# **Self-Determination Theory and Older Adults**

A qualitative analysis of how senior citizens perceive relatedness over their course of life and during the Corona pandemic 2020

# Master's Thesis

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#### SELF - DETERMINATION THEORY AND OLDER ADULTS

#### Abstract

This study was based on the Basic Psychological Needs Theory (BPNT). This theory claims that the basic psychological needs for autonomy, competence and relatedness have to be satisfied in order to achieve full well-being (Ryan & Deci, 2008). This research, however, only concentrated on the need relatedness. The aim was to find out how people over the age of 60 and living at home experience and have experienced the satisfaction of need for relatedness, also in the times of the Corona pandemic 2020. This was investigated using an inductive interview approach concerning four different life spans: the past, the time shortly before the Corona pandemic, during the pandemic and its mitigation measures and, lastly, the future. The sample consisted of four people (three female, one male, mean age: 70.5).

The findings of this study indicate that people have their own definition of relatedness. However, it seems that all participants needed to experience some sense of mutuality, compassion as well as trust and reliance to feel related to a person. Regardless of this definition, all participants stated that relatedness is more of a feeling for them, rather than a need, e.g., feeling cared about, feeling home or feeling a connection, regardless of to whom or what. This might be interesting for future research. Regarding the change of relatedness over time, participants indicated that, in their youth, this need was satisfied with being liked by others whereas only later in their adulthood, they had the desire for closer emotional connections to satisfy their need for relatedness. The Corona pandemic did not represent an obstacle to relatedness for the participants. They minimised most contacts to phone or text but apart from that, they did not feel less related than before the pandemic. However, this might also be because many of them thought the measures would diminish in a few weeks. Hence, further research should be conducted that focuses on a possible lack of need satisfaction during the later stages of the pandemic. Regarding the future, all claimed to be satisfied with the situation as it is and did not have any other desires regarding relatedness.

*Keywords:* Basic psychological needs, BPNT, relatedness, older adults, COVID-19, Coronavirus, lifespan, interview study

#### Introduction

In our current society, there are much more older than young people. In Germany, for instance, 17.88 million people are 65 or older. That means, 21% of German citizens are considered senior citizens (Pawlik, 2019). Furthermore, since 1972 the mortality rate in Germany has been lower than the fertility rate (Statista Research Department, 2019) and due to the available offers of health services, people are getting considerably older than just 20 years ago (Coleman, 2000). However, in our current times, especially older people are at risk of getting seriously ill. At the moment, COVID-19, also called Coronavirus or SARS-CoV-2, is causing people around the globe to change their behaviour. Early statistics from China suggest that people with an age of 60 and upwards are much more at risk of the disease taking a fatal course than people below this age (The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team, 2020).

To slow down the rapid spread of the virus, Germany has been taking on containment and mitigation measures as, for example, isolating infected people and their close social environment, closing shops and schools, prohibiting social group building or social events and advising people to stay home in social isolation. These measures may not stop the pandemic, but they are helping to slow down its development (Anderson, Heesterbeek, Klinkenberg, & Hollingsworth, 2020). On the contrary, these measures can also pose a strain on peoples' mental health as they are strictly advised to not see each other in person anymore. Even though there are other options like video chats or phone calls, for many people from the older generation this might be a challenge too since they may not have internet access or the knowledge on how to use such devices (Selwyn, Gorard, Furlong, & Madden, 2003).

However, several researchers state that closeness to other people and having deep relationships is very important for one's mental health and quality of life (Camfield, Choudhury, & Devine, 2009; Myers, 2003; Ryff, 1995; Vinokur & Van Ryn, 1993). The basic psychological needs theory (BPNT), for instance, which is a sub theory of the self-determination theory (SDT) (Deci & Ryan, 1985), states that inter alia having deep relationships and experiencing mutual support is an essential component for well-being (Ryan & Deci, 2008). According to Ryan and Deci (2008), three basic psychological needs, namely autonomy, competence, and relatedness, have to be fulfilled for a person to achieve full well-being and ensure personal growth. *Autonomy* implies being able to make decisions on one's own. *Competence* means that one can achieve what one intended and the last need, *relatedness*, refers to having meaningful social contact with others

and experiencing mutual support. If all three basic psychological needs are supported, this enables full well-being (Ryan & Deci, 2008).

