



## Dropping out of a transdiagnostic online intervention: A qualitative analysis of client's experiences



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### ABSTRACT

**Introduction:** An important concern in Internet-based treatments (IBTs) for emotional disorders is the high dropout rate from these protocols. Although dropout rates are usually reported in research studies, very few studies qualitatively explore the experiences of patients who drop out of IBTs. Examining the experiences of these clients may help to find ways to tackle this problem.

**Method:** A Consensual Qualitative Research study was applied in 10 intentionally-selected patients who dropped out of a transdiagnostic IBT.

**Results:** 22 categories were identified within 6 domains. Among the clients an undeniable pattern arose regarding the insufficient support due to the absence of a therapist and the lack of specificity of the contents to their own problems.

**Conclusions:** The analyzed content has direct impact on the clinical application of IBTs. A more tailored manage of expectations as well as strategies to enhance the therapeutic relationship in certain clients are identified as the two key elements in order to improve the dropout in IBTs. Going further, in the mid and long run, ideographic interventions would be vital. The present study permits to better grasp the phenomenon of dropout in IBTs and delineate specific implications both in terms of research, training and practice.

### 1. Introduction

Internet-based treatments (IBTs) have emerged as an innovative treatment approach designed to reduce the large number of untreated people suffering from different mental disorders (Andersson, 2016). Geographical, cultural, and social barriers can be overcome due to IBTs' ability to be implemented in multiple contexts, both community and clinical. A successful dissemination of IBTs would produce a more cost-effective relationship (Nordgren et al., 2014), leading to a significant reduction in the mental health care budget (McCrone et al., 2004). Apart from wide dissemination, IBTs can have a wide range of other advantages. In relation to client recruitment, online interventions can bring alternatives to people who avoid consulting a therapist for a number of reasons, such as stigmatization or other practical concerns. Thus, flexibility in establishing the framework for the therapy (in terms of space and time) is an evident facilitator of these kinds of treatments. In addition, it may be easier to assess clients in IBTs than in face-to-face therapy because better data monitoring can be carried out, as well as

lower rates of missing data (Andersson and Titov, 2014).

In the past 15 years, a growing body of evidence has shown the efficacy of these types of treatments (Botella et al., 2000; Marks et al., 2004). IBTs have been found to be efficacious and effective for a wide range of disorders (for a review, see Andersson, 2016). Although more research is needed, in many cases these treatments are found to be equally as effective as face-to-face approaches (Andersson et al., 2014). Particularly in the field of emotional disorders (ED) (depression and anxiety disorders), which are the most prevalent mental disorders (Wittchen et al., 2011), different IBTs have been developed, with considerable evidence supporting their efficacy (Karyotaki et al., 2017; Olthuis et al., 2016).

#### 1.1. Focusing on the dark side of the moon

Although IBTs' progress and promising future are undeniable, many aspects remain to be studied to conclusively show their effectiveness. Among them, negative effects are a vital factor. Negative effects have

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**Table 1**  
Demographic and clinic characteristics of the 10 participants.

P	Gender	Age	Marital status	Education	PD	CD	BDI-II <sup>a</sup>	OASIS <sup>b</sup>	QLI <sup>c</sup>	MOD
#1	Female	23	Single	1	OCD	2 (DD, AD)	8	8	8.4	4
#2	Male	27	Single	3	AD	1 (PD)	8	8	7.6	4
#3	Female	45	Married	2	SAD	2 (MDD, GAD)	37	12	3.5	5
#4	Female	60	Divorced	2	MDD	1 (GAD)	25	1	2.7	9
#5	Female	28	Single	3	MDD	2 (SAD, GAD)	38	11	3	3
#6	Male	23	Single	2	MDD	1 (PD)	33	9	4.5	3
#7	Female	24	Single	4	AD	1 (MDD)	25	13	4.9	5
#8	Female	40	Single	2	SAD	1 (MDD)	42	20	2.6	3
#9	Female	35	Divorced	3	GAD	1 (MDD)	52	12	2.8	8
#10	Female	61	Married	3	GAD	1 (PD)	40	14	5.5	4

Note: P: Participant; Education: 1 (Basic), 2 (Secondary studies), 3 (University studies); PD: Principal diagnosis; OCD: Obsessive-compulsive disorder; AG: Agoraphobia; SAD: Social anxiety disorder; MDD: Major depressive disorder; GAD: Generalized anxiety disorder; DD: Dysthymic disorder; PD: Panic disorder; CD: Comorbid diagnoses; QLI: Quality of Life Inventory; MOD: Number of completed modules.

<sup>a</sup> Beck Depression Inventory (BDI), (Beck et al., 1996).

<sup>b</sup> Overall Anxiety Severity and Impairment Scale (OASIS), (Norman et al., 2006).

<sup>c</sup> EuroQoL-5D questionnaire (EQ-5D), (Badía, 1999).

been studied within clinical psychology (Bergin, 1963), but only recently has emphasis been placed on determining how to prevent and correct failure in psychotherapy (Barlow, 2010; Lambert, 2010; Lilienfeld, 2007). Nevertheless, little research has been carried out on the negative effects of Internet interventions (Rozenal et al., 2015). A recent meta-analysis showed that among the total number of analyzed clients who received Internet Cognitive Behavior Therapy (ICBT), 5.8% experienced deterioration (Rozenal et al., 2017).

Likewise, an important concern about IBTs is related to the high rates of non-adherence to these protocols (Christensen et al., 2009; van Ballegooijen et al., 2014). Dropout rates have consistently been found to be higher in non-guided IBTs than in guided ones (e.g. Andrews et al., 2010; Richards & Richardson, 2012). However, previous meta-analyses yielded average dropout rates of around 20% in guided IBTs for emotional disorders (e.g., Andrews et al., 2010; van Ballegooijen et al., 2014), suggesting that there is still considerable room for improvement in this regard. Consequently, adherence in general and treatment dropout in particular should be studied in order to establish the main stumbling blocks in implementing IBTs, and identify potential profiles of patients who might benefit from these treatments, compared to other profiles that could respond adversely to them.

Undoubtedly, client characteristics are of vital importance in conducting an in-depth study of potential barriers to the success of a certain psychotherapeutic approach (Bohart and Wade, 2013). Conclusive evidence supports that the less adherent a client is, the worse the treatment outcomes are (Vermeire et al., 2001; Taylor et al., 2012), what has been specifically studied in IBTs (Donkin et al., 2011). In this regard, dropping out has consistently been identified as a predictor of failure in all the possible dimensions of psychotherapy outcomes. For instance, in terms of symptomatology, dropout is associated with less remission and greater worsening of symptoms (McIvor et al., 2004; Reis and Brown, 1999).

Characteristics associated with patients are numerous, such as readiness to change or client expectations. Expectations are not only an important issue in terms of their direct relationship with outcomes (Constantino et al., 2011), but also due to their link with early termination or dropout, although more evidence is needed about this finding. However, studies have shown that clients who do not believe in the treatment's rationale are more prone to dropping out (Westmacott et al., 2010), and that educating patients about the expected length of the treatment may decrease the dropout rate (Swift and Callaghan, 2011).

### 1.2. Clients' experiences of dropout in IBT

Although many qualitative studies do examine client experiences

from a qualitative perspective (e.g. Knowles et al., 2014), only few have posed the question on the experience of dropping out an IBT (e.g. Johansson et al., 2015). To date, the most common approach used in the research on IBT dropout has been based on quantitative methodologies, particularly regarding the study of predictors (e.g., Alfonsson et al., 2016; Högdahl et al., 2016; Karyotaki et al., 2015; Melville et al., 2010).

