

Relationships between ICT use and subjective well-being among the oldest-old in Germany: Findings from the NRW80+ study

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Purpose The use of information and communication technologies (ICT) can foster interconnected-ness and social inclusion for older adults. In particular, web-connected ICT (e.g., smartphones, tablets) facilitate high levels of interaction and a broad access to digital information and services. (Czaja et al., 2018). While research has demonstrated positive associations between web-connected ICT use and older adults' well-being (Cotton, 2017; Hofer et al., 2019), there is limited knowledge for the group of the oldest-old (80+). We analyzed the relationships between ICT use and subjective well-being in this underexplored group. **Method** Our findings are based on data from the NRW80+ study. NRW80+ is the first representative state-wide survey study on quality of life and subjective well-being of the oldest-old under-taken in the federal state of North Rhine-Westphalia (NRW) in Germany (Wagner et al., 2018). Multi-stage sampling was applied with a random sample of individuals aged 80 years and older living in private homes and institutional settings (n = 1863, mean age: 85.61 years, age range: 80-103). We conducted multiple regression analyses to compare different user groups of ICT (non-users, users of non-web-connected ICT, users of web-connected ICT) and analyzed their levels of subjective well-being with a focus on loneliness, anomie, and autonomy. **Results and Discussion** In total, 25.9% (n = 440) of all individuals aged 80 years and older reported using web-connected ICT, in contrast to 38.5% (n = 653) who do not use ICT at all (see Table 1 for individual characteristics of the groups). ICT use explained a significant amount of variance within the oldest-old's levels of subjective well-being (range of R²: .02-.23). Our results demonstrate that about two thirds of the oldest-old in NRW use ICT in their everyday life and that the use of ICT can have an independent effect on selected domains of well-being. Still, many older adults lag behind in the ownership of web-connected ICT. We argue, that the differences in technology adoption can lead to new inequalities in society and may have a negative impact on the oldest-olds' well-being. Technology training with attention paid to the technological skills and special learning needs of the oldest-old should be offered to overcome technology-induced constraints of subjective well-being.

References

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Table 1. Individual characteristics of ICT user groups.

		No ICT	Non-Web ICT	Web ICT
Total (n = 1698)	% total	38.5	35.6	25.9
Age (n = 1693)	M (SD)	86.91 (4.38)	84.73 (3.55)	83.92 (3.26)
Sex (n = 1698)	% female	46.3	35.5	18.2
	% male	25.1	35.8	39.1
Education (n = 1577)	% low	57.3	34.5	8.2
	% medium	35.0	38.6	26.4
	% high	17.8	29.8	52.4