Master Thesis

Older Adults and Perceived Competence – A Qualitative Study on the Experiences of Competence Throughout the Lifespan and in Times of the COVID-19 Pandemic

Laura Giesler

s1838776

l.giesler@student.utwente.nl

Behavioural, Management and Social Science (BMS)

Department of Positive Psychology and Technology (PPT)

First Supervisor: Dr. Noortje Kloos

Second Supervisor: Dr. Anneke Sools

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UNIVERSITY OF TWENTE.

Abstract

The experiences of competence, which contribute to well-being, change throughout the lifespan, as explained by the Self-Determination Theory (SDT). This can be explained by changing environments, obligations and surroundings. In the SDT, competence refers to feeling a certain amount of mastery and effectiveness while interacting with the environment. Therefore, the aim of this study was to explore the experiences and activities that older adults relate to competence and how they look back and describe how these changed throughout their life course. An additional focus was set on the COVID-19 pandemic, as the pandemic put new strains on people's satisfaction of competence.

Four semi-structured interviews were conducted with interviewees between the age of 75 and 85, consisting of one man and three women. All interviewees were living in their own apartment. The questions of the interview focused on the experiences and activities that the interviewees related to competence at four different stages in their lives: during adolescence/early adulthood, in the time preceding the COVID-19 pandemic, during the COVID-19 pandemic, and in the future. For the analysis, a partially deductive combined with an inductive approach was used. Statements of the interviewees were structured around ten codes, which were categorized into activities, experiences and limitations.

The results show that a sense of mastery or effectiveness was mostly experienced while engaging in activities that required certain abilities of the interviewees and was further enhanced by rewards, support of, and recognition from others. Supporting others and participating actively in life was identified throughout all timeframes. Additional experiences and activities that older adults related to mastery or effectiveness during adolescence and early adulthood were financial matters and their jobs. During the time preceding the pandemic, no new experiences and activities were identified, but they felt restricted to actively participate in life because of the regulations passed due to the COVID-19 pandemic and thus, decreased their perceived competence. For the future, the interviewees hope to satisfy their need of competence by experiencing independency and possessing the abilities and skills to live on their own.

Based on these findings, interventions could be developed to support older adults to engage in activities, which are aimed at increasing their perceived competence. Furthermore, future studies should extend this research with quantitative correlational analyses to further investigate to what extent the identified experiences and activities relate to the perceived feeling of competence of older adults on a broader sample.

Key words: self-determination theory, basic psychological need, competence, older adults, interview study, COVID-19

Older Adults and Perceived Competence – A Qualitative Study on the Experiences of Competence Throughout the Lifespan and in Times of the COVID-19 Pandemic

A majority of our today's society is over the age of 60 and the world's population is getting increasingly older (WHO, 2017). On the one hand, this can be seen as a positive development and can be traced back to an increased life expectancy worldwide (Crimmins, 2015). On the other hand, with increasing age, older adults become more fragile and vulnerable for issues related to their health, such as cancer, cardiovascular diseases and depression (Slaets, 2006). The corona virus disease (COVID-19) in 2020 placed one of the most apparent risks on the health of our societies, but especially on older adults. COVID-19 is a global infectious disease, which can cause mild to severe respiratory illness (WHO, 2020a). In Germany, for example, regulations were passed such as closing facilities for the public life, including schools, kindergarten and any kind of social gatherings (land.nrw, 2020). Especially people over the age of 60 and people with underlying medical conditions are at a high risk of developing severe symptoms, which may lead to acute health damage or even death (WHO, 2020b; RKI, 2020). Consequently, especially older adults and other risk groups are advised to stay isolated.

While designed to protect older adults' health, these new regulations arguably could include counterproductive effects regarding health and well-being. Quite importantly, social isolation can have a detrimental effect on the physical and mental health of older adults (Cornwell & Waite, 2009; Rohde, D'Ambrosio, Tang, & Rao, 2016; Wang et al., 2017). Preliminary research has already shown that quarantining older adults and thus, isolating them from their social surroundings, increases their risk for displaying adjustment reaction or even developing a depressive disorder (Banerjee, 2020). Especially, since people worldwide were obliged to follow safety regulations that were passed by their government (WHO, 2020c), they had to conform their behaviours accordingly. A consequence of these regulations might be that it becomes impossible for older adults to fully interact with their environment, which is said to be a crucial requisite for experiencing a feeling of competence (White, 1959; Ryan & Deci, 2017). Hence, it might become a challenge for older adults to satisfy their need for competence.

Competence is part of the basic psychological needs theory (BPNT) (Ryan & Deci, 2001), a sub-theory of the Self-determination Theory (SDT). The SDT states that the fulfilment of three basic psychological needs (autonomy, relatedness and competence) is essential for personal well-being (Ryan & Deci, 2000). According to Ryan and Deci (2017), competence can be defined as feeling a certain amount of effectiveness and mastery, whereas relatedness concerns the feeling of being socially connected and autonomy refers to the need and ability to

regulate one's own actions and experiences. The term "basic need" was defined by Ryan and Deci (2000) as an activating state, which either contributes to a person's health and well-being or is detrimental to it, depending on whether it is fulfilled or not. According to Ryan and Deci (2001), the effect of the fulfilment of the basic psychological needs on well-being is universal and depends on a person's environment but is independent of age, culture and context. However, as people age they become more vulnerable and fragile (Slaets, 2006), which makes it more difficult to satisfy the basic psychological needs (Coleman, 2000).

