

## Research Article

# COVID-19 and Everyday ICT Use: The Discursive Construction of Old Age in German Media

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## Abstract

**Background and Objectives:** Media discourses have the power to construct and perpetuate positive and negative aging images and influence public and individuals' attitudes. This study aims to critically examine the media portrayal of older persons' everyday information and communication technology (EICT) usage during the first and second waves of the coronavirus disease 2019 pandemic.

**Research Design and Methods:** A total of 51 articles published in 3 leading German newspapers between March 2020 and November 2020 were identified from the LexisNexis Academic database. Data were analyzed employing critical discourse and thematic analysis.

**Results:** EICT use was associated with youthful, consumption-orientated, and active lifestyles, while nonuse was constructed as failures on the policy or individual level. The pandemic seemed to have acted as an amplifier, further exacerbating and perpetuating stereotypical, dichotomous, but also empowering aging images.

**Discussion and Implications:** Neoliberal rational and binary distinctions of active users and nonusers opened and encouraged critical discussions on positive aging trends, the concept of the third and fourth ages, and aging-and-innovation discourses. Moreover, the crucial educative role of the media in raising awareness about power imbalances and reducing EICT-related ageism is stressed.

**Keywords:** Active aging, Ageism, Discourse analysis, Media, Technology

For all ages, everyday information and communication technologies (EICTs), such as online banking, e-shopping, or video calling, are crucial to participate in meaningful everyday life activities. The digital divide, describing unequal accesses to and benefits from EICT, remains a major challenge of the twenty-first century (Fang et al., 2019). Despite promising technological advancements promoting active and healthy aging, a significant share of the population remains excluded from some crucial EICT and experiences subsequent disadvantages in everyday life practices (Gallistl et al., 2020). Factors such as age, gender,

socioeconomic background, ethnicity, and living setting cumulatively contribute to low technology adoption over the life course and the subjective notion of being “on the other side of the divide” (Fang et al., 2019).

The coronavirus disease 2019 (COVID-19) pandemic has more than ever underscored the importance of EICT to maintain social ties, health, and well-being (Seifert et al., 2020). In 2020, media coverage related to older persons was more prominent than ever, due to higher expected health risks and greater susceptibility to the coronavirus in older age, but also due to the severe consequences of

physical distancing policies for aging individuals (Miller et al., 2020). With everyday life rapidly shifting to an online mode, both the empowering role of EICT during the pandemic and the negative impacts of the digital divide turned into trending media topics, identifying older persons as a major risk group for digital exclusion (Lichtenstein, 2021). According to recent evidence, the pandemic has indeed double-burdened many older persons by social and digital exclusion, as EICTs have become the only means for communication (Seifert et al., 2020). Those individuals who lack sufficient experience in using EICTs, who choose not to engage in new technologies, or who cannot afford technological devices or internet access are particularly affected (Seifert et al., 2020). On the other hand, current surveys have also identified a rising interest and uptake of online activities by older individuals during the pandemic (Global Centre for Modern Ageing, 2020). These contrasting developments and individual experiences with the pandemic only further emphasize the heterogeneity and the varying opportunities of older people as well as different policy measures taken to address the digital divide.

Despite the fact that the baby boomer generation is today considered the fastest-growing group of internet adopters (Vogels, 2019), media discourses on technology adoption tend to portray older adults as a homogeneous group, disadvantaged in accessing and using EICT and dependent on help from the young (Meisner, 2021). Stereotypical assumptions depicting older persons as technophobic, incapable, or unwilling to use new EICT are widespread among younger and older persons (Neves & Amaro, 2012). On the other hand, current evidence has also identified trends of extremely positive media portrayal of later life deriving from as well as adding to successful aging discourses (Loos & Ivan, 2018; Yläne, 2015). In the context of technology, this is reflected in “aging-and-innovation” discourses sensing the potential of lucrative future markets (Neven & Peine, 2017). As a major site of social discourse production, the media can create and perpetuate positive and negative stereotypical portrayals, influencing both older adults’ and the public’s attitudes about aging and later-life technology usage (Fraser et al., 2016).

The media, including television, the internet, or newspapers, has the power to both propagate and debunk stereotypical notions in society (Fraser et al., 2016). Language is seen as a fundamental means through which social reality is constructed and through which power relations are perpetuated (Ainsworth & Hardy, 2004). Discourses are produced and spread in ways that create particular kinds of ideal subjects and seek to influence peoples’ sense of who they are and who they strive to be (Michon, 1988). Hence, discourses have the power to shape the way older adults are perceived by society and how they view themselves (Fraser et al., 2016). Drawing from the Stereotype Embodiment theory (Levy, 2009), individuals start at a young age to internalize positive and negative age stereotypes. Continued exposure to those stereotypes

throughout the life span may lead to the embodiment or incorporation of these stereotypes into the individual’s self-concept, becoming increasingly more self-relevant as people grow older. Alarming, embodied age stereotypes can eventually act as self-fulfilling prophecies, effectively resulting in avoidance, withdrawal, or challenges in performing more complex everyday life activities, such as EICT (Lamont et al., 2015). While media discourses about older adults convey some positive pictures (e.g., “silver economy”), they predominantly address and nurture negative age stereotypes, portraying older age as a time of dependency, frailty, cognitive decline, and loneliness (e.g., “the gray tsunami”; Fraser et al., 2016).

### Media Coverage in the Context of COVID-19

During the COVID-19 pandemic, negative and stereotypical perceptions of older persons intensified on social media (Meisner, 2021). Catchphrases referring to the virus as “Boomer Remover,” “Senior Deleter,” or “Boomer Doomer” went viral and revealed ageism and intergenerational tensions. Ageism, defined as the stereotyping, prejudice, and discrimination against people on the basis of their age (World Health Organization, 2018), however, has also been widespread in print and television advertisements, television programs, politics, and health care: A study by Lichtenstein (2021) investigated ageism in the newspapers, media websites, and current affairs magazines, comparing responses to coronavirus control in Australia, the United Kingdom, and the United States. This research has found that ageism took similar forms in all three countries depicting older persons’ age as a problem. Segregation, name-calling, blame, or acceptance of indefinite isolation for older adults were commonplace (Lichtenstein, 2021).

### Study Focus

This analysis draws data from newspapers published in Germany. Newspapers are the most accessed type of print media by Germans, especially in middle-aged and older persons. In 2020, 40.25 million Germans aged 14 years and older, or 56.6% of the population, have read daily or weekly printed newspapers; the share of those aged 50 and older even reaches 69.8% (Arbeitsgemeinschaft Medien-Analyse e.V., 2020). Acknowledging earlier presented negative media trends on aging and the increased necessity to access EICT during the COVID-19 pandemic, the discursive portrayal of older persons’ EICT engagement in print news media remains to be examined.

