Chapter 7
Digital Cure or Digital Cage?
Reassessing Wellness in the Age of Algorithmic Mental Health

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ABSTRACT

This chapter examines the dual effects of digital technology on mental health, looking at how AI-powered tools, telepsychiatry, and mobile applications influence modern experiences of psychological identity, emotional regulation, and self-care. With the utility of tools like natural language processing (NLP), cognitive behavioral therapy (CBT) feedback, and predictive risk assessment algorithms, these digital platforms provide scalable and practical interventions. However, they also carry risks, such as over-reliance, a loss of intrinsic motivation, and an inability to recognize deep human nuances. An elaborate discussion of 'surveillance' in the place of 'support' is portrayed in detail through an analysis of the most common underlying technological mechanisms of different digital intervention tools. The chapter ends with an advocation of optimizing digital care by careful planning, moral supervision, and integration with human-centered assistance to guarantee that technology enhances, rather than harms, mental health outcomes.

INTRODUCTION

Historically, healthcare technology has prioritized physical health, a trend shaped by the biomedical model, which focuses on observable and measurable factors, as well as the traditional clinical separation of the mind and body. This longstanding bias paved the way for mental health neglect, creating a gap in research and innovation for future generations (Engel, 1977). Additionally, most digital health investments, such as the development of diagnostics and therapeutic devices, have been directed towards

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identifying physical diseases, including cancer, diabetes, and cardiovascular issues, with over 70% of funding allocated to these areas (McKinsey, 2022).

In contrast, mental health has experienced less attention, despite being recognized as a global concern. This gap is particularly stark in low- and middle-income countries, such as India and the Philippines, where the ratio of psychologists to population remains critically low. Several barriers, such as stigma, underreporting, the subjective nature of diagnosis, and the challenges of applying generalized digital algorithms to nuanced mental health conditions, have caused this mental health lag.

This chapter examines how digital mental health technologies, including AI-powered tools, mobile apps, and telepsychiatry, are helping to bridge the gap in mental health care. It critically examines the psychological implications of these technologies for users' identity, behavior, and emotional well-being. The chapter begins with an overview of the evolution of digital mental health technologies and their role in addressing the obstacles of affordability, accessibility, and stigma. It will then analyze the specific technological mechanisms that can influence the human psyche, both positively and negatively. Lastly, using empirical data and key psychological theories, this chapter will examine the advantages and disadvantages of these digital solutions.

Shifting the Digital Focus Towards Mental Health

As a movement and a global crisis, mental health emerged with great attention in the early 20th century globally. Concepts such as mental hygiene, emotional intelligence, and psychological well-being, as well as the simple idea of happiness, have transformed the way people live. The World Health Organization states that one in eight people globally lives with a mental disorder (World Health Organization, 2022). Factors such as pandemics, economic pressures, and social isolation have contributed to a fast-paced lifestyle, with many struggling with depression and generalized anxiety disorder. Global mental health research identifies three significant barriers to care: unawareness about mental health concerns, stigmatization of disorders, and the scarcity of mental health professionals and treatment therapies (Henderson et al., 2013).

Digital mental health solutions stepped in to address all of these problems simultaneously. For example, in India, there is only one psychiatrist for every 100,000 people, as published in the year 2015-2016 by a nationally representative mental health survey (Murthy, 2017). Although this may no longer accurately reflect the current situation, it still highlights the scale of the accessibility gap.

Historical Trajectory of Digital Mental Health Tools

The evolution of digital mental health tools has been shaped by advances in artificial intelligence (AI) and the development of Digital infrastructure. Early, rule-based chatbot therapists, such as "ELIZA", "MoodGym", and "Beating the Blues", transitioned into real-time, responsive, and conversational depth chatbots like "Woebot" and "Wysa".

Digital mental health tool solutions emerged in parallel with the internet revolution in the 1900's and early 2000s. One of the first examples of digital mental health was ELIZA, developed by Joseph Weizenbaum at MIT in the 1960s. The conceptual idea was to replicate/simulate a Rogerian psychotherapist with a machine named a chatbot therapist. Clients or users would engage in written dialogues, emphasizing empathetic reflection. Even though this written method was not a therapeutic tool in the clinical sense, Weizenbaum created a straightforward, rule-based form of communication that paved the way