Examining clients' experiences from a qualitative perspective may provide more in-depth and clearer answers about the complexity of treatment dropout. Among the wide range of qualitative methodologies, Consensual Qualitative Research (CQR) (Hill et al., 2005) has been shown to be useful for several reasons. First, as in Grounded Theory, there is a data analysis protocol that provides a clear and precise way of analyzing the raw data (McLeod, 2013). Additionally, CQR has been developed by psychotherapy researchers, which makes this approach a particularly suitable tool for any study within the field. Finally, CQR is based on consensus as its defining characteristic, which makes it a very attractive methodology for working in teams with different levels of experience, from PhDs to graduate students. CQR, unlike phenomenological approaches that focus only on descriptive analysis, includes interpretation as a way of unraveling the core meaning of clients' or therapists' experiences (McLeod, 2013).

Thus, the aim of this study is to conduct a qualitative analysis of the subjective experience of a sample of patients who dropped out of a transdiagnostic IBT for emotional disorders.

## 2. Methods

### 2.1. Sample

Ten patients (8 women, 2 men) who dropped out of a transdiagnostic IBT participated in the study. The participants ranged in age from 21 to 59 years old (Mean = 35.4, Standard Deviation = 13.4). Demographic and clinical characteristics are depicted in Table 1. The sample was selected by convenience and was obtained from two randomized controlled trials (RCT) that are currently being conducted.

### 2.2. Treatment

Transversal is a transdiagnostic IBT developed by Labpsitec. The protocol consists of 12 modules, and participants are encouraged to complete one module per week. Two RCTs are being conducted using the protocol. The purpose of one of the RCTs is to analyze the effectiveness of a transdiagnostic IBT compared to treatment as usual as provided in the Spanish public mental health care system (González-Robles et al., 2015). The other RCT seeks to study the differential

efficacy of a transdiagnostic IBT that includes a treatment component to enhance positive affectivity in a community sample. In this protocol, the contents are organized in 16 modules (Díaz-García et al., 2017). These two studies have three important characteristics in common: 1) Both treatments target ED, namely, major depressive disorder, dysthymic disorder, social anxiety disorder, generalized anxiety disorder, panic disorder, agoraphobia, obsessive-compulsive disorder, and not otherwise specified mood and anxiety disorders; 2) Both treatments are based on the transdiagnostic approach to the treatment of ED (Barlow et al., 2004) for which several studies have shown its the efficacy and effectiveness in improving symptomatology, functionality, quality of life, and emotion regulation skills of patients with emotional disorders in both naturalistic and randomized controlled trials (RCTs) (Dear et al., 2011; Farchione et al., 2012; Johnston et al., 2011; Titov et al., 2013); and 3) Both treatment protocols are web-based, self-administered treatments with minimum contact/support from a therapist that consists in a weekly phone call lasting 5 to 10 min to each participant. These calls aim to resolve technical difficulties or doubts about the use of the protocol and to encourage the participants to continue doing it. Besides, a non-human support is delivered through two weekly mobile phone text messages that are automatically sent and aim to remind the participants of the importance of reviewing the modules as well as doing the homework tasks.

### 2.3. Procedures

Overall, participation was offered to 18 individuals who dropped out of these two RCTs. Out of the total 18, 10 agreed to participate in the study. The 8 participants that were offered to participate and declined, adduced the following reasons: 5 did not have time, 2 were not interested in the study and 1 participant firstly accepted but then was not reachable so after 3 attempts it was decided to find a new participant. The contact was made by phone calls. Eligibility criteria included: a) providing written, informed consent, and b) having dropped out of the treatment after completing a minimum of 3 modules. This criterion was established to ensure that every participant had at least minimally experienced the different aspects of the online intervention, in terms of clinical content, technical features, therapist support, personal aspects, and so on. The study was approved by the ethics committee of Universitat Jaume I.

Five interviews were conducted face-to-face in the laboratory, and the other five were conducted via videoconference. Each interview lasted between 40 min and 1 h. All interviews were audio-recorded for transcription and subsequent codification. The interviews were transcribed verbatim (except for minimal silences or stutters) for all participants. At the end of the interview, all the participants received a monetary compensation of 15 € for their participation.

### 2.4. Characteristics of interviewers, judges, and auditor

Three graduate students (two males and one female) interviewed participants and served as judges on the primary team. A full professor in psychology served as auditor. All of them are authors of the study. Two of the graduate students had completed a course in qualitative research where CQR was addressed. The senior researcher is a leading researcher in the field of Internet interventions. Thus, the primary team had strong support in discussing the contents, in terms of their involvement in the field of Internet interventions.

Two of the interviewers (ADG & AGR) had previous knowledge of the participants as the sample was recruited from the respective trials that each of them is in charge of. So as to ensure an unbiased procedure in the interviewing process, ADG only interviewed participants that took part of AGR trial and the other way around. JFA interviewed indistinctly, as he did not have previous contact with the participants. Besides, it must be mentioned that the study was conducted as the master thesis of the first author (JFA).

### 2.5. Interview protocol

A semi-structured interview with open-ended questions was designed, following the principles specified in the CQR guidelines (Hill et al., 2005). As in many other qualitative interviewing processes, the main purpose of the CQR is to gather information that is as diverse as possible within certain thematic areas. The CQR is considered a relevant first step that may highly coincide with the subsequent domains (Hill et al., 2005).

As in other semi-structured interviews, the main aim is to delve into the client's subjectivity while not moving outside certain boundaries (related to the questions) that may help, afterwards, to compare the data obtained from all the participants (Knox and Burkard, 2009).

For this study, the interview construction process included initial discussion among the primary team. The second step was the elaboration of the questions by the three graduate students, and separately by the full professor. Finally, agreement was reached by comparing the two lists of questions, trying to balance the greatest number of topics with the least number of questions.

### 2.6. Data analysis

As described above, CQR was applied to analyze the narrative content. The CQR's structure includes two essential aspects. The first is to set up a team with at least three members, the auditor and two judges. These roles can be interchangeable, as in the present study. The second main aspect is to follow specific steps to establish the domains, the core ideas, and the cross categories.

To report the study, the Consolidated criteria for reporting qualitative research (COREQ), proposed by Tong et al. (2007), were followed (see Supplementary Table 1).

The procedure consisted of audiotaping, transcribing, and coding the interviews.

The categories were labeled *general* if they applied to all ten cases, *typical* if they applied to at least half but not all of the participants (5 to 9), and *variant* if they applied to less than half (1 to 4).

## 3. Results

Domains, categories, and illustrative core ideas make up the three aspects of the CQR. In all, 22 categories were found, 3 of which were general, 5 typical, and 14 variant. Table 2 shows the results of the qualitative analysis.

### 3.1. Past experiences with psychotherapy

Past experiences with psychotherapy include any form of psychological assistance received by the participants, regardless of the context, the duration, or the format. Previous treatments of close relatives or friends were also taken into consideration because these types of indirect experiences may also have some kind of influence on the patient's representations (such as motivation, expectations, or attitudes toward therapy). The diverse experiences expressed by the patients were classified in three categories: positive, negative, and ambivalent.

Positive (Variant): This category refers to the fact that the clients experienced past psychotherapies as something that helped them. For example, one participant (#8) claimed:

Interviewer: Regarding your experience, how was it?

Participant: Completely positive. Positive. He was a cognitive behavioral therapist. That was his framework. For now, I had to quit because currently I am not working, and I couldn't afford the treatment. I had gone to around 15 sessions, one per week. The therapist was an essential part of that treatment.

Interviewer: Sure. He helped you.