When considering research on the SDT and older adults in nursing homes or hospitals, most of it concerns the relationship between all three basic psychological needs and well-being or depressive symptoms (Custers, Cillessen, Westerhof, Kuin, & Riksen-Walraven, 2014; Ferrand, Martinent, & Durmaz, 2014; Kloos, Trompetter, Bohlmeijer, & Westerhof, 2019; Souesme, Martinent, & Ferrand, 2016). None of these studies, however, aimed at identifying what kind of experiences and activities older adults relate to competence, autonomy and relatedness and thus, might increase their well-being. First insights into what kind of experiences satisfy the need of competence for older adults were received by Nygren, Norberg and Lundman (2007). They analysed narratives of older adults with the aim to find out what inner strength means to them. During their study, the concept of competence was one of the five themes that appeared in these narratives and related to the recognition and use of own capacities. This is in line with research of Ryan and Deci (2017), who explained that people feel a sense of competence when they are able to engage in experiences and activities in which they can use their own skills and expertise. Still, they did not find out during which experiences and activities older adults recognised and used their capacities. Thus, nothing is known about the specific activities that enhance the perceived competence of older adults and therewith, might increase their well-being.

Looking only at the concept of competence, evidence suggests that the experience of competence changes and develops throughout lifespan (Clausen, 1991; Masten et al., 1995; White, 1959). These changes are dependent on the environmental influences of a person (White, 1959). For example, toddlers start to explore, crawl, walk or start to think and attend to language, which results in a competent interaction with their environment (White, 1959). During the time of childhood, competence develops from making friendships and academic achievements (Masten et al., 1995) to competences in occupation and marital careers in adolescence (Clausen, 1991). Afterwards, competences in careers and marriages stabilizes (Clausen, 1991). More changes in competence become visible for older adults. For example, changes in their cognitive competences, but also physical limitations and impairments appear

and can violate their feeling of competence (Power et al., 2017). These studies used quantitative methods to demonstrate that a change in the experiences of competence occur. However, none of these studies investigate how people look back at their life and experience these changes, and to what extent the activities change that help them to satisfy their need for competence. Hence, a qualitative approach was chosen, to find out how older adults experience these changes retrospectively, and which activities they relate to experiencing competence.

The need for competence becomes satisfied when people are able to make experiences and engage in activities in which they can use and develop their skills and expertise (Ryan & Deci, 2017). Based on that, an interview study with the focus on the experiences and activities that older adults relate to competence and how it changes throughout their lifespan, was conducted. Therewith, experiences refer to circumstances, situations or skills and knowledge, whereas activities refer to specific behaviours or tasks the interviewees described. The main research question of this paper is "Which experiences and activities do older adults relate to competence and how do they look back and describe how these change throughout their life course?". Accordingly, the sub-questions of this paper are

1. How do older adults describe their experiences of competence when they were younger and what kind of activities do they relate to competence?
2. How do older adults describe their experiences of competence in the half year preceding the COVID-19 pandemic and what kind of activities do they relate to competence?
3. How do older adults describe their experiences of competence in times of the COVID-19 pandemic and what kind of activities do they relate to competence?
4. How do older adults wish that their experience of competence and activities that they relate to competence will develop in the future?"

Method

Design & Procedure

A qualitative study was conducted using semi-structured interviews. Prior to the interviews, a pilot interview with an acquaintance of the researcher was administered to receive feedback on question clarity and phrasing. After the questionnaire was revised accordingly, the interviewees were contacted via telephone. First, they were provided with background information about this study. This information entailed the purpose and aim of the study as well as the idea behind the SDT, that different components contribute to the perceived well-being.

Interviewees were asked for an oral confirmation regarding their consent to participate. Following that, a date and time was agreed to conduct the interview.

Because this study was conducted in times of the COVID-19 pandemic, all interviews were conducted via telephone. Oral consent was received prior to the start of the interview itself. The oral consent included confidentiality of the data, voluntariness, the possibility to drop out of the study at any given time, and contact information about the researcher in case of any remaining questions. To conduct the study, permission was given by the ethical committee of the University of Twente (approval number: 200270). After receiving oral consent, general and personal information about the interviewees was collected. Here, the interviewees were asked to provide some personal information about their family, physical independence, living conditions, social situation and education.

Since the interviewees were known to the researcher, adaptations were made to decrease a possible bias. For example, it was expected that some questions might be too personal and therefore, it was explained that the interviewee does not have to provide answers when feeling uncomfortable. Besides that, it was expected that answers of the interviewees could be intentionally socially desirable. Therefore, it was emphasized that the interviewees could provide honest answers and that nobody, except the researcher, will know to whom the answers belong. Lastly, interviewees had to be reminded to provide the background information about themselves in a manner as if they are telling it to somebody unknown. This helped to receive a complete and unbiased overview of the interviewees' background.

The interviews were conducted by the researcher herself and were recorded via smartphone. After all interviews were conducted, they were transcribed verbatim by the researcher.

Interview

For this study, a semi-structured interview scheme was developed with open-ended questions. The interview consisted of four parts, each focusing on a different timeframe: (1) adolescence/early adulthood, (2) time preceding COVID-19, (3) time during COVID-19, and (4) future.

The questions to each timeframe were asked separately but consisted of the same structure and similar types of questions, with the exception of one question about the future. The first question in each timeframe concerned the meaning of competence ("*When you think about the past half year, before the corona pandemic, what do you think of, when you think about competence?"*). After their own meaning of competence was discussed, interviewees

were provided with the definition of competence that the researcher used for the study (*feeling a certain amount of effectiveness and mastery* (Ryan & Deci, 2017)) in order to ensure that all interviewees had the same understanding of competence.

