

Social Media about Grandparents as Childcare Providers: Evidence from Russian Region

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Abstract: Social media and the internet are proving more and more popular, even among older people. While still providing child care, grandparents become active users of social media. This research aims to estimate whether publications mentioning grandparents explore the topic of raising grandchildren and whether the increasing activity of older people on social media results in more proactive grandparental labour. The paper analyses socio-political communities—including the mass media ones—of the largest social media in Russia—Facebook, VK, Instagram, Telegram, and Odnoklassniki. The location of the publications analysed is the Sverdlovsk Region. The sample included posts mentioning grandmothers and grandfathers. The analysis identified main topics which the publications mentioning grandparents are associated with and tried to find a correlation between their activity on social media and contribution to childcare. The research shows that the publications analysed are mostly related to the topics of safety and accidents. Education and childcare rank third in terms of the frequency of posts mentioning grandparents. The publications mention grandmothers more than three times more often than grandfathers. On the one hand, social media facilitate a better understanding between the younger and the older generations. On the other hand, social media may replace face-to-face communication with grandchildren. Grandparents are becoming less involved in raising grandchildren because of the increasing retirement age and state programmes that support social activity of the older generation, which is proved by their activity on social media and results of this study. However, in the Russian Federation, the state and information support for grandparental labour (i.e., grandparents' activity while raising, educating, and taking care of grandchildren) may become one of the tools to promote fertility. The paper suggests several possible mechanisms to integrate grandparental labour in the economic subsystem of the society.

Keywords: social media, grandparents, childcare, grandparental labour, older people, communication

1. Introduction

Every year, the internet and social media are becoming more popular among older people. However, the core audience of social media established in 2005-2010, when a rate of new social media users could be increasing by 100% per year among specific age groups (Perrin, 2015). In the following decade, this rate accounted for on average 3-7% per year (Auxier and Anderson, 2021; Statista, 2021). Among older people, the increase rate was the highest but remained within the range mentioned above.

To forecast the number of older social media users, it is possible to use the cohort component method, which is effective for 10-15-year intervals. For example, in 2010, the number of social media users aged 50-64 equalled to 47% of the total adult population of the US (Madden, 2010), whereas those aged 65 and above accounted for 26% (Perrin, 2015). However, in 2021, the latter figure increased to 45% (Auxier and Anderson, 2021). (The mean value method would have been less effective in this case with the result being 52-54% of social media users aged 65 and above). The cohort component method allows arguing that within 10-15 years nearly 70-75% of the US citizens older than 65 and 80-85% of the ones aged 50-64 would use social media. In 2041-2051, these figures would increase to 80-85% and 85-90% correspondingly. (In 2021, among social media users were 73% of those aged 50-64 and 81% aged 30-49).

The increasing social media presence of older people has a vast potential for their integration into the social life—in terms of self-development, education, communication, and leisure time (Llorente-Barroso, Vinaras-Abad, and Sanchez-Valle, 2015) as well as personal fulfilment. Another advantage of online engagement lies in improving health conditions of older people. Junfeng and Jiang (2022) found that “middle-aged and older adults with access to the internet had better physical and mental health than those without, and online social capital indeed improved middle-aged and older adults' physical and mental health”. However, these positive changes also have a downside—fewer time for family and for helping children to raise grandchildren. As the cohort component method yielded the more pervasive social media presence of older people in the future, the duration and intensity of grandparental labour would hypothetically decrease over time. By grandparental labour,

Bagirova and Shubat (2021) imply the involvement of older women and men in the sphere of parents' labour; they also consider parenting as a separate type of labour exercised while taking care of children.

The social media environment should be viewed as a determinant of the grandparental labour intensity. With that, there is currently the inverse correlation between the social media presence of older people and the intensity of grandparental labour due to the following reasons:

- The more time grandparents spend on social media, the less time they have for grandparental labour.
- Publications on social media mentioning grandparents are not related to the topic of raising grandchildren.

Today's statistics prove the increase in both social media activity and time spent on it. The research attempts to study the context grandparents appear in on social media, which topics the publications mentioning grandparents cover, and how often these publications explore the topic of childcare.

2. Research sample and methods

The sample included posts featuring categories under analysis—"grandmother" or "grandfather"—and published in one of the following communities: mass media accounts, authorities' and companies' pages, socio-political communities. The analysis did not cover communities focused on entertainment, leisure, and advertisement. The sample is restricted not only by the topic, but also by the territory and time. The location of the publications analysed is the Sverdlovsk Region. Generally, the sample comprised 15 102 posts published in 2021 on 5 social media—Facebook, VK, Instagram, Telegram, and Odnoklassniki. To sample posts, a social media management instrument was used (API-Monitoring, 2021). Table 1 presents an overview of the sample.