One method to research media narratives is critical discourse analysis (CDA). CDA is an established method to examine media content by critically analyzing text and talk as well as their influence on political and social trends and developments (Fairclough, 1993; van Dijk, 1993). In discourse analysis, language is understood as a

form of social practice (instead of an individual activity), which, on the one hand, constitutes the social world and, on the other hand, is constituted by other social practices (Fairclough, 1993). Hence, CDA particularly focuses on how social actors use words, grammar, and rhetorical devices to construct cultural models and narratives that eventually turn into common knowledge (Gee, 2014). The critical perspective sheds light on the construction of the social, economic, cultural, and political environment and aims to understand how such constructions eventually can constrain, hinder, or disable particular population groups (Kushner Kaysi & Morrow Raymond, 2003). It addresses issues of power and justice, asking how age, race, social class, ethnicity, or gender contribute to the construction of social systems in ways that privilege or support some groups while disadvantaging others (Connidis & McMullin, 2002). Moreover, critical researchers attempt to identify populations whose voices are missing (Parker, 2014). The persisting digital divide leading to social exclusion, and unequal access to goods, services, and opportunities for personal development in older people, reflects power relations and processes through which injustice regarding everyday life engagement occurs and persists (Fang et al., 2019). Media discourses can either fuel these inequalities and power imbalances or reveal and dissolve them (Hellmich, 2007). This study, hence, aims to critically examine how public discourse in German print media portrays older persons' EICT engagement during the first and second waves of the COVID-19 pandemic.

## Method

A search of three of the five most circulated German newspapers, namely, *die Sueddeutsche Zeitung*, *die Frankfurter Allgemeine*, and *Die Welt*, was completed, limited to newspaper publications from March 11, 2020 to December 1, 2020. This period reflects the time from the World Health Organizations' declaration of COVID-19 as a pandemic to the peak of the second wave by the end of November 2020 in Germany. Also, it covers the time span when COVID-19 vaccines were not available to the general population in Germany and people strongly relied on EICT usage to perform everyday activities, to comply with physical distancing instructions. *Die Sueddeutsche Zeitung* is rated as liberal and left-leaning, *die Frankfurter Allgemeine* as more conservative and right-leaning, while *Die Welt* is considered as conservative (deutschland.de, 2012). All three newspapers have a 6-day readership, are published in German language, and are distributed across all regions of Germany.

Newspaper articles were collected using the LexisNexis database for newspapers. In this research, we focused on older adults and EICT use. We did not specifically add terms related to COVID-19 to the search string, as all articles were published during the first and second waves of

the pandemic which defined and set the overall context of this study. A first search included relatively broad search strings, such as "older people" and "aging," while in the subsequent search new terms detected in the initial search were added to the search string (e.g., "baby boomers," "seniors"). Regarding EICT engagement, we again focused on both broad and specific terminology (e.g., internet use vs. online banking or video calling).

In the original search, a total of 785 newspaper articles met our search term criteria. Duplicates, advertisements, obituaries, and invitations (e.g., "Termine," "Service," "Rat und Hilfe") were excluded, leaving 135 articles for screening. Screening procedures were performed by the first author. In doubtful cases, the second author was contacted for consultation. Articles were not considered for further analysis if EICT was barely addressed or if the article's focus was primarily on children and younger adults. All kinds of contexts and settings were included (e.g., EICT courses, nursing home, or family contexts). Eventually, 52 articles were considered for in-depth review and final analysis (Table 1). Of all included articles, 33 have been published in *die Sueddeutsche Zeitung*, 11 in *die Frankfurter Allgemeine*, and six in *Die Welt*.

## Analysis

CDA as proposed by Fairclough (1993), van Dijk (1993), and Parker (2014) was employed in order to understand how aging and EICT use in later life are discursively constructed in German news media during the first and second waves of the COVID-19 pandemic. For this study, the full texts were critically analyzed by two authors (H. Köttl and V. C. Tatzler). Basic situational data were organized in a coding grid similar to the one used in the work of Fraser et al. (2016). It included (a) publication date, (b) type of article, (c) article length (word count), (d) section of the newspaper, (e) author's name and gender, (f) age and gender of individuals mentioned in the article, (g) the overall tone of the article (positive, neutral/mixed, and negative), and (h) type of EICTs addressed. Authors first individually allocated articles into the overall tone scheme. An article was perceived as positively toned if it presented an optimistic and nuanced picture of later life and EICT usage. On the contrary, an article's tone was categorized as negative in case of pessimistic future outlooks, victimization of older people, and overly negative depictions of later life and/or technological advancements. The neutral/mixed tone scheme accounted for articles that were initially negative and changed to positive and vice versa. After coding the articles' overall tone, we had an initial discrepancy of 21% across raters. However, only one article was coded with the opposite tone (positive vs. negative), and all other dissonances were owed to the neutral tone scheme (neutral vs. positive or neutral vs. negative). Conflicts related to the specific article were discussed among authors, and a consensus was found.