For the past and present timeframe, a second question was concerned with general personal experiences of the interviewees with competence (*"What are your own experiences with competence during times of the corona pandemic?"*), whereas in the future, the second question was concerned with the wishes that a person has (*"What do you wish regarding competence for your future?"*). The third and fourth question were again very similar in all four timeframes and were concerned with specific moments in the life of the interviewees. Question three asked about a specific moment when the interviewee did not feel competent (*"Can you remember a moment of your youth/early adulthood when you did not feel competent?"*), whereas question four asked for a specific moment when the interviewee did feel competent (*"Can you remember a moment of your youth/early adulthood when you did feel competent?"*).

Participants and Recruitment

In total, four interviewees volunteered their time for this study. The age of the interviewees ranged from 75 to 85 with a mean age of 80.5. The sample consisted of one male and three female interviewees, all of them live in their own apartment, three live alone and one lives together with the partner. All interviewees have the German nationality.

The interviewees were recruited by means of convenience sampling. The researcher contacted the interviewees, who fulfilled the inclusion criteria, via phone call. Inclusion criteria were that the people have to be older than 65 years, speak the German language, living at home (with or without their partner) and not having severe mental, speech, or listening impairments. All participants were relatives or acquaintances of the researcher.

Data Analysis

After all data was anonymized, the transcripts were saved to an encrypted flash drive. The original recordings of the interviews were deleted, except for their oral consent. The content of the interviews was analysed using ATLAS.ti version 8.4. The overall approach used in this study was a conventional content analysis approach, also known as bottom-up coding approach. The specific procedures adhered to were a partially deductive category application and inductive category formation, both based on Mayring (2000, 2004).

The analysis consisted of the following steps: 1) All interviews were read to gain an overview of the content. 2) The interviewees received pseudonyms and a description of each

interviewee was created, based on provided background information at the beginning of the interview. 3) All interviews were reread for experiences and activities that have do to with the two concepts “mastery” and “effectiveness”. These are part of the definition of competence as defined by Ryan and Deci (2017) and were thus, applied deductively. Statements containing experiences and activities that had to do with these concepts were marked for further coding. 4) Based on the statements that were marked in the previous step, new codes were formed inductively. These codes summarize the themes of the previously marked statements. First only codes from the first transcript were deduced. Afterwards, the codes were extended and revised with the remaining transcripts. 5) After analysing all transcripts, the list of codes was further minimized by combining similar codes and assigning them to the categories: *experiences* and *activities*. The two categories are based on the research questions of this study. 6) Following that, the coded statements, including their categories were divided into the timeframes of the interview (childhood/youth/early adulthood, time preceding COVID-19, time during COVID-19, and future). Since not every code was identified in each timeframe, a variation of codes within the categories appeared. 7) In the end, definitions were developed for each code, including one example quotations.

Because some quotes of the categories regarding competence in times preceding and during the COVID-19 pandemic were not clearly separable, these two categories were merged into one category, called *present*. Besides that, an additional category called *limitations to competence* was added, since the limitations that the interviewees experienced to their perceived competence concerned specific themes. Adding this category allowed a closer discussion of specific themes. For example, interviewees talked about their limitations to their health or the COVID-19 pandemic.

Difficulties in coding arose, when statements could be assigned to more than one sub-code. In that case, the main message of the statement was identified. In case the main message included the topics of two sub-codes, it was assigned to both. For example, the statement *“I did a training as an industrial clerk and worked at street and civil engineering company and there I sat alone with my boss in an office and I was the king at the company and have… yes I earned good money and such”* was coded for the sub-codes *financial matters* and *occupation.*

Statements were not coded when interviewees talked about other themes of their life. For instance, one interviewee complained about his situation at home and often returned to this topic but denied that this situation concerned his perceived feeling of competence when explicitly asked. Consequently, statements about his difficult situation at home were not coded. In similar cases of doubts, the same procedure of explicitly asking the interviewee was used.

In the end, approximately one fifth of the answers of the interviewees were coded. Themes that appeared in the interviews but were not coded concerned, for example, personal stories about how they grew up, their relationships, and other personal problems.

Results

In the following, the four interviewees will be shortly introduced. Afterwards a general impression of the interviews will be provided, followed by the experiences and activities that older adults relate to competence which will be presented for each timeframe. First, the past time will be presented, followed by the present, including the time before and during the COVID-19 pandemic and finally, findings about the future will be presented. To support the results, quotes of the interviewees will be provided. In the end, an overview will be provided on how the experiences and activities that older adults relate to competence change throughout their life.

Interviewee Description

John. The interviewee is an 85-year-old man, who lives alone as his wife is living in a nursing home. They have been married for 62 years and have two children. His physical health is decreasing and he feels restricted by it. As a child, he grew up at his grandmother's home because his mother was working a lot and his father died during the second world war. When he finished school, he completed a vocational training as a carpenter and worked in the steel industry for 45 years.

Nancy. Nancy is a 78-year-old widowed woman, who lives alone in her old family house. She has three children and nine grandchildren. Nancy likes to garden and enjoys the advantages of living in a house, as she is still capable of living alone without much support. She graduated from school and started a commercial training. Following that, Nancy worked as an industrial clerk until she married and got her first child.

Mary. She is a woman and 75 years old. Mary is married to her husband who was diagnosed with dementia eight years ago and of whom she takes care at her home. She was diagnosed with breast cancer seven years ago but she fully recovered. Overall, she is physically independent of others and experiences no limitations. Mary has one daughter and one granddaughter, and she enjoys helping out both of them. Furthermore, she enjoys working in the garden of her granddaughter or on her own balcony. After finishing school, she did a commercial training and worked as an industrial clerk afterwards.