Table 1: Overview of 2021 sample of social media posts

Number of posts	Type of account			Social media				
	Mass media accounts	Authorities' and companies' pages	Groups	VK	Instagram	Facebook	Telegram	Odnoklassniki
Mentioning grandparents	4,785	1,245	7,407	10,628	439	572	1,149	649
Mentioning grandparental labour	695	229	741	1,453	29	75	40	68
Total	5,480	1,474	8,148	12,081	468	647	1,189	717

Most often, posts with the keywords "grandmother" and "grandfather" are published in social media groups. Grandparental labour is almost equally mentioned in mass media accounts and groups. Authorities and companies publish posts mentioning the social group analysed less often than others.

The biggest number of posts with the keywords "grandmother" and "grandfather" was found on VK—the most popular social media in Russia with 72 million users (Mediascope, 2021); thus, it was given closer attention. Most of the Odnoklassniki users are also Russian citizens with less than 10% being from Belarus, Kazakhstan, Germany, Armenia, and Georgia. Odnoklassniki is traditionally considered a platform for older people; however, the share of its users aged 35 to 44 is 1.34 times higher than the share of this age group in the total population of Russia and 1.10 higher than that in the total number of internet users in Russia. Telegram messenger—which was banned by The Russian Federal Service for Supervision of Communications, Information Technology and Mass Media until June 2020—is the third most popular after WhatsApp and Viber with nearly 23 million users (Statista, 2021).

This research aims to analyse which topics are covered by the posts mentioning grandparents. To that end, it is crucial to evaluate how often grandparents are mentioned as grandparental labour actors—those who are involved in taking care of their grandchildren—and not only in the professional, sport- or entertainment-related contexts. A linguistic analysis of the topics covered and a text sentiment analysis were conducted. Further, there was designed a word cloud—that is "a visual representation of word frequency derived from written text" (Atenstaedt, 2017) to identify the focus of the material. The sentiment of the posts was based on the neighbouring keywords. For example, if the word "grandmother" neighbours words with the negative sentiment ("anger", "punish", "aggression", "problem", etc.), this publication was classified as the one having the negative sentiment.

3. Results

The thematic and sentiment analysis yielded the following results.

3.1 Grandmothers are mentioned 3 times more often than grandfathers.

In total, the category “grandmother” was mentioned 11 861 times on 5 social media under analysis. The biggest share belongs to VK—75.9% of the total number of the posts analysed. Figure 1 presents the distribution of publications concerned with grandparents on VK.

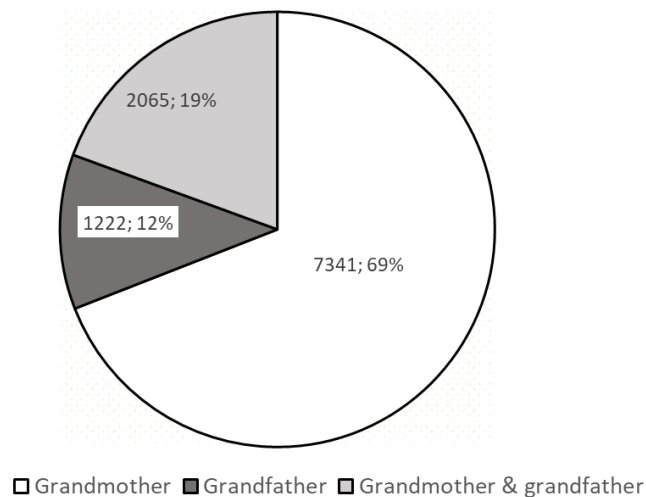


Figure 1: Distribution of publications concerned with grandparents on VK

Grandfathers were featured 2.86 times less often than grandmothers; 69% of VK posts were dedicated to grandmothers and only 12% to grandfathers. 19% of VK posts mentioned both grandparents. Other social media have the smaller number of publications, but the pattern revealed still remain. Figure 2 presents the distribution of posts concerned with grandparents on Facebook, Instagram, Telegram, and Odnoklassniki.