**Table 1.** Newspaper Articles Included in Analysis

#	Article title (translated into English)	Newspaper	Publication date	Overall tone
D1	Tablet instead of tea dance; age report calls for internet access for more seniors. Many seniors have a more positive view of digitalization since the start of the Corona pandemic	D.W.	August 13, 2020	Positive
D2	A fundamental right; access to the internet also means social participation for older people	S.Z.	December 16, 2020	Mixed
D3	Financial industry neglects older bank customers with regard to digitalization	F.A.Z.	October 30, 2020	Negative
D4	Risky gap: On Tuesday, the Corona warning app comes, but every fifth German citizen does not even own a smartphone. Of all people, senior citizens are affected—although they belong to the risk group	D.W.	June 15, 2020	Mixed
D5	Daring using the internet: What older people should be aware of in further training	S.Z.	November 06, 2020	Positive
D6	Leaving no one behind: Almost half of seniors feel overwhelmed by digitalization. Many associations call for more practical support	S.Z.	December 16, 2020	Negative
D7	Digital Christmas story: A joint project of the Poing churches has produced an alternative to the conventional nativity play. In the form of an e-book, all participants want to convey confidence and hope in a modern way	S.Z.	December 21, 2020	Positive
D8	“Don’t leave seniors behind”: Hans Lincke helps seniors use smartphones and the internet via remote counseling	S.Z.	March 31, 2020	Positive
D9	This is the way to go! In the past, the rule was: More experienced employees guide inexperienced beginners. Today, the young often know better—at least when it comes to new technologies. But older employees also have a trump card in their hands	S.Z.	March 14, 2020	Mixed
D10	“People should not feel disconnected”: Sabine Gus-Mayer, Geretsried’s senior citizen counselor, has set up a telephone consultation hour for older people. She says that there is a great willingness to help, and that something can always be arranged	S.Z.	March 27, 2020	Positive
D11	Seniors on the Internet: Creating a suitable basis for all generations	S.Z.	October 06, 2020	Negative
D12	Digital retirement provision	S.Z.	August 13, 2020	Positive
D13	Blogging for women over 40: Susanne Ackstaller’s lifestyle tips and commentary on aging have many fans on the internet	S.Z.	March 11, 2020	Positive
D14	Some older adults are left behind on the internet	F.A.Z.	August 13, 2020	Positive
D15	Promoting digital skills in old age	S.Z.	June 19, 2020	Positive
D16	Solidarity is on the rise; more and more people are offering help to older or impaired fellow human beings on social networks, for errands, rides or even technical help with internet access. The first groups are being set up. There has been less demand for professional neighborhood help so far	S.Z.	March 14, 2020	Mixed
D17	Digital participation for seniors; multigenerational house offers media consultation hours	S.Z.	June 23, 2020	Positive
D18	“Hey, old dude!” Instagram is only for young people with toned bodies? No way! Digital-savvy seniors have discovered the social network. A selection	S.Z.	September 05, 2020	Positive
D19	Peter no longer understands the world; senior citizens and people with disabilities live at Franziskuswerk Schönbrunn. They suffer particularly badly from contact restrictions and quarantine measures. Persons with dementia also often experience the corona crisis as very frightening. The SZ Advent calendar helps those affected	S.Z.	December 05, 2020	Negative
D20	Desperate relatives, unsettled nursing homes; because of the coronavirus, visits are largely prohibited in many facilities. The dilemma: Loneliness also makes people ill. A gerontologist makes an urgent appeal to politicians	D.W.	April 07, 2020	Negative
D21	An app for Dachau seniors; the advisory board is now looking into possible content	S.Z.	July 15, 2020	Positive
D22	Digital devices for all; M-net collects secondhand tablets and smartphones	S.Z.	May 02, 2020	Mixed
D23	CORONA-APP: The great skepticism	S.Z.	July 11, 2020	Negative
D24	ECONOMY SUMMIT 2020: The second chance; Germany has missed the boat to digitalization. The Corona crisis, of all things, could now change that	S.Z.	November 16, 2020	Negative
D25	Mail from “the pack” at last; contact despite Corona: Jennifer Waag, Nicolas Mercier and Adrian Missy want to collect photos and messages on the “Roodle” app and send them to relatives as a print magazine	S.Z.	May 06, 2020	Mixed
D26	Bus stops remain without digital display: Ottobrunn forgoes technology that indicates bus arrivals and departures in real time due to high costs	S.Z.	July 16, 2020	Negative

**Table 1. Continued**

#	Article title (translated into English)	Newspaper	Publication date	Overall tone
D27	Online crash course for adult education centers; because of quarantine measures, adult education institutions have to move their programs online. The know-how that lecturers acquire for this can also be used after the Corona crisis	S.Z.	April 16, 2020	Positive
D28	Out of the gray fog with smileys: A tablet helps to better understand and engage patients with dementia. Sometimes the algorithm discovers interests that even relatives don't know about	S.Z.	July 22, 2020	Positive
D29	Breaking new ground: The Dachau Forum is responding to the Corona pandemic with courses in hybrid form that can be attended both in person and online. In the coming educational year, more courses are offered in the areas of migration and integration as well as environment and nature	S.Z.	September 15, 2020	Negative
D30	"More time for creativity"	F.A.Z.	November 28, 2020	Positive
D31	The virus has changed volunteerism; the pandemic makes the work of charitable organizations more complicated; contacts must be limited while the need is growing. But there is no shortage of one thing: The willingness to help	S.Z.	December 02, 2020	Mixed
D32	The cash bastion is shaking; due to the pandemic, more Germans prefer to pay by card than ever before	D.W.	September 16, 2020	Mixed
D33	Without a plan at the kitchen table	F.A.Z.	September 29, 2020	Mixed
D34	When the lecturer is ten years younger	F.A.Z.	August 29, 2020	Mixed
D35	"The market is far from being saturated"	F.A.Z.	September 22, 2020	Positive
D36	The savior robots are coming	F.A.Z.	April 21, 2020	Negative
D37	Via WhatsApp to the bank	F.A.Z.	October 15, 2020	Mixed
D38	Wild mix for young and old; art and culinary, music and new media: The Marii Bossert Foundation invites you to the two-day "Eigenleben Festival" in Salon F at Leopoldstraße 7	S.Z.	October 30, 2020	Positive
D39	Talk and have fun; Petra Fuchs' gaming café receives award from German Chancellor	S.Z.	October 30, 2020	Positive
D40	"We produce a lot of average pupils": Hauke Schwitzer, founder of the Startup Teens network, calls for a school subject called "future," a U-25 director in the board of every German company, and a greater voice for the younger generation	D.W.	May 18, 2020	Negative
D41	The big shrinkage: During the Corona crisis, banks and savings banks had to close branches. Now, many branches are likely to remain permanently closed. In some municipalities, however, there are other approaches	S.Z.	June 18, 2020	Mixed
D42	New ways to faith: With online devotions, Facebook messages, letters and phone calls, pastors in the Dachau district try to reach the faithful and give them support in the crisis	S.Z.	April 09, 2020	Negative
D43	Postpone if possible; because of the pandemic, no owners' meetings may be held at present. This poses unprecedented problems for administrators and apartment owners	S.Z.	April 11, 2020	Negative
D44	Media use is growing enormously—even among children	F.A.Z.	March 28, 2020	Positive
D45	Praying in front of empty benches	F.A.Z.	June 22, 2020	Mixed
D46	"We want to continue to stand by people in the name of God": Five churches; Germering's city pastor Andreas Christian Jaster talks in an interview about the changes in Corona times and holy mass at Easter	S.Z.	April 07, 2020	Mixed
D47	The digital loophole; from Jane Fonda to Caro Daur: All age groups pass their pandemic free time watching nonsense videos on the app TikTok. What boredom does to us	D.W.	April 11, 2020	Positive
D48	Pension at a click? Minister Heil: From 2023 onwards, overview of pension provision for everyone	S.Z.	August 27, 2020	Positive
D49	DIGITALIZATION: The gap	S.Z.	April 14, 2020	Negative
D50	Starting signal for digital pension information	F.A.Z.	July 31, 2020	Positive
D51	Testosterone-charged; women not only earn less money than men, but they also have less security. Is this due to male-dominated sales? And does digitization provide a remedy? Experts disagree	S.Z.	August 11, 2020	Mixed

Note: S.Z. = Süddeutsche Zeitung; F.A.Z. = Frankfurter Allgemeine Zeitung; D.W. = Die Welt.

