

## Randomized study of different anti-stigma media

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### Abstract

**Objective:** We designed our study to assess if computer-assisted anti-stigma interventions can be effective in reducing the level of psychiatric stigma in a sample of special education university students.

**Methods:** We enrolled 193 graduate students. They had two study visits with an interval of 6 months. The participants were randomly distributed into three study groups: 76 students read anti-stigma printed materials (reading group, RG), and 69 studied an anti-stigma computer program (program group, PG), and 48 students were in a control group (CG) and received no intervention. We used the Bogardus scale of social distance (BSSD), the community attitudes toward the mentally ill (CAMI) questionnaire, and the psychiatric knowledge survey (PKS) as the main outcome measures.

**Results:** After the intervention BSSD, CAMI and PKS scores significantly improved both in RG and PG. After 6 months in RG two out of three CAMI subscales and PKS scores were not different from the baseline. In PG all stigma and knowledge changes remained significant.

**Conclusions:** This study demonstrated that computers can be an effective mean in changing attitudes of students toward psychiatric patients.

**Practice implications:** A computer-mediated intervention has the potential for educating graduate students about mental disease and for reducing psychiatric stigma.

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**Keywords:** Computer-assisted education; Psychiatric stigma; Special education

### 1. Introduction

Stigma is a negative label that people frequently attach to groups or persons who differ from social norms in some respect, such as race, appearance, physical, or mental health. Stigma is often connected with discrimination, i.e., treating the stigmatized group differently than other people, denying them personal and civil rights [1]. The stigma of psychiatric diseases is a barrier to the rehabilitation of mentally ill patients and their effective functioning in society. Many professionals who work with psychiatric patients themselves have negative beliefs and attitudes about their clients [2–4].

Some approaches that can be effective in reducing psychiatric stigma include media campaigns [5], workshops for professionals interacting with people suffering from psychiatric disorders [6], lectures [7] and computer-assisted

education [8,9]. Numerous accounts of conventional anti-stigma education have been published [10,11]. Single-session education, for example, that included patient contact, lecture, discussion, and a film improved the attitudes of a sample of Turkish general practitioners and medical students toward people with schizophrenia [12,13]. Attitudes of Japanese [14] and Hong Kong [15] medical students toward mental disorders changed favorably after a 1-h seminar. Direct personal contact may be one of the most efficient approaches to diminish psychiatric stigma [16]. Although there is a lot of research data available on anti-stigma interventions, there is an evident lack of randomized trials assessing different anti-stigma education media and the stability and duration of their effects.

Special education students are being trained to work with children suffering from speech, hearing, and vision disabilities, intellectual disability and other mental health problems. These children and their family members are frequently stigmatized [17,18]. Ironically, teachers themselves are the source of the stigmatization. It significantly undermines their efforts to educate and socialize disadvantaged pupils [19]. We designed our study to answer the following questions: (1) can computer-

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