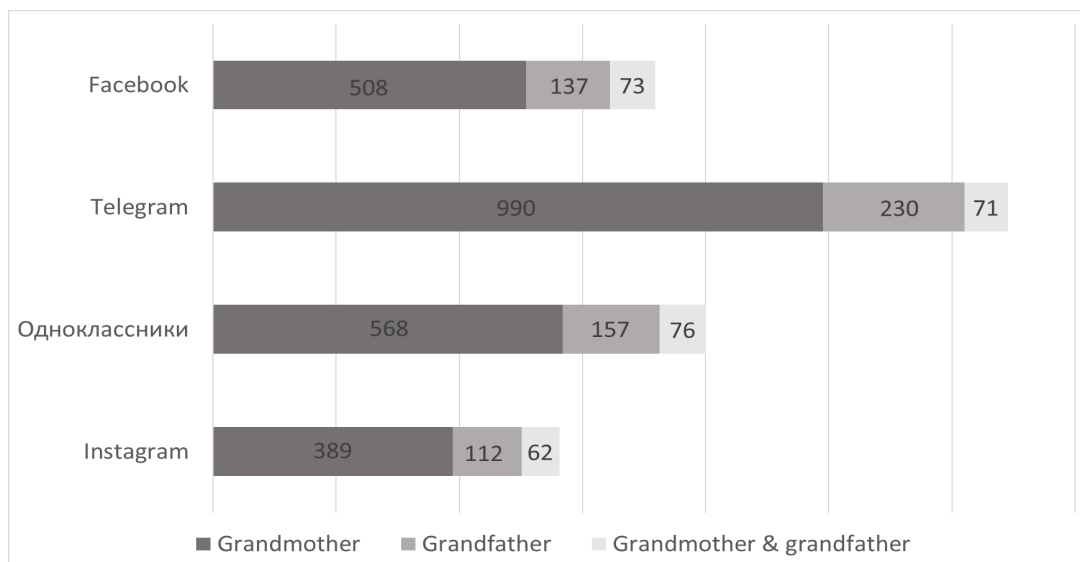


Figure 2: Distribution of publications concerned with grandparents on social media

Telegram ranks second according to the number of publications. On this social media, the gap between the number of posts mentioning grandmothers and grandfathers is even larger—more than 4 times—than on VK. (Publications mentioning both grandparents were not covered). As for other social media, the discrepancy slightly exceeds 3 times. Therefore, VK has a more even structure of mentions, but as compared to other social media, the difference is still minor. In general, grandmothers are normally paid much more attention on social media in the Sverdlovsk Region compared to grandfathers.

3.2 Education and upbringing are the third most frequent topics among the posts mentioning grandparents. The most popular topic on all social media is safety and accidents, followed by healthcare and upbringing of grandchildren. The share of publications on education and upbringing is only 10.5% among all topics mentioning grandparents. Figure 3 shows a word cloud with all topics. The more often the topic is raised, the larger it is in the cloud.



Figure 3: Topics of posts related to grandparents

The share of posts concerned with the other two most popular topics—safety and health—is 23.5% and 14.2% respectively (of the total number of posts). The largest number of publications on these topics was found on Instagram. Culture, holidays and celebrations are mentioned on VK and Odnoklassniki equally often. On Telegram, the context of holidays and celebrations is insignificant and is often referred to the topic of social support, where the keywords analysed can be found rarely. Figure 4 presents the distribution of top topics of posts related to grandparents on different social media.

