomy. The data supports that with ageing, people develop a greater feeling of autonomy (Ryff, 1995; Sheldon et al., 2005; Sheldon & Kasser, 2001) and that people's autonomy satisfaction can change when the life situation changes (Ryan & La Guardia, 2000). The main reasons for that are having more available time and fewer obligations in life during retirement. Overall, feeling autonomous in one's life seems to be an important need throughout the whole life.

References

- Cantarero, K., van Tilburg, W. A., & Smoktunowicz, E. (2020). Affirming Basic Psychological Needs Promotes Mental Well-Being During the COVID-19 Outbreak. doi: 10.31234/osf.io/pyhce
- Chen, B., Van Assche, J., Vansteenkiste, M., Soenens, B., & Beyers, W. (2015). Does psychological need satisfaction matter when environmental or financial safety are at risk?. *Journal of Happiness Studies*, *16*(3), 745-766. doi: 10.1007/s10902-014-9532-5
- Chen, P., Mao, L., Nassis, G. P., Harmer, P., Ainsworth, B. E., & Li, F. (2020). Wuhan coronavirus (2019-nCoV): The need to maintain regular physical activity while taking precautions. *Journal of sport and health science*, *9*(2), 103. doi: 10.1016/j.jshs.2020.02.001
- Costa, S., Cuzzocrea, F., Gugliandolo, M. C., & Larcan, R. (2016). Associations between parental psychological control and autonomy support, and psychological outcomes in adolescents: The mediating role of need satisfaction and need frustration. *Child Indicators Research*, *9*(4), 1059-1076. doi 10.1007/s12187-015-9353-z
- Custers, A. F. J., Westerhof, G. J., Kuin, Y., Gerritsen, D. L., & Riksen-Walraven, J. M. (2012). Relatedness, autonomy, and competence in the caring relationship: the perspective of nursing home residents, *Relatedness, Autonomy, And Competence In The Caring Relationship: The Perspective Of Nursing Home Residents*. doi: 10.1016/j.jaging.2012.02.005
- Hahn, J., & Oishi, S. (2006). Psychological needs and emotional well-being in older and younger Koreans and Americans. *Personality and Individual Differences*, *40*(4), 689–698. doi: 10.1016/j.paid.2005.09.001
- Henning, G., Bjälkebring, P., Stenling, A., Thorvaldsson, V., Johansson, B., & Lindwall, M. (2019). Changes in within- and between-person associations between basic psychological need satisfaction and well-being after retirement. *Journal of Research in Personality*, *79*, 151–160. doi: 10.1016/j.jrp.2019.03.008
- Henning, G., Stenling, A., Tafvelin, S., Hansson, I., Kivi, M., Johansson, B., & Lindwall, M. (2019). Pre-retirement work motivation and subsequent retirement adjustment – a self-determination theory perspective Advance Online Publication. *Work, Aging & Retirement*. doi: 10.1093/workar/way017

OLDER ADULTS AND THE NEED FOR AUTONOMY

- Kloos, N., Trompetter, H. R., Bohlmeijer, E. T., & Westerhof, G. J. (2019). Longitudinal associations of autonomy, relatedness, and competence with the well-being of nursing home residents. *The Gerontologist*, *59*(4), 635-643. doi: 10.1093/geront/gny005
- Lindwall, M., Berg, A. I., Bjälkebring P, Buratti, S., Hansson, I., Hassing, L., ... Johansson, B. (2017). Psychological health in the retirement transition: rationale and first findings in the health, ageing and retirement transitions in sweden (hearts) study. *Frontiers in Psychology*, *8*, 1634–1634. doi: 10.3389/fpsyg.2017.01634
- Mackenzie, C., Karaoylas, E., & Starzyk, K. (2018). Lifespan differences in a self determination theory model of eudaimonia: A cross-sectional survey of younger, middle-aged, and older adults. *Journal of Happiness Studies : An Interdisciplinary Forum on Subjective Well-Being*, *19*(8), 2465-2487. doi: 10.1007/s10902-017-9932-4
- Meng, H., Xu, Y., Dai, J., Zhang, Y., Liu, B., & Yang, H. (2020). Analyze the psychological impact of covid-19 among the elderly population in china and make corresponding suggestions. *Psychiatry Research*, *289*, 112983–112983. doi: 10.1016/j.psychres.2020.112983
- Mroczek, D. K., & Kolarz, C. M. (1998). The effect of age on positive and negative affect: a developmental perspective on happiness. *Journal of personality and social psychology*, *75*(5), 1333. doi: 10.1037/0022-3514.75.5.1333
- Parra-Rizo, M. A., & Sanchis-Soler, G. (2020). Satisfaction with life, subjective well-being and functional skills in active older adults based on their level of physical activity practice. *International journal of environmental research and public health*, *17*(4), 1299. doi: 10.3390/ijerph17041299
- Presse- und Informationsamt der Bundesregierung. (2020a, May 1). *Coronavirus in Deutschland. Was bedeuten die neuen Leitlinien?* Retrieved from <https://www.bundesregierung.de/breg-de/themen/coronavirus/faqs-neue-leitlinien-1733416>
- Presse- und Informationsamt der Bundesregierung. (2020b, May 1). *Leitlinien zum Kampf gegen die Corona-Epidemie.* <https://www.bundesregierung.de/breg-de/aktuelles/leitlinien-zum-kampf-gegen-die-corona-epidemie-1730942>
- Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: the role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin*, *26*(4), 419–435. doi: 10.1177/0146167200266002