We performed a thematic analysis, following the steps suggested by Braun and Clarke (2006). Thematic analysis is suitable for constructionist analytical approaches (Braun & Clarke, 2006) and provides a clear structure to frame media content. The combination of thematic analysis with (critical) discourse analysis has been employed previously and proven to be an effective approach to deconstruct power relations and societal inequities (see, for instance, Allen & Ayalon, 2020; Taylor & Ussher, 2001).

As a first step, articles were read by the first two authors several times to get acquainted with the material. Second, we developed initial codes, distinguishing between semantic and latent codes. Semantic codes are verbally expressed meanings and latent codes address underlying meanings. In line with CDA, we searched the texts for hidden power structures (e.g., Who has a voice? Whose voices are missing? or How are older people being addressed?) and linguistic strategies used by journalists to emphasize their interpretation, including emotion-provoking narratives, suggestive questions, or specific terminology (e.g., anglicisms, youth language). Moreover, latent codes also acknowledged the various contexts in which discourses took place (e.g., finance, health care). In the third step, we organized the codes into various themes, while the fourth step focused on breaking down the themes into subthemes. We labeled the themes to highlight their actual meaning. The sixth step focused on presenting the results of the procedures. Coding was performed iteratively over a period of 3 months. All authors were involved in discussions and finding consensus. MAXQDA (2020) was used to code the data.

## Results

Our CDA involved 51 news articles that reported on older persons' EICT engagement during the first and second waves of the COVID-19 pandemic (Table 1). Metadata on type of article, section of newspaper, author's gender, voices of discourse (persons "speaking" and adding journalistic content to the articles aside from article authors), and overall tone of the article are described in Table 2. Definitions of older age and older people varied across articles, applying terms such as "seniors," "older people," "elders" (Ältere), "pensioners" (Rentner/in), "grandma" (Oma), "grandpa" (Opa), "older and demented people," "older and lonely people," or "baby boomers." Reporting on nonuse or lower EICT use was commonly accompanied by ascriptions to a certain age group, but throughout the 51 articles, no consensus was found on who is considered "old" with regard to EICT (non-)use. Overall, 35.3% ( $n = 18$ ) of articles mentioned a certain chronological age when defining older people. The suggested chronological ages ranged from 50 and older ( $n = 2$ ), 60 and older ( $n = 7$ ), to 65 and older ( $n = 6$ ); while in the context of work, older age was commonly conceptualized as 40 and older ( $n = 3$ ;

**Table 2.** Metadata of Included Articles ( $N = 51$ )

Item	<i>n</i>	%
Article type <sup>a</sup>		
Interviews	8	15.7
Letter to the editor	2	3.9
General article	41	80.4
Newspaper section		
Finance	4	7.8
Economy	9	17.7
Business	4	7.8
Regional	20	39.2
Politics	4	7.8
People/culture/lifestyle	5	9.8
Career	3	5.9
Letter to the editor	2	3.9
Author's gender		
Female authors	30	59.8
Male authors	10	19.6
Both genders	2	3.9
No gender details given	9	17.6
Voices in discourse <sup>b</sup>		
Members of older people organization/ICT project leaders	16	
Experts and researchers	14	
Directors or persons in any other leading position	14	
Politicians	12	
Older persons themselves <sup>c</sup>	12	
Article tone		
Overly positive tone	22	43.1
Overly negative tone	15	27.5
Neutral or mixed tones	14	27.5

Note: *n* = number of newspaper articles that address the item; ICT = information and communication technology.

<sup>a</sup>Article length ranged between 129 and 1,993 words with an average word count of 927.4.

<sup>b</sup>Several articles represented multiple voices. Though some older persons had a voice in current media discourses, the oldest old and persons in care facilities were barely represented. Moreover, voices of older immigrants and older persons with disabilities were missing.

<sup>c</sup>Those older people who were to a certain extent given "a voice" in the journalistic discourses (usually one short statement), were an older male politician (D1), older male technology trainers (D4, D2), two female technology course participants (D4, D27), older journalists (D11, D23), so-called "granfluencer," active older Instagram users or blogger (D18, D13), a female university student at the age of 51 (D34), an older woman with dementia (D19), as well as an oldest-old woman living in a residential care facility and her caring daughter (D20).

D9, D13, D34). COVID-19 was mentioned in almost all articles.

The thematic analysis resulted in three major themes: (a) *(non-)stereotypical images of aging and EICT use*, (b) *aging actively in the digital era*, and (c) *EICT use is power*. The first theme accommodates the two subthemes *dichotomous aging images* and *breaking the stereotypes*. Under the second theme, the subthemes *the debate around the necessity of EICT for societal participation* and *older users as*

consumers were addressed. The third theme included the subthemes *EICT—a fundamental right* and *old technology for old people*.

### Theme 1: (Non-)Stereotypical Images of Aging and EICT Use

The COVID-19 pandemic hit Germany in March 2020 and appeared to have intensified both negative and positive images of aging in news media discourses on older people and EICT usage. Some articles constructed seemingly binary distinctions into users versus nonusers, overlooking the great heterogeneity of later-life EICT engagement. Other articles explicitly promoted positive aging images and the need to overcome EICT-related ageism.

#### Dichotomous aging images

Journalistic discourses commonly portrayed older active users as participating and contributing members of society. Nonusers, on the contrary, were depicted as “left behind” or victims of technological advancements (D2, D3, D6, D19, D24, D26). Images of older persons as lonely, excluded, isolated, and dependent were widespread (e.g., D8, D16, D42) and seemingly reinforced through both the COVID-19 pandemic and low access to EICT (D8, D11, or D42). While both journalists and interviewees raised awareness about the truthfully detrimental consequences of digital exclusion of certain populations during the pandemic, they commonly drew on generalizing language, ignoring the diversity of older persons, or differentiating between age groups. This came, for instance, forward in an EICT trainer’s statement:

Communication via internet and Smartphone are extremely important these days [of the pandemic]. One can only really communicate through digital media. And particularly the seniors should not be abandoned like this. (D8)

Another common assumption appeared to be that older persons are incompetent and helpless when it comes to engaging in EICT. This was, for example, reflected in interview questions posed by journalists, “Mr. Meckler, are your seniors lost completely when experiencing difficulties with smartphones or computers?” (D8), but surfaced also in older active users’ reflections (in this case an older technology instructor) when talking about other older persons with less EICT experience:

I then see faces of people older than 70, who desperately sit in front of their screens or stare into their smartphones. They are aghast and seem helpless (...). To help those people, I have initiated the foundation Digital Chances. (D2)

Aside from competence, the idea that cognitive functioning declines with older age was implicitly reflected in journalistic

discourses. Remembering passwords or symbols was understood as more complex in older age. For example, an EICT instructor argued that “with increasing age and declining memory, the willingness to engage [with EICT] drops while insecurity increases” (D2). Regarding a Germany-wide coronavirus warning application for the smartphone, politicians advocated for “understandable instructions to also address older people’s needs” (D4).