**Table 2**  
Domains, categories and illustrative ideas of the 10 participants.

Domains	Categories/(frequency)	Illustrative core idea
Past experiences with psychotherapy	Positive experiences <i>Typical</i> (5) Negative experiences <i>Variante</i> (3)  Ambivalent experiences <i>Variante</i> (2)	All previous therapies had helped the P P expresses that he just talked about how in the past week had not had any guidelines to follow P claims that maybe the therapy she received in the past was appropriate, but she didn't like the kind of interaction she had with the therapist The program did not provide the P with specific information about her problems
Reasons given for dropout	Insufficiently addressing the client's concerns <i>Variante</i> (4) Logistic reasons <i>Variante</i> (2) Low levels of supportiveness <i>Variante</i> (2) Ineffectiveness of the treatment <i>Variante</i> (2)	P moved to another country where he did not have Internet connection P needed more contact with a therapist P expressed that the treatment was not working on him/her
Expectations before receiving an online treatment	Negative <i>Variante</i> (4) Positive <i>Variante</i> (3) Ambivalent <i>Variante</i> (3)	P was not confident that a machine could help her P says that he started the treatment thinking that the online therapy would help P said that he did not have any particular expectations about the online treatment
Facilitators of online therapy	Specific elements of the online treatment <i>Typical</i> (8) Flexibility <i>Typical</i> (7) Dissemination <i>Variante</i> (3)	P said that the contents were very well organized  P states that it is not necessary to follow any specific schedule P states that it can be useful to reach more people in a more economical way
Barriers to online therapy	Lack of individualization <i>General</i> (9) Feedback from the therapist <i>General</i> (9)  Technical aspects <i>Variante</i> (4) Lack of supportiveness <i>Typical</i> (7) Feedback from the online treatment <i>Variante</i> (3)	P highlights that the therapist did not tell her whether she was progressing well or not P complains that videos load slowly P feels that the online treatment is cold and impersonal P states that the program did not give her feedback about what she was doing well
Strategies to improve online therapy	Individualization of treatment <i>General</i> (9) Technical aspects <i>Variante</i> (2) Flexibility in the delivery approach <i>Typical</i> (7) Specific elements of the online treatment <i>Variante</i> (5)	P states that the treatment should include more examples related to her problem P expresses that the font used for the text was too small and basic P states that the program should be more interactive  P expresses that it would be useful to combine the online treatment with face-to-face sessions when necessary

Participant: A lot.

Negative (Variant): This category includes either psychotherapy experiences that did not work on the client (i.e. the fact that the patient experienced past psychotherapies as something that did not help him/her) or explicit “negative aspects” (i.e. negative experiences stemming from either the characteristics of the therapy or the therapeutic relationship). Whereas a negative overall result of the therapy involves an objective or subjective feeling of deterioration, negative aspects could be part of a whole process whose final result may or not be adverse.

Participant (#3): “Actually, I didn't stay long in that therapy because I didn't feel good. I didn't feel comfortable enough with the therapist to open up.”

Ambivalent (Variant): Although this seems to be a straightforward issue, this is not the case because some answers are full of nuances. A client (#10) gives an illustrative example of how ambivalent an answer can be:

“Client: I have been once, actually twice, to a psychologist. The first time was many years ago (15 or 18 years ago) due to problems related to my job. The second time was when I was referred to this study. Before coming here, I had been to a psychologist who talked to me about the study. I didn't stay long in the therapy because I didn't have enough trust in the psychologist to open up to him. There are people you talk to and you notice that you can rapidly trust them. But I didn't feel comfortable with him. He didn't even talk much. I used to arrive at his office, and I started giving my speech. He just said: “all right, see you next week”. If therapy is for that, I have friends, you know? Maybe it was the appropriate therapy, but I didn't like to have that kind of interaction.

Interviewer: So, if you had to say whether your general experience with the therapy was positive or negative, what would you say?

Client: Positive.

Interviewer: You can be absolutely honest.

Client: Yes, it was positive. I would tell you otherwise.”

### 3.2. Reasons for dropout

All the patients talked about the reasons that led them to drop out of the online treatment. It must be mentioned that the principal aim of the study was not only to examine the reasons clients dropped out, but also to look into the feelings and experiences they had during the treatment. Three categories emerged from the interviews:

Logistic reasons (Variant): This category encompasses space and time limitations, as well as Internet connection problems. One participant (#2) expressed it in these words:

“I couldn't finish the treatment because I moved to England for work reasons. In my room, I didn't have Internet connection”.

Insufficiently addressing the client's concerns (Variant): Referring to the fact that the online treatment was not able to provide answers to the participant's case-specific reasons for seeking help. As an example, participant #4 concluded:

“I needed a therapy that could better address what I felt. It didn't give me a specific answer to my worries”.

Low levels of supportiveness (Variant): i.e. referring to the reduced ability of online therapy, compared to face-to-face therapy, to make the patients feel protected, understood, and listened to. A client (#1) expressed it in the following way:

“From my point of view, the contact with the therapist was an essential aspect of therapy. Therefore, I lost all my interest in the therapy and didn't want to continue”.

Ineffectiveness of the treatment (Variant): This category includes those participants who stated that the treatment was not working on them. Some put this into words in the following way (participant #8):

“I was feeling that the therapy wasn't going to help me with my problems. I thought it could lead me to be even more anxious and that it wasn't going to be beneficial for me. So, I felt that I was going to waste my time if I continued”.

### 3.3. Expectations before receiving the online treatment

Three main categories were found within this domain: Positive expectations, Negative expectations, and Ambivalent or Neutral expectations.

Positive (Variant): This category captures all the patients who started with high expectations.

Negative (Variant): By contrast, this category captures all the answers referring to low expectations.

Neutral/Ambivalent (Variant): Neutral refers to expectations that cannot be identified as either positive or negative, whereas ambivalent is a mixture of both positive and negative feelings. An illustrative example of this ambivalence is shown in the following extract (participant #5):

“I called and I was told that face to face therapy... Is it called that? That face to face therapy was full and a new method was being launched and being offered... this online therapy... Well, to be honest at the beginning I was... I was reluctant because I was aiming to talk with someone (a therapist) and explain to them what I was feeling and what I was experiencing. But I thought to myself... it may be OK, I will try, it might be OK... That's why I accepted, and I started the treatment”.

Within these categories, some trajectories could be identified comparing the beginning of the treatment and the course of the treatment. The trajectory is relevant because it can reflect changes during the treatment, which is probably the most decisive aspect when considering expectations in different contexts, but also in psychotherapy. Three trajectories were identified: a) Some clients tend to worsen their initial positive expectations; b) Others start and finish with low expectation levels; and c) Others start and finish with positive expectations. As an illustrative example of the first trajectory identified, a client (#1) used the following words:

“I had great expectations, but I was disappointed. I would call it “the collapse of a myth””.

### 3.4. Perceived facilitators of online therapy

In this domain, clients were asked about the advantages of Internet-based treatments in order to identify the perceived benefits. Three categories were created within this domain.

Flexibility (Typical): Participants referred to aspects of the online treatment that provide more adaptability, such as accessibility from anywhere and at any time. Some participants valued the fact that they did not need to follow a specific schedule, and also that this kind of therapy was much less time-consuming than other formats such as individual face-to face treatments.

Specific elements of the online treatment (Typical): Aspects associated with the contents (e.g. techniques, exercises, or clinical vignettes) or the format (e.g. videos) of the treatment. In this regard, some clients felt that the contents of the therapy were very well organized, that the intervention was adequate, and that it also allowed them to make their own self-assessment. The following example illustrates this category (participant #9):

“Interviewer: Can you tell me a little bit about your experience with the online treatment?”

Client: My experience... In general, I am satisfied because I think the online treatment we are talking about was... it was well done... I

mean, the treatment properly addressed topics like emotions, assertiveness, and so on... The tasks were also very well organized, and the questionnaires were really useful because you can see your results instantly... In general, it was a good experience.”