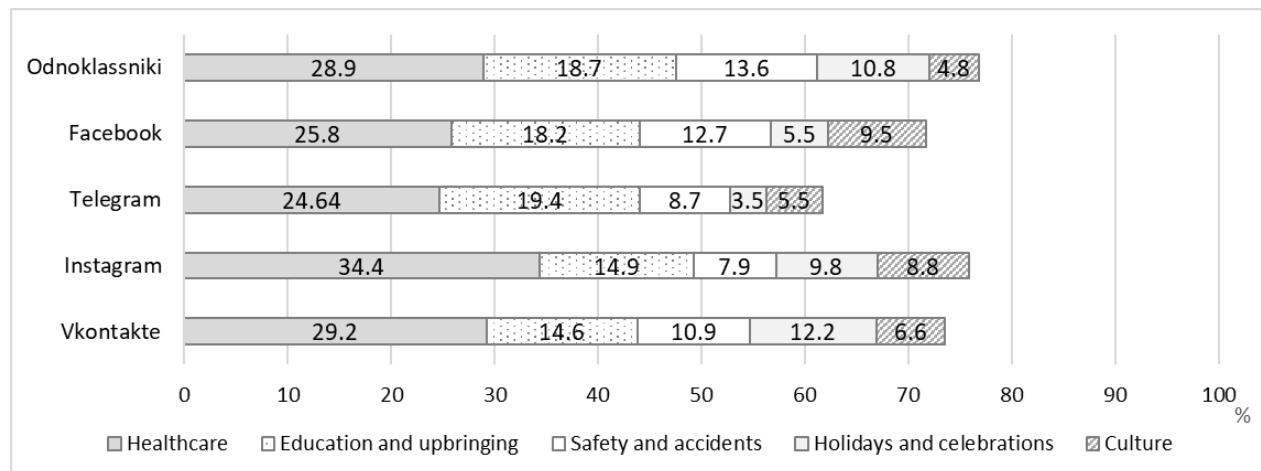


Figure 4: Topics of posts related to grandparents on different social media

On analysing the context of the keyword “grandfather”, it was concluded that the topic of security is the most popular on all social networks. Odnoklassniki mentions the topic of education and upbringing along with healthcare. The least frequent topic, as in the case of the keyword “grandmother”, is social support. On Telegram, it is not mentioned at all. In addition, culture-related topics are rarely raised on Odnoklassniki. The least frequent topics in the context of the keywords “grandfather” and “grandmother” are social support, religion, physical education and sports.

3.3 The posts covering the topic "education and upbringing of grandchildren" have mostly positive or neutral sentiments.

The sentiment analysis of publications allowed classifying the sample of posts into two groups with the first one being a group of positive and neutral publications and the second one a group of negative or problematic

publications. In general, negative publications on social media account for no more than a quarter of all units of analysis. At the same time, there are small statistical differences depending on the social media. The distribution of the share of posts by their sentiments is shown in Figure 5.

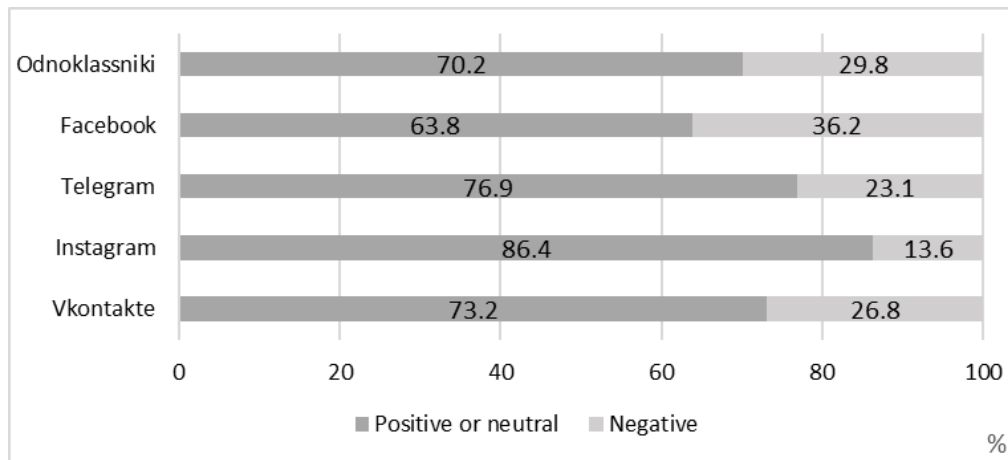


Figure 5: Sentiments of publications about grandparents

In particular, the number of negative publications is the largest on Facebook (36.2%) and Odnoklassniki (29.8%). The smallest number of problematic publications was found on Telegram (23.1%) and Instagram (13.6%), which may be due to certain features of these social networks. Facebook and Odnoklassniki are more focused on everyday communication and have a wide range of feedback tools. On the other hand, Telegram and Instagram provide fewer feedback opportunities and are used to increase the social capital.

4. Discussion

Publications about grandparents on social media and their context are important for the research to assess the information environment that emerges around the topic of raising grandchildren. The information and communication environment developing on social networks around this topic is one of the determinants of the grandparental labour intensity.

Grandparental labour can contribute to supporting family and stimulate the birth rate. In many developed countries, birth rates and the natural population growth are declining; therefore, it is crucial to find new tools and resources to stimulate fertility. At present, researchers are studying the phenomenon of grandparents' participation in raising children from various aspects. They view grandparents taking care of children as an alternative to subsidies and public childcare services in Belgium (Biegel and Neels, 2021), Spain (Osuna, 2021), China (Zhong and Peng, 2020), and other countries. Aparicio-Fenoll and Vidal-Fernandez (2015) proved that in Italy grandmothers' availability for childcare "increases the labor force participation (LFP) and fertility of daughters". This essential conclusion suggests that grandparental labour can increase the birth rate in Russia. Other studies confirm that time spent with grandchildren has a positive effect on the health of grandmothers (Gessa, Glaser, and Tinker, 2016).