OLDER ADULTS AND THE NEED FOR AUTONOMY

- Robert Koch Institut (2020b, May 1). SARS-CoV-2 Steckbrief zur Coronavirus-Krankheit-2019 (COVID-19) Retrieved from https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Steckbrief.html
- Robert Koch Institut. (2020a, May 1). Informationen und Hilfestellungen für Personen mit einem höheren Risiko für einen schweren COVID-19-Krankheitsverlauf. Retrived from https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Risikogruppen.html
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist*, 55(1), 68–78. doi: 10.1037/0003-066X.55.1.68
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology*, 52(1), 141-166. doi: 10.1111/nhs.12016
- Ryan, R. M., & La Guardia, J. G. (2000). What is being optimized over development?: Self-determination theory and basic psychological needs. In S. Qualls & R. Abeles (Eds.), *Psychology and the aging revolution: How we adapt to longer life* (pp. 145–172). Washington, DC: American Psychological Association.
- Ryan, R. M., & Lynch, J. H. (1989). Emotional autonomy versus detachment: revisiting the vicissitudes of adolescence and young adulthood. *Child Development*, 60(2), 340–356.
- Ryan, R. M., Bernstein, J. H., & Brown, K. W. (2010). Weekends, work, and well-being: Psychological need satisfactions and day of the week effects on mood, vitality, and physical symptoms. *Journal of social and clinical psychology*, 29(1), 95-122. doi: 10.1521/jscp.2010.29.1.95
- Ryan, R. M., Huta, V., & Deci, E. L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, 9(1), 139–170. doi:10.1007/s10902-006-9023-4
- Ryff, C. D. (1995). Psychological well-being in adult life. *Current directions in psychological science*, 4(4), 99-104.
- Schüz, B., Westland, J. N., Wurm, S., Tesch-Römer, C., Wolff, J. K., Warner, L. M., & Schwarzer, R. (2016). Regional resources buffer the impact of functional limitations on perceived autonomy in older adults with multiple illnesses. *Psychology and aging*, 31(2), 139. doi: 10.1037/pag0000064

OLDER ADULTS AND THE NEED FOR AUTONOMY

- Sheldon, K. M., & Kasser, T. (2001). Getting older, getting better? Personal strivings and psychological maturity across the life span. *Developmental psychology*, 37(4), 491-501. doi: 10.1037//0012-1649.37.4.491
- Sheldon, K. M., Houser-Marko, L., & Kasser, T. (2006). Does autonomy increase with age? Comparing the goal motivations of college students and their parents. *Journal of Research in Personality*, 40(2), 168-178. doi: 10.1016/j.jrp.2004.10.004
- Sun, R., Balabanova, A., Bajada, C., Liu, Y., Kriuchok, M., Voolma, S. R., ... & Li, C. (2020). Psychological wellbeing during the global COVID-19 outbreak. doi: 10.31234/osf.io/r7xaz
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 27(2), 237–246. doi: 10.1177/1098214005283748
- United Nations (2017). World Population Prospects: The 2017 Revision, Key Findings and Advance Tables. Retrieved from https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_KeyFindings.pdf
- United Nations. (2019). World Population Prospects: the 2019 Revision. Retrieved from <https://population.un.org/wpp/Graphs/Probabilistic/POP/60plus/908>
- van der Kaap-Deeder, J., Vansteenkiste, M., Soenens, B., & Mabbe, E. (2017). Children’s daily well-being: The role of mothers’, teachers’, and siblings’ autonomy support and psychological control. *Developmental psychology*, 53(2), 237. doi 10.1037/dev0000218
- Walker, G. J. (2016). Social class and basic psychological need satisfaction during leisure and paid work. *Journal of Leisure Research*, 48(3), 228-244. doi: 10.18666/JLR-2016-V48-I3-6515
- Wallin, M., Talvitie, U., Cattan, M., & Karppi, S. L. (2007). The meanings older people give to their rehabilitation experience. *Ageing and Society*, 27, 147. doi: 10.1017/S0144686X06005113
- Winick, B. J. (1992). On autonomy: Legal and psychological perspectives. *Villanova Law Review*, 37, 6, 1705-77.
- World Health Organization. (2020a). *Coronavirus disease 2019 (COVID-19) situation report—51*. World Health Organization. Retrieved from https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10.
- World Health Organization. (2020b). *Coronavirus disease 2019 (COVID-19) situation report—72*. World Health Organization. Retrieved from https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200401-sitrep-72-covid-19.pdf?sfvrsn=3dd8971b_2

OLDER ADULTS AND THE NEED FOR AUTONOMY

World Health Organization. (2020c). *Coronavirus disease 2019 (COVID-19) situation report—74*.
World Health Organization. Retrieved from https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200403-sitrep-74-covid-19-mp.pdf?sfvrsn=4e043d03_14