Dissemination (Variant): The last category that emerged in this domain referred to the potential of IBTs to reach more people in a more cost-effective way.

### 3.5. Barriers to online therapy

One of the main aims of this study is to delve into obstacles perceived by clients who dropped out; therefore, a central domain to examine was *Barriers to online therapy*. It could be of paramount importance in helping to explain what might interfere with IBTs' acceptance, implementation, and, finally, effectiveness. Four main categories stemmed from this domain:

Lack of individualization (General): This category included all the illustrative core ideas related to the therapy's inability to address the client's specific concerns, symptoms, problems, questions, or doubts. That is, a lack of tailored or personalized interventions. All the patients mentioned this category as a major shortcoming of this kind of approach. An example provided by a participant (#1) was:

“Interviewer: Do you think IBTs can work?”

Client: No. Based on what I think, no.

Interviewer: Why?

Client: Just because of it. Let's see, everything is too general, and it's a very important factor. Those of you who do believe in these kinds of treatments should take into account that not everyone is the same. So, some people may need more treatment, others less. For example, emotion regulation, which is what the treatment was based on... not everyone functions in the same way.

Interviewer: Mhm...

Client: Yeah, it's too general. Everyone... Emotion regulation. Some common standards are applied to everyone. Maybe I am a weirdo, I don't know.

Interviewer: No, of course not. That's your opinion and it's valid.

Client: So, summarizing my idea... I think the treatment was too general, and not everyone is alike or at the same level.”

Feedback from the therapist (General): This category involves the transmission of evaluative or corrective information given to the client in an unsystematic way, rather than using some kind of routine outcome monitoring assessment, as Lutz et al. (2015) described. The following extract illustrates this category:

“Interviewer: Did you feel the need for therapist contact while you were receiving the online treatment?”

Client: Well... I think I need to be in contact with a professional very often because I tend to... I don't know the proper words, but I tend to become unstable quite often. I mean... to become unstable because I feel depressed, and I need a professional to tell me: “This happened because of that”, “don't worry because nothing is wrong”.

Interviewer: So, you mean that the online treatment did not fulfill that need.

Client: No, it didn't. I've told you about it before. There are very different kinds of people. There are people who know how to solve their doubts, but people like me need someone to tell us “you are wrong”, “you are making a mistake”. Maybe it is a lack of maturity, I don't know...”

Lack of supportiveness (Typical): All the statements about problems



due to the lack of a therapeutic bond were classified within this category.

One participant (#8) stated this clearly:

“Apart from advice you are provided... It is as I said before, it is necessary to have a therapist behind to push you a bit, to give support, to encourage you. That's very important, extremely important. Otherwise I don't think I could benefit from a treatment.”

Feedback from the online treatment (Variant): As some of the participants stated, online treatments can lead to less involvement by the clients due to the lack of regular contact with a therapist. Thus, some of them stated that it was an obstacle that the treatment itself did not provide more feedback on the exercises, as well as on their progress.

Technical aspects (Variant): This category assembles all the difficulties encountered by the participants in the use of the system. An illustrative example of this is expressed by a participant who said that “*videos were too slow*”. Other features are more related to the difficulty of following the materials due to the density of the text.

### 3.6. Strategies to improve online therapy

This is the last domain identified within the interviews, and it refers to possible strategies to improve clients' adherence to treatment and, thus, reduce dropout rates in these kinds of interventions. In this domain, participants described four main categories. Logically, this domain is consistent with the *Barriers* domain because many of the perceived limitations of the treatment are addressed in this domain as possibilities for improvement in the future.

#### 3.6.1. Individualization of treatment (General)

As in other domains, such as *Barriers* and *Reasons for dropout*, lack of individualization is the most compelling issue to address in IBTs. Hence, some participants express the need for treatments that can adapt their contents to specific needs, particularly matching the content of the modules to their specific cases.

#### 3.6.2. Technical aspects (Typical)

It was consistently found throughout the interviews that some participants were not satisfied with the system. This can definitely be improved in the future, as long as technology continues to develop. Some of the ideas expressed by the patients are related to the presentation of the content, such as increasing the dynamic aspect by including more videos, or presenting texts in a more attractive way.

#### 3.6.3. Flexibility in the delivery approach (Typical)

This domain contains aspects that may help to improve the treatment and features of the way it is delivered. For instance, a client stated that it would have been better if he had received the IBT combined with face-to-face sessions when necessary.

#### 3.6.4. Specific elements of the online treatment (Variant)

In line with the obstacles related to the contents or delivery formats of these contents, participants defended the need to find a way to improve these kinds of treatments. Clients also mentioned the importance of increasing the interaction with the program as a way of enhancing treatment adherence.

## 4. Discussion

This study analyzes clients' experiences in the process of dropping out of an Internet-based treatment. Although Internet-based treatments have been shown to be effective, only a few studies have focused on potential barriers to their implementation (e.g. [Montero-Marín et al., 2015](#)) and possible negative effects (e.g. [Rozenal et al., 2017](#)). Hence, qualitative research is a useful tool with which to reflect on this topic in an exploratory way ([McLeod, 2013](#)). In general, the answers given by

the clients express important commonalities that may contribute to research and practice.

First, it should be mentioned that all the participants had previous experiences with psychotherapy. Positive, negative, and ambivalent experiences emerged as categories, and so no pattern was identified in this domain. Although in all cases these previous experiences were in face-to-face approaches, previous findings suggest that even clients with experience with an IBT would prefer face-to-face therapy if they could choose between these two delivery methods ([Wallin et al., 2016](#)). In any case, the novelty of IBTs is a key aspect when evaluating this approach because patients who enter the treatment may be uncertain about the unknown or have unrealistic expectations about what the treatment entails. Expectations, in any kind of therapeutic process, are thought to play an instrumental role in the treatment outcome ([Constantino et al., 2011](#)). In this regard, some authors have suggested that more emphasis should be placed on the management of expectations in these types of treatments ([Ekberg et al., 2016](#); [Montero-Marín et al., 2015](#)). Thus, therapists in charge of admitting new clients to IBTs should thoroughly describe the implications and potential of the treatment. Because expectations have been found to be a key predictor of adherence to Internet interventions ([Beatty and Binnion, 2016](#)), the way therapists manage them should be taken into consideration.

Although scant research has examined specifically non-adherence from a qualitative perspective, prior research also emphasized expectations, suggesting that they may have an influence on adherence ([Johansson et al., 2015](#)).

Therapists should capitalize on providing reasonable and realistic therapeutic rationales. Thus, it might be worthwhile to apply a stratified strategy, depending on the clients' profiles. Currently, all admissions are carried out equally, regardless of their socio-demographic or clinical characteristics (e.g. [Díaz-García et al., 2017](#), [González-Robles et al., 2015](#)). Taking into account previous research on dropout in IBTs and socio-demographic characteristics such as being male or having low educational levels ([Beatty and Binnion, 2016](#); [Karyotaki et al., 2015](#)), or clinical characteristics such as personality traits ([Högdahl et al., 2016](#)), or comorbidity with anxiety symptoms ([Karyotaki et al., 2015](#)), specific types of treatment introductions and better expectations management could be carried out. Previous research in this regard for face-to-face approaches has shown that it is possible to start making a systematic use of the available data in order to customize the treatments ([Rubin et al., 2016](#); [Zilcha-Mano et al., 2016](#)).