The BPNT has been explored in several contexts, like physical activity, education or work (Gunnell, Crocker, Wilson, Mack, & Zumbo, 2013; Klassen, Perry, & Frenzel, 2012; Van den Broeck, Ferris, Chang, & Rosen, 2016). Regarding research with older adults, Coleman (2000) claims that satisfying these basic psychological needs may become more difficult as one grows older and Agich (2003) states that many older adults are afraid to give up things like autonomy as they age or become a resident of a nursing home. Nevertheless, the actual presence of the basic psychological needs in this context has not been evaluated as much (Ng et al., 2012; Ryan & LaGuardia, 2000). Furthermore, in the few studies that have been conducted with older adults, the focus was on quantitative analysis and the influence of the basic psychological needs on well-being. Their findings suggest that there is a significant positive relationship between the satisfaction of the basic psychological needs in nursing homes and increased quality of life as well as lower levels of depressive feelings (Custers, Westerhof, Kuin, & Riksen-Walraven, 2010; Ferrand, Martinent, & Durmaz, 2014; Kasser & Ryan, 1999).

As mentioned, the BPNT has often been evaluated in a specific context as exercise or work, but seldomly on its own. Moreover, most studies assess in what way the satisfaction of a need influences something else whereas how the need itself is influenced by, for instance, environmental or life changes, is scarcely investigated. An exception is the study by Karaoylas (2011), who investigated changes in well-being across the lifespan and also included the basic psychological needs in his research. However, he did not pay attention to important life events as, in this case, the Corona pandemic. Also, he used a quantitative approach. Qualitative, interview approaches, on the other hand, are rarely seen in this context, even though they allow for a much more detailed insight into the topic. They not only measure what is asked but also include personal input of the participants and, hence, allow for a much more detailed and profound analysis of the topic under investigation. Therefore, in this study, a qualitative interview approach is used.

Moreover, the current study only concentrates on the need relatedness. According to several studies, the satisfaction of this need in older people has a positive effect on personal growth, purpose of life, perceived health or vitality and it decreases depressive symptoms and apathy (Ferrand et al., 2014; Kasser & Ryan, 1999; Tang, Wang, & Guerrien, 2020). Furthermore, researchers have found that, for older people, relationships are essential for their well-being, yet,

the type of relationship also plays an important role in this, as it determines the impact the relationship has on the person's well-being (Carstensen, Fung, & Charles, 2003). This means that the satisfaction of the need relatedness depends on the quality of the relationship, not the quantity (Carstensen et al., 2003; Kasser & Ryan, 1999). Carstensen et al. (2003) also claim that with age, the nature and function of relationships change. Due to their limited time, older adults are placing more importance on the emotional meaningful aspects of relationships than they may on the entertaining aspects (Löckenhoff & Carstensen, 2004). Hence, they might have more very close and trusting relationships rather than several short-term and superficial ones. Moreover, they might be more motivated to keep up these relationships and, thus, may serve their need for relatedness more than younger people. Hofer, Busch, Raihala, Poláčková Šolcová, and Tavel (2017) even state that maintaining relationships and social support is crucial for ageing successfully. If this satisfaction of relatedness is not given, it can be detrimental to one's mental health. Several studies found that people who do not feel related to other people are at higher risk of suffering from depression, low self-esteem or other mental issues (Allen, Hauser, Eickholt, Bell, & O'Connor, 1994; Huey, Laursen, Kaniušonytė, Malinauskienė, & Žukauskienė, 2020; Oxman, Berkman, Kasl, Freeman, & Barrett, 1992). Other studies indicate that a lack of relatedness increases the person's social cynicism, meaning, a person's negative view of and mistrust in other people (Hofer et al., 2017). Wei, Shaffer, Young, and Zakalik (2005) even claim that relatedness may be the "conceptual opposite of perceived loneliness" (p. 596).

Perceived loneliness, though, should not be confused with being alone. Someone can also be lonely in a group full of people. Loneliness implies *feeling* alone instead of *being* alone and, as relatedness, it depends on the nature of relationships, not on the quantity of them (Heinrich & Gullone, 2006; Utz, Swenson, Caserta, Lund, & de Vries, 2014). According to Forbes (1996), it can also be interpreted as a feeling of missing deep relationships and connection. Especially ageing, which is often connected with losing a partner, a decrease in physical abilities or fewer social contacts, can make people more prone to loneliness (Aartsen & Jylhä, 2011). This poses a huge problem due to the effect it can have on mental health and well-being (Lee & Ishii-Kuntz, 1987). People who feel lonely are at higher risk of getting depressive symptoms or other mental health issues (Cacioppo, Hughes, Waite, Hawkley, & Thisted, 2006). For many older people, their spouse is their main source of relatedness and according to Green, Richardson, Lago, and Schatten-Jones (2001), the romantic partner also has the main influence on emotional loneliness. Yet, several

people of a certain age might have already lost their spouse, or they might not have one. In contrast to Green et al. (2001), Schnittker (2007) states that peoples' evaluations of their relationships are improving with age and they feel less lonely than many people would expect. Moreover, he claims that this process is so powerful that the loneliness even decreases in people who reported to have no partner, children or are living alone. Therefore, it could be interesting to see whether relatedness and also the source of relatedness might change over time as well.