Barb. Barb is a widowed woman, 83 years old and lives in her apartment on her own. She has three children, including a mentally disabled son. Her other two children also have kids,

so that she has three grandchildren. Barb experiences a decrease in her fitness but otherwise she is healthy. After she attended school, she became a nurse and worked in a hospital until she had her first child. Her husband kept working and provided the family with money.

The interviews

The length of the interviews varied between 20:41 and 41:05 minutes. Overall, the interviewees were able to answer the questions, but still different difficulties appeared. Throughout the interview of Mary and Barb, the researcher repeatedly had to paraphrase questions. First, they did not understand what the researcher meant, thus the researcher had to phrase them differently. Besides that, interviewees had difficulties with answering the questions about their meaning of competence. Only John explained that competence meant for him to go on vacation with his wife. Hence, it seems as if competence implied to him that he was capable of engaging in activities, participate in life and having a general fitness. After discussing his meaning of competence, he was provided with the definition that was also used by the researchers Ryan and Deci (2017). The other three interviewees could not think of a specific definition and thus, asked the researcher for the definition themselves.

Another difficulty that appeared throughout the interviews was that some interviewees had problems with remembering experiences or activities that they related to competence when they were younger. This resulted in limited retrieval of information from the adolescence/early adulthood of the interviewees. Besides that, it was generally difficult for interviewees to think about specific situations in which they did or did not experience competence. For example, Mary could not think of any specific moments before and during the COVID-19 pandemic. She stated to have never experienced any limitations to her competence.

Competence in the past

The first timeframe is called *past* and targeted the question how older adults describe their experiences of competence when they were younger and what kind of activities they related to competence. An overview of the interviewee's activities, experiences and limitations of competence can be found in Table 1.

Table 1

Categories and codes, including definition and one quotation for competence in the past.

Category	Code	Definition	Quote
Activities	Hobbies	Activities a person regularly did and demanded certain skills.	"It really referred to the sportive success, because there I was good at." – Nancy
	Supportive activities	Activities which provide help, support or encouragement to a person's family or others.	"My whole life I helped the family… and I always felt comfortable doing it." – Mary
Experiences	Financial matters	Experiences that had to do with money.	[Was the ability to work a sign of competence for you?] Yes, I would say so because I began to earn money after I finished my training – John
	Job	Experiences made while carrying out a profession.	"So, I did a training as an industrial clerk and worked at a street and civil engineering company where I sat alone with my boss in an office and I was the king at the company and have… yes I earned good money and such." – Mary
Limitations to competence	Education	Matters related to the education of a person (high school, higher educational institutions)	"Yes, maybe some of my school… some friends or so… they kept going to school or went to university. I thought, this is something that I cannot do. This made me sad sometimes." - Nancy

Activities. Activities that gave the interviewees a feeling of competence in their adolescence and early adulthood were *hobbies* and *supportive activities*. *Hobbies* refer to activities that a person engaged in on a regular basis and demanded certain skills. Nancy, for example, described that her hobby gave her a feeling of mastery. According to her, "it really referred to the sportive success…". She explained that she tumbled when she was younger and also competed against others. Being good at tumble demanded mastering skills from her, which other people might not compose. By competing against others, she was compared to fellow tumblers, which may have made her more aware of the skills she had and thus, her competence in tumbling became more visible. However, she also described a feeling of effectiveness, since the skills she learned helped her to succeed.

Similarly, Nancy and Mary described feeling mastery in their hobby of sewing when they were younger. Mary sewed dresses for her child and said "*it was totally my thing"*, which showed, that sewing was something Mary identified with and she knew that she was good at. Sewing also demands certain knowledge and skills. Nancy for example said:

> *"Yes, that gave me some strength, that I sewed my own dress. I am still surprised about that." [Nancy, 78].*

This quote shows that Nancy might not have expected to have the skills to successfully sew her own dress. However, finishing the dress successfully might have shown her that she indeed does possess these skills and mastered the challenge.

Supportive activities are activities which provide help, support or encouragement to one's family or others. For instance, Mary explained that she felt a sense of effectiveness when she helped her mother as she was suffering from cancer. She explained that having the ability to provide the help, which was needed, made her feel effective. Additionally, this shows that being needed by others might increase the feeling of competence due to an enabling effect that the feeling of being needed might have given.

Experiences. Experiences during which interviewees felt competent related to *financial matters* and their *job*. *Financial matters* refer to experiences related to money. For instance, John explained that earning money, after he finished his training as a carpenter increased his feeling of mastery and effectiveness. He reported that his family did not have a lot of money, which restricted him in engaging in different activities. In his youth he often had to rent objects from his family or was not able to join friends in activities that cost money. Earning money enabled John to finally engage in activities, which he was not able to engage in when he was younger. By learning a profession, he was able to acquire skills and consequently, master challenges at work. Besides that, he might have also felt more effective, because he worked and

consequently earned money for what he did. Thus, earning money might gave him a feeling of mastery and effectiveness at the same time, which led to a feeling of increased competence.

Another experience during which an interviewee felt a sense of mastery and effectiveness related to her *job*, which concerns the experiences a person made while carrying out a profession. Mary did a training as an industrial clerk and worked at a civil engineering company. She was successful at her job and shared an office with her boss, additionally she said:

"…I was the king at the company and have… yes I earned good money." [Mary, 75]

As Mary used to the word *"king"* instead of *"queen"* to describe her position at the company, it might be that she thinks of the word competence as something masculine. Also, being the *king* in a company leads to the perception that she was one of the important employees of the company and had power over other employees. Additionally, Mary explained that earning a lot of money gave her a feeling of competence. This might show that earning much money meant to her that someone has a highly respected and important position in a company and thus, must have particularly good skills.

