



# The Impact of the Relationship and Family Status in Retirement Age on Women's Incorporation of Technical Devices in Their Everyday Life

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**Abstract.** Older people and specifically women at retirement age are typically not associated with technological competence. However, some of them are avid users and little is known about the ways they incorporate technical devices in their everyday life. In this study, we depict how women's relationship and family status at retirement age have an influence on their technology usage. Having interviewed women between 65 and 75 years old, we describe three types of lifestyles where our analysis follows the women's approach to technical devices. The 'GrandMother' focusses on her family and local community, the 'Half Couple' emphasizes her husband and marriage and the 'Independent' concentrates on herself. Generally, the smart phone is used as an extension of their personal lifestyle and routines of everyday life: the GrandMothers direct their digital technology usage inwards, the Independents outwards and the Half Couples are split between those who use it sideways or not at all. For the GrandMothers, their technical devices are a facilitator of their daily duties and existing ties whereas the Independents have a strong self-motivated interest to use social media as an entertainment platform and as an extension of their interests. For the Half Couples, their mobile phones are either nice to have or simply unnecessary. Our study adds to the limited literature on older women's technology usage and presents an understanding of how technologies are incorporated in a certain life phase.

**Keywords:** Age · Aging studies · Older adults · Later life · Smartphones · Digitalization · Digitization · Elderly life · Qualitative interviews · Digital practice · Human-computer-interaction

## 1 Introduction

Looking critically at older women and their positioning in society, it is easy to fall into the trap of only highlighting women's problems and portraying these older women

as a burden for society [1]. Older women's situations are not automatically negative – however, they are quickly labeled “invisible” [2, p. 158] and “the other” [2, p. 159]. On the contrary, they are better at “social networks and social support” [1, p. 438] than men. What is more, Gibson [1] notes that especially for women, the setbacks they apparently face as soon as they are considered older, in terms of their health, their income and their housing situation, have always been there throughout their lifetime and does not just appear when entering retirement phase. Hence, “we run the risk of reinventing and reinforcing a self-concept and a societal concept of old women as a dependent group with little to offer society and much to demand” [1, p. 435]. In this study, the authors' focus is on women's sole conditions, circumstances and positions – and not in contrast to men, which is in line with Gibson's recommendation [1].

Whenever older people and technology are the topic of a conversation, there is usually a belittling of their skills and knowledge and easily some form of stereotyping, presenting older women as incompetent. Loe [3] argues that there is not enough emphasis on older people's actual capabilities and usage of technologies: “we do not have a sense of how elders creatively utilize, reject, and make sense of a wide array of old and new technologies in their lives” [3, p. 320] – which is especially true for older women [3]. Our article aims at fixing this gap to some extent. While most of the research on older people and technology focuses on how they use it for utilitarian reasons, some researchers call for the highlighting of how older people give a sense, connotation and significance to technologies [3], which will be addressed here.

The goal of this study conducted in Germany in 2018 is to highlight how women's relationship and family status at retirement age influence their incorporation of technical devices in everyday life. This is especially relevant because while in 2017, 21% of the population in Germany was aged 65 or older, the number will rise: presumably 27% of Germans will be 65 years old or older by 2030 [4].

In this article, age in society, age and technology as well as anocriticism [5] are presented in a literature and theoretical review. Then, the sample's cluster of our empirical study on older women's relationship and family status influencing their incorporation of technical devices in their everyday life is thoroughly presented. A method section follows on how the qualitative in-depth interviews were conducted and analyzed. After presenting the results, a connection is made back to the aforementioned literature and theory presented, followed by the study's implications and overall conclusion. Altogether, where younger and middle-aged women's technology use has been extensively analyzed, this study helps to fill the gap of research on how older retired women “utilize and ascribe meaning to technologies into their day-to-day lives” [3, p. 321]. We are therefore wondering: How do women's relationship and family status at retirement age influence their incorporation of technical devices in everyday life?

In this article, we refer to the study's participant group as ‘older women’ which is only meant to be descriptive because of the relevant age category and not discriminatory.

## 2 Literature and Theoretical Review

### 2.1 Age in Society

Age is a factor that we all carry with us, there is no escaping or rejection. Age is a social category held by every human being and as such is heavily loaded with assumptions, prejudices and associations. Self-identity is age influenced, as a person's age determines, to some extent, someone's body posture and looks. In Western society, the individual's aging of the body is a place of judgment, especially in connection with sexuality [6, 7]. The physical becomes part of others' perception of oneself and ultimately influences one's own identity construction [8]. This identity creation stems from society and is man-made because, naturally, aging is the most human process every individual encounters. Depending on an individual's lifespan, they enter all age stages, from young to middle to old, one after the other [9]. However, in the Western society of the 21<sup>st</sup> century, age is a cultural category connected to certain associations for each stage of life and primarily linked to decline when it is an opponent to youth [10].

With life expectancy continuously rising in Europe [11], it is no surprise that there are anticipations from society towards older people to be capable of handling their life by themselves with hardly any need from other people. As Rozanova [12, p. 380] states: "as 'successfully aging' stereotypes are connected to the notion that individual choices and attitudes play a role in aging well, they may possibly serve as further justification for giving increasing responsibility for their wellbeing to the old persons themselves. The larger social, institutional, and cultural issues that underlie economic and health inequalities among older persons [...] constrain older adults' lifestyle choices". See [13–15] for more information on this point. This is also frequently visualized on websites for older people, where often pictures of the elderly present them as youthful, healthy, active and social with others [15], which also rings true for print media and television [16].

### 2.2 Age and Technology

Technologies can play a crucial role in older people's lives, as they help them to "maintain social networks, intellectual growth and participation, and physical wellbeing" [3, p. 320]. Hence, technologies can foster their general happiness and let them work on their cognitive, emotional, and physical abilities [3]. Older people have become more and more digitally active: The D21-Digital-Index of 2016 [17, p. 8] shows that people in Germany older than 60 have steadily increased their Internet usage in the last couple of years. Instant messaging services such as WhatsApp are the most commonly used communication forms on Internet providing devices in the age group of people aged 60 years or older, and social networks such as Facebook are used by a fifth of people in their 60s [17, p. 15]. Melenhorst, Rogers and Bouwhuis [18] had a look at older (aged 65 to 80) people's motivation to use traditional communication (in person or via telephone) versus e-mail communication. They found that it is necessary for older people to see a benefit in using a device and keep being motivated to do so. No apparent necessity or no understanding for digital technologies explains the lack of interest by older people [18]. That is something we would like to address with this study because for seniors,

their chances of using digital technologies largely depend on a cost-benefit analysis. For older people specifically, their capability of skillful usage is a crucial factor, too [19].