EICT usage was constructed by journalists as a discriminator between the young and the old, but also between the young-old versus the oldest old. This came forward in descriptions about a recent phenomenon of so-called “granfluencer,” older Instagram users promoting themselves or their ideas on social media by celebrating their older age (D18), just like the “British David Cyril, 87, with a likeable pot belly (...) and the sweetest grandpa-smile north of the South Pole” (D18). Terminology such as “sweet,” “likeable,” “grandpa,” or “grandma” shaped the journalistic discourse, seemingly conveying a message that these older people are not “invading” social media, “the empire of the young,” but rather are providing “cute contributions.” Sayings by older persons themselves, such as “a good hip swing does not know age” by Ross Smith, an American internet-grandma, 94 years old (D18), indicated how these individuals use their older age as a kind of brand and a way to distinguish themselves from the young. Journalists usually mentioned chronological age in the context of active older users, just like a proof of group affiliation. Positive images of aging related to EICT usually depicted older users as “young at heart” through descriptions such as “hipster-pensioner” or “snotty little madame,” fashion items like latex clothes, sneakers, sunglasses, and cutoff jeans as well as activities usually associated with a youthful lifestyle, such as clubbing (D18). In contrast to descriptions of these active users, the oldest old were overly depicted as nonusers by article authors. Discourses about the oldest old took place mainly in residential care homes, emphasizing the catastrophic digital exclusion experienced by this population group during the pandemic (D14, D2).

#### Breaking age stereotypes

The discursive portrayal of EICT use in later life also involved explicit attempts to counter age stereotypes arguing that “the image of the senile senior who does not know how to turn on a mobile phone is outdated” (D21). One article in the context of the coronavirus warning smartphone application explicitly warned of ageism (D4). Against widespread stereotypes that older persons are less willing to use EICT, a course instructor reported great openness and willingness toward new technology, for instance, toward the corona smartphone application: “Many ask, when will it eventually come and when trainings will be offered” (D4). Educational researchers and technology trainers also emphasized that perceiving oneself as too old or left behind can be seen as a defect within a person’s situational self-esteem and needs to

be tackled directly. They argue that “age prejudices are often wrong—neither do older adults necessarily learn slower nor are they automatically wise” (D34).

Age stereotypes were also countered by journalists through nuanced and comprehensive portrayals of EICT usage in late life, respecting the heterogeneity of older people as well as experiences and disadvantages cumulating over the life course (e.g., D5, D14, D41). This came forward, for instance, in the following statement:

Within the group of older people, the access to and use of digital services and devices are distributed unevenly with regard to educational level and income—significantly more unequal than in younger age groups. (D1)

Articles aiming to promote a positive image of aging in the context of EICT commonly reported on older celebrities promoting products, fashion, or political activities on social media platforms (D18, D13, D47). While the journalists of these articles obviously intended to shed a positive light on older internet users, the terminology indicated a certain connotation of surprise and reprobation. It was, for instance, acknowledged, that “even” “the 82-year-old Jane Fonda uses the platform [Instagram], to raise awareness about her activities on climate protection” (D47). In the same article, it was argued that TikTok has been increasingly *invaded* by famous people “who are actually a bit too old for the teenager platform” (D47). Considering the title of the earlier mentioned article about “granfluencer” (D18), “Hey old boy! Instagram is only for the young with well-toned bodies? As if! Techy seniors have discovered social media,” journalists clearly aimed to change aging images about later-life EICT usage by transporting a sense of youthfulness and coolness. The rise in older celebrities posting, blogging, or applying fun filters was to a certain extent ascribed to the corona crisis (D47). Self-isolation and the need to stay in touch with family members were presented as the major reasons for older people to start sending “fun cat-videos or emoji messages” (D18).

## Theme 2: Aging Actively in the Digital Era

Most articles applied a positive or mixed tone, emphasizing the many positive aspects of being an active EICT user in later life. Active EICT engagement was associated with a young aging identity by journalists. It was widely constructed as desirable for aging individuals, presented as a growing trend and a social necessity to achieve positive outcomes (e.g., social participation, independence, and autonomy) as well as to avert undesired outcomes in older age (e.g., social exclusion, unemployment, or dependency). The COVID-19 pandemic was to a certain extent understood as a positive driver for older people to eventually get acquainted with new technology and appeared to have further fostered directives toward more active EICT engagement in later life.

## The debate around the necessity of EICT for societal participation

The reasoning that “digital sovereignty is a prerequisite for societal participation” (D14) was particularly prominent in policymakers’ statements; however, it was barely mentioned by older people themselves. Besides the highly recurrent reference to the German Ageing Report or other survey data to emphasize the importance of EICT use for active aging (e.g., D14, D15), politicians, such as the family minister or the federal minister of seniors repeatedly stressed that the digitalization offers a big potential for the everyday life of older people. This must be made more accessible as it “significantly contributes to an autonomous life and full societal participation until old age” (D12).

Yet, two letters to the editor written by older persons criticized that active EICT usage is often automatically equated with active participation. They both claimed to be active members of society but to not use smartphones due to perceived negative consequences of EICTs, such as lack of data security and fear of surveillance, energy consumption, and complication of communication (D11, D23). One of them, an older journalist, raised awareness about public labels of persons that are not active EICT users:

I object to the insinuation that those older people who withhold the alleged progress are disparaged as “left behind,” because even the young gradually realize the side effects of digitalization. (D11)

## Older Users as Consumers

Media reporting on older adults’ EICT usage within the context of banks, businesses, or start-ups was overly optimistic, expecting a developing new market of future consumers and customers (e.g., D3, D30, D37, D41). Commonly these articles started by acknowledging that markets have so far neglected the group of older consumers, regarding both the design and user interfaces as well as targeted customer services addressing older persons’ needs. The COVID-19 pandemic was often depicted by the journalists as especially harmful to older people, depriving them from important services and goods (e.g., “Older bank customers are particularly affected by the corona-related closures of bank branches” (D3)). At the same time, discourses in this context conveyed empowering messages, promoting a specific product or service to enable older persons to actively participate in everyday life (e.g., D25). Titles such as “The saving robots are coming” (D36) emphasized the promising nature of technological advancements for an active lifestyle in older age. Many of these consumption-orientated articles provided concrete solutions to get older future consumers on board. Most of these solutions targeted the design or interfaces of devices as well as simplification of processes to access services, for instance by demystifying and facilitating the two-factor



authentication in online banking (D3) or by using bigger font sizes in applications (D6).

