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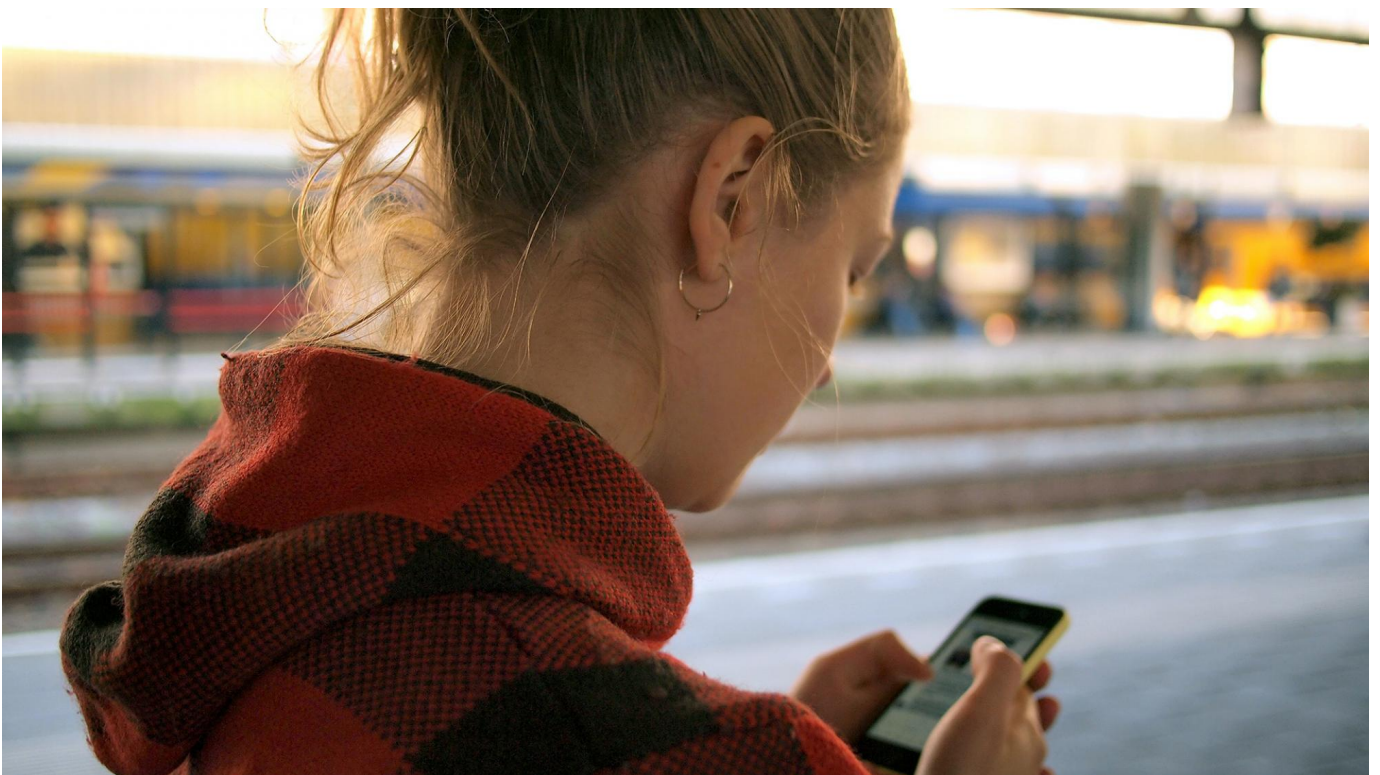
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# The effects of digitalisation on mental health are a double-edged sword

Digitalisation affects human life comprehensively, entailing phenomena many of which are still left unexplored. Health and mental health are, undoubtedly, a crucial part of human life, as they lay the basis for wellness and effective functioning. The recent statistics provide motivation for mental health research in the digital era, as between 20 to 25 percent of young people in Finland suffer from mental health related problems. In the DigiWellBeing group, we investigate the relationship between mental health and digital activities, including social media use and online gaming. Here, we share some of our key insights into this complex issue.



## Health is a subjective experience

The first step in unwrapping the relationship between mental health and digitalisation requires a visit to the core definition of health. According to the World Health Organisation



(WHO), health is a complex concept that consists of social, physical, and psychological elements, which are interconnected. The balance of these elements predicts good health.

The set ways of measuring health cannot entirely reflect the actual unique and subjective nature of health. Health can imply different things to different people, and people diverge in their personal resilience and sensitivity to life stressors. The subjective experiences of health emerge in our survey-based study on young adults' social media use.

## **What makes a person vulnerable?**

The question of who is more likely to develop addictions and other mental health problems concerning the online world is the essential starting point for our research. But even in the mapping of these 'risk factors,' how people experience social media for instance, is highly subjective and varies from person to person.