In this age group, benefits of digital technology can include enjoyments [20] and functions or content they could not receive otherwise or not as fast, such as family pictures, for example [21]. Costs contain the acquisition of new skills [20], “learning and relearning of a product” [19, p. 89] as well as “effort, frustration, time taken away from enjoyable activities, and monetary costs” [21, p. 13]. Moreover, digital technologies need to fit into the older people’s lifestyle and daily routines [20].

What is of interest for this study is that digital technologies for enjoyment, such as digital games [22], might function for older women as a distraction from their husband’s passing [20]. Indeed, it has been found that older women who have experienced widowhood inherit strong ties to family and friends [1] and older people use digital technologies for social connectedness [20]. Therefore, it is important to ensure older people’s connection to society by granting them access to (technology related) information [23, 24]. Bouwhuis [25] confirms that usually older people think of their activities with a main focus on social relationships and that they need the telephone to schedule meet-ups and appointments. This has become more and more important due to the younger generation moving away from the place they grew up in, creating a spatial distance [25]. The importance of social activities within older people’s lives is backed by a longitudinal study conducted by Hultsch, Hertzog, Small and Dixon [26]. They find that older women integrate more social activities into their lives than older men. Also, in contrast to men, women do not decrease their social activities while getting older. They keep their close social contacts across time [27].

A common classification of older people is the term “digital immigrants” in contrast to the “digital natives” term, both coined by Prensky [28]. It is a widespread practice to divide generations by their media usage in childhood and teenage years, arguing that media is an influencing and socializing factor for each generation [29]. For example, the interviewed women born between 1943 and 1953 belong to “a generation of the household revolution (born 1939–1948)” and “a generation of technological spread (born 1949–1963)” [30, p. 494]. These differences in technology generations are made with regards to the technologies people grew up with during their so-called formative period, between 15 to 25 years old [31]. However, not only the generational background but also individual experiences have an impact on someone’s technology usage [32]. Which media do they own, how do they use them, what kind of meaning do they ascribe to them and how do they identify with them [30]? With respect to the aforementioned division between digital immigrants and digital natives, Jandura and Karnowski [29] question this, as, to them, these wordings have developed from vernacular terms to taken for granted ones instead of scientifically proven expressions. The authors argue that a medium’s role is not as ground-breaking in defining a generation as oftentimes assumed and that there are rather differences in media usage because of class affiliation [29]. This viewpoint is underlined by Ball, Francis, Huang, Kadylak, Cotten and Rikard [33] who find older people to be the most dispersed in their digital technology usage. They also find evidence that older people dislike the increasingly common consumption of digital technology in personal gatherings and situations whereas simultaneously they see it as a practical tool to connect with closed ones living farther away [33]. See also

Bennett, Maton and Kervin [34], Helsper and Eynon [35] and Loos [14] for a further critical discussion of the distinction between digital immigrants and digital natives.

Taken together, technologies can function for women of a certain age in two ways: they can “provide a respite from loneliness and boredom, and/or intensify these emotions. They can symbolize mortality and life, stimulation or stasis, isolation or connection, and continuity and change” [3, p. 328]. Nonetheless, in contrast to industrial technologies, “digital technologies, based on brain rather than brawn, on networks rather than hierarchy, herald a new relationship between women and machines” [36, p. 291]. An example comes from Ivan and Hebblethwaite [37] who take a closer look at grandmothers’ experiences of Facebook in family communication. They find that grandmothers are willing to use Facebook in order to maintain a relationship with their grandchildren who live far away from them and get informed about their daily lives [37]. Here, grandmothers use social media and video chats to socialize and communicate with relatives [37], although, generally, the telephone is their preferred medium of choice [37].

### 2.3 Anocriticism

As we are looking at women of a certain age, the social categories gender and age and their connected historical development are of relevance. The combined contemplation of gender and age stems from the 1960s and 1970s when two research interests worked in parallel: feminist studies focused on gender-based disadvantages where social gerontologists examined aging as a social problem [1]. Ultimately, this led “to the emergence of the double jeopardy approach to the analysis of being old and female” [1, p. 434] as, apparently, aging is especially a problem for and of old women [1]. Therefore, Maierhofer [38] asks scholars to examine how age identities are defined by society.

Anocriticism was coined by Maierhofer [5] who classified the need to have a closer look at the differences between how age is perceived by older people and how it is defined by society. She argued that “the feminist concept that individual identity, both in literature and society, is culturally constructed and tied to race, class, and gender can be extended to the notion of age” [5, p. 130], which is why this approach should be taken into consideration. Maierhofer [5] criticizes that there are certain stereotypes for old and female people in society that are exclusively held for them and that are neither questioned nor changed. These stereotypes describe older women as “self-effacing, easy-to-handle, and uncomplaining” [5, p. 132]. Furthermore, she proclaims that age is socially constructed and, similar to gender, not stuck to someone objectively [34]. Moreover, age is an individual perception and, in relation to technology, there are differences in usage and points of view within generations, not only from one generation to the other [36]. This is why Ratzenböck [39, p. 67] recommends anocriticism as a supportive concept to analyze the permanent “interplay of continuity and change” throughout one’s course of life because it is an “interpretational lens that emphasizes the individuality of older women’s experiences”.

### 3 Methods

#### 3.1 Sample

Individual qualitative in-depth interviews and observations on technology with twenty retired women born between 1943 and 1953 living in the Southwest of Germany were conducted. At the time of the interview, all women were between 65 and 75 years old to make sure none of them was employed, as a job can give you access to technology, which we wanted to exclude as a factor. All interviewees live in the same region in the southwest of Germany to ensure a similar usage and comprehension of language as well as a comparable social environment.

For this cluster, the following statistics can be found:

In comparison to 2015, people aged 60 to 69 gained 4 percentage points from 65% to 69% and people older than 70 gained 6 percentage points from 30% to 36% in the D21-Digital-Index, which indicates the level of digitalization in society [17, p. 8]. 51% of people aged 60 to 69 use smartphones and 25% of people aged 70 or older. Furthermore, 53% of people in their 60s use notebooks and laptops, whereas it is 18% for people aged 70 or older. The least usage in these two age groups is of desktop computers (38% by people in their 60s and 33% by people aged 70 years or older) as well as tablet PCs (19% by people in their 60s and 17% by people aged 70 years or older). Above that, people aged 60 years or older are the strongest users of mobile phones (older version of smart phones): 49% of people in their 60s and 64% of people aged 70 years or older [17, p. 8]. The Internet usage of people in Germany decreases with age: people aged 60 to 69 years old in Germany use the Internet 1 h and 37 min daily and people aged 70 years or older use the Internet 34 min on a daily basis [17, p. 13]. Generally, when combining the categories of access, usage, competence and openness to and of digitalization, it can be found that this index decreases with age: The D21-Digital-Index census of 2016 [17, p. 25] assigns a Digital-Index of 39% to people in their 60s and of 24% to people older than 70, which gives the latter a score that is half as strong as the average German citizen.