Moreover, Barb also reported about feeling a sense of mastery in her profession. Towards the end of her training to become a nurse, she had to take care of a patient for 24 hours. During this time, she had to take over several care activities herself, which included for example washing and feeding the patient. She explained that this was very tough but, in the end, she felt very competent and was proud of herself. For her it seemed that a sense of challenge, perseverance and accomplishment gave her a feeling of competence. Also, it showed that the competence to take care of a patient was something that needed to be learned and was not a given.

Limitations to competence. The status of education was named by some participants as an obstacle to competence. For instance, Nancy explained that not having the ability to achieve a higher level of education, compared to her friends, violated her feeling of mastery. She reported that some of her friends from school *"... kept going to school or went to university*.", whereas she started to work at an early age. Nancy expressed that "*…this is something that I cannot do. This made me sad sometimes."*. This quote shows that Nancy might have thought that competence related to intelligence or specific skills, which she did not possess but that others had. It also seemed to be something that she had wished for, as it made her sad that she did not continue with school.

Competence in the present

The timeframe *present* is concerned with how older adults described their experience of competence in the half year preceding the COVID-19 pandemic, what kind of activities they relate to competence and what changes they noticed in their experiences and activities during the pandemic. Table 2 provides an overview of the activities, experiences with and limitations to competence prior and during the COVID-19 pandemic.

Table 2

Categories and codes, including definition and one quotation for competence in the present.

Category	Code	Definition	Quote
Activities	Free-time activities	Engaging in activities in one's free time that are enjoyable.	"We enjoyed to drive to different places, to eat outside and taking long walks." – John
	Supportive activities	Activities which provide help, support or encouragement to a person's family or others.	"The task as a mother, to be there for the grandchildren, even spontaneously, that I found… there I felt strong and was also seen as it from my children. (…)"Yes, maybe that I always function when my grandchildren come over – Nancy
Experiences	Fitness	The bodily fitness of a person, which permits them to engage in different activities.	"And maybe… because I enjoy doing everything, I do feel competent. I like to get some fresh air, go for a walk, I just enjoy everything." – Mary
Limitations to competence	COVID-19	The corona virus pandemic that broke out in February 2020.	"I was a little bit restricted, but not as I am right now. I still could go outside and go grocery shopping and go to my doctor, which I cannot do right now." – Barb
	Health	Conditions related to a person's bodily and mental health.	"Yes, sure After my eye surgery, I had bleedings in my eye and then I received my pacemaker last November, where I was very restricted." – Barb

Activities. Activities that gave interviewees a feeling of competence prior to and during the COVID-19 pandemic are *free-time activities* and *supportive activities*. *Free-time activities* relate to activities that a person does in his/her free time and that are enjoyable. For example, John described that engaging in different kinds of activities gave him a feeling of mastery before the pandemic:

> *"We enjoyed driving to different places, eat outside, and take long walks". – [John, 85]*

Engaging in these activities without any further help might also give him a feeling of independence. Especially, being capable of driving his own car and walking on his own requires skills from John and consequently might increase his feeling of mastery.

Other activities that provided interviewees with a feeling of competence were *supportive activities*, which were already mentioned by some interviewees as activities that made them feel competent in the past. Nancy, for instance, explained that taking care of her grandchildren gave her a feeling of mastery as well as effectiveness. She explained that she enjoys taking care of them, especially the younger ones to whom she has a very good relationship. She often takes care of them when her son and his wife go out to events.

> *"The task as a mother, to be there for the grandchildren, even spontaneously, that I found… there I felt strong and was also seen as it by my children."* (…) *"Yes, maybe that I always function when my grandchildren come over." [Nancy, 78]*

These quotes show that the ability to function plays an important role in her perceived competence. Taking care of her grandchildren requires some skills as well and might sometimes feel like a "challenge". However, the ability to apply these skills might, in turn, increase her sense of mastery. Additionally, Nancy might receive the feeling that she is needed by her son and his wife and therefore it has an enabling effect on her feeling of effectiveness and consequently her perceived competence as well.

Experiences. Some experiences that made the participants feel more competent were related to *fitness* and concerned the bodily state of a person that permits them to engage in different activities. For example, Mary explained that being active and engaging with her environment increased her sense of mastery and effectiveness. She described herself as a very active person, who experiences no limitations to her competence yet. Especially, experiencing no restrictions and having the possibility to engage in all kinds of activities gave her a feeling of competence.

> *"And maybe… because I enjoy doing everything, I do feel competent. I like to get some fresh air, go for a walk… I just enjoy everything." [Mary, 75]*

In this quote, it seems as if feeling no restrictions might contribute to an almost consistent feeling of mastery and effectiveness. Besides that, Mary's perceived competence seemed to be linked to enjoyment.

Limitations to competence. According to the sample, the *COVID-19 pandemic* and *health* were the two biggest obstacles regarding competence. The *COVID-19 pandemic* concerned the corona virus pandemic that broke out in February 2020. Barb for example, explained that not being able to engage in activities that she usually enjoyed engaging in before the pandemic, decreased her feeling of mastery as well as effectiveness. She explained that the activities that she is allowed to engage in are very limited compared to the time before the pandemic. For example, due to the infection risk, her children and grandchildren dropped her grocery bags at the entrance of her apartment. She explained that by taking away her weekly shopping trip, it decreased her opportunities to use her own abilities in mastering her environment. The only activity that she can still engage in is to make a walk around the house.

