# Web-based, self-help intervention for Adjustment Disorders: acceptance and usability.

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**Abstract.** Despite having proved their efficacy, Internet-based interventions (IBI) have not yet been implemented in health care settings. The acceptability of these interventions may be one key barrier. The present work aims to assess the acceptability and usability of a Web-based self-help intervention (TAO) for Adjustment disorders (AD) among 7 patients with AD and 15 clinicians. The intervention was well accepted and described as user-friendly by both samples. Furthermore, results of this work suggest that certain aspects should be considered during the development of IBI in order to promote adherence and achieve the desired changes. To our knowledge, this is the first work to explore specific features of an IBI that might impact users' satisfaction and adherence.

**Keywords.** internet-based self-help interventions, acceptance, usability, adherence, adjustment disorders

# 1. Introduction

Research has proven that Internet-based interventions (IBI) are not only an effective way to disseminate psychological interventions [1], but they also provide advantages over traditional face-to-face therapy [2]. However, the low acceptability of IBI may be one of the reasons for the lack of implementation of these interventions in clinical settings [3]. The present work assesses the acceptability and usability of a Web-based self-help intervention (TAO) for Adjustment disorders (AD) among patients and clinicians. AD is one of the most prevalent psychological disorders [4], which causes great suffering, including suicidal thoughts and behaviors [5]. It is essential to develop evidence-based, well-accepted interventions, able to reach everyone who needs them.

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#### 2. Methods

# 2.1. Participants

Seven patients with AD [6] and fifteen clinicians (12 clinical psychologists and 3 master students) voluntarily agreed to participate in the study and signed the informed consent form. The mean age of the patients (4 men and 3 women) was 30.57 years (SD=11.18). The mean age of the clinicians was 31.27 (SD=4.43). None of them were familiarized with TAO. However, five of the participants had wide experience in the development and use of internet-based interventions.

#### 2.2. Measure

A survey to examine users' opinion on TAO was specifically designed for this pilot study. The survey was structured in three parts, each of them focusing on different aspects of the online-based intervention. In the first part, 10-point Lickert scales were used to assess different characteristics and audiovisual resources included in TAO. Open answer questions were used in order to collect qualitative data. The second part included *System Usability Scale* [7] to explore the user-friendliness of TAO. Finally, the third part explored the users' attitude and opinion towards an internet-based, self-help intervention like TAO.

#### 2.3. TAO: Adjustment Disorders Online

TAO is a self-applied online treatment program for AD structured in 7 modules which includes different multimedia resources: texts, videos, illustrations, and interactive exercises. It is a computerized version of a CBT protocol including the following therapeutic components: psychoeducation, techniques to manage negative emotions, exposure, problem solving techniques, acceptance and elaboration of the stressful event, positive psychology strategies, and relapse prevention. The system presents a simple interface which facilitates its use even to people who are not skilled in computers.

# 2.4. Procedure

Participants had approximately an hour to freely explore module 3 of the TAO program. Afterwards, they completed the survey described above.

# 3. Results

Opinions on TAO module and the overall internet-based intervention for AD are shown in Tables 1 and 2, respectively. The intervention was well-received by both samples.

Clinicians **Patients** Usefulness of the To help patients with AD 7.43 (1.40) 9.20 (1.01) To treat other psychological disorders 7.71 (1.25) 8.47 (1.69) program content Characteristics of the Logical 8.57 (0.79) 9.47 (0.52) program content Boring and/or difficult 2.86 (2.55) 2.33 (2.50) 7.53 (1.51) 7.86 (1.07) Pleasant and/or interesting Clear and/or understandable 8.14 (1.57) 8.93 (0.80) Need for professional assistance 2.00 (1.30) 3.93 (3.08) Overall program Module 3 of TAO program 8.00 (0.82) 8.67 (0.72) rating Multimedia contents 8.29 (1.38) 8.13 (0.99) Usefulness of the Texts 8.14 (1.46) 8.33 (1.11) 8.33 (1.40) included audiovisual 8.14 (1.07) Images resources Illustrations 7.71 (1.25) 8.47 (1.30) 5.57 (1.40) 8.93 (1.03) Videos

Table 1. Means and standard deviations of participants' opinion on TAO module.

Table 2. Means and standard deviations of participants' opinion on TAO.

	Patients	Clinicians	
Helpful	7.86 (1.86)	8.53 (0.99)	
Useful	8.00 (2.00)	8.13 (2.10)	
Would use	7.71 (1.98)	8.13 (1.51)	
Would recommend	<u>-</u>	8.80 (1.32)	

The usability of the system was scored with 88.93/100 (SD=5.37) by patients and 91.67/100 (SD=6.03) by clinicians. Finally, all participants highlighted the inclusion of videos, clear and well-structured contents, simple terminology, and availability of examples as strengths of the intervention. Interactivity and the amount of written information were identified as aspects that could be improved.

### 4. Discussion

TAO was well accepted and described as user-friendly by both patients and clinicians. Different features of TAO were detected as adherence enhancers. Inclusion of relevant therapeutic contents does not seem to be enough to achieve the desired clinical changes. Therefore, certain aspects should be considered during the development of IBI.

To our knowledge, this is the first work to explore specific features of an IBI that might impact on the users' satisfaction and adherence. Further study is needed in this field in order to be able to fully leverage the potential of IBI as a therapeutic tool.

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