These unusual times of the COVID-19 measures and the subsequent advice to stay away from physical contacts might also influence the nature of a relationship one has with another person. For some people only contacting others by phone might make it easier as it saves time or because they are already used to staying in contact mainly via phone. But for others, who might not be used to phone contact or that prefer physical contacts, this might make it harder to stay in touch with other people and keep up the relationship as it was before the pandemic. However, this possible change of the relationship might not only apply in the times of the Coronavirus. As stated earlier, relationships in general and also the priorities within these are changing throughout life, regardless of a crisis (Carstensen et al., 2003).

As mentioned, several studies have found a positive influence of the satisfaction of all three basic psychological needs on quality of life and mental health (Custers et al., 2010; Ferrand et al., 2014; Kasser & Ryan, 1999), however, that the definitions of these needs may be different for a person in different episodes of life was not considered yet. As indicated by Divine, Watson, Baker, and Hall (2019), social comparison can influence the feeling of relatedness positively as well as negatively. If people are prone to comparing each other with their peers, it could be that also their definitions of relatedness are influenced by their comparison with their friends. To see whether this might be the case and if the meaning and definition of relatedness are changing throughout life as well as within the times of COVID-19, the aspect *change over time* is included in this study.

Therefore, this study concentrates on a qualitative evaluation of the presence, satisfaction and meaning of the basic psychological need relatedness in older people (60+) over their course of life. The interviews are conducted to answer the research question: "How do senior citizens feel their view on, need for, and satisfaction of relatedness has changed over time?". Sub-questions to answer here are: "How do older adults wish their experience and meaning of relatedness will change in the future?" and "How do older adults make meaning of relatedness during the times of COVID-19?".

#### **Methods**

# Design

This study used a semi-structured interview approach. A qualitative, inductive research design was applied as it allows for opinions, reasoning and, due to its synchronous communication character, for direct feedback (Opdenakker, 2006). Furthermore, as the feeling of relatedness might be a very personal topic for the interviewee, he/she might feel more comfortable when talking directly to the researcher. The data were obtained in April and May 2020.

# Sample

Four participants took part in this study. One male and three females were included in the sample. Their ages ranged from 60 to 79 (M = 70.5, SD = 8.10) and all were German. One of them was still working, whereas the other three were retired. Moreover, all were living at home alone. The sample was collected via the convenience sampling method and consisted of people that were known by the family and friends of the researcher.

The inclusion criterion was that the participants needed to be 60 years or older. An exclusion criterion was that the person should not have hearing disabilities or mental disabilities as Alzheimer or Dementia.

## **Procedure**

Unfortunately, due to the current Coronavirus measures as well as the fact that the sample was, due to their age, belonging to the risk group, a face to face interview was not possible. Therefore, the participants were interviewed via phone, which is also the reason why people with hearing disabilities were excluded from this study. Moreover, since all the participants were German, the interviews were also conducted in German.

After the study was ethically approved by the Ethics Committee of the Faculty of Behavioural Sciences at the University of Twente (UT), eligible participants were contacted, and provided with information regarding the topic of the interviews, the handling of the data and what they had to expect from the interview in general (e.g. how long it will probably take and what kind of questions will be asked). Afterwards, the person was given the contact info of the researcher

where he/she could then call or text to schedule the interview if he/she had decided to take part in the study.

Prior to the data collection, a pilot interview was conducted to see whether the questions were understandable. Based on the suggestions of the pilot participants, the interview scheme was revised. Moreover, two phones were used, one to conduct the phone call and one to record it (with the consent of the interviewee). This was done to not allow third parties (as phone recording applications) to have control over the data.

**Interview.** The interview was started by asking the participants about their demographics like age, job/former job, and their current living situation. Following, the four live periods were investigated. The first one being the past (childhood, youth, young adulthood), followed by the last six months (before the Corona pandemic), the present situation (during the Corona pandemic and its mitigation measures) and the last one was the future.

Two main questions were asked regarding each of the four life periods. The first one was about the participant's definition or meaning of relatedness regarding that period of life, for instance, "What do you think when you are thinking about relatedness in the current times of the Coronavirus?". If necessary, follow-up questions were asked to clarify their definition. Then, the participants were asked to describe specific experiences they had with relatedness during the investigated period of life. Such a question could look like this: "Can you tell me a little bit about your experiences with the feeling of deep connection with others and mutual support in your youth?" To get more detailed descriptions of situations, follow-up questions were posed about moments the person felt very related or not at all related to other people. For the last period, the future, the questions needed to be adapted based on the pilot interviews. Instead of asking about the meaning of and experience with relatedness, their wishes, expectations, and fears/concerns regarding relatedness in the future were investigated. Example questions here would be: "What do you wish for in your future regarding the feeling of relatedness?" or "Do you want something to change in your future regarding relatedness and what do you need to realise this?". The duration of the interviews differed from 28 minutes to 1 hour and 27 minutes (M = 51.22 min, SD = 25.42).