> *"I was a little bit restricted, but not as I am right now. I could still go outside and go grocery shopping and go to my doctor, which I cannot do right now." [Barb, 83]*

Nancy and John spoke about very similar experiences, that decreased their feeling of mastery and effectiveness. They explained that usually, going grocery shopping gave them a feeling of mastery, since it demonstrated that they can still take care of themselves. However, their children forbade them to go outside for grocery shopping and to visit other people. Again, by forbidding them to engage in certain activities, the opportunities to master their environment were restricted. However, both did not feel majorly restricted because they had the possibility to go outside in their backyard, but the regulations still limit their perceived competence.

Another limitation to the perceived competence of participants were *health* concerns and relate to conditions of a person's bodily and mental health. Barb described that surgeries in the past half year took away her feeling of mastery but also effectiveness. She explained that these were moments where she did not feel competent, as they limited her mobility and full participation in life.

> *"Yes sure! After my eye surgery I had bleedings in my eye and then I received my pacemaker last fall, where I was very restricted." [Barb, 83]*

Experiencing these restrictions consequently mean that Barb was not able to engage in the activities that she usually would have, consequently decreasing her feelings of mastery and effectiveness. This quote also makes visible that when older adults have surgeries, they are

restricted in their ability to engage in life, which might consequently lower their perceived competence.

Competence in the future

The timeframe future is concerned with how older adults wish that their experience of competence and activities that they relate to competence will develop in the future. An overview of the experiences and activities can be found in Table 3. Additionally, it shows the kind of limitations that older adults expect that could limit their perceived competence.

Table 3

Categories and codes, including definition and one quotation for competence in the future.

Category	Code	Definition	Quote
Activities	Supportive activities	Activities which provide help, support or encouragement to a person's family or others.	"Yes, if I can still help out my children for a long time." – Mary
Experiences	Independency	Experiences a person would like to make, while being independent of other people.	"… that I can live here on my own for a long time in my own house with the backyard, that is what I wish for, because it would mean so much to me… the freedom and independency…" – Nancy
Limitations to competence	Health	Conditions relating to a person bodily and mental health.	"Yes, if I am not able anymore to do what I would like to do. If I am dependent on my children or others."- Mary

Activities. Activities that older adults wish to engage in to enhance their perceived competence relate to *supportive activities*. John and Mary explained that it gives them a feeling of effectiveness when they are able to help their families. Both of them mentioned that it is

important for them to help and support their spouses or children. John said it would make him feel competent if he could help his wife, whereas for Mary it relates to her children.

> *"Yes, if I can help out my children with food for a long time." [Mary, 75]*

By helping others, John and Mary may both experience a feeling that they are being needed, which already seemed to have an enabling effect in the past and present. Feeling needed might also contribute to their feeling of mastery, since helping other requires some skills and the ability to function bodily.

Experiences. Experiences that some older adults wished to make in the future, to increase their feeling of competence, related to *independence*. These are experiences a person would like to make while being independent of other people. Nancy talked about how living in her house on her own with the backyard increases her feeling of mastery. She explained that it means a lot to her being able to still live there independently, since it makes her aware of the abilities and skills she still possesses. At the same time, she reported that she is grateful for receiving help from her children with some of the tasks that need to be done in her house. However, for the future she wished to stay in this house.

> *"… that I can live here on my own for a long time in my own house with the backyard, that is what I wish for, because it would mean so much to me… the freedom and independence…" – [Nancy, 78]*

Living alone in a house requires a person to have a certain bodily and mental fitness, as she still has to engage in some basic activities. For example, taking care of herself and being able to walk. It might be that by engaging in these activities, Nancy receives a feeling of mastery and thus, increases her perceived competence.

Limitation to competence. Experiences that would limit the perceived competence of all interviewees in the future related to *health* and were already mentioned as a limitation in the present time. Mary explained during the interview that being healthy and thus, having the ability to engage in different kinds of activities independently from others gives her a feeling of mastery. Especially engaging in activities that she enjoys while being independent from others means a lot to her. Mary explained that she would not feel competent, *"if I am dependent on my children or others"*. This is very similar to a statement of Barb.

> *"For me it means that I can still do a lot on my own without the help of my daughters or that I do not have to go into the nursing home." [Barb,]*

Being able to do a lot on one's own and not being dependent on others requires older adults to have a certain bodily fitness to master their environment. Consequently, not being able to

engage in activities on their own might limit their feeling of mastery which in turn influences their perceived competence.

Change over time

As can be seen in Table 1, 2 and 3, the kind of activities, experiences and limitations that older adults described seem to change over their lifespan. *Supportive activities* were the only activities that appeared in every timeframe. Engaging in activities that support other people might have an enabling effect, since it can give a feeling of being needed by others, and thus being able to provide support increases the feeling of mastery and effectiveness. Other activities that increased the perceived competence were personal hobbies in the past and free-time activities in the present. For the future, no new activities were identified.

In the past, experiences regarding finances and the personal profession/job seemed to be important in relation to competence. In the present, interviewees related their perceived competence to experiences in which they felt a certain degree of bodily fitness. In the future interviewees expect that experiences of independency will give them a feeling of competence. Especially, not being dependent on their children or others and hence, still being able to engage in activities that are needed to live on one's seem to play an important role.

Lastly, a limitation that older adults experienced in the past was related to education, for example when they did not achieve a higher level of education. In the present time, older adults experienced limitations to their competence during the COVID-19 pandemic, since they were not able to engage in the activities that they engaged in prior to the pandemic. Similarly, limitations to competence were also experienced when the interviewees had issues with their health, which also interrupted the engagement in usual activities. Lastly, when thinking about the future, older adults expect to feel less competent when their health is negatively affected, which is similar to the present time.