At the same time, a number of researchers also note the negative effects arising from the grandparents' participation in the children's upbringing. First of all, they affect grandparents' life and self-perception. Backhaus and Barslund (2021) found "a large negative impact of grandparenthood on the employment rate of women aged 55 to 64" in 10 European countries. Simultaneously with raising the retirement age, many countries initiated Active Aging Programmes (Piekkola, 2004; Evans, Nistrup, and Pfister, 2018). They provide better opportunities for older people to participate in the economy and public life. As a result, older people are more interested in self-realisation and a more active social life, whereas a need to participate in grandchildren's upbringing leads to depression (Brunello and Rocco, 2019), financial problems (Bagshaw et al, 2015) and deterioration of health (Grinstead et al, 2003). Boon-Nanai, Thaggard, and Montayre (2021) revealed elder abuse and disrespect while taking care of children, particularly, "prolonged childminding deprived them of time which could be used to benefit them and their community in the long run". Moreover, older people could use this time for communication, extra work, or entertainment on social media. However, excessive online interaction, according to Junfeng and Jiang (2022), as well as poor understanding of the cultural context while

taking care of grandchildren (Boon-Nanai, Thaggard, and Montayre, 2021) lead to the deterioration of mental and physical health of the elderly.

Henderson et al (2017) emphasised the importance of the cultural context when studying the social phenomenon of grandparents' childcare. Thus, it is important to ensure a balance between the culture of grandparental labour, participation of older people in public life, and their social media presence, as well as to develop the information environment to maintain this balance. According to the research, the information environment around grandparents on social media is now dominated by the topics of health and medicine, safety and accidents, while the topic of raising grandchildren is one of the least frequent.

Based on results and studies mentioned above, determinants of grandparental labour intensity can be grouped according to their positive or negative impact on this process. The determinants that contribute to low grandparents' involvement in grandparental labour include:

- Raising the retirement age
- Active ageing programmes
- Support measures for women with children which encourage them to stay on parental leave for a long time
- Increasing usage of social networks among people aged 50+.

For the most effective use of grandparental labour for increasing fertility, it is necessary to reinforce the intensity determinants with a positive impact and to mitigate the negative one, which results in the lower grandparents' involvement in grandparental labour. Mechanisms to integrate grandparental labour in the economic subsystem of society, which allow overcoming the abovementioned determinants, include:

- Lowering the retirement age for grandparents actively involved in the upbringing of grandchildren;
- Supplementing active ageing programmes with the activities aimed at strengthening family ties (e.g., compensations for family cultural activities, psychological assistance for family conflicts, special courses for the elderly on the modern methods of raising grandchildren).
- Introducing direct payments for grandparental labour
- Developing the information environment on social media which would place particular focus on the importance of grandparental labour in the society.

5. Conclusions

The study explored publication topics mentioning grandparents on 5 social networks (Facebook, VK, Instagram, Telegram, and Odnoklassniki) in different socio-political online communities of the Sverdlovsk Region. The analysis showed that the main topics of such publications are safety and accidents and health and medicine. Education and childcare rank third among other topics in terms of their frequency. Posts mentioning grandmothers are published more than three times more often than those related to grandfathers. The increasing usage of social networks among people aged 50+ is considered one of the external determinants of grandparental labour intensity, which negatively affects their participation in the upbringing and taking care of children. Mechanisms to integrate grandparental labour in the economic subsystem of society, which allow overcoming this determinant, include the development of the information and communication environment on social networks, where the topic of grandparents' participation in the education and upbringing of grandchildren will be as popular as the health and social activity of older people.

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References

- Aparicio-Fenoll, A. and Vidal-Fernandez, M. (2015) "Working Women and Fertility: the Role of Grandmothers' Labor Force Participation", *Cesifo Economic Studies*, Vol 61, No. 1, pp 123-147.
- API-Monitoring (2021) "Social Media", [online], <http://xn----7sbksba0aicgcfu0a.xn--p1ai/Pages/Index.aspx>
- Atenstaedt, R. (2017) "Word Cloud Analysis of the BJGP: 5 Years on", *British Journal of General Practice*, Vol 67, No. 658, pp 231-232.