# Data analysis

After conducting the interviews, they were transcribed by the researcher and inserted into the coding programme Atlas.ti version 8.4. There, the interviews were coded and analysed by using

an inductive, thematic/descriptive coding approach. Hence, no prior codes were created but the coding scheme was solely created based on the first interview. In an iterative process, the codes were revised with every interview that is being analysed. For better understanding, the codes were grouped into categories in the last step. With this final coding scheme, all four interviews were coded again. To organise the data, several codes were then grouped into categories in a bottom-up approach.

#### **Results**

During the coding process, eight different codes became apparent. In the following, the two categories and their codes are discussed. Moreover, variances within the codes are named and supported with quotes by the sample. In the end, a table can be found that summarises the results for the categories *definition of relatedness* (see Table 1) and *change over time* (see Table 2).

#### **Definition of relatedness**

According to the sample, relationships that satisfy the need for relatedness include a person that can be trusted and is reliable, but first of all, there has to be a ground sympathy and some similarities to be built upon. It seems that when these things were non-existent, they were also unable to develop a feeling of relatedness with that person. Nevertheless, a lack of relatedness within a relationship did not mean that there was no relationship. The participants stated that with these people, the relationship was simply a bit shallower. They were able to talk to them or have fun with them, but they were missing an emotional connection with that person. The reason that was named most often for that were personal differences.

**Compassion.** What all participants considered to be very important for a feeling of relatedness with someone was being interested in each other as well as everything the other person has to offer to the relationship. One variation within this code was *caring*. The participants described it as a feeling of an emotional connection or a feeling of love for the other person. Participant 2, for instance, spoke about a time where her group of friends visited one from their group in the hospital, who was suffering from cancer and awaiting surgery. She stated that she cares for her friend very much and it was hard for her seeing her friend suffering.

Moreover, physical care was also considered important. Participant 3, for instance, takes care of her mother during the pandemic.

"[...] her lift was broken, and she lives on the 7th floor and then I said: Oh no, mom, now you're coming to me! Because if I need to carry all that stuff up there because I go grocery shopping for her and everything because she turns 80. I mean she's still fit in her head, but the walking is causing her more and more difficulties..."

Another variance within this code was *understanding*. Participant 2, for instance, spoke about a situation with her mother, to whom she always had a difficult relationship. During a deep conversation, her mother opened up about some unresolved issues from the past and this helped participant 2 to feel more related to her mother since she could now show understanding to the situation of her.

"That was just so relieving! We both sat there and cried and then I could also understand her better!" (Participant 2)

**Mutuality.** Another aspect of feeling related to someone that was mentioned a lot by all participants was experiencing mutuality. A feeling of relatedness implies a connection that is not one-sided but that comes from both sides. Participant 1 explained mutual *support* like this:

"[...] if someone is in an emergency situation, one absolutely offers to help, or rather offers to be available, which then also implies the same in return."

Nevertheless, it seems that this does not only cover emotional support but also support in material matters:

"Even when I would have money problems, I would just need to call, and they would bring me money immediately!" (Participant 2).

Moreover, participant 1 said that mutual *communication* is, for him, a big part of feeling related to others as well. If the communication or the relation is one-sided, this does not satisfy his need for relatedness. This was supported by participants 2 and 3.

"That means, when I am interested in a person, I expect [...] that this person also shows interest in me and that I can also feel that in our conversations" (Participant 1)

Participant 4, on the contrary, said about herself that she is not someone who takes initiative. Therefore, for her, the *initiative needed to come from other people*, which is another variation within the code mutuality. She was the only one with that opinion, but she stated that she is someone who rather waits for others to show interest and contact her. This has also already led to the ending of a friendship:

"So, I have a friend and we've met sometimes, every three weeks we went to x (city) and went through the city there and had a nice day... Then there was something and she said: "So, now you are going to call me for once!" I didn't call her again. Didn't hear from her since then." (Participant 4).