Discussion

The aim of this study was to investigate which experiences and activities older adults living at home relate to competence and how these changed throughout their life course. An additional focus was set on how the experiences and activities that older adults relate to competence changed during the COVID-19 pandemic and the future. Accordingly, interviews with four older adults were conducted to assess which experiences and activities they related to competence in their youth/early adulthood, in the time preceding and during the COVID-19 pandemic, and what they wish for in their future. The results show, that the experiences and activities that older adults related to competence changed throughout the lifespan of all

interviewees. However, some experiences and activities were relatively stable across the timeframes. For example, older adults related an active participation in life, by means of providing support, having hobbies and engaging in different free-time activities, to competence throughout all timeframes. Nevertheless, an absence of competence was related to bodily and mental health issues. An additional threat to the perceived competence was the COVID-19 pandemic, since it limited the interviewees to actively engage with their environment.

The study revealed, that engaging in supportive activities played a constant role for older adults to satisfy their need for competence. This finding is in accordance with Midlarsky (1984), who proposed a link between competence and helping. Inter alia, she explained that if people are able to help successfully, it can serve as an indicator of skills and abilities and therewith increase the perceived competence. This could mean that by the ability to help others, people are being made aware of their competence, as they possess certain skills and abilities. Similarly, free-time activities and hobbies were related to competence throughout the timeframes as well. Here, mobility and active participation seemed to increase the perceived competence of the interviewee. Interviewees reported that for example, activities such as traveling, going to different places and going grocery shopping enhanced their perceived competence. This supports research conducted by Parra-Rizo and Sanchis-Soler (2020), who stated that older adults who actively engage in their life also experience generally higher levels of life satisfaction. Moreover, hobbies require skills of the interviewees, which might have increased their feeling of mastery. Teck Koh, Wang, Erickson, and Côté (2012) explained that the more positive experiences people make by having certain abilities in skills the more likely it is that the need for competence is satisfied. This could mean that hobbies provide a source where people can make positive experiences with their abilities and skills and hence, experience competence.

Limitations that older adults experienced to their competence throughout timeframes were health issues. Interviewees described that by experiencing health issues they feel restricted to engage in activities and therefore also in using skills and abilities. This is in line with research conducted by Power et al. (2016) and Rowe and Kahn (1991), who explain that limitations in cognitive and physical functioning are expected to influence the feeling of competence negatively, since it limits a person to interact effectively with their environment, which consequently lowers their feeling of competence (White, 1959).

This study also illustrated experiences and activities that older adults related to competence in specific timeframes. For example, older adults related *financial matters* or their *job* to competence during their adolescence and early adulthood. Akkerman, Kef, and

Meininger (2018), showed that job satisfaction is strongly associated with fulfilment of need for competence, especially if people feel effective in what they are doing and are able to master challenges. Next to this, if older adults saw the payment as an reward for their work, it seems to play an important role in their perceived competence as well, since rewards can enhance the perceived competence (Houlfort, Koestner, Joussemet, Nantel-Vivier, & Lekes, 2002). These studies show, that the job yielded different sources, to increase the perceived competence for older adults before their retirement.

In the time preceding the COVID-19 pandemic, older adults did not relate other specific experiences and activities to competence, aside from participating actively in life. However, during the COVID-19 pandemic, interviewees specifically related the pandemic as a threat to their perceived competence. The interviewees explained that the safety regulation that were passed due to the COVID-19 pandemic limited their perceived competence by decreasing mobility and the possibility to actively engage in life. The perceived decrease of competence is understandable, since the safety regulations limited the older adults to engage in experiences and activities, which usually gave them the possibility to use their skills and abilities. Notably, evidence shows that interaction with one's environment, participation and the application of skills and abilities are crucial for experiencing a feeling of competence (White, 1959, Ryan & Deci, 2017) but were all negatively affected by COVID-19 regulations according to the interviewees.

Concerning the future, older adults related a certain amount of *independency* to an enhanced feeling of competence. Being able to engage in supportive activities and experiencing a certain amount of independency, while for example living at home without much support, might create a feeling of usefulness and self-efficacy. This is in line with research by Ryan and Deci (2017), who explained that the need for competence becomes satisfied, when a person has the ability to engage in activities that provide the opportunity to use their skills and expertise. Besides that, experiencing a feeling of self-efficiency is important as well, as it enhances a feeling of mastery (Bandura, 1977), as well as the psychological competence of a person (Diehl, 1998). All in all, experiencing a sense of independency seems to be an important source to satisfy the need of their competence in the future.

Finally, the results of this study support the conceptualization of competence as stated in the SDT, namely that competence can be defined as experiencing a certain amount of effectiveness and mastery (Ryan & Deci, 2017). While talking about experiences and activities that relate to effectiveness and mastery, the interviewees agreed that these helped them to increase their perceived competence. However, this study also demonstrated that some

experiences and activities that older adults relate to competence change throughout the lifespan. Therefore, it shows that even though the fulfilment of competence is independent of age, the contexts how the need can be satisfied changes throughout the lifespan.

Strengths and Limitations

Within this study, two main strengths can be identified. First, a major strength of this study is the focus on the influence that the novel COVID-19 pandemic has on the perceived competence of older adults. No prior study was identified that focused on the influence of COVID-19 pandemic on the basic need satisfaction. It is only known that pandemics increase the risk of developing mental health issues (Banerjee, 2020). Thus, asking older adults about their experiences and activities that they relate to competence preceding and during the pandemic provided insights into how their perceived competence changed since the safety regulations were passed. Also, it provides insights into which specific activities give older adults a feeling of competence during the pandemic. Receiving such insights and knowing the counterproductive effects of these regulations on the perceived competence on older adults is important, since social isolation can have an detrimental effect on the mental health of older adults and is associated with mortality (Gale, Westbury, & Cooper, 2018). For the future, these insights can be used to decrease the negative effects of isolation on the perceived competence of older adults. This can be achieved by offering possibilities to engage in activities which are known to increase the perceived competence, but which still conform with the safety regulations.