The participants of this study can be assigned to the D21-Digital Index's group of the so-called *outside skeptics* who have the lowest level of digitalization in comparison to other groups [17, p. 28]. On average, they are 66 years old and female with a low educational background. Furthermore, they are mostly not employed and have a below-average income. Their digital competence is almost non-existent and they are hardly open to digitalization. Technology for them is oftentimes "electro-mechanical equipment" [30, p. 494] and this age group has more difficulties than younger people born after 1960 with "multi-layered interfaces" of software driven technologies [30, p. 494].

#### 3.2 Generational Allocation

It should be noted here that the following descriptions and titling of generations are the terms mostly and preferably used in Germany. In other countries or languages, the names for these generations might be different. As German participants are interviewed for this study, the German terms are chosen and translated: 'War Children' for the German word 'Kriegskinder' and 'People of 1968' for the German label '68er'.

### *War Children*

The interviewed women are partly from the age group called ‘War Children’, born between 1930 and 1945. Therefore, they were born during World War II and/or raised during and have lived in post-war time [40]. As this generation has been confronted with skepticism about their potential traumas leading to failed recognition of possible suffering [40], the interviewed women might also have restraints talking about their opinion and their thoughts, as they might not be used to opening up. Their focal point was to function in order to make up for the absent parents – the working mother and the missing father – and to not talk about their feelings [41]. This generation was perceived as a silent one, not speaking as much about their experiences during the war as the public dealt with this topic [42]. Although the experience of war can be seen as a significantly crucial event in life, psychotherapy has not produced a considerable body of work on that topic – silencing this generation’s experiences even more [42]. War Children are confronted with their pain especially when they get older and they usually do not see a therapist [41] nor do they speak about their anxieties [40]. Although they grew up in silence about the war and people’s feelings, War Children confront themselves with their emotions related to the war time when getting older [43]. The reasons could be that one can only keep such emotions and thoughts to themselves for so long – they have to free themselves from such burden sooner or later [42]. Also, after retirement, not being mainly occupied with their job, these people seek an understanding of their history and that of their families [41].

Studies show that women born in Germany around 1940 are not in a good mental health state: they are socially isolated and missed out on developing a concept of self on their own [44]. It is no surprise that interviews with War Children show how they longed for safety in their life – in their partners, in their living situation and in their jobs [45]. More precisely: people born in 1945 have a higher chance of falling prey to psychosomatic diseases in later life than those born in 1935 [46].

### *People of 1968*

Another generational group of the interviewed women stem from the so-called 1968 era in Germany. In the 1960s in Germany, people grew up in a post war mentality of a conservative morality with strong rules and strictly defined roles in society [47]. At the end of the 1960s, young people, mostly below the age of 30, cut off this system by proclaiming self-realization, free thinking, anti-authoritarian education, free choice of profession and living arrangements as well as an open-minded sexuality and emancipation [47]. Next to this apparently liberating lifestyle, the people actively trying to change the political status quo were also blamed for a rising wave of “political extremism and terrorism” [48, p. 168] in connection with a worldwide protest mentality with demonstrations across the globe [48]. Also, this cohort paved the way for a more open communication with regards to the private as well as the political – with people talking rather freely in the following years surrounding 1968 [48]. In current times, women born in Germany around 1950 are in a much better mental state than the women born during war time: they can critically assess their marriage, they are busy maintaining some form of independence and have developed and kept their own standards [44].

Many women involved in this transformative phase questioned the supremacy of men and fought for feminism, not accepting the subordination of females any longer.



In those days, the patriarchy – a “system of social structures and practices in which men dominate, oppress and exploit women” [49, p. 214] – in all aspects of life had been analyzed and criticized by female scholars. In contrast to the former rather silent generation, the women of 1968 started conversations about their inner thoughts and problems, which they had not been used to before [50]. Their sociohistorical wave has been labeled as the second German women’s movement and became fruitful due to women’s increasing professional qualification, higher education and economical self-confidence. Even though these women were not necessarily politically aligned, they shared the goal of a better social positioning for women. For the first time, these women did not focus on other people but solely on themselves [51]. At the end of the 1960s, more and more mothers were working and women expressed interests in their professions and not only justifying their decision to work with the need for money. In the following years, women gained more and more self-confidence in the professional sector. In the 1980s, it became normal for women to be mothers and housewives as well as workers [51].

### 3.3 Interviews and Analysis

Some of the interviewees were approached by the interviewer personally and through a snowball system, more and more people joined the sample. This proved to be valuable in numerous ways: Especially with the participants the interviewer knew personally, it was possible to note the things and people they talked and did not talk about. As the participants were interviewed in their homes, the setting was not as staged as an interview situation in an unfamiliar environment the interviewees actively had to go to. Also, the women showed the interviewer the places their device of choice usually is, so the shown usage of it was as close to their actual handling of it as possible. With the interviewer stemming from the same region, a conversation in dialect was feasible, additionally supporting a casual and freely spoken chat.

The interviews lasted between 20 min and 95 min. After conducting the interviews at the participants’ respective homes, they were transcribed and the relevant statements were translated to English, word by word. To ensure anonymity, the names of the participants in the results section are hidden behind the letter A followed by an allocated number. The interviewer’s name is protected with ‘A0’.

We applied Braun and Clarke’s [52] thematic analysis approach of “identifying, analyzing and reporting patterns (themes) within data” [52, p. 79] in order to “code for a quite specific research question” [52, p. 84]: How do women’s relationship and family status at retirement age influence their incorporation of technical devices in everyday life? Here, coding aims to detect repeatedly mentioned themes, showcasing the interviewees’ statements, attitudes and comprehensions [52]. We were interested in understanding the contextual reasons for their prepositions. Then, we created coding maps, which helped us in deciphering the relationship and connections between our data and our codes. In our analysis, we wanted to highlight the women’s family situation in relation to their digital technology usage. The participants’ words signifying the three types of women presented in the results below were chosen in order to answer the research question. Eventually, we linked our findings to the literature and theory depicted above [52].