A particular focus was put on the role and development of health care technology, discursively constructed as a necessity and particularly important to age actively. The role of technological solutions to support persons with dementia and their carers was repeatedly mentioned in this context (e.g., D28, D30). In contrast to these depictions of illness and the need for technology to stay active, journalists also portrayed older persons as active, healthy, and consuming, promoting fashionable products and goods of consumption on social media (D13, D18).

### Theme 3: EICT Use Is Power

The COVID-19 pandemic revealed differences in later-life opportunities to access and use EICT. Active older EICT users were depicted as being in a position of power, while nonuse and a lack of technological equipment were associated with disempowerment and dependency.

#### EICT—A fundamental right

Throughout the media discourses, access to EICT was constructed as a fundamental right, necessary to live a good life in older age (D1). Especially gerontologists and those involved in the German Aging Report shared this reasoning (D1, D12). In light of the COVID-19 pandemic, politicians and experts suggested free internet access in public spaces and in citizens' homes. Improvement with internet access was especially perceived as necessary in socioeconomically disadvantaged populations, rural areas, as well as in residential care homes (D14, D2).

Residential care homes appeared to be at the very bottom of the power hierarchy, being portrayed by journalists as deprived from Wi-Fi access and unprepared to meet older residents' digital needs during the COVID-19 pandemic. While older residents themselves were not interviewed personally, some family members had the chance to share their fears and concerns with the media, repeatedly emphasizing the difficulty to receive information from the institution and to stay in touch with their loved ones.

We have tried since more than ten days to reach somebody in charge who could provide information about the well-being of my 93-years-old father. Everyone is straightaway dismissed on the phone. (D20)

Some emotion-provoking statements even further emphasized the powerlessness of both residents and family members:

People were dying and could not say goodbye to their relatives because there was no internet connection. (D4)

Although differences in opportunities to access EICT were acknowledged, nonuse was commonly constructed as individuals' problems and responsibilities to be overcome

through personal initiative, engagement in EICT courses, and openness to change. For instance, the Federal minister of family affairs emphasized that "it is in older people's responsibility to be open towards digital technology" (D14).

#### Old technology for old people

Further attributions of power were related to EICT and technology design itself. Newspaper articles distinguished between individuals with new, well-functioning technology and those with old, poorly functioning EICT including those individuals without EICT devices. A shared understanding seemed to be that older individuals are disadvantaged or sometimes even powerless in this pandemic because they do not own some crucial EICTs or at least do not have the latest technology (D2, D3, D23). This was reflected in COVID-related initiatives to provide older people with EICT. For example, the news media presented a Munich telecom company collecting and donating old tablets and smartphones to older people as a role model initiative (D22). It became clear from other articles that older individuals often receive cast-off EICT from younger family members (D2, D3). "Hence, the grandmother 'inherits' the old smartphone or tablet of the grandchild who already keeps an eye on the latest model" (D3). While this was overly portrayed as a noble and generous act of solidarity, no article critically shed light on the potentially disempowering and challenging experience of learning to use a smartphone or tablet on an old and cast-off device.

### Discussion

The aim of this study was to critically examine media discourses addressing older adults' EICT usage from articles published in three major German newspapers during the first and second waves of the COVID-19 pandemic.

#### The Role of the Media in (De-)Constructing Aging Images

Newspapers may be seen as a window to current public views, culture, politics, and social life, strongly influencing and contributing to policy agenda setting and the formation of public attitudes (Fairclough, 1993). This may be particularly formative in times of a worldwide crisis such as the COVID-19 pandemic, which forces all of us to reformulate our thinking. As presented in the results of this study, the news media seemed to powerfully shape and perpetuate the public imagery of older age and aging. This comes forward in stereotypical descriptions of older people, intergenerational comparisons, or in the varying chronological age ascriptions related to who is considered old when it comes to EICT use. In line with earlier research, the findings of this study identified a variety of technology-related age stereotypes, devaluing older persons as incompetent, helpless, dependent, cognitively impaired, or less affluent

(Fraser et al., 2016; Neves & Amaro, 2012). While EICT usage clearly contributed to preventing the coronavirus infection and mitigating the negative effects of social isolation and loneliness imposed by COVID-19 confinements (Llorente-Barroso et al., 2021), an additional image was further pronounced in our data, namely, that older adults are socially isolated and lonely due to lack of access or inability to use EICT. Discourses on residential care homes conveyed particularly negative images of socially isolated, lonely, and technology-alienated older adults. This is in accordance with recent research on media discourses about residential care homes during the COVID-19 crisis (Allen & Ayalon, 2020) and a general rise of ageism during the pandemic (Meisner, 2021).

Our discourse analysis found that the media also functioned as a medium to debunk and combat age stereotypes by providing nuanced information about the various potential reasons for nonuse in later life and by explicitly warning of ageism and the dangers of internalizing negative age stereotypes. Especially, educative inputs provided by gerontologists, experts, and other researchers played a crucial role in changing the narrative and promoting the diversity of older age in the analyzed articles. Earlier research has proven that ageism can be combated through educational inputs and interventions that foster intergenerational exchange (Burnes et al., 2019). Hence, by adding evidence-based educative elements to journalistic reporting and portraying the heterogeneity of later-life EICT usage, the media may counteract the internalization of negative age stereotypes and empower both younger and older people.

### EICT Usage, a Discriminator Between the Third and the Fourth Ages

Discourses around “granfluencers” clearly highlighted how active EICT usage functioned as a medium and discriminator to rejuvenate and distinguish oneself from other old people, particularly from those who are very old, disabled, inactive, and not contributing to society anymore. Older active EICT users were portrayed as healthy, participating members of society, raising awareness about critical topics, such as climate change, while contributing to the economy through active consumption. Ascriptions to a certain age group and dichotomous thinking of older people as active/inactive, able/disabled, or empowered/disempowered members of society may result in marginalizing older nonusers and “othering” them from active older users and younger EICT users (Pickering, 2001). Realizing that one is ascribed a position as “the other” because of one’s age or ability may significantly influence the subjective experience of aging. The two analyzed letters to the editor reflect this paradox of internally feeling “young and active” but still being degraded by society as “old and not participating” because of not using some EICTs. Being deemed an older nonuser may, however, negatively affect older people’s age

identity and ability or willingness to engage in EICT (Köttl et al., 2020).