It is also important to take into account not only the expectations at the beginning of the treatment, but also their tendency to change during it. Therefore, both perspectives should be considered. The former perspective expresses to what extent clients expect the treatment to be beneficial for them in solving the problems that motivated them to seek help. The latter is important to examine how the client's expectations can interact with the course of the treatment. In this regard, in a face-to-face approach, therapists can foresee the wide range of feelings, thoughts, desires, and needs of the patients and deliberately intervene in an appropriate way ([Lambert, 2013](#)). Although the type of IBTs used for this study only involves minimal support by a therapist as explained in the methods, exploring whether the treatment meets the client's expectations is an important issue because it could increase adherence. In fact, as the results show, three trajectories were identified. The three cases where expectations did not decrease (#2, #6 and #9) are consistent with those whose reasons for dropout were not related to limitations of the treatment protocol, but rather to logistic reasons. Hence, the way therapists introduce an objective picture of potential advantages and limitations of the treatment becomes important in producing reasonable expectations in the client.

The analyzed interviews also reveal that the main *Reasons given for dropout* by the patients overlap with the perceived *Barriers of the online treatment* and with the *Strategies to improve online therapy*. All the ideas captured in these domains highlight a major drawback in the process of building the therapeutic alliance in IBTs. All the participants clearly

identify the common feature of the absence of a therapist. Clients tend to compare this situation to traditional face-to-face approaches, which they find substantially more positive in this regard.

Nevertheless, different perspectives are identified related to this issue. Whereas some clients mention a lack of individualization of the treatment as a major drawback, which is consistent with previous research (Montero-Marín et al., 2015), others put a greater emphasis on the lack of supportiveness. The former is associated with the content received during the treatment that may not target the specific problems of the participants, whereas the latter is related to the lack of affective and personal contact with the therapist.

The reasons to understand why the clients express a lack of individualization are twofold. First, the online platform provides a non-interactive treatment, and thus the clinical examples and exercises are not adapted to the patient's clinical or socio-demographic characteristics. Second, the protocol implemented is based on a transdiagnostic approach that seeks to deliver the same treatment for different clinical symptoms (all ED). Although there is a strong and supported psychopathological rationale for its use (Harvey et al., 2004), as well as conclusive evidence of its efficacy and effectiveness both for traditional and online therapy (Andersen et al., 2016; Newby et al., 2015; Newby et al., 2016; Păsărelu et al., 2017), it may constitute a barrier to deliver more personalized contents.

With regard to the lack of supportiveness, it is evident that it is related to the minimal human contact provided by the treatment. In this sense, whereas an enhanced personalization can potentially be improved by further developing cutting-edge technology (e.g. tailored contents using algorithmic strategies), there is controversy about whether a strong affective relationship can be deployed at all through an IBT approach (Berger, 2017). There is even controversy about the relationship between therapeutic alliance and the outcome in IBTs. The existing data on this issue are contradictory (Sucala et al., 2012), unlike face-to-face therapy, where it is a robust predictor of change, accounting for 0.27 of the variance (Horvath et al., 2011). When considering therapists' perspectives of the importance of the therapeutic alliance in e-therapy, the answers show that they consider the therapeutic alliance to be an extremely important aspect, both in face-to-face treatments and IBTs. However, as shown by previous research, therapists do not feel confident about their ability to build a strong alliance within an IBT (Sucala et al., 2013).

Accordingly, much more research shall be conducted to better elucidate how alliance, outcome and other explanatory variables may interact in IBTs. To do so, it should be taken into account the abundant existing research in this regard for face-to-face therapies throughout decades (e.g. Muran and Barber, 2010; Rossetti and Botella, 2017). In fact, both face-to-face approaches alliance (Sharf et al., 2010) and poorer alliance expectations (Zilcha-Mano et al., 2016) were found to be predictors of dropout.

All in all, these points are summarized in a specific example given by a participant (#4):

“Well, I start very motivated. Maybe only due to my need to improve. When I am not doing well, I always look for alternatives, different kind of alternatives. I got interested in this treatment due to its novelty. And it was working on me, but I encountered a machine, time and again. I needed a person. I needed the therapeutic relationship.”

This 60-year-old woman dropped out in module 9, after completing 75% of the program. In her case, expectations were high, and her motivation was evidently high. Likewise, she was considered to be improving throughout the treatment. Nevertheless, the weakness of the therapeutic relationship was a decisive aspect in her decision to drop out. While the perceived necessity of a therapist may be undeniable, it is also possible to consider that the experience and the reasons for early withdrawal could be influenced by the syndrome treated. It may be the case that a depressed patient is more prone to procrastination or an

anxious patient is more sensitive to interpret experiences of exposure as adverse events.

Results also indicate the presence of facilitators of online therapy within the domains. However, according to our results, none of these facilitators was sufficiently decisive to keep clients from dropping out. Although it seems rather logical, it can be argued that if more facilitators were provided, dropout rates could decrease, even if barriers were still perceived. This hypothesis relies on basic decision-making theory and classical conditioning theory, which support the idea that people are influenced by gain-loss effects (Hastie and Dawes, 2010) and conditioned by positive reinforcement and punishment (Skinner, 1958). Moreover, categories such as *Flexibility* can be perceived as positive by clients, which is consistent with previous studies exploring the motivations to persist with IBTs (Wilhelmsen et al., 2013). In order to improve the design and implementation of these treatments to reduce non-adherence and maximize effectiveness, clients' experiences can provide an insightful perspective. In this regard, and consistent with the need for more personalized treatments, clients expressed the importance of matching the participant's answers to the program's contents. Similar to face-to-face approaches, if technological advancements make it possible, algorithms to generate expected outcome curves could make useful contributions to personalizing program contents and to better specifying all assessment processes (DeRubeis et al., 2014; Delgadillo et al., 2016). That is, principally permitting an interaction between clients' initial assessment and their evolution with the treatment's content. The potentialities of applying complex statistical developments and data mining techniques may provide with vital answers for IBT's delivery (Mohr et al., 2013). A well-developed example is an emerging mobile phone intervention design, called the just-in-time adaptive intervention (JITAI; Nahum-Shani et al., 2014). In this sense, some initial progress has been made with online assessment and diagnostic system within a web-based population and even with regard to posttreatment attrition and its predictors (Al-Asadi et al., 2014, 2015).

#### 4.1. Study limitations

First, although this limitation is shared by most qualitative studies, the retrospective answers given by participants are a major methodological limitation. Retrospective recollection of experiences is subject to strong biases depending on the participant's awareness of the past event. Moreover, the way clients express these recalled ideas can also be inaccurate or conflict with their inner thoughts. In addition, the data obtained rely only on participants' willingness to disclose information. Thus, the interviewer's ability becomes a key aspect in qualitative approaches (Knox and Burkard, 2009). Another issue is that a convenience sample was recruited. It must be mentioned that clients who were reached and did not agree to take part in the study may have expressed different ideas about their adherence experience that would also been worth investigating. Nevertheless, representativeness in qualitative research is not equally determinant as in quantitative research. The key feature for qualitative research is data saturation which means that data collection should be in pursuit until no new conceptual insights are generated. In the case of this study the last analyzed interview did not produce an increase in the number of domains, so no more interviews were conducted. Besides, with regard to the sample size, CQR guideline were followed which recommends samples of 8–15 participants.

#### 4.2. Future directions

It would be quite useful to examine the experiences of clients who finished the whole treatment. Completers can be divided into two main groups. On the one hand, some participants show significant improvements on the pre-post treatment measures. On the other hand, some participants either do not improve, or they even deteriorate. By describing successful treatments, these participants may shed light on the key factors that contribute to producing client change. Regarding

completers who showed worsening, it would be relevant to differentiate reasons for dropout from iatrogenic components of the treatment. Previous studies may contribute to addressing these further questions (e.g. Donkin and Glozier, 2012; Wilhelmsen et al., 2013).

It is also important to take into account therapists' experiences at different care levels, such as primary care settings (Gellatly et al., 2017; Montero-Marín et al., 2015), specialized care (Gellatly et al., 2017; Kivi et al., 2015) and rural contexts (Sinclair et al., 2013). Adherence depends not only on the client's willingness to take part in these kinds of treatments and on the specific contents of the treatments, but also on the clinician's perspectives and active involvement.