## 4 Results

### 4.1 Introduction

Within the analysis, three types of women at retirement age are presented. The three categories were established depending on the women's focus in life, which is comprised of their relationship and family situation. The analysis follows the women's approach to technical devices in their everyday life with respect to the corresponding typologies, namely the 'GrandMother', the 'Half Couple' and the 'Independent'. The GrandMother's focus in life is her family and local community, the Half Couple emphasizes her husband and marriage and the Independent concentrates on herself. These various possibilities of daily attention seem to have an influence on the women's approach to digital technology in their everyday life. Of course, these typologies do not define the women solely but are valuable classifications of the women's everyday life in retirement in contrast to the professional life phase where the job takes up most of people's time, mind and focus.

### 4.2 The GrandMother

The name GrandMother highlights both the responsibilities and duties they still have for their grandchildren and children albeit grown up. It is also representative of their caring for the hometown's society that they join in social clubs and support with charitable time and effort. They are all in their first marriage and have at least one child and at least one grandchild. Their identity is that of a matriarch: They are not only or merely focused on their husband but have an umbrella function in which they are strongly involved in their overall family's lives: of the children, grandchildren, siblings, siblings' families and possibly parents. Their role can be described as overarching, protective, supportive and involved. They understand their local communities as a point of reference to which they are closely tied as club members, event organizers, donating supporters or politicians. Their engagement goes even beyond their immediate family and extends to the local community. Similarly to how they care for their relatives, these women embrace a comparable role with their neighbors and village kinship and additionally take on voluntary work. Therefore, in contrast to the Half Couples, their non-independence is not just connected to their husbands (and his status or steps in work and life) but more to the family as a whole. Usually, their family members live either in the same house or at least close by, often just walking distance away. They have fulfilled the role of the family's caretaker since giving birth and have grown into the matriarchal position over the years. Generationally, most of them are rather older and allocated to the 'War Children'.

Their personality is mainly led by caretaking but can also be described with ease, comfort, self-possession, calmness, self-assurance and even casualness, which is transferred to their digital technology usage:

A0: And how are you feeling when it is so easy to you [to use technology]?

A6: How I'm feeling about it? Good! (laughs) no, yes

A0: Yes, yes

A6: I also try out some things! Something I have always done, that I tried it out, if it works

They are happy with what they know and what they can do with their technical devices, using it mainly as a way to connect with their social group:

A13: It [smart phone] can do a lot! It can do a lot, I am well served with it

A0: Do you see it as an enrichment since you have it?

A13: Yes, I like it a lot.

The GrandMothers' connection through digital technology is directed inwards: to their family, community and existing ties. Furthermore, the husband's competence with smart phones and other technologies does not play a role or is even of notice, he might be the point of initial access though. Talking to and observing the GrandMothers shows how the above description of their personality is represented in their usage of digital technology, as they appear content with it however strong or almost non-existent their actual usage, just as they rest within their way of life and their strong connection to nearby social ties:

A3: I feel, what I want to know, that I know and what is there, I cannot say that I am falling behind, I can't say that, just that I am not really occupied with the computer and such, that is basically all, but so ...

If they own and make use of technical devices, it is a connection to and facilitation of their existing ties as well as some hobbies here and there, hence an inwards direction:

A13: WhatsApp. Yes, you see, I always see, you can look yourself, I don't have it for too long now, you see, then they texted me, the neighbor: "I have saved your number, saved it for good", "Hello [name interviewee], now the...", yes, so, good and then when I, then I always take a look, if something came in [...] and [name granddaughter], she always texts me, you know, my little grandchild, she always texts and then I say: "[name granddaughter], come downstairs, it's only a couple of steps" but no, she has to text it.

Just as the women's children and grandchildren represent their focus in life, they are also the women's access to digital technologies and their main go-to point of help in case of problems with their devices. These women embody matriarchal structures by keeping the family close and together. Their role is to make the family system work and they are strongly involved in most of the family members' lives – with the help of smart phones:

A6: Okay, we have, how can I say, from the private side and, yes [of course], it is only private. And then the children [means grandchildren], they have, they play soccer, both of them and we are in groups together [means WhatsApp group chats], so that we know, when the dates are and we share our calendars all around, so that everyone knows, when the other [...], where everyone shares their appointments [...], texting or as in our group [means family WhatsApp group chat] with the, setting up appointments or when something is happening, right, that, yes [...] yes, because, we also, for example, because we pick him [means grandson] up at school, if school finishes early and then he has to text me, so that we can pick him up earlier [...] or when something is going on, he wants that to eat.

### 4.3 The Half Couple

The Half Couple segment identifies as one half of their marriage in the manner in which they bring up their partner consistently and across topics as their point of reference. It seems as if the Half Couples involve their husband in most of their thought forming

processes. Whether these women have children or not, their identity is mainly formed by being one half of a couple and not necessarily a matriarch – at least that is how they present themselves. They frequently refer to their husband not only when talking about the time they were still working but also particularly since both of their retirements. Their other tasks in life were directed at having their husband's back and providing a strong support system. The role of their children and possible grandchildren is different from the GrandMothers, as they do not interact on a daily basis; the children more or less live their own life and the Half Couple women might support them here and there. The local community is not as crucial to them as it is for the GrandMothers because some of the Half Couple women moved depending on their husband's job. What also unites the Half Couples is that they subordinated their career and life mainly to the husband's, with children being a factor, too but the initial and strongest impact came through marriage and the husband's profession. This meant that the women had to step back in their own career. In some cases, the women worked for and in their husband's business, therefore performing as a team even in their working life. This does not mean that they are not aware of their supportive and strong role, as they seem to take pride in their work-related accomplishments. Generation-wise, they all stem from the 'People of 1968'.

With these women regularly referring to their husband across topics, they also mention them when talking about their access to digital technology:

A10: And I often got a used-up computer from the [husband's company's] office, when they got some new ones, when they, when the volume wasn't right for the office or I don't know what, right

Plus, they connect to others through their husband's digital technology usage:

A8: But I ruffle against the computer and cell phone. The laptop, it's always with us on vacation, my husband always says: "come, just a little bit", but, ugh.

A0: But do you take the laptop with you on vacation?

A8: He's always working on it, he's always in touch with several friends and they share with each other ...

A0: So you're connected through him?

A8: Yes, right, or now the daughter is in [name country], she constantly sends photos and then he responds via e-mail, well, alright (laughs)

They are basically relying on their husband's technological competence:

A7: I was never interested, already from the beginning, that's what it is and then I always thought "oh well, he does it"

Here, the relation to technical devices is just as well an extension of circumstances and roles the women and their husbands share anyways in their daily life, with the man as the main point of reference:

A0: And do you think you're missing out on something when you, because you don't have WhatsApp or a computer?