**Reliance and Trust.** Reliance is something that all participants considered to be crucial for feeling close and related to someone. Here, it was important that the person shows up *in good as well as bad times*:

"First of all, in good and bad times, not only in good. That someone should be there for me, when I need him, that is very important to me! [...] So the people that I have around me, on who I can rely on, that are there for me and I am there for them." (Participant 2)

However, for many of the participants it was just as important that the person was reliable regarding their promises and behaviour, which also often included the value of trust and *confidentiality* for them:

"My mother was often my attachment figure. I could go to her and tell her what's going on, but I always knew that it stays within the family! She is not telling anyone and that was always very important to me." (Participant 4).

**Similarities.** Having similarities was named by all participants as an important factor for feeling related to someone. Participants 1, 2 and 3 talked about how *shared memories* made them feel more connected and closer to someone. Participant 3, for instance, spoke about a vacation with her mother, where they visited an old friend of her mother. On the way there, her mother told an old story about a memory with that friend and when they arrived, she and her friend hugged in tears and her friend told the same story as the mother just minutes ago. Participant 3 said she could quite feel the relatedness between these two, even though they had not been in contact with each other for years, one could see the connection between them:

"And there, I got goose bumps because I thought: That cannot be! My mom just told the story in the car and now they hug after yeeeears and she is telling the exact same story!" (Participant 3)

Another important factor regarding similarities was a *shared identity*, which was often highlighted by participant 3.

"[...] I was 13 when I came to Germany and in x (a city in Romania) the relatedness was so much stronger! Because there was just a very small part of Germans that lived there."

She grew up in Romania and reported several situations in which she or her father have met someone that spoke the same dialect, or they saw something that reminded them of that place. She explained that the *celebration of traditions* and the *language* alone can evoke a feeling of relatedness in her. However, this participant expressed that she also feels very related to her German identity. She mentioned several times that the town where she lives now is also something she feels connected with. It is a feeling of comfort and of *feeling home*:

"That's also relatedness to me! That is my district, where I live, where I reside, where I go for a walk [...] and I meet this one or that one."

The opposite of having similarities, experiencing *personal differences*, was considered as the most important obstacle to a feeling of relatedness by the participants. Participant 3, for instance, talked about her work colleague and that something was missing in order to feel related to her:

"I have this one colleague, I work with for several years but with her, yeah, I don't really feel such a feeling of relatedness. Even though we work together for so long... but she is also a different type, she is a bit colder than me, can't come out of her shell so much."

**Sources of relatedness.** The *family* was named by all participants as important contact persons. Participant 1, for instance, said:

"So, when I think back to my childhood... so, clearly before my Youth, relatedness was basically the family [...]".

Participant 4 mentioned that, for her, people from her family are her only attachment figures, as, for instance, either her daughters or the mother in law of her daughter. She also explained that the mother in law of her daughter is like a mother-figure to her. And it seems as since her mother was always the main attachment figure her whole life, the two may feel such a relatedness. This did not change from her childhood to now according to her. If she wants to talk about something more private, she only consults her closest people, in that case, her family. Moreover, her main source of relatedness next to her family is her *dog*. When asked for relatedness, she mainly stated that her dog was enough for her and that he was giving her all she needed.

For participant 3, *friends* were the main attachment figures next to her family. She spends her time mostly with them and also goes on vacation with them. When asked about her wishes for the future, she said:

"Yes, what's important to me is that I will have much more happy hours with my friends! We also always come together in the Christmastime [...]. And we have so much fun!"

The *partner* was mentioned as well as an important source for relatedness. Participant 2 for instance, never really had a good relationship with her parents or siblings and she claimed that, after she split from her family in her youth, her husband became her main reference person. Yet, this was mostly related to the past as none of the participants had a partner at the time of the interview conduction. Neighbours, work colleagues and fellow students were named as well by participants. However, not as a source of relatedness but rather as acquaintances.

Table 1 The category "Definition of relatedness" with its codes, definitions, variations within the codes and example quotes.

Code	Definition	Variations within the code	Example quote
Compassion	Caring for and feeling with someone	Caring Understanding	P <sub>2</sub> about her friend group: "And now, all husbands have passed away, only one of them is still left. They have all and my husband was the first. Yes, that definitely brought us girls closer together!"
Mutuality	Something that is both-sided	Mutual support  Mutual communication  Initiative from other people	P <sub>2</sub> : "Yes, one has to, well, do a little bit for that. Contact one another. I mean if one person always waits and the other doesn't call you can do that for some time but at one point you think: If she is not contacting me, well then But that's not the way it is with us."
Reliance and Trust	Being able to count on someone and his/her word	Being there in good and bad Confidentiality	P <sub>4</sub> : "[] Trust is important if I want to open up to someone, but I don't need many from that sort of person, one is enough!"
Similarities	Having something in common	Shared memories  Shared identity  Celebration of traditions  Language  Feeling home  Personal differences	P <sub>3</sub> : "And we were often together on vacation and it works out so well because, you know, we have a system. So, when we are tired, we go to bed and then we still read and then that's so weird! Then we both get tired at the same time and turn off the lights! Even though the other one could still read or so but somehow yeah, there is just such a harmony!"
Sources of relatedness	People/things I feel related to	Family Friends Dog Partner	P <sub>4</sub> talking about toxic friendships in the past: "But then one got a partner, then you also did not need them anymore, right? When you had a partner, it was obvious that problems were solved within the family then."

