Chapter 83
Positive Psychological Interventions and Information and Communication Technologies

Rosa M. Baños
University of Valencia, Valencia, Spain

Ernestina Etchemendy
Instituto Carlos III, Valencia, Spain

Alba Carrillo-Vega
University of Valencia, Valencia, Spain

Cristina Botella
University Jaume I, Spain

ABSTRACT

Since the advent of Positive Psychology there has been a connection between positive psychological interventions (PPIs) and the digital world. The development of PPIs, especially those delivered online, is becoming widespread within and outside the scientific field. Therefore, there is currently a need for accurate information that provides a critical view of all the interventions currently available. This chapter presents an updated review of the relationship between these two fields (PPIs and technologies), and discusses relevant considerations that should be taken into account when technologies are used to deliver PPIs, as well as the elements that can moderate their effectiveness. The final aim of the chapter is to provide readers with basic tools to make critical judgments about PPIs delivered via a technological format.

DOI: 10.4018/978-1-7998-3432-8.ch083

INTRODUCTION

Positive Psychological Interventions (PPIs) can be defined as interventions or intentional activities designed to cultivate positive feelings, cognitions and behaviours (Sin & Lyubomirsky, 2009). Since the establishment of the basic principles and objectives of Positive Psychology, increasing and relevant knowledge, both empirical and theoretical, has been produced in this field, demonstrating the efficacy of these interventions for improving well-being and reducing clinical symptomatology (specially depressive). Some examples of this idea come from the two meta-analyses carried out by Sin and Lyubomirsky (2009) and Bolier, Haverman, Westerhof, Riper, Smit and Bohlmeijer (2013). In the latter, the authors concluded that most of the analysed PPIs had a self-applied format, sometimes with face-to-face support, but most were delivered online (Bolier et al., 2013).

The connection between PPIs and Information and Communication Technologies (ICTs), especially with the development of the World Wide Web (WWW), has been present since their inception. Positive Psychology emerged at the same time as the expansion of the digital era; from the beginning it has taken advantage of many of the possibilities offered by ICTs, especially the Internet. In fact, one of the first studies to assess the efficacy of different PPIs was carried out over the Internet by recruiting a sample of people who had visited the webpage https://www.authentichappiness.sas.upenn.edu/ (Seligman, Steen, Park & Peterson, 2005).

Most of PPIs are brief and simple exercises or activities that can be implemented as part of one's daily routine, and where both commitment and daily practice become essential elements of their efficacy (Sheldon & Lyubomirsky, 2006). ICTs (especially mobile devices with Internet access) are being introduced exponentially in our daily lives. They can be very useful tools for designing, introducing and managing the intervention naturally as part of a routine, taking advantage of the growing number of innovative resources they offer, which can make the intervention more attractive and flexible. Moreover, the Internet provides accessibility that allows that these interventions reach a population that otherwise would not have access to them (Andersson, 2009; Andrews, Cuijpers, Craske, McEvoy & Titov, 2010; Bolier, et al., 2014). The current technological advances not only offer a new way to provide treatment, they also open up new possibilities for assessment and intervention. For example, sensorisation systems, currently available through mobile technologies, allow to monitor an intervention, patient's parameters, and environmental indicators, with a degree of ecological validity not previously achieved in the field of Psychology (where the main sources of information were self-reports and retrospective information). There are also examples of the potential benefits of other ICTs. Virtual Reality and Augmented Reality offer high-quality simulations of environments at an increasingly affordable cost, making them powerful tools for therapeutic change. Video games are also presented as innovative learning methods aimed at improving adherence and motivational components, both important variables for increasing treatment efficiency and efficacy. It is not surprising that the potential of ICTs has promoted most developed countries to consider them as the basis for health-care solutions.

This work aims to further examine and describe the associations between PPIs and ICTs. First, the current definitions of the relationships between the two fields will be clarified, and a summary of the PPIs using ICTs for which scientific evidence exists, including several technological applications developed by our group, will be described. Then, relevant considerations to be taken into account when technologies are used to deliver PPIs, as well as the elements that can moderate their effectiveness and their relationship with technologies will be considered. Finally, information from existing scientific literature regarding who consumes technology-based PPIs will be provided.