A7: No, no, no. [name husband] just made that last night, tomorrow we are having a voucher, where we go out to eat, in [name region] and he prepared the navigation system

A0: So you're happy that he

A7: Absolutely, that he's still up-to-date

The reference is independent of the husband's actual competence and usage of digital technologies:

A5: I don't know, I can't really justify it, why I am against it in that way and fight against it, so, I don't know. Because my husband actually also isn't interested in such things, maybe [that's why].

In some cases, the Half Couple women know more than their husband when it comes to the computer and smart phones and they also highlight it – again, in contrast to the GrandMothers, where all of them are also in long marriages but the husband is not mentioned when talking about digital technology:

A10: Around us, people we know and friends and so, they are all sick and recently so many died and somehow, my husband says “stop with all this shit [talking about the computer and smart phone], come, we go for a ride with the bike, come on, let's have a good time!” or something like that (laughs), that's the intention for me.

Younger family members such as children are not the main reason to own a technical device, they might grant them access to it, though. The Half Couples who do own and use a smart phone stay in touch with the family through it, but it is also used to stay connected to friends and hobbies:

A18: We are also in other, we are also in other social clubs and so on and there, we are committed to nature conservancy and elsewhere and then it's very convenient, of course, right, to inform each other.

In contrast to the GrandMothers, where digital technologies are needed because of their responsibilities and obligations and different from the Independents, where technical devices are vital for entertainment reasons, for the Half Couple women, both of these aspects – the duties and the activities – are mainly directed at and fulfilled by their husbands in real life, perfectly so in the analog world. Plus, their social ties are oftentimes met in couple formations. Therefore, for one part of these women, digital technologies and their benefits seem nice to have, while the other part says that they do not need them and are indifferent about them.

#### **4.4 The Independent**

These women are categorized under the Independents label because all of them are independent in multifarious ways: They are not in an active marriage (they are single, divorced, widowed, separated or in a long-distance relationship), their daily life does not evolve around their children and grandchildren (if they even have any), they live alone, and they stand financially on their own two feet because they mostly have worked full-time in well paid jobs in which they actively made career choices on their own. Moreover, most of them particularly mention traveling as a recurring hobby, much more so than the GrandMothers and Half Couples, although they do not necessarily have someone to travel with or to, which makes them even independent in their hobbies. Generally, their personality can be described as self-confident and strong, with a substantial sense of self-fulfillment. Altogether, they take their life into their own hands. Age-wise, they are spread across both the 'War Children' and the 'People of 1968' generations.

All of that leads to the explanation of their digital technology usage, which for them is a connection to the outside world: to family and friends but also to people who share similar interests and who they join in fulfilling them, such as travel or sports groups they would not know privately from their existing social ties:

A1: Yes, when we go hiking, we have an app on the smart phone and the smart phone app, two. One is for seniors till 50 years old and the others are, well, the others are, we actually have, I even have three. One is for seniors up to 50 years old, that's in the area around [name city]. The other one is for [name city], 50 + , they are all younger than me.

The Independents' access to digital technology is self-motivated:

A15: I bought the iPad on my own, the laptop, no, the smart phone I bought on my own

as is the usage:

A12: I just bought a new smart phone

A0: Really? Which one?

A12: The iPhone 8. Yes and I have everything, now I'm advertising Apple, the iPad, the iPhone and the iMac, yes, and then, well it goes, when I take a photo here, it is on everything, yes.

or it might be initiated by family members but they have to deal with it by themselves in a steady learning process:

A0: And who thought you all of this?

A17: Well myself!

In case of problems, they mostly contact external experts, whereas GrandMothers and Half Couple women would contact family members:

A1: I bought it myself, then it was broken, it is six months old now, then I went to [name city] in the repairing store, there is somebody in [name city] and they have, I can from home, when there's a mistake, I can write to them and they can from home, repair it from there, right

In contrast to the GrandMothers, where digital technologies are directed inwards, and different from the Half Couples, who see their husband as a sparring partner, the Independents direct their social media usage outwards:

A15: [in retirement] I was utterly afraid, that I become depressed, that I become depressed but that wasn't the case. I was able to so many interests, yes, and it turned out that I never have time, never! And that's still the case. And in the last couple of years, what I do a lot, do a lot, I travel. Six years ago my partner died and for those six years I am constantly on the go. And so, so you have to, you have to go with the times and then you can't, that you say "oh well, I don't care about it, I don't want anything to do with technology, I don't want to have this and I don't want to have that", no, that is wrong. You have to go with the times. And yes, therefore I, of course I also have that, a smart phone, I have an iPad and that, I have a laptop and I'm online.

It is used for entertainment reasons:

A9: Yes, yes, I sometimes play games on it but only Majong. Or when you sit here in the evenings and there's something with music like "ah, why...?" then I look it up

as an information source:

A12: I read a lot, read a lot on the Internet, for example American politics, so, Huffing Post, HuffPost, and Politico, and I have it all at one glance, the breaking news, on the smart phone and then you're informed.

and to facilitate communication to people that are not part of their everyday life:

A15: And the iPad, I bought it to be able to phone my sister in the USA and my siblings in general, that is just a fabulous thing, you can phone someone on FaceTime and you see each other, that's fantastic!

## 5 Discussion

Having interviewed German women aged 65 to 75 years old about their incorporation of technologies into their everyday life, we find that digital technologies such as smart phones, laptops and notebooks function as an extension of the women's day-to-day lifestyle. As stated before, it was our goal to provide answers to the request of showcasing older women's assimilation to technologies [3], which we catered to by presenting the typologies and their respective approach to and usage of technologies. Apparently, there is a strong connection between the women's relationship status and family set-up and the role of technologies.

We link to the aforementioned cost-benefit analysis older people make use of when deciding on digital technologies [18]. For the three types we found, there seem to be different reasons: For the GrandMothers, the benefits include a quicker communication to their close circle [37] and therefore, digital technologies are incorporated into their existing family systems, as exemplified by Nap, de Koort and IJsselstein [20]. For the Independents, the advantages of previously out of reach content [21] as well as enjoyments [20] outweigh costs, as they can now connect to societal offers more easily. This rings especially true to them, as there is no husband in the household [1] and not all family and friends live close by [25]. For the Half Couples, however, it is twofold: some make use of digital technologies when they are granted access through their husband, some just rely on their husband's competence, while others do not use any because the husband does not either and it seems like a waste of time and energy, as proposed by McLaughlin, Gandy, Allaire and Whitlock [21] and Sharit, Czaja, Perdomo and Lee [19]. In either case, with the Half Couples, the cost-benefit analysis is made in dependence to the husband. Altogether, we align with the argument made by Ball, Francis, Huang, Kadylak, Cotten and Rikard [33] that older people are dispersed in their digital technology usage. Our study backs parts of Loe's [3] assumption that such usage can function as a nice distraction of lonesomeness, which is the case for the Independents.