# Change over time

The participants could all name lifetime changes regarding relatedness. As relationships change over time, participants also found different aspects in their relationships that changed with age. It seems that in their childhood/youth it was more important to the participants to be liked by others and have many friends rather than having deep connections with other people. When making friends during their studies or work as well as when being in their first relationship, this changed for them. During that time, it was very important for them to also speak about more private things. Moreover, regarding the pandemic, it seems that the restrictions, like being advised to minimise physical contacts, did not severely influence their feeling of relatedness or, at least, did not cause need frustration. For them, relatedness was more about an emotional connection than a physical one.

**Change**. Participant 2 stated that her *social contacts* have changed over time. She did not consider family as important in her childhood since she had a really difficult relationship with them. However, this became much more important to her when she had her own children. Her children and grandchildren are very important to her and the people she shares a feeling of relatedness with. For participant 4, the main social contacts changed from her family in her childhood to her partner in her young adulthood:

"[...] most of the time that was my mother, I mean, in our family and for my sister too. We were in very close contact, also when we were younger. Later there was the partner and well... yeah, then it was the love relationships.".

Whereas for participant 1, a change took place from the family as main attachment figures in his childhood to friends later on.

"Thus, as I said, neighbours and friends were rather secondary. Though, this came later during my youth, [...]. There, these things may have taken on a bigger role, or later during my studies, the fellow students and so on." (Participant 1)

Furthermore, all participants claimed that the *nature of the relationships* had changed with time. Participant 1 stated that, with age, the number of contacts became less, though the quality and feeling of relatedness rather increased with time:

"With time, these things developed and have also shifted, yet, that does not mean that the contacts one maybe had a bit more intensive back in time... well... have been lost. On the

contrary, they have been maintained. Even though... with different focuses/priorities of course."

Participant 2 explained that for her, not only the nature of the relationship has changed over time but her *priorities* as well:

"Back in the days that did not matter to me but today, when I don't want to have someone as my friend then I don't do it. I can say if the people are not my kind of people, why should I do it then? [...] Back in the days I thought differently, there it didn't matter to me. They were chill but now, no..."

**No wishes.** Moreover, all participants expressed that they do not wish for something to change but that they are rather *satisfied with the situation as it is now*. They did not want anything to change in the future regarding their feeling of relatedness.

"No, I don't have other wishes, or rather additional wishes, no. If it stays as it is now, then this is great" (Participant 1).

The Corona pandemic 2020. Furthermore, all of the participants indicated that only some small things have *changed due to the pandemic*. For instance, they have reduced their meetings to phone calls, text messages or meetings with distance and masks. Participant 1 argued that this has led, for him, to an increased feeling of relatedness and connection.

"It has maybe also become a bit better because you get closer together. Where you have been meeting someone from time to time in the past, you are now calling someone. And because calling someone is easier than meeting someone, this is, of course, happening more often. That also, of course, means a stronger feeling of relatedness[...]."

He highlighted that he even had more positive experiences with relatedness despite the regulations due to COVID-19.

"I have also increasingly been contacted by people that may have not done it that excessively in the past and now just wanted to hear how I am doing." (Participant 1)

Apart from that, all participants explained that, at least for them, *nothing has really changed* due to the pandemic:

"So that didn't really change, it rather shifted, as I said earlier. The contact is now more over the phone and before it was more often the personal contact that is now at the moment... not possible or at least not advised." (Participant 1).

Table 2

The category "Change over time" with its codes, definitions, variations within the codes and example quotes.

Code	Definition	Variations within the code	Example quote
Change	Something has changed over time	Change of social contacts	P <sub>3</sub> : "That's just how life is [] there is a lot [of contacts] coming on top, however, others are leaving or also returning again, right?"."
		Change of the nature of relationships	
		Change of priorities	
No wishes	No wishes for something to change	Satisfaction with the situation	P <sub>1</sub> : "Overall, as I already said, I mainly had positive experiences, except for maybe very, very, very small exceptions. But on the whole, I can be very satisfied and that was like that before Corona and it is now. And I assume, to anticipate, that it will also stay that way in the future."
	The influence of the pandemic	Change during the pandemic  No change during the	P <sub>2</sub> : "I don't think that anything has changed. I mean we can call each other now."
		pandemic	

#### **Discussion**

The purpose of this study was to examine how people over the age of 60 and living at home experience and have experienced the satisfaction of the need for relatedness, including the Corona pandemic 2020.