#### 4.3. Implications for practice, training, and research

In terms of practice, the use of IBTs in general, and transdiagnostic IBTs in particular, is expected to increase within the mental health field, particularly in public health systems, such as the IAPT in UK (NICE, 2009). Thus, one of the most relevant aspects to take into consideration is therapist training. Even in self-guided treatments, some kind of support is always provided. Therapists giving support should be trained to better introduce the program. This key aspect may lead to better management of expectations, which, in light of previous studies and consistent with our results, may play an instrumental role in clients' adherence. In addition, these types of studies should include patient's suggestions in future research designs in order to better address an unattended aspect of Evidence Based Practice (Swift and Greenberg, 2015). To achieve this aim it must be essential to incorporate the already developed lines on user-centered designs (De Vito Dabbs et al., 2009), person-based approaches (Yardley et al., 2015) or practice oriented research (Castonguay et al., 2013), all facets that incorporate the needs of all stakeholders.

Finally, the study may also contribute to the discussion about adverse effects in IBTs (Rozenal et al., 2017), emphasizing the need to further develop this line of research.

#### 5. Conclusion

It is doubtless that more personalized treatments shall be delivered to increase adherence rates. Thus, there is a clear need to determine for whom IBTs may work as well as any other psychotherapeutic intervention (Norcross and Wampold, 2011), carrying out more studies on moderators, mediators, and mechanisms of change (Mogoase et al., 2017). It is essential to continue the development of systems and platforms that can reproduce therapeutic settings as closely as possible (Andersson and Titov, 2014) and address patients' specific needs. In fact, Internet interventions were initially designed to provide with personalized treatments (Andrews and Williams, 2014), in other words, to better adapt the contents of the treatment to the needs of the client. As Kazdin and Blase (2011) point out, a great effort should be made to find a balance between effectiveness and dissemination, but without ignoring the client's preferences (APA, 2006). To achieve that aim it will be indispensable to integrate unconnected research lines such as IBTs and Ecological Momentary Assessment under a common conceptual model (Mohr et al., 2014). All in all, IBT, as a research area, is still in its infancy. Hence, many aspects will require study in the near future, in order to develop a promising field that can be a key tool for coping with current mental health challenges.

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#### Conflict of interests

The authors declare that they have no competing interests.

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#### References

- Al-Asadi, A.M., Klein, B., Meyer, D., 2014. Posttreatment attrition and its predictors, attrition bias, and treatment efficacy of the anxiety online programs. *J. Med. Internet Res.* 16 (10), e232. <http://dx.doi.org/10.2196/jmir.3513>.
- Al-Asadi, A.M., Klein, B., Meyer, D., 2015. Multiple comorbidities of 21 psychological disorders and relationships with psychosocial variables: a study of the online assessment and diagnostic system within a web-based population. *J. Med. Internet Res.* 17 (3), e55. <http://dx.doi.org/10.2196/jmir.4143>.
- Alfonsson, S., Olsson, E., Hursti, T., 2016. Motivation and treatment credibility predicts dropout, treatment adherence, and clinical outcomes in an internet-based cognitive behavioral relaxation program: a randomized controlled trial. *J. Med. Internet Res.* 18 (3), e52. <http://dx.doi.org/10.2196/jmir.5352>.
- Andersen, P., Toner, P., Bland, M., McMillan, D., 2016. Effectiveness of transdiagnostic cognitive behaviour therapy for anxiety and depression in adults: a systematic review and meta-analysis. *Behav. Cogn. Psychother.* 44 (6), 673–690. <http://dx.doi.org/10.1017/S1352465816000229>.
- Andersson, G., 2016. Internet-delivered psychological treatments. *Annu. Rev. Clin. Psychol.* 12 (1), 157–179. <http://dx.doi.org/10.1146/annurev-clinpsy-021815-093006>.
- Andersson, G., Titov, N., 2014. Advantages and limitations of internet based interventions for common mental disorders. *World Psychiatry* 13 (1), 4–11. <http://dx.doi.org/10.1002/wps.20083>.
- Andersson, G., Cuijpers, P., Carlbring, P., Riper, H., Hedman, E., 2014. Guided internet-based vs. face-to-face cognitive behavior therapy for psychiatric and somatic disorders: a systematic review and meta-analysis guided internet-based vs. face-to-face cognitive behavior therapy for psychiatric and somatic disorders. *World Psychiatry* 13 (3), 288–295. <http://dx.doi.org/10.1002/wps.20151>.
- Andrews, G., Williams, A.D., 2014. Internet psychotherapy and the future of personalized treatment. *Depress. Anxiety* 31 (11), 912–915. <http://dx.doi.org/10.1002/da.22302>.
- Andrews, G., Cuijpers, P., Craske, M.G., McEvoy, P., Titov, N., 2010. Computer therapy for the anxiety and depressive disorders is effective, acceptable and practical health care: a meta-analysis. *PLoS One* 5 (10), e13196. <http://dx.doi.org/10.1371/journal.pone.0013196>.
- APA Presidential Task Force on Evidence-Based Practice, 2006. Evidence-based practice in psychology. *Am. Psychol.* 61, 271–285.
- Badía, X., 1999. EuroQol: un instrumento para valorar la salud EQ-5D guía del usuario, versión española. *Med. Clin.* 114, 6–14.
- van Ballegooijen, W., Cuijpers, P., van Straten, A., Karyotaki, E., Andersson, G., Smit, J.H., Riper, H., 2014. Adherence to internet-based and face-to-face cognitive behavioural therapy for depression: a meta-analysis. *PLoS ONE* 9 (7), e100674. <http://dx.doi.org/10.1371/journal.pone.0100674>.
- Barlow, D.H., 2010. Negative effects from psychological treatments a perspective. *Am. Psychol.* 65 (1), 13–20. <http://dx.doi.org/10.1037/a0015643>.
- Barlow, D.H., Allen, L.B., Choate, M.L., 2004. Toward a unified treatment for emotional disorders. *Behav. Ther.* 35 (2), 205–230. [http://dx.doi.org/10.1016/S0005-7894\(04\)80036-4](http://dx.doi.org/10.1016/S0005-7894(04)80036-4).
- Beatty, L., Binnion, C., 2016. A systematic review of predictors of, and reasons for, adherence to online psychological interventions. *Int. J. Behav. Med.* 23 (6), 776–794. <http://dx.doi.org/10.1007/s12529-016-9556-9>.
- Beck, A.T., Steer, R.A., Brown, G.K., 1996. *Manual for the Beck Depression Inventory-II*. Psychological Corporation, San Antonio, TX.
- Berger, T., 2017. The therapeutic alliance in internet interventions: a narrative review and suggestions for future research. *Psychother. Res.* 27 (5), 511–524. <http://dx.doi.org/10.1080/10503307.2015.1119908>.
- Bergin, A.E., 1963. The effects of psychotherapy: negative results revisited. *J. Couns. Psychol.* 10, 244–250.
- Bohart, A.C., Wade, A.G., 2013. The client in psychotherapy. In: Lambert, M.J. (Ed.), *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change*, 6th ed. Wiley, Hoboken, NJ, pp. 219–257.
- Botella, C., Baños, R.M., Guillén, V., Perpiñá, C., Alcañiz, M., Pons, A., 2000. Telepsychology: public speaking fear treatment on the internet. *Cyberpsychol. Behav.* 3, 959–986. <http://dx.doi.org/10.1089/109493100452228>.
- Castonguay, L.G., Barkham, M., Lutz, W., McLeavey, A.A., 2013. Practice-oriented research: approaches and application. In: Lambert, M.J. (Ed.), *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change*, 6th ed. Wiley, New York, NY, pp. 85–133.
- Christensen, H., Griffiths, K.M., Farrer, L., 2009. Adherence in internet interventions for anxiety and depression: systematic review. *J. Med. Internet Res.* 11 (2), e13. <http://dx.doi.org/10.2196/jmir.1194>.
- Constantino, M.J., Arnkoff, D.B., Glass, C.R., Ametrano, R.M., Smith, J.Z., 2011. Expectations. *J. Clin. Psychol.* 67 (2), 184–192. <http://dx.doi.org/10.1002/jclp.20754>.
- De Vito Dabbs, A., Myers, B.A., Mc Curry, K.R., Dunbar-Jacob, J., Hawkins, R.P., Begey, A., Dew, M.A., 2009. User-centered design and interactive health technologies for patients. *Comput. Inform. Nurs.* 27 (3), 175. <http://dx.doi.org/10.1097/NCN.0b013e31819f7c7c>.