Within each of the three typologies, the women seem to be in charge of cultivating social relationships, which has been found in other studies, too [1]. Here, it is either family related, as with the GrandMothers, which has been found by Ratzenböck in her interview studies with older women [32], or it is friends-focused, as with the Half Couples, and additionally aimed at hobbies, as with the Independents. Also in line with what has been stated before [1], the women's lifestyle since their retirement has not fundamentally changed compared to their situation before, with regards to their financial independence, for example. Rather, the women's day-to-day life has been slightly altered, as they do not need to go to work anymore – but the duties in their private life have not changed that much and might have been amplified. This is where we link our findings to the presented generations of the 'War Children' and the 'People of 1968'.

When we take a look at the generational allocation of the three typologies, we find the Independents to not necessarily be tied to a year of birth, as, age-wise, they are

dispersed across the two generations of the ‘War Children’ and ‘People of 1968’. In contrast, the GrandMothers are rather older and mainly stem from the ‘War Children’ generation, whereas the Half Couples are rather younger, with all of them assigned to ‘People of 1968’. With the women’s lifestyle not necessarily in contrast to their employed life phase, we find the reason for why the ‘War Children’ women are connected to the GrandMothers in how they were raised. They grew up with a mentality of women as the main caretaker of the household and might therefore focus on their family and extended network of closed ones. Digital technology functions as a facilitator of their communication stream here. In contrast to that are the Half Couples, who all stem from the ‘People of 1968’. The reason for those women could also be in their upbringing. They experienced a shift from women’s duties in family matters to relationships at eye level and therefore concentrate on their partnerships and their friends. That is why digital technologies are used laterally here. With the Independents, however, there is no definitive generational classification, as they are dispersed across both the ‘War Children’ and the ‘People of 1968’. We argue that the relationship status as non-partnered and the family status that is kept to minimum responsibilities have such a strong impact here that they overtake the generational influence. Apparently, the role of digital technology is the strongest facilitator for external connections here in comparison to the GrandMothers and Half Couples. Altogether, we find the generational background to be prominent when digital technologies function as an internal and lateral connection to people as with the GrandMothers and Half Couples, respectively, but to be not as relevant when digital technologies are mainly used for external connections as with the Independents.

As coined by Maierhofer [5, 38], anocriticism asks for a plurality in age identities and how those various versions of self are constructed especially in old age. We find this approach to be adoptable to our findings because the three typologies presented show, on the one hand, how older women are perceived by society depending on their gender when we listen to the GrandMothers and Half Couples describe how they are expected to perform and have grown into the roles of the typical caretaker and classic wife type, respectively. On the other hand, however, the Independents show how older women can just as well see themselves as self-confident, self-sufficient and autonomous individuals, independent of their age. Taken together, we find a strong connection between the older women’s focus in life – their family, their husband or themselves – and their approach to digital technology.

## 6 Conclusions, Limitations and Implications for Future Research

In our research question we ask: How do women’s relationship and family status at retirement age influence their incorporation of technical devices in everyday life? We conclude that for retired women in Germany, new technologies play a role with their value depending on the women’s focus in life: whether it is their family and community, their husbands or themselves. Generally, the smart phone is used as an extension of their personal lifestyle and routines of everyday life. It can be concluded that the GrandMothers direct their digital technology usage inwards, the Independents outwards and the Half Couples are split between those who use it sideways or not at all. For the GrandMothers, their technical devices are a facilitator of their daily duties and existing ties, whereas the



Independents have a strong self-motivated interest in using social media as an entertainment platform and as an extension of their interests. For the Half Couples, their mobile phones are either nice to have or simply unnecessary. The GrandMothers have a rather neutral, self-evident appraisal for digital technology, while the Independents highlight the benefits and the Half Couples either evaluate it indifferently or negatively.

Apparently, older women's realities and identities are manifold and it is crucial to keep in mind that an active life just does not stop with retirement. On the contrary, women's duties that have kept them busy next to their former job can become intensified in older age.

What should be kept in mind is that our study additionally shows how in older age one's former education and career can still have an influence on technology usage. As women in this age group usually have not had a high education nor a high position in their previous job, new digital technologies should be created that consider different usage skills. Also, society in general and younger people specifically, as they usually are the go-to point for older people when it comes to new technologies, should be aware of these different competencies people bring to the table. Our study focused on women aged 65 to 75 years old living in Germany. It would be interesting to find other researchers looking at this age group in different countries to see whether other factors such as nationality play a role, too. Moreover, a comparison to men in the same age group would be another way to fill some of our study's limitations.

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## References

1. Gibson, D.: Broken down by age and gender: "The problem of old women" redefined. *Gender Soc.* **10**, 433–448 (1996). <http://www.jstor.org/stable/189680>. <https://doi.org/10.1177/089124396010004005>
2. Krekula, C.: The intersection of age and gender: reworking gender theory and social gerontology. *Curr. Soc.* **55**, 155–171 (2007). <https://doi.org/10.1177/0011392107073299>
3. Loe, M.: Doing it my way: old women, technology and wellbeing. *Soc. Health Illness* **32**, 319–334 (2010). <https://doi.org/10.1111/j.1467-9566.2009.01220.x>
4. McKinsey Global Institute: The future of women at work. Transitions in the age of automation (2019). <https://www.mckinsey.com/featured-insights/gender-equality/the-future-of-women-at-work-transitions-in-the-age-of-automation>
5. Maierhofer, R.: American studies growing old. In: Kettemann, B., Marko, G. (eds.) *Crossing Borders. Interdisciplinary Intercultural Interaction*, vol. 15, pp. 255–268. Gunter Narr Verlag, Tübingen (1999)
6. Berdychevsky, L., Nimrod, G.: Sex as leisure in later life: a netnographic approach. *Leisure Sci.* **39**(3), 224–243 (2017)
7. Gewirtz-Meydan, A., Hafford-Letchfield, T., Benyamini, Y., Phelan, A., Jackson, J., Ayalon, L.: Ageism and sexuality. In: Ayalon, L., Tesch-Römer, C. (eds.) *Contemporary Perspectives on Ageism*. IPA, vol. 19, pp. 149–162. Springer, Cham (2018). [https://doi.org/10.1007/978-3-319-73820-8\\_10](https://doi.org/10.1007/978-3-319-73820-8_10)