Regarding the research question of how senior citizens feel their view on, need for, and satisfaction of *relatedness* has changed over time, it can be said that all of the participants have experienced a change of this need at some point in their lives. Regarding what is needed to satisfy the need for relatedness, participants stated that the priorities in their relationships have changed from quantity to quality. This supports the findings of Kasser and Ryan (1999) as well as Carstensen et al. (2003), who describe that the quality of a relationship is an important part of satisfying the need for relatedness.

The found change of expectations and priorities within the relationships, as well as the change of sources for relatedness based on age, can also be supported by other studies. For instance, Carstensen et al. (2003), as well as Löckenhoff and Carstensen (2004) found that the priorities

within the relationships are changing over time and that older adults may lay more emphasis on the supporting and caring aspects than on the entertaining aspects compared to younger adults. Moreover, the change from family to peers as main attachment figures during the young adult years was found by Fraley and Davis (1997) as well. As mentioned in the beginning, this development might also be dependent on the way we compare ourselves to our peers (Divine et al., 2019). When we look at them and see that they define relatedness differently or have different sources of relatedness, we might strive to keep up. Hence, we might adapt our view on the need for relatedness to the one our friends have. Therefore, its meaning changes for us. To identify the reasons that may lead to a change in our definition, experience or satisfaction of the need relatedness, further research should be conducted.

Regarding the definition of relatedness, all participants had their own important points. However, what they could all agree upon was that mutuality is a crucial factor for feeling related to someone. According to Alderfer, Kaplan, and Smith (1974), mutuality is necessary to satisfy relatedness needs. For the participants, mutual communication was considered the most important factor. But even though this is important, the content of that communication is just as important for people to feel a deep connection (Guerrero, Andersen, & Afifi, 2017). Apart from mutuality, the participants explained that trust and caring for each other are crucial in a relationship as well, which is, again, in line with the results of other studies (Annis, 1987; Rempel, Holmes, & Zanner, 1985). The questions included in the questionnaires that measure relatedness, like the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS) for adults (Center for Self-Determination Theory [CSDT], 2020a) also support these findings. With items like: "I feel that the people I care about also care about me" (CSDT, 2020a, p. 23), the mutuality mentioned by the sample is included in the questionnaires as well. Furthermore, they also involve the caring, or, as named in this study compassion aspect, that was mentioned by the participants. Relatedness frustration items, on the other hand, often include one-sided caring for a person, or a one-sided relationship, as well as they include the personal differences aspect, that was named by many participants: "I feel the relationships I have are just superficial" (CSDT, 2020a, p. 24). Wherever, in the Intrinsic Motivation Inventory (IMI) (CSDT, 2020b), that also measures relatedness, none of the items includes mutuality. They rather focussed on trust and a basic interest in the other person, which was also named as an important part of relatedness by the participants.

Moreover, all participants agreed that relatedness is more of a feeling than a need for them. Some indicated that relatedness was feeling home, feeling loved or, in general, feeling a connection, whether it was with a person, an animal or with the job. However, these types of relatedness are not included in questionnaires that aim to measure relatedness, like the BPNSFS. As mentioned earlier, its main focus rather was on close relationships and a sense of belonging. Therefore, it might be interesting to investigate these different types of relatedness and their importance for need satisfaction in future research.

Regarding the sub-question that concerned the wishes for relatedness in the future, results indicated that none of the participants wanted anything to change. All of them claimed to be satisfied with the situation as it is and that they are not missing anything. This finding is supported by a study conducted by Alderfer et al. (1974), who state that when relatedness satisfaction is high, the desire for relatedness decreases. Furthermore, Karaoylas (2011), who also investigated the basic psychological needs across the lifespan, found that, regarding the satisfaction of the need, age did not have an effect. He claims that for someone whose need for relatedness has been satisfied in childhood, chances are high that it is still satisfied in adulthood. However, this is only concerning the satisfaction of the need and does not include information on the definition or other aspects of relatedness.

Concerning the sub-question that aimed at investigating the influence of the Corona pandemic on the feeling of relatedness, all participants announced that they have changed their contact medium. Contacts were reduced to phone or video contacts, the maximum being face to face meetings with distance. Even though some of them missed the physical contact at times, it became clear during the interviews that none of them had the feeling that their need for relatedness was not satisfied due to the pandemic. The findings rather suggest that older people are receiving more support and help from others during these times, which, in some cases, makes them feel even more connected to other people. McCullough and Barton (1991) also allege in their study that a feeling of relatedness might be important for people to overcome a crisis, which might explain these findings. It might be that people who had a high need satisfaction before the crisis, might also be more resilient and, hence, overcome a crisis with less damage. However, these specific findings could have also resulted from the fact that all participants saw the pandemic more as a short-term event and expected to experience physical contact and normality again soon.