- Dear, B.F., Titov, N., Schwencke, G., Andrews, G., Johnston, L., Craske, M.G., McEvoy, P., 2011. An open trial of a brief transdiagnostic internet treatment for anxiety and depression. *Behav. Res. Ther.* 49 (12), 830–837. <http://dx.doi.org/10.1016/j.brat.2011.09.007>.
- Delgado, J., Moreoa, E., Lutz, W., 2016. Different people respond differently to therapy: a demonstration using patient profiling and risk stratification. *Behav. Res. Ther.* 79 (February), 15–22. <http://dx.doi.org/10.1016/j.brat.2016.02.003>.
- DeRubeis, R.J., Cohen, Z.D., Forand, N.R., Fournier, J.C., Gelfand, L.A., Lorenzo-Luaces, L., 2014. The personalized advantage index: translating research on prediction into individualized treatment recommendations. A demonstration. *PLoS One* 9 (1), 1–8. <http://dx.doi.org/10.1371/journal.pone.0083875>.
- Díaz-García, A., González-Robles, A., Fernández-Álvarez, J., García-Palacios, A., Baños, R., Botella, C., 2017. Efficacy of a transdiagnostic internet-based treatment for emotional with a specific component to address positive affect: study protocol for a randomized controlled trial. *BMC Psychiatry* 17, 145. <http://dx.doi.org/10.1186/s12888-017-1297-z>.
- Donkin, L., Glozier, N., 2012. Motivators and motivations to persist with online psychological interventions: a qualitative study of treatment completers. *J. Med. Internet Res.* 14 (3), e91. <http://dx.doi.org/10.2196/jmir.2100>.
- Donkin, L., Christensen, H., Naismith, S.L., Hons, B.A., Neuro, D., Neal, B., ... Glozier, N., 2011. A systematic review of the impact of adherence on the effectiveness of e-therapies. *J. Med. Internet Res.* 13 (3), 1–12. e52. <https://doi.org/10.2196/jmir.1772>.
- Ekberg, S., Barnes, R.K., Kessler, D.S., Malpass, A., Shaw, A.R.G., 2016. Managing clients' expectations at the outset of online Cognitive Behavioural Therapy (CBT) for depression. *Health Expect.* 19 (3), 557–569. <http://dx.doi.org/10.1111/hex.12227>.
- Farchione, T.J., Fairholme, C.P., Ellard, K.K., Boisseau, C.L., Thompson-Hollands, J., Carl, J.R., Gallagher, M. W. & Barlow, D. H., 2012. Unified protocol for transdiagnostic treatment of emotional disorders: a randomized controlled trial. *Behav. Ther.* 43 (3), 666–678. <http://dx.doi.org/10.1016/j.beth.2012.01.001>.
- Gellatly, J., Pedley, R., Molloy, C., Butler, J., Lovell, K., Bee, P., 2017. Low intensity interventions for Obsessive-Compulsive Disorder (OCD): a qualitative study of mental health practitioner experiences. *BMC Psychiatry* 17, 77. <http://dx.doi.org/10.1186/s12888-017-1238-x>.
- González-Robles, A., García-Palacios, A., Baños, R., Riera, A., Llorca, G., Traver, F., ... Botella, C., 2015. Effectiveness of a transdiagnostic internet-based protocol for the treatment of emotional disorders versus treatment as usual in specialized care: study protocol for a randomized controlled trial. *Trials* 16 (1), 488. <http://dx.doi.org/10.1186/s13063-015-1024-3>.
- Harvey, A.G., Watkins, E., Mansell, W., Shafran, R., 2004. *Cognitive Behavioural Processes Across Psychological Disorders: A Transdiagnostic Approach to Research and Treatment*. Oxford University Press, Oxford(<https://doi.org/10.1002/erv.647>).
- Hastie, R., Dawes, R.M., 2010. *Rational Choice in an Uncertain World: The Psychology of Judgment and Decision Making*, 2nd ed. Sage Publications, London.
- Hill, C.E., Knox, S., Thompson, B.J., Williams, E.N., Hess, S.A., 2005. Consensual qualitative research: an update. *J. Couns. Psychol.* 52 (2), 196–205. <http://dx.doi.org/10.1037/0022-0167.52.2.196>.
- Högdahl, L., Levallius, J., Björck, C., Norring, C., Birgegård, A., 2016. Personality predicts drop-out from therapist-guided internet-based cognitive behavioural therapy for eating disorders. Results from a randomized controlled trial. *Internet Interv.* 5, 44–50. <http://dx.doi.org/10.1016/j.invent.2016.07.002>.
- Horvath, A.O., Del Re, A.C., Flückiger, C., Symonds, D., 2011. Alliance in individual psychotherapy. *Psychotherapy* 48 (1), 9–16.
- Johansson, O., Michel, T., Andersson, G., Paxling, B., 2015. Experiences of non-adherence to internet-delivered cognitive behavior therapy: a qualitative study. *Internet Interv.* 2 (2), 137–142. <http://dx.doi.org/10.1016/j.invent.2015.02.006>.
- Johnston, L., Titov, N., Andrews, G., Spence, J., Dear, B.F., 2011. A RCT of a transdiagnostic internet-delivered treatment for three anxiety disorders: examination of support roles and disorder-specific outcomes. *PLoS One* 6 (11), e28079.
- Karyotaki, E., Kleiboer, A., Smit, F., Turner, D.T., Pastor, A.M., Andersson, G., ... Cuijpers, P., 2015. Predictors of treatment dropout in self-guided web-based interventions for depression: an "individual patient data" meta-analysis. *Psychol. Med.* 45 (13), 2717–2726. <http://dx.doi.org/10.1017/S0033291715000665>.
- Karyotaki, E., Riper, H., Twisk, J., Hoogendoorn, A., Kleiboer, A., Mira, A., ... Cuijpers, P., 2017. Efficacy of self-guided internet-based cognitive behavioral therapy in the treatment of depressive symptoms: a meta-analysis of individual participant data. *JAMA Psychiat.* 1–9. <http://dx.doi.org/10.1001/JAMAPSYCHIATRY.2017.0044>.
- Kazdin, A.E., Blase, S.L., 2011. Rebooting psychotherapy research and practice to reduce the burden of mental illness. *Perspect. Psychol. Sci.* 6 (1), 21–37. <http://dx.doi.org/10.1177/1745691610393527>.
- Kivi, M., Eriksson, M.C.M., Hange, D., Petersson, E., Björkelund, C., Johansson, B., 2015. Experiences and attitudes of primary care therapists in the implementation and use of internet-based treatment in Swedish primary care settings. *Internet Interv.* 2, 248–256. <http://dx.doi.org/10.1016/j.invent.2015.06.001>.
- Knowles, S.E., Toms, G., Sanders, C., Bee, P., Lovell, K., Rennick-Egglestone, S., ... Bower, P., 2014. Qualitative meta-synthesis of user experience of computerised therapy for depression and anxiety. *PLoS One* 9 (1). <http://dx.doi.org/10.1371/journal.pone.0084323>.
- Knox, S., Burkard, A.W., 2009. Qualitative research interviews. *Psychother. Res.* 19 (4–5), 566–575. <http://dx.doi.org/10.1080/10503300802702105>.
