

### **Abstract**

Mental health stigma has been a concerning issue globally due to its adverse effects on recovery of people with mental illness. With technological advancement, Internet-based mental health stigma reduction interventions have been developed to combat mental health stigma. Recently, Internet-based stigma reduction interventions have shown promise in reducing public mental health stigma. The present study aimed to examine the efficacy and mediators of different Internet-based stigma reduction interventions by comparing Internet-based interventions with the combination of interactivity and stigma content, with stigma content-only, and with interactivity-only.

This study was a 4-arm randomized control trial involving four Internet-based interventions: an interactive stigma content website named AMAZING ADVENTURE AGAINST STIGMA (“Condition A”), a non-interactive stigma content website (“Condition B”), an interactive non-stigma content website (“Condition C”) and a non-interactive non-stigma content website (“Condition D”). Participants were recruited via mass emails to all students and staff of authors’ university and social networking site. Eligible participants were randomized into four conditions: A (n=67), B (n=65), C (n=64) or D (n=67). Participants viewed the respective web page afterward. Mental health stigma measures were self-reported online at pre-assessment, post-assessment, and 1-week follow-up. Perceived autonomy and immersiveness were assessed at post-assessment.

Among the 263 participants, 263 and 262 completed the post- and 1-week follow-up assessment, respectively. Both conditions A (n=67) and B (n=65) were efficacious in reducing public stigma and microaggression towards people with mental illness, and social distance from people with mental illness at post- and 1-week follow-up. Condition C can significantly reduce public stigma at post- but not 1-week follow-up. Condition C showed no significant results in other outcomes and condition D was not significant in reducing all mental health stigma