8. González, C.: Age-graded sexualities: the struggles of our ageing body. *Sex. Cult.* **11**(4), 31–47 (2007). <https://doi.org/10.1007/s12119-007-9011-9>
9. North, M.S., Fiske, S.T.: A prescriptive intergenerational-tension ageism scale: succession, identity, and consumption (SIC). *Psychol. Assess.* **25**, 706–713 (2013). <https://doi.org/10.1037/a0032367>
10. Gullette, M.M.: *Aged by Culture*. University of Chicago Press, Chicago (2004)
11. World Health Organization: WHO: Number of people over 60 years set to double by 2050; major societal changes required. World Health Organization, 30 September 2015. <http://www.who.int/mediacentre/news/releases/2015/older-persons-day/en/>
12. Rozanova, J.: Discourse of successful aging in the Globe & Mail: insights from critical gerontology. *J. Aging Stud.* **24**(4), 213–222 (2010). <https://doi.org/10.1016/j.jaging.2010.05.001>
13. Mosberg Iversen, S.: Not without my kitties: the old woman in casual games. In: Paper presented at the Foundation of Digital Games, at Pacific Grove, CA, June 2015. [https://www.researchgate.net/profile/Sara\\_Iversen/publication/281447662\\_Not\\_without\\_my\\_kitties\\_The\\_old\\_woman\\_in\\_casual\\_games/links/55e823d808ae65b63899707c/Not-without-my-kitties-The-old-woman-in-casual-games.pdf](https://www.researchgate.net/profile/Sara_Iversen/publication/281447662_Not_without_my_kitties_The_old_woman_in_casual_games/links/55e823d808ae65b63899707c/Not-without-my-kitties-The-old-woman-in-casual-games.pdf)
14. Loos, E.F.: Designing for dynamic diversity: representing various senior citizens in digital information sources. *Observatorio (OBS\*) J.* **7**(1), 21–45 (2012)
15. Loos, E.F., et al.: Ageing well?: A cross-country analysis of the way older people are visually represented on websites of organizations for older people. *J. Comp. Res. Anthropol. Sociol.* **8**(2), 63–83 (2017)
16. Loos, E., Ivan, L.: Visual ageism in the media. In: Ayalon, L., Tesch-Römer, C. (eds.) *Contemporary Perspectives on Ageism*. IPA, vol. 19, pp. 163–176. Springer, Cham (2018). [https://doi.org/10.1007/978-3-319-73820-8\\_11](https://doi.org/10.1007/978-3-319-73820-8_11)
17. Initiative D21 e.V.: *Jährliches Lagebild zur Digitalen Gesellschaft [Annual report of the digital society]* (2016). <https://initiated21.de/publikationen/d21-diital-index-2016/>
18. Melenhorst, A.-S., Rogers, W.A., Bouwhuis, D.G.: Older adults' motivated choice for technological innovation: evidence for benefit-driven selectivity. *Psychol. Aging* **21**, 190–195 (2006). <https://doi.org/10.1037/0882-7974.21.1.190>
19. Sharit, J., Czaja, S.J., Perdomo, D., Lee, C.C.: A cost-benefit analysis methodology for assessing product adoption by older user populations. *Appl. Ergon.* **35**, 81–92 (2004). <https://doi.org/10.1016/j.apergo.2003.12.003>
20. Nap, H.H., de Kort, Y.A., Ijsselstein, W.A.: Senior gamers: preferences, motivations and needs. *Gerontechnology* **8**, 247–262 (2009). <https://doi.org/10.4017/gt.2009.08.04.003.00>
21. McLaughlin, A., Gandy, M., Allaire, J., Whitlock, L.: Putting fun into video games for older adults. *Ergon. Des. Q. Hum. Fact. Appl.* **20**(2), 13–22 (2012). <https://doi.org/10.1177/1064804611435654>
22. Loos, E., Zonneveld, A.: Silver gaming: serious fun for seniors? In: Zhou, J., Salvendy, G. (eds.) *ITAP 2016. LNCS*, vol. 9755, pp. 330–341. Springer, Cham (2016). [https://doi.org/10.1007/978-3-319-39949-2\\_32](https://doi.org/10.1007/978-3-319-39949-2_32)
23. Loos, E.F.: Senior citizens: digital immigrants in their own country? *Observatorio* **6**(1), 1–23 (2012)
24. Loos, E.F.: De oudere: een digitale immigrant in eigen land? Een verkenning naar toegankelijke informatievoorziening. [Older people: Digital Immigrants in their own country? Exploring accessible information delivery, inaugural lecture]. Boom Lemma, The Hague (2010)
25. Bouwhuis, D.G.: Parts of life: configuring equipment to individual lifestyle. *Ergonomics* **43**, 908–919 (2000). <https://doi.org/10.1080/001401300409107>
26. Hultsch, D.F., Hertzog, C., Small, B.J., Dixon, R.A.: Use it or lose it: engaged lifestyle as a buffer of cognitive decline in aging? *Psychol. Aging* **14**, 245–263 (1999). <https://doi.org/10.1037/0882-7974.14.2.245>

