

PDA Self-Register System for Eating Disorders: A Study on Acceptability and Satisfaction

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Abstract: Self-monitoring techniques, such as the use of dietary registers, are considered to be central to cognitive-behavioral treatment of Eating Disorders (ED). This information allows the clinician to identify the triggers of the behaviors associated to ED as purges and/or binges, and the associated thoughts and emotions, helping to carry out a more accurate assessment. Traditionally these registers are made with paper and pencil mode, where the patient has to register every eating and the emotions/thoughts associated; but this system has some problems, as low portability, low adherence or methodological difficulties. The use of PDA for self-registers can help to solve these problems. The aim of this study is to study the levels of acceptability and satisfaction with PDAs self-register system specifically designed for assessment and treatment of ED. Samples of 30 subjects diagnosed with ED are receiving a PDA with software specifically designed for recording type and amount of food, emotions before and after eating and other behaviors. The participants are completing self-register daily during a week, and afterwards answer an acceptance and satisfaction questionnaire. This work is in progress at the moment. It is expected that the PDA system will show high levels of acceptance and satisfaction.

Keywords: Eating Disorders, Personal Digital Assistant, Self-registers.

Introduction

The self-register technique is an important tool for the diagnosis, functional analysis and evaluation of treatment in Eating Disorders (ED). The self-register is an assessment semi-structured technique that measures behavior in natural settings (home, work, school, etc). Also, it is useful to know the monitoring of therapeutic guidelines and assess the effects of treatment and patient outcomes. Traditionally the patient receives a paper where the patient must record every eating, and also the thoughts and emotions before and after the eating. This information allows the clinician to identify the triggers of purges and/or binges, and the associated thoughts and emotions, helping to carry out a more accurate assessment. But the traditional self-register system has several problems, as situational constraints, missing reports because of lapses of motivation and memory [1], difficulties to identify if the information has been recorded in real time [2] and poor rates of adherence to the treatment [3]. It is necessary to design more efficient methods to simplify the process of self-monitoring and to improve the consistency and completeness of self-reports [4]. Information and Communication Technologies (ICT) can help achieve this goal. In recent years, new mobile technologies, such as personal digital assistants (PDAs) and mobile phones have become more readily available, thus generating new interest in developing systems adapted for these tools. The aim of this study is to explore the levels of acceptability and satisfaction with PDAs self-register system specifically designed for assessment and treatment of ED.

1. Method

The sample is composed of 30 patients diagnosed with Anorexia Nervosa (purging type), Bulimia Nervosa or Binge Eating disorder (according to DSM-IV-TR). Exclusion criteria are major depression, schizophrenia or other psychotic disorders and severe physical illness. The participants have entered into the study voluntarily and have signed informed consent (if the participant is underage, consent has been

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signed by parents or guardians). The sample is receiving a PDA with software specifically designed for recording type and amount of food, emotions before and after eating [Fig.1], thoughts before and after intake, the intensity of hungry and in general, the environmental circumstances that are surrounding their eating behavior [Fig. 2], frequency of binge eating, vomiting and laxative use. The participants are completing self-register daily, after each intake during a week. The degree of acceptance and satisfaction is being evaluated with scales specifically designed at the end of the recording time.

2. Results

This study is currently a work in progress. It is expected that the PDA system will show high levels of acceptance and satisfaction.

3. Conclusion

The use of electronic PDA diaries offers important advantages and may enhance weight loss treatments and assessment of ED. It is expected that in this study the PDA system will show good levels of Acceptance and Satisfaction in the participants. The software designed and the technology used will help participants find it easy to use and user-friendly. It is expected that due to the portability and novelty of the system, the adherence will improve rather than allowing users motivation to deteriorate over time. These improvements will interact allowing the system to show good acceptance in ED patients. All these advantages of PDA recording systems are also anticipated to increase therapeutic efficiency in ED treatment. Electronic diaries using PDAs are likely to become routine tools in clinical psychology, as mobile technologies become ubiquitous, more robust and less expensive, new software programs to meet the needs of the clinicians will be developed [1].

Figure 1.



Figure 2.



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