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Saying "Hi" to Grandma in Nine Different Ways*

Established and Innovative Communication Media in the Grandparent-Grandchild Relationship

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The grandparent-grandchild (GP-GC) relationship is a relevant factor for the wellbeing of both grandchildren and grandparents. Digital communication technologies play an important role in maintaining it, especially when face-to-face interactions are not possible, e.g., due to living far from each other or pandemic contact restrictions. The aim of this study was to investigate the role of nine different communication forms in the GP-GC relationship that fall into three technology categories: non-digital (e.g., face-to-face communication, letter/postcard), established digital (e.g., mobile phone calls, texting), and innovative digital (augmented reality-based (AR), social robot-based). N = 286 young adults from Germany took part in an online survey and vignette experiment where they described their current and evaluated possible future communication with their grandparents. Results showed that face-to-face and phone communication take place most frequently in GP-GC relationships and are associated with higher perceived communication quality compared to digital communication forms. Innovative digital media such as AR and robots were met with skepticism regarding grandparents' technical competence, however with higher expectations regarding communication quality. Results demonstrate the limits of technological deterministic thinking and stress that richer media, such as video conferencing or AR, do not automatically lead to better perceived communication quality, while leaner media such as letters or text messages can provide rich communication experiences. Implications for future research and technology development are discussed.

Keywords: grandparent-grandchild relationship, communication, digital media, augmented reality, social robots

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