Secondly, this study adds a unique contribution to the literature, as no previous study aimed at gaining an understanding of which experiences and activities older adults living on their own relate to competence, as defined by the SDT (Deci & Ryan, 2000) and how these change throughout their lifespan. Specifically, no study was identified that focused on different moments of time (present, past, future). Within this study, interviewees received the opportunity to talk about their own experiences with competence throughout their life and which activities provided them with a feeling of competence. Especially, since all interviewees reported about their experiences based on the same definition of competence, namely that it consists of a feeling of mastery and effectiveness (Ryan & Deci, 2017), allowed for analysing the transcripts from the same viewpoint. However, this might also yield a limitation, since providing the same definition for all interviewees did not allow for much variation and exploration of their own viewpoint.

Next to the strengths of this study, two main limitations can be identified. First, the interviewees personally knew the researcher as they were family members or acquaintances. This could have yield rather socially desirable and not always honest answers, since interviewees might have felt uncomfortable talking about some experiences and activities that they related to competence. For example, one interviewee reported that she never experienced limitations to her perceived competence. This could have different reasons, for example, because she might not want to admit to experience limitation or because she in fact does not notice any limitations. Nevertheless, knowing the researcher might have also yielded the advantage that a trustful connection was already established between the researcher and the interviewee, which made the interviewee feel more comfortable during the interview.

Besides that, due to the COVID-19 pandemic all interviews were conducted via phone, which means that any facial expressions were missing. Seeing the faces of the interviewees could have helped in adjusting the questions and responding to the interviewees more appropriately. Especially, anticipating reactions of interviewees and comforting them without visual cues was a barrier in this study. For example, one interviewee became emotional when he talked about limitation to competence prior to the pandemic. This was the time when his wife came into a nursing home. Before his wife came into a nursing home, he took care of her. Consequently, when his wife left, he felt lonely and his main task was gone. Visual cues could have helped to anticipate his reactions and to comfort him again (Sturges & Hanrahan, 2004). For the results of this research it meant that no information was collected about situations when he experienced limitations to his perceived competence. However, conducting the interviews via phone might also hold the advantage that the interviewees have felt more anonymous compared to an interview that takes place in person (Sturges & Hanrahan, 2004). Thereby, the interviewees might have told stories that they would have not told the researcher in person.

Suggestions for Future Research

Some recommendations can be made for future research, based on the findings of this study. As mentioned earlier, this study has found various factors that contribute to perceived competence, for instance supporting other people and actively participating in life by means of free-time activities or hobbies. However, due to the small sample the results are not representative for the population of older adults. Following that, the results of this study could function as first insights. Based on these, new questionnaires and quantitative correlational analyses could be conducted to further investigate to what extent the identified experiences and activities relate to the perceived feeling of competence of older adults on a broader sample.

Consequently, these findings, confirmed by research with larger samples, could be used to design interventions that aim at supporting older adults to engage in experiences and activities that help them satisfying their need for competence.

Furthermore, within this research it became visible that the regulations which were passed due to the COVID-19 pandemic limited the perceived competence of older adults. Engaging in daily or free-time activities, such as going to different places, going grocery shopping or visiting their doctor were not possible anymore. This highlights that it is important to gain an even deeper understanding on how older adults experience these regulations and how exactly these influence their need for satisfaction of competence. This is crucial, because such safety regulations can have detrimental effects on the well-being of older adults, which is unfortunate since researchers know how important a feeling of competence is for older adults (Baltes et al., 1993; Diehl, 1998; Kalisch et al., 2011; Neubauer, Schilling, & Wahl, 2017). Hence, knowing which experiences and activities older adults relate to competence, practitioners could give older adults the opportunity to remain active in life. This could be done by providing alternative activities to older adults that are in accordance with the safety regulations. For example, providing them with different activities to choose from that support other people (e.g. knitting socks for people in need) or reserving special times for older adults in supermarkets to shop. This would allow older adults to still act independently and master their grocery shopping on their own. Even giving older adults the possibility to make some decisions on their own already contribute to a feeling of competence (Baltes et al., 1993).

Conclusion

This study provided insights into which activities and experiences older adults relate to competence and how these changed throughout their lifespan as well as how these are influenced by the COVID-19 pandemic. The experiences and activities which satisfy the need of competence changed throughout the life of all interviewees and seemed to be dependent on a person's environment, obligations and social surrounding. Generally, being needed and supporting others was related to competence in all timeframes, as well as an active participation in life. More specifically, during adolescence and early adulthood, competence seemed to be related to hobbies, financial matters or their job and was further enhanced by rewards, support of and recognition from others. In the time preceding the COVID-19 pandemic it was mainly related to engaging in different free-time activities. An exceptional influence on the perceived competence of older adults had the COVID-19 pandemic. Almost all interviewees experienced some limitations to their competence, since they were restricted in actively engaging in their

life. For the future, interviewees wish and expect to feel a sense of competence by experiencing independency and the ability to live on their own.

Overall, the study showed that feeling competent is important throughout the entire lifespan of people and can be achieved by various experiences and activities. Although these experiences and activities by which older adults can satisfy their need of competence do not remain the same throughout their life, they have a great sense of which experiences and activities will help them in the future to maintain a feeling of competence.

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