Distinctions of older populations into the “third age” and “fourth age” have on the one hand been praised for highlighting the diversity of older age, but on the other hand have been criticized for further exacerbating stereotyping and “othering” as well as intensifying intergenerational ageism (Higgs & Gilleard, 2020). Indeed, differentiations between an “aspirational” and a “feared” later life allow individuals with a young subjective age to retain their societal status and to distance themselves from group members of the “fourth age,” representing the “real old age” (Higgs & Gilleard, 2020). In our data, this came forward in primary accounts of older politicians, older technology instructors, or retired researchers whose reporting added to the understanding that older nonusers are victims of technological changes and in need of greater support to become active EICT users. By doing so, they promoted their own positive aging identity and distinguished themselves from members of the “fourth age.” Besides, discourses about active older social media users were portrayed as “young at heart,” following youth trends while transporting a message of positive aging. To a certain extent, these kinds of media discourses may counter the public image that older people are avoiding technology and lack tech-savviness. However, they may also further marginalize and discourage nonusers, conveying the message that EICT usage is only relevant or accessible for “third agers,” the young, the rich, the famous, or able-bodied.

### Aging Discourses in Neoliberal Contexts

Neoliberal political trends, emphasizing individual responsibility and privatization instead of collective responsibilities and state involvement, have also fostered successful, positive, and active aging discourses, partly contributing to an unrealistic framing of older age (Rubinstein & de Medeiros, 2015). In the results of this study, this comes forward in comments of active EICT users and politicians as well as in suggested policy measures to close the digital divide. Depictions of active EICT engagement as an individual choice and indirect blaming of nonusers for not engaging and profiting from existing EICT training opportunities were omnipresent and may intensify (self-)stereotyping and the internalization of negative aging images (Köttl et al., 2020).

Moreover, neoliberal and antiaging rational was reflected in contexts where older people were sensed as future consumers/customers, for instance, in health care, finance, or fashion. In recent years, the promise of the “silver economy” and “aging-and-innovation” discourses, including the design of technology for older people, has been on the rise and often constructed by the media and policymakers as the solution to “problems of aging” (Neven & Peine, 2017). In our data, this narrative became evident in the presentation of technological advancements, such as

robots to foster later-life independence or applications for older people to stay in touch with their loved ones during the pandemic. Media discourse in this context was informed by an overly positive and optimistic tone, usually providing developers' or policymakers' primary accounts that promoted a certain technology product. Neven and Peine (2017), however, warn that "aging-and-innovation" discourses have contributed to the construction of an overly negative imagery of older persons as frail and needy, due to the fact that the majority of designed products for older people focuses on health care/assistive technologies.

The data of this analysis also revealed that older individuals were portrayed as not needing the latest EICT and being satisfied with old, cast-off devices. The consequences of using old technology, however, may be severe. User-unfriendly interfaces, outdated software systems, or slow data processing of the device may impair successful use and prevent a positive user experience, potentially leading to nonuse and further amplifying existing age stereotypes that older people are unwilling or incapable of using EICT. Future research should further explore the potential association between the use of old technology and self- or other-directed ageism. Policy initiatives that aim to empower older adults who lack EICT devices are encouraged to promote the use of the latest models of technological products to enable barrier-free user experiences. Moreover, participatory and inclusive EICT design initiatives can prevent ageism in the design process of EICT, contribute to the development and design of technologies older people actually want and need, and ensure barrier-free use of contemporary EICTs (Neven & Peine, 2017).

The findings of this study should be interpreted with a certain degree of caution, as only three major newspapers in one country were included in the analysis. The German tabloid newspaper with the highest coverage, namely *BILD*, was excluded due to its primary use of graphics, pictures, and short texts. Future studies may explore EICT usage by analyzing other types of media (e.g., online media) as well as graphics and pictures. Another limitation of this research is the single focus on print media, disregarding the role of online media. As the percentage of online readers has significantly increased over the past years (Loos et al., 2019), future news media analysis should investigate eventual differences in online versus print reporting.

## Conclusions

The goal of this study was to analyze German newspaper discourse on older people's EICT usage during the COVID-19 pandemic. Overall, stereotypical and dichotomous images of aging were widespread and seemed to have contributed to the construction of the older EICT user and nonuser. EICT engagement was portrayed as a social and cultural necessity, crucial for engagement in everyday activities, social interactions, access to goods and services, consumption, and simply indispensable in times of a pandemic. Nonuse, in contrast, was depicted as a failure of policies that "left older people behind" and fell short in addressing

their needs and, on the other hand, as the failure of older individuals themselves for not catching up with the latest developments. Discourses commonly distinguished between young and old, but also between "third agers" and "fourth agers." This study has added to the understanding of how technology-related ageism in the media may affect older people's age identity and ability or willingness to engage in EICT. Our analysis also highlighted that evidence-based educative journalistic elements and nuanced reporting on the heterogeneity of aging and later-life EICT usage have the potential to counteract the internalization of negative age stereotypes and promote a world for all ages.

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## Conflict of Interest

None declared.

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## References

- Ainsworth, S., & Hardy, C. (2004). Critical discourse analysis and identity: Why bother? *Critical Discourse Studies*, 1(2), 225–259. doi:10.1080/1740590042000302085
- Allen, L., & Ayalon, L. (2020). "It's pure panic": The portrayal of residential care in American newspapers during COVID-19. *The Gerontologist*, 61(1), 86–97. doi:10.1093/geront/gnaa162
- Arbeitsgemeinschaft Medien-Analyse e.V. (2020). *ma 2020 Pressemedien II*. <https://www.agma-mmc.de/presse/pressemitteilungen/pressearchiv/pressemitteilung/ma-2020-pressemedien-ii-veroeffentlicht>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. doi:10.1191/1478088706qp0630a
- Burnes, D., Sheppard, C., Henderson, C. R. Jr, Wassel, M., Cope, R., Barber, C., & Pillemer, K. (2019). Interventions to reduce ageism against older adults: A systematic review and meta-analysis. *American Journal of Public Health*, 109(8), e1–e9. doi:10.2105/AJPH.2019.305123
- Connidis, I. A., & Memullin, J. A. (2002). Sociological ambivalence and family ties: A critical perspective. *Journal of Marriage and Family*, 64(3), 558–567. doi:10.1111/j.1741-3737.2002.00558.x
- deutschland.de. (2012). *Die Zeitungen im Medienland Deutschland*. <https://www.deutschland.de/de/topic/kultur/kommunikation-medien/die-zeitungen-im-medienland-deutschland>
- Fairclough, N. (1993). *Discourse and social change*. Polity Press.
- Fang, M. L., Canham, S. L., Battersby, L., Sixsmith, J., Wada, M., & Sixsmith, A. (2019). Exploring privilege in the digital

