

## Chapter 8

# Digital Mental Health Interventions: Impact and Considerations

**Christopher R Shelton**

*The Behrend College, Pennsylvania State University, Erie, USA*

**Anitgoni Kotsiou**

*The Behrend College, Pennsylvania State University, Erie, USA*

**Melanie D. Hetzel-Riggin**

 <https://orcid.org/0000-0001-7302-0676>

*The Behrend College, Pennsylvania State University, Erie, USA*

### ABSTRACT

*This chapter will provide a brief background on the need for digital mental health interventions given the high rates of mental health issues and the barriers to access quality care. Three main types of digital mental health interventions (internet-based interventions [IBIs], smartphone apps, and virtual and augmented reality [VR and AR, respectively]) will be discussed, followed by a consideration of the ethical and logistical issues surrounding digital mental health interventions. The chapter will then address issues related to content and design, user engagement, user contact, and formatting of the interventions. Finally, the chapter will end with a discussion of future directions.*

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## **INTRODUCTION**

Advancements in computers, technology, and the internet have led to rapid changes in mental health interventions. One growing field of study and practice in mental health treatment is the use of digital mental health interventions for psychological issues (Mora et al., 2008; Proudfoot et al., 2011; Wantland et al., 2004). With the increase of Internet and technology use for psychological purposes, both the research evidence and the use of telehealth has risen sharply (Ben-Zeev, 2020; Maheu & Gordon, 2000; Wantland et al., 2004).

According to data provided by the World Health Organization (WHO; Kessler et al., 2009), mental health disorders occur commonly across the world. In the United States alone, the lifetime prevalence rate of any type of mental health disorder is 47.4% (Kessler et al., 2009); similar rates are demonstrated across the globe (GBD Disease and Injury Incidence and Prevalence Collaborators, 2017). Wang et al. (2007) indicated that most people suffering from mental illness around the world do not receive treatment. While both younger and older populations tend to avoid mental health treatment, data reveal that emerging adults (i.e., 18-25 years old) have the highest rates of any mental health illness in comparison to all other adult populations; at the same time, emerging adults receive the lowest rate of mental health treatment compared to all other adult populations (Substance Abuse and Mental Health Services Administration, 2017). Overall, a vast expansion of treatment availability needs to occur (Wang et al., 2007). However, several barriers to treatment exist, such as affordability, accessibility, and availability of treatments or providers, as well as stigma associated with mental health. Addressing mental health needs using technology offers a way to reduce these barriers (Andersson & Titov, 2014; Boggs et al., 2014; Spek et al., 2007; Schueller et al., 2019; Wang et al., 2007).

As of 2018, 89% of adults use the internet and 77% of adults in the United States own a smartphone (Pew Research Center, 2017). Many digital or technological interventions and services have been created to assist with addressing mental health needs. Multiple practitioners developed these services to provide easy access to information and intervention-based programs to individuals who seek immediate attention (Cugelman et al., 2011).

Considering the COVID-19 pandemic, the desire for and use of digital mental health interventions has skyrocketed (Ben-Zeev, 2020; Torous et al., 2020). The COVID-19 pandemic has increased the need for mental health services to be provided via telehealth, as restrictions were put in place that would prohibit physical proximity between providers and consumers. Phone and videoconference are the methods most used and reported to be as acceptable, feasible, and effective as in-person delivery (Gloff et al., 2015; Osenbach et al., 2013). However, given the high rates of mental health concerns, significant barriers to care, and technological

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