- Auxier, B. and Anderson, M. (2021) "Social Media Use in 2021", [online], *Pew Research Center*, www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021/
- Backhaus, A. and Barslund, M. (2021) "The Effect of Grandchildren on Grandparental Labor Supply: Evidence From Europe", [online], *European Economic Review*, Vol 137, No. 103817. doi10.1016/j.euroecorev.2021.103817
- Bagirova, A. P. and Shubat, O. M. (2021) "Models of Grandparents' Labour in the Socio-Economic Space of Russia", *Economy of Region*, Vol 17, No. 1, pp 197-208.
- Bagshaw, D. M., Adams, V., Zannettino, L., and Wendt, S. (2015). "Elder Mediation and The Financial Abuse of Older People by a Family Member", *Conflict Resolution Quarterly*, Vol 4, No. 443.
- Biegel, N. and Neels, K. (2021) "Uptake of Childcare Arrangements-Grandparental Availability and Availability of Formal Childcare", [online], *Social Sciences-Base*, Vol. 10, No. 2. doi10.3390/socsci10020050.
- Boon-Nanai, J., Thaggard, S., and Montayre, J. (2021) "'I Just Want to be a Grandmother, not a Caregiver for Their Kids' Perceptions of Childminding Among Pacific Grandparents Living in Aotearoa, New Zealand", [online], *Health & Social Care in the Community*, doi10.1111/hsc.13492.
- Brunello, G. and Rocco, L. (2019) "Grandparents in the Blues. The Effect of Childcare on Grandparents' depression", *Review of Economics of The Household*, Vol 17, No. 2, pp 587-613.
- Evans, A. B., Nistrup, A., and Pfister, G. (2018) "Active Ageing in Denmark; Shifting Institutional Landscapes and The Intersection of National and Local Priorities", *Journal of Aging Studies*, Vol 46, pp 1-9.
- Gessa, G. D., Glaser, K., and Tinker, A. (2016) "The impact of caring for grandchildren on the health of grandparents in Europe: A lifecourse approach", *Social Science & Medicine*, Vol 152, pp 166-175.
- Grinstead, L. N., Leder, S., Jensen, S., and Bond, L. (2003) "Review of Research on The Health of Caregiving Grandparents", *Journal of Advanced Nursing*, Vol 44, No. 3, pp 318– 326.
- Henderson, T. L., Dinh, M., Morgan, K., and Lewis, J. (2017) "Alaska Native Grandparents Rearing Grandchildren", *Journal of Family*, Vol 38, No. 4, pp 547.
- Jiang, J. F. and Song, J. (2022) "Health Consequences of Online Social Capital among Middle-Aged and Older Adults in China", *Applied Research in Quality of Life*, doi10.1007/s11482-021-10033-9
- Llorente-Barroso, C., Vinaras-Abad, M., and Sanchez-Valle, M. (2015) "Internet and the Elderly: Enhancing Active Ageing", *Comunicar*, Vol 23, No. 45, pp 29-36.
- Madden, M. (2010) "Older Adults and Social Media", [online], *Pew Research Center*, www.pewresearch.org/internet/2010/08/27/older-adults-and-social-media/
- Mediascope (2021) "WEB-Index 2021", [online], *Mediascope*, <https://webindex.mediascope.net/>.
- Osuna, V. (2021) "Subsidising Formal Childcare Versus Grandmothers' Time: Which Policy is More Effective?", *Economics-The Open Access Open-Assessment E-Journal*, Vol 15, No. 1, pp 85-111.
- Perrin, A. (2015) "Social Media Usage: 2005-2015", [online], *Pew Research Center*, www.pewresearch.org/internet/2015/10/08/social-networking-usage-2005-2015/
- Piekkola, H. (2004) "Active Ageing Policies in Finland", [online], *ETLA Discussion Papers*, No. 898, <https://www.econstor.eu/handle/10419/63737>
- Statista Research Department (2021) "Number of Global Social Network Users 2017-2025", [online], *Statista*, <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/#:~:text=In%202020%2C%20over%203.6%20billion,almost%204.41%20billion%20in%202025.>
- Zhong, X. H. and Peng, M. G. (2020) "The Grandmothers' Farewell to Childcare Provision under China's Two-Child Policy: Evidence from Guangzhou Middle-Class Families", *Social Inclusion*, Vol 8, No. 2, pp 36-46.