- divide: Implications for theory, policy, and practice. *The Gerontologist*, 59(1), e1–e15. doi:10.1093/geront/gny037
- Fraser, S. A., Kenyon, V., Lagacé, M., Wittich, W., & Southall, K. E. (2016). Stereotypes associated with age-related conditions and assistive device use in Canadian media. *The Gerontologist*, 56(6), 1023–1032. doi:10.1093/geront/gnv094
- Gallistl, V., Rohner, R., Seifert, A., & Wanka, A. (2020). Configuring the older non-user: Between research, policy and practice of digital exclusion. *Social Inclusion*, 8(2), 233–243. doi:10.17645/si.v8i2.2607
- Gee, J. P. (2014). *An introduction to discourse analysis: Theory and method* (4th ed.). Routledge.
- Global Centre for Modern Ageing. (2020). *COVID-19 & the uptake of technology*. <https://www.gcma.net.au/covid19/2020/3/29/covid-19-uptake-of-technology>
- Hellmich, E. (2007). *Forever young? Die Unsichtbarkeit alter Frauen in der Gegenwartsgesellschaft*. Milena Verlag.
- Higgs, P., & Gilleard, C. (2020). The ideology of ageism versus the social imaginary of the fourth age: Two differing approaches to the negative contexts of old age. *Ageing and Society*, 40(8), 1617–1630. doi:10.1017/S0144686X19000096
- Köttl, H., Cohn-Schwartz, E., & Ayalon, L. (2020). Self-perceptions of aging and everyday ICT engagement: A test of reciprocal associations. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*. Advance online publication. doi:10.1093/geronb/gbaa168
- Kushner Kaysi, E., & Morrow Raymond, E. (2003). Grounded theory, feminist theory, critical theory: Toward theoretical triangulation. *Advances in Nursing Science*, 26(1), 30–43. doi:10.1097/00012272-200301000-00006
- Lamont, R. A., Swift, H. J., & Abrams, D. (2015). A review and meta-analysis of age-based stereotype threat: Negative stereotypes, not facts, do the damage. *Psychology and Aging*, 30(1), 180–193. doi:10.1037/a0038586
- Levy, B. (2009). Stereotype embodiment: A psychosocial approach to aging. *Current Directions in Psychological Science*, 18(6), 332–336. doi:10.1111/j.1467-8721.2009.01662.x
- Lichtenstein, B. (2021). From “coffin dodger” to “boomer remover”: Outbreaks of ageism in three countries with divergent approaches to coronavirus control. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 76(4), 206–212. doi:10.1093/geronb/gbaa102
- Llorente-Barroso, C., Kolotouchkina, O., & Mañas-Viniegra, L. (2021). The enabling role of ICT to mitigate the negative effects of emotional and social loneliness of the elderly during COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(3923), 3923. doi:10.3390/ijerph18083923
- Loos, E. F., & Ivan, L. (2018). Visual ageism in the media. In L. Ayalon & C. Tesch-Roemer (Eds.), *Contemporary perspectives on ageism* (pp. 163–176). Springer.
- Loos, E. F., Nimrod, G., & Fernández-Ardèvol, M. (2019). Older audiences in the digital media environment: A cross-national longitudinal study. *Wave 2 Report v1.0*. [https://spectrum.library.concordia.ca/986444/1/Loss\\_nimrod\\_Fernandez\\_Longitudinal\\_wv2\\_2019.pdf](https://spectrum.library.concordia.ca/986444/1/Loss_nimrod_Fernandez_Longitudinal_wv2_2019.pdf)
- Meisner, B. A. (2021). Are you ok, boomer? Intensification of ageism and intergenerational tensions on social media amid COVID-19. *Leisure Sciences*, 43(1–2), 56–61. doi:10.1080/01490400.2020.1773983
- Michon, P. (1988). Thomas C Heller, Morton Sosna, David E. Wellbery éds, *Reconstructing individualism. Autonomy, individuality and the self in western thought*, Stanford, Stanford University Press, 1986, 365 p. *Annales. Histoire, Sciences Sociales*, 43(4), 947–949. doi:10.1017/S0395264900072243
- Miller, E. A., Simpson, E., Nadash, P., & Gusmano, M. (2020). Thrust into the spotlight: COVID-19 focuses media attention on nursing homes. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 76(4), 213–218. doi:10.1093/geronb/gbaa103
- Neven, L., & Peine, A. (2017). From triple win to triple sin: How a problematic future discourse is shaping the way people age with technology. *Societies*, 7(3), 26. doi:10.3390/soc7030026
- Neves, B., & Amaro, F. (2012). Too old for technology? How the elderly of Lisbon use and perceive ICT. *The Journal of Community Informatics*, 8(1). doi:10.15353/joci.v8i1.3061
- Parker, I. (2014). *Discourse dynamics (psychology revivals): Critical analysis for social and individual psychology*. Routledge.
- Pickering, M. (2001). *Stereotyping: The politics of representation*. Palgrave.
- Rubinstein, R. L., & de Medeiros, K. (2015). “Successful aging,” gerontological theory and neoliberalism: A qualitative critique. *The Gerontologist*, 55(1), 34–42. doi:10.1093/geront/gnu080
- Seifert, A., Cotten, S. R., & Xie, B. (2020). A double burden of exclusion? Digital and social exclusion of older adults in times of COVID-19. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 76(3), 99–103. doi:10.1093/geronb/gbaa098
- Taylor, G. W., & Ussher, J. M. (2001). Making sense of S&M: A discourse analytic account. *Sexualities*, 4(3), 293–314. doi:10.1177/136346001004003002
- van Dijk, T. A. (1993). Principles of critical discourse analysis. *Discourse & Society*, 4(2), 249–283. doi:10.1177/0957926593004002006
- Vogels, E. (2019). *Millennials stand out for their technology use, but older generations also embrace digital life*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2019/09/09/us-generations-technology-use/>
- World Health Organization. (2018). *Ageing and life-course*. <https://www.who.int/ageing/ageism/en/>
- Ylänne, V. (2015). Representations of ageing in the media. In Martin, W., & J. Twigg, (Eds.). *Routledge handbook of cultural gerontology* (first edition) (pp. 369–376). London: Routledge International Handbooks.