# **Strengths and Limitations**

A limitation of this study is that some of the interview questions seem to have been difficult to understand. This might have also been the case due to a translation difficulty of the word "relatedness". The German word "Verbundenheit" is, first of all, not used as much as the word relatedness in the English language and thus, some participants were rather unfamiliar with the word. Moreover, it has a much broader definition. In German, the word "Verbundenheit" does not clearly state that it means relatedness with other people. It can also mean that you feel connected with something or through something. This can be seen with participant 3, who talked a lot about feeling connected to home when asked about relatedness, which does not describe the same relatedness that is meant by the BPNT.

One of the main strengths of this study is that, to our knowledge, it is the first to also include the recent topic of the Corona pandemic in 2020 and its possible influence on need satisfaction. Asking older adults about their feeling of relatedness during the pandemic can give more information about what is most important to these people. However, what should also be considered here is that the interviewees expected this to be a momentary situation and were, thus, expecting to be able to have physical contacts with others again soon. Therefore, this study could not evaluate in what way a permanent lack of physical contact might influence the satisfaction of the need relatedness in older adults. Moreover, to our knowledge, this is the first study that has explored the development of the need relatedness during the lifetime of older people. Most other studies have either investigated all three needs and their interplay or just explored the satisfaction of the need and not its development regarding meaning and definition.

### Recommendations

As mentioned earlier, the definition of the word relatedness in German might not have been clear enough, wherefore, when recreating a study similar to this one, it is advised to conduct more extended pilot interviews. The pilot sample should be diverse in age, gender, and intellect to see whether everyone can understand the questions. Adapting the questions to the results may solve the problem of miscommunication.

Furthermore, based on the German definition of the word and this study's findings of several types of relatedness, further research regarding this topic should be conducted to investigate whether other German people experience different kinds of relatedness as well. Moreover, different

age groups may be included to determine whether this finding might have been age-specific. Based on the results, it could be considered to adapt the German questionnaires that measure relatedness accordingly and include these other types of relatedness. Besides, by gaining more knowledge on this topic it might be, for instance, possible to design interventions to increase relatedness which are more tailored to the different age groups. It can also be a contribution to the SDT or the BPNT by stating that the definition and experience of relatedness are changing throughout life and that there are several different types of relatedness to take into account when measuring the need satisfaction. Hence, the theories might need to be extended by integrating other types of relatedness than close relationships and mutual support. Also, it could be considered to use different questionnaires for people in different stages of their life to achieve high validity.

Regarding the inclusion of the, at that time, very recent topic of COVID-19, it could be interesting to investigate how people think about these questions later during the pandemic. This study was conducted while the mitigation measures and the pandemic were still in their beginning and many people thought they could live like before the pandemic in a few months. However, since the pandemic is still enduring and most of the mitigation measures are still active, it might be that its consequences for relatedness satisfaction just follow now (Bundesregierung, 2020). Therefore, it might be interesting to investigate how the view on relatedness satisfaction might have changed during the later stages of the pandemic and what kind of consequences this might have for older people.

Furthermore, this study was conducted retrospectively as there was only one point in time these questions were asked. For future research, it might be interesting to conduct a longitudinal study that accompanies the participants in their different life periods. With this, one could see how exactly and due to which reasons the need for relatedness is changing over time given the specific circumstances.

#### **Conclusion**

This study shows that the need for relatedness can be satisfied with several things, whether it might be the job, a pet, a project, or people that one feels connected with or through. Even though the participants had their own expectations and definition of relatedness, there was still some overlap in the things that made the satisfaction of the need possible.

Moreover, since everyone's personal story is unique, so is the development of relatedness for each person. There are several things that might influence it or bring about change. Nevertheless, in this study, it was found that the source of relatedness was changing for everyone at approximately the same point in life. Each time their attachment figures changed, expanded, or diminished, their sources of relatedness did too. This might also be due to our tendency in our youth to compare ourselves with our peers. It shows that changes in our personal life also affect our definition and the meaning we make of the need relatedness. One of these changes has been the mitigation measures during the Corona pandemic 2020. It seems to have influenced everyone differently, but all participants could agree that, at the time of the data collection, it did not decrease their need satisfaction. They stated to be, in general, rather satisfied with everything as it is and therefore, did not have any wishes regarding the future.

Overall, it can be said that everyone has his/her own definition of relatedness but, still, feeling related to something or someone seems to be an important need for everyone.

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