One of the factors is age, as it guides people's behaviour online. Teenage years entail different conflicts which a young person must resolve to progress in their development. In some cases, the surrounding digital activities might disrupt a young person's development.

Other so-called 'push factors' that may predispose a person to developing problems in respect of the online world include the underlying mental health problems and individual coping mechanisms. For example, when feeling anxious or down, a person might resort to online gaming to alleviate their distress. In the same way, social media can also function as a coping mechanism for some.

A person's values as well as beliefs and attitudes towards the digital world are also the essential 'push factors.' Whether one's mental health begins to deteriorate as a result of their social media use depends on their personal values and how they use social media to begin with, and as a byproduct of these values.

At this point, however, the cause-effect relations of online activities and mental health issues are quite vague. Whether mental health issues lead to the development of problematic behavior regarding online activities, or if the reverse is also true, remain as the important questions that future research should address.

In fact, recent research has even proposed the 'dopamine hypothesis.' When going online, people may be looking for 'quick fixes' to alleviate their distress. Social media and online gaming may offer quick sources of pleasure which are easily available. Dopamine gets released in the brain, and the person feels a momentary relief.

Research has shown that in addictions, dopamine is released in the brain, and it keeps the person hooked on the substance or activity, depending on the type of addiction the person is suffering from.

In the International Classification of Diseases (ICD-11), there are criteria for gaming and gambling disorders, which means that a doctor can veritably diagnose someone as having an addiction of that sort. In the future, there may also be criteria for problem behaviours on social media, but more research is needed to build the framework for the diagnosis.

## **What aspects of social media contribute to mental health problems?**

Social media has several qualities which may work to decrease one's well-being more directly. Aside from causing addictions, social media may foster feelings of loneliness, depending on how one uses the platform. In addition to that, one may feel the urge to compare themselves to other users, resulting in feelings of inferiority in respect of other people. Bullying is also common on social media platforms.

For those who are already suffering from mental health problems, research has shown that social media use may reinforce depression and anxiety, and conditions such as attention-deficit/ hyperactivity disorder (ADHD) and obsessive-compulsive disorder (OCD) positively correlate with online problem behaviours.

In terms of the physical dimension of health, research has shown that social media use may contribute to insomnia, as well as stiffness of neck and wrists. A person might spend hours lying on a couch in an uncomfortable position while scrolling through social media.

One of the other downsides of social media use, particularly from the point of view of teenagers, is the access to fake, provocative and shocking images and content. When encountering this type of content, young people may lack the resources needed for coping. In addition to that, the content which a young person is exposed to contributes to their overall understanding of the world.

The city of Oulu has published a guideline book of children's and teenagers' use of digital devices as a support for guardians. One of the important building blocks as introduced in the guidelines is the fostering of a positive and safe conversation atmosphere at home. Children and teenagers should be encouraged to talk about their feelings. Caregivers and teachers also have a huge responsibility in teaching critical reading skills to younger generations.

# In what ways can social media use promote mental health?

When evaluating the risks of social media, it is also important to consider the other side of the coin. [While for some people, social media may foster feelings of loneliness, for others it may be a great outlet for building and maintaining social connections.](#) Instead of comparing oneself to others, the likes and comments on social media may also boost one's self-esteem.

Social media may also help people to crystallise their personal goals and life aspirations. Information about potential career choices and university programs, for example, are readily available on social media, and the platform enables networking and interaction with these institutions.

People are also increasingly relying on the digital world for peer support, regarding mental health issues, for instance. Instagram has thousands of mental health accounts, run by users themselves, that provide support and resources for people who may be struggling with the same issues.

## Moving forward: more longitudinal and cross-cultural research is needed

As digitalisation is here to stay, it will require people to learn and adopt new skills. Being able to pause and reflect rather than directly internalising information at first glance might prevent people from acquiring unreliable information on social media in terms of mental health treatments, for instance.

In addition to critical reading, resilience thinking might also be one of these skills.

More longitudinal research is needed to elucidate cause and effect relationships between mental health issues and problematic online behaviors, such as addictive behaviors on social media. Longitudinal research could help develop valid scales for assessing problem behaviours on social media.

Finally, cross-cultural research is also needed, as online problem behaviours might appear differently across cultures.

Photo: Daria Nepriakhina, Unsplash

[Read more about the DigiWellbeing research group \(https://www.oulu.fi/en/research-groups/digital-well-being-and-health-promotion-digiwellbeing\)](https://www.oulu.fi/en/research-groups/digital-well-being-and-health-promotion-digiwellbeing)

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Niko Männikkö is a postdoctoral researcher at the Research Unit of Health Sciences and Technology. Männikkö's doctoral thesis was about problematic online gaming and its effects on young adults' well-being. Since then, Männikkö has extended his research focus to tackle other types of digital activities aside from online gaming.