27. Smith, J., Baltes, P.B.: Differential psychological ageing: profiles of the old and very old. *Ageing Soc.* **13**, 551–587 (1993). <https://doi.org/10.1017/S0144686X00001367>
28. Prensky, M.: Digital natives, digital immigrants part 1. *On Horiz.* **9**(5), 1–6 (2001)
29. Jandura, O., Karnowski, V.: Digital Natives vs. Digital Immigrants – fruchtbares empirisches Konzept für die Kommunikationswissenschaft oder populärwissenschaftliche Fiktion? [Digital natives vs. digital immigrants – fruitful empirical concept for communication science or popular science fiction?]. *Publizistik*, **60**(1), 63–79 (2015). <https://doi.org/10.1007/s11616-014-0221-5>
30. Sackmann, R., Winkler, O.: Technology generations revisited: the internet generation. *Gerontechnology* **11**(4), 493–503 (2013). <https://doi.org/10.4017/gt.2013.11.4.002.00>
31. Van de Goor, A.G., Becker, H.A.: *Technology Generations in the Netherlands: A Sociological Analysis*. Shaker Publishing, Maastricht (2000)
32. Ratzenböck, B.: Everyday life interactions of women 60+ with ICTs: creations of meaning and negotiations of identity. In: Zhou, J., Salvendy, G. (eds.) *ITAP 2017*. LNCS, vol. 10297, pp. 25–37. Springer, Cham (2017). [https://doi.org/10.1007/978-3-319-58530-7\\_3](https://doi.org/10.1007/978-3-319-58530-7_3)
33. Ball, C., Francis, J., Huang, K.-T., Kadylak, T., Cotten, S.R., Rikard, R.V.: The physical–digital divide: exploring the social gap between digital natives and physical natives. *J. Appl. Gerontol.* **38**(8), 1167–1184 (2019). <https://doi.org/10.1177/0733464817732518>
34. Bennett, S., Maton, K., Kervin, L.: The ‘digital natives’ debate: a critical review of the evidence. *Br. J. Educ. Technol.* **39**(5), 775–786 (2008)
35. Helsper, E.J., Eynon, R.: Digital natives: where is the evidence? *Br. Educ. Res. J.* **36**(3), 503–520 (2010)
36. Wajcman, J.: From women and technology to gendered technoscience. *Inf. Commun. Soc.* **10**, 287–298 (2007). <https://doi.org/10.1080/13691180701409770>
37. Ivan, L., Hebblethwaite, S.: Grannies on the net: GrandMothers’ experiences of Facebook in family communication. *Rom. J. Commun. Public Relat.* **18**(1), 11–25 (2016). <https://doi.org/10.21018/rjcp.2016.1.199>
38. Maierhofer, R.: An uncritical reading of American culture: the old woman as the New American hero. *J. Aging Humanit. Arts* **1–2**, 23–33 (2007). <https://doi.org/10.1080/19325610701410890>
39. Ratzenböck, B.: Examining the experiences of older women with ICTs. Interrelations of generation-specific media practices and individual media biographies. *Nordicom Rev.* **37**, 57–70 (2016). <https://doi.org/10.1515/nor-2016-0023>
40. Jachertz, N., Jachertz, A.: Kriegskinder: Erst im Alter wird oft das Ausmaß der Traumatisierungen sichtbar [War children: Only in old age does the extent of trauma often become visible]. *Deutsches Ärzteblatt International* **110**(14), A656–A658 (2013). <https://www.aerzteblatt.de/archiv/136946/Kriegskinder-erst-im-Alter-wird-oft-das-Ausmass-der-Traumatisierungen-sichtbar>
41. Hinrichsen, P.: Kriegskinder ohne Väter: Ein persönlicher Bericht [War children without fathers: a personal report]. *Bildung und Erziehung* **60**, 465–480 (2007). <https://doi.org/10.7788/bue.2007.60.4.465>
42. Ermann, M.: Wir Kriegskinder [Us war children]. *Forum der Psychoanalyse* **20**, 226–239 (2004). <https://doi.org/10.1007/s00451-004-0196-3>
43. Hagenberg-Miliu, E.: *Unheiliger Berg: Das Bonner Aloisiuskolleg der Jesuiten und die Aufarbeitung des Missbrauchsskandals* [Übersetzung: Unholy mountain: The Bonn Aloisiuskolleg of the Jesuits and the processing of the abuse scandal]. Kohlhammer Verlag, Stuttgart (2014)
44. Fookien, I.: “Späte Einsichten” bei “späten Trennungen”: plötzlicher Konsensbruch, trügerische Konsens-Illusion oder langjähriger Dissens? Subjektive Repräsentationen biografischer Verlaufsmuster und seelische Gesundheit im zeitgeschichtlichen Kontext [“Late insights” in “late separations”: sudden consensus break, deceptive consensus illusion or long-term dissent? Subjective representations of biographical patterns and mental health in a historical context]. *Zeitschrift für Familienforschung* **16**(3), 289–304 (2004)

45. Lamparter, U., Holstein, C., Thießen, M., Wierling, D., Wiegand-Grefe, S., Möller, B.: 65 Jahre später [65 years later]. *Forum der Psychoanalyse* **26**, 365–387 (2010). <https://doi.org/10.1007/s00451-010-0053-5>
46. Hiltl, M., Bielmeier, P., Krumm, B., Franz, M., Schepank, H., Lieberz, K.: Die seelische Gesundheit ehemaliger Kriegskinder [The mental health of former war children]. In: Lieberz, K., Franz, M., Schepank, H. (eds.) *Seelische Gesundheit im Langzeitverlauf – Die Mannheimer Kohortenstudie [Mental health in the long term – The Mannheim cohort study]*, pp. 135–144. Springer, Berlin (2011). [https://doi.org/10.1007/978-3-642-13057-1\\_14](https://doi.org/10.1007/978-3-642-13057-1_14)
47. Mair, B., Stetter, J.: Wenn 68er 68 werden [When 68er turn 68]. *GDI Impuls* **3**, 104–107 (2013). [https://www-wiso-net-de.eaccess.ub.tum.de/document/GDI\\_7B884427AD0F4F5D37F508882E0378A2](https://www-wiso-net-de.eaccess.ub.tum.de/document/GDI_7B884427AD0F4F5D37F508882E0378A2)
48. Häberlen, J.C.: Review of the book 1968 und die 68er: Ereignisse, Wirkungen und Kontroversen in der Bundesrepublik [1968 and the 68ers: Happenings, impacts and controversies in the Federal Republic], by G. Dworok & C. Weißmann]. *Ger. Hist.* **32**(1), 168–171. <https://doi.org/10.1093/gerhis/ght085>
49. Walby, S.: Theorising patriarchy. *Sociology* **23**(2), 213–234 (1989). <https://doi.org/10.1177/0038038589023002004>
50. Schaeffer-Hegel, B.: Sozialistische Eminenzen‘, ‚Busen-Attacken‘ und ‚Weiberrat‘ – geschlechterpolitische Impulse von 1968 [‘Socialist eminences’, ‘breast-attacks’ and ‘women’s council’ - gender political impulses of 1968]. *Neue Soziale Bewegungen* **21**(3) (2008). <https://doi.org/10.1515/fjsb-2008-0309>
51. Onnen-Isemann, C., Bollmann, V.: Studienbuch Gender & Diversity. Eine Einführung in Fragestellungen, Theorien und Methoden [Studybook gender & diversity. An introduction to questions, theories and methods]. In: Nitschke, P., Onnen-Isemann, C. (eds.) *Aktuelle Probleme moderner Gesellschaften [Contemporary problems of modern societies]*. Peter Lang Internationaler Verlag der Wissenschaften, Frankfurt am Main (2010)
52. Braun, V., Clarke, V.: Using thematic analysis in psychology. *Qual. Res. Psychol.* **3**(2), 77–101 (2006). <https://doi.org/10.1191/1478088706qp063oa>