# Experts View on …

## … Digital Media in Times COVID-19

We asked two experts from two different fields about the impact of digital media during the pandemic. Martina Zemp from Psychology and Helmut Hlavacs from Computer Sciences (both from University of Vienna) spoke to **Digital Psychology** about these topics.

*[DP] How can we fight COVID-19 using digital media?*

*Helmut Hlavacs:* The spread of COVID-19 is fully determined by the behavioral adherence of the populace, or the lack thereof, to virus control measures. Media in general may influence this adherence drastically – or not – by communicating the right message tailored to the specific needs of different social groups and personality traits. Ordering or even suggesting lifestyle changes for many people is a red flag. We should be able to avoid echo chambers of social networks which otherwise remain closed bubbles of misinformation. Digital media can prove to be very effective in this endeavor. So far, technological innovations have focused on fostering home offices and remote working, social distancing, video conferences, determining physical proximity etc.

*[DP] Do you expect problems and threats with digital media in the light of this crisis?*

*Helmut Hlavacs:* Any technology made for influencing people, even those made with the best of intentions, can and will be used by autocrats to influence the pliant masses to help them stay in power. Technologies detecting physical proximity can easily be misused for tracking people's whereabouts. Also, if messages are not tailored to the specific requirements of their target audience, the effect of spreading them through digital media may have the opposite impact of what was intended.

*[DP] Are there any technological developments that can help us avoid echo chambers? How do they work?*

*Helmut Hlavacs:* Typical AI-based recommender systems used by Facebook, YouTube, etc. help to create echo chambers by analyzing interests and recommending mostly similar content, e.g. based on clicks or key words. Furthermore, clickbait-abusing extreme headline claims move attention to untrustworthy sources. But while AI contributes to the formation of echo chambers, it can also help break open such chambers by e.g. flagging possible fake news, correcting untruthful claims, identifying abusive language, searching for approved statements from other trustworthy sources, or flagging or even banning clickbait.

*[DP] Are there specific problems or threats for children or adolescents?*

*Martina Zemp:* Whilst the use of digital media among children and adolescents is likely elevated during the crisis, I would not expect that the potential for problems is significantly different to at other times. There are a few well-known possible threats related to digital media use, such as a certain addiction potential of computer games, aggressive media content, or exposure to other content not suitable for minors. At the same time, surrounding factors have changed in the light of the crisis. For instance, during pandemic restrictions, we expect that adolescents' fear of missing out might become less of a problem, because they know that others have to stay at home as well. Or in the event that parents work at home, they may have more control over their children's media use.

*[DP] Digital media was used by almost everyone for teleconferencing, working from home and homeschooling during this crisis. What do you think about this development? Should we keep this new mode of operating after the crisis has come to an end?*

*Martina Zemp:* These options are both a blessing and a curse for most of us. They enable us to stay in touch with family and friends despite physical distance, not to lose the thread at work, and during school shutdowns they prevented the complete interruption of children's education. However, many of us wonder how to find an adequate dose of these tools in future. For sure we will have to deal with them in some way or another after the crisis. The crucial question is: What is the reasonable middle ground to ensure public health, while at the same time preventing isolation, loneliness, and disconcertment in the population? Concerning homeschooling we probably all agree that what parents have done for their children during the lockdown deserves greatest recognition. But we also know that parental stress levels were extremely high in most households. This is one of the many reasons why I don't deem homeschooling as an appropriate concept in the long term.

**Helmut Hlavacs:** Remote working is something that has been done for many years, for instance in physically dispersed companies, or programming. In many traditional companies however, old school thinking still confuses physical presence with productivity. The COVID-19 crisis has forced organizations to deploy home offices no matter what, and this is something that will definitely stay where it makes sense. However, there are many areas like schools, social work, maintenance, police, etc. where physical presence is and will remain necessary.

*[DP] How do you perceive the impact of social media on the development of children and adolescents?*

**Martina Zemp:** It has repeatedly been shown in previous research that social media has addiction potential, especially for children and adolescents. Some youngsters – although it is a minority – even display clinically relevant symptoms of addiction, such as excessive use, loss of control, and psychological withdrawal symptoms. However, current studies clearly demonstrate that real world relationships matter most, also for today's youth. The desire to live in a loved family environment is stable and universal, and is among the most important values in digital natives' lives. On the surface, friendships of children and adolescents appear different nowadays compared to those of previous generations, but they are underpinned by the same basic motivations at the core. It is still about the desire to be recognized, socially included, and loved, although many aspects of interaction currently take place online on social media. We have to learn to navigate through offline and online spheres without impairing our relationships and to model for our children a functional and well-balanced approach to media use.

*[DP] Do you think that digital media use during the COVID-19 crisis will influence family dynamics and parent-child interaction?*

**Martina Zemp:** There is a growing body of research about the effects of family members' digital media use on parent-child in-teractions. The phenomenon of interference and interruptions of everyday face-to-face interactions through technology, in particular smartphones, has been referred to as "technoference". Not only youngsters, but also parents of the present generation use digital media on a regular, daily basis. In the long run, this might affect family relations, parents' sensitivity, and child attachment. During the COVID-19 pandemic, average digital media use in families of course increased sharply, but simultaneously, shared family time did as well. Ongoing research will inform whether effects of media use differ during the crisis compared to before the onset of the pandemic.

## Bios

**Univ.-Prof. Dr. Helmut Hlavacs** studied Mathematics at the University of Technology Vienna, and received a Master's degree in 1993 and a PhD in 2001. In 2004 he became Associate Professor at the Faculty of Computer Science at the University of Vienna, and in 2011 he became Full Professor of Computer Science there. His research interests include computer games, gamification, gaming technologies and applications of computer games.

**Univ.-Prof. Dr. Martina Zemp** is professor of clinical child and youth psychology at the University of Vienna. She studied psychology and education at the University of Zurich. She received her doctorate in 2014 with a PhD thesis about interparental conflict as a risk factor for children's attention problems. Her current research and teaching focus on family risk and protective factors in the development of children and adolescents. She is a trained psychotherapist in cognitive behavior therapy and systemic therapy.