- Lambert, M.J., 2010. *Prevention of Treatment Failure: The Use of Measuring, Monitoring, and Feedback in Clinical Practice*. American Psychological Association, Washington (<https://doi.org/10.1037/12141-000>).
- Lambert, M.J. (Ed.), 2013. *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change*. John Wiley & Sons, New York.
- Lilienfeld, S.O., 2007. Psychological treatments that cause harm. *Perspect. Psychol. Sci.* 2 (1), 53–70. <http://dx.doi.org/10.1111/j.1745-6916.2007.00029.x>.
- Lutz, W., De Jong, K., Rubel, J., 2015. Patient-focused and feedback research in psychotherapy: where are we and where do we want to go? *Psychother. Res.* 25 (6), 625–632. <http://dx.doi.org/10.1080/10503307.2015.1079661>.
- Marks, I.M., Kenwright, M., McDonough, M., Whittaker, M., Mataix-Cols, D., 2004. Saving clinicians' time by delegating routine aspects of therapy to a computer: a randomized controlled trial in phobia/panic disorder. *Psychol. Med.* 34 (1), 9–17. <http://dx.doi.org/10.1017/S003329170300878X>.
- McCrone, P., Knapp, M., Proudfoot, J., Ryden, C., Cavanagh, K., Shapiro, D.A., ... Tylee, A., 2004. Cost-effectiveness of computerised cognitive-behavioural therapy for anxiety and depression in primary care: randomised controlled trial. *Br. J. Psychiatry* 185, 55–62.
- Mclvor, R., Ek, E., Carson, J., 2004. Non-attendance rates among patients attending different grades of psychiatrist and a clinical psychologist within a community mental health clinic. *Psychiatrist* 28 (1), 5–7. <http://dx.doi.org/10.1192/pb.28.1.5>.
- McLeod, J., 2013. *Qualitative research: methods and contributions*. In: Lambert, M.J. (Ed.), *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change*, 6th ed. John Wiley & Sons, New York, pp. 49–84.
- Melville, K.M., Casey, L.M., Kavanagh, D.J., 2010. Dropout from Internet-based treatment for psychological disorders. *Br. J. Clin. Psychol.* 49 (4), 455–471. <http://dx.doi.org/10.1348/014466509X472138>.
- Mogoase, C., Cobeanu, O., David, O., Giosan, C., Szentagotai, A., 2017. Internet-based psychotherapy for adult depression: what about the mechanisms of change? *J. Clin. Psychol.* 73 (1), 5–64. <http://dx.doi.org/10.1002/jclp.22326>.
- Mohr, D.C., Burns, M.N., Schueller, S.M., Clarke, G., Klinkman, M., 2013. Behavioral intervention technologies: evidence review and recommendations for future research in mental health. *Gen. Hosp. Psychiatry* 35 (4), 332–338. <http://dx.doi.org/10.1016/j.genhosppsy.2013.03.008>.
- Mohr, D.C., Schueller, S.M., Montague, E., Burns, M.N., Rashidi, P., 2014. The behavioral intervention technology model: an integrated conceptual and technological framework for eHealth and mHealth interventions. *J. Med. Internet Res.* 16 (6), e146. <http://dx.doi.org/10.2196/jmir.3077>.
- Montero-Marín, J., Prado-Abril, J., Botella, C., Mayor, F.C., Baños, R., Herrera-Mercadal, P., ... García-Campayo, J., 2015. Expectations among patients and health professionals regarding web-based interventions for depression in primary care: a qualitative study. *J. Med. Internet Res.* 17 (3). <http://dx.doi.org/10.2196/jmir.3985>.
- Muran, J.C., Barber, J.P., 2010. *The Therapeutic Alliance: An Evidence Based-Guide to Practice*. Guilford Press, New York.
- Nahum-Shani, S., Smith, S.N., Tewari, A., Witkiewitz, K., Collins, L.M., Spring, B., Murphy, S.A., 2014. Just-in-time adaptive interventions (JITAs): an organizing framework for ongoing health behavior support. In: *Technical Report No. 14-126*. The Methodology Center, Penn State, University Park, PA.
- Newby, J.M., McKinnon, A., Kuyken, W., Gilbody, S., Dalgleish, T., 2015. Systematic review and meta-analysis of transdiagnostic psychological treatments for anxiety and depressive disorders in adulthood. *Clin. Psychol. Rev.* 40, 91–110. <http://dx.doi.org/10.1016/j.cpr.2015.06.002>.
- Newby, J.M., Twomey, C., Yuan Li, S.S., Andrews, G., 2016. Transdiagnostic computerised cognitive behavioural therapy for depression and anxiety: a systematic review and meta-analysis. *J. Affect. Disord.* 199, 30–41. <http://dx.doi.org/10.1016/j.jad.2016.03.018>.
- NICE, 2009. *Depression: treatment and management of depression in adults*. In: *Clinical Guideline 90*. National Institute for Health and Clinical Excellence, London.
- Norcross, J.C., Wampold, B.E., 2011. What works for whom: tailoring psychotherapy to the person. *J. Clin. Psychol.* 67 (2), 127–132. <http://dx.doi.org/10.1002/jclp.20764>.
- Nordgren, L.B., Hedman, E., Etienne, J., Bodin, J., Kadowaki, Å., Eriksson, S., ... Carlbring, P., 2014. Effectiveness and cost-effectiveness of individually tailored internet-delivered cognitive behavior therapy for anxiety disorders in a primary care population: a randomized controlled trial. *Behav. Res. Ther.* 59, 1–11. <http://dx.doi.org/10.1016/j.brat.2014.05.007>.
- Norman, S.B., Cissell, S.H., Means-Christensen, A.J., Stein, M.B., 2006. Development and validation of an Overall Anxiety Severity and Impairment Scale (OASIS). *Depress. Anxiety* 23 (3), 245–249. <http://dx.doi.org/10.1002/da.20182>.
- Olthuis, J.V., Watt, M.C., Bailey, K., Hayden, J.A., Stewart, S.H., 2016. Therapist-supported Internet cognitive behavioural therapy for anxiety disorders in adults. *Cochrane Database Syst. Rev.* 21 (5), 290. <http://dx.doi.org/10.1002/14651858.CD011565.pub2>.
- Păsărelu, C.R., Andersson, G., Nordgren, L.B., Dobrea, A., 2017. Internet-delivered transdiagnostic and tailored cognitive behavioral therapy for anxiety and depression: a systematic review and meta-analysis of randomized controlled trials. *Cogn. Behav. Ther.* 46 (1), 1–28. <http://dx.doi.org/10.1080/16506073.2016.1231219>.
- Reis, B.F., Brown, L.G., 1999. Reducing psychotherapy dropouts: maximizing perspective convergence in the psychotherapy dyad. *Psychother. Theory Res. Pract. Train.* 36 (2), 123–136. <http://dx.doi.org/10.1037/h0087822>.
- Richards, D., Richardson, T., 2012. Computer-based psychological treatments for depression: a systematic review and meta-analysis. *Clin. Psychol. Rev.* 32 (4), 329–342.
- Rossetti, M.L., Botella, L., 2017. Alianza terapéutica: evolución y relación con el apego en psicoterapia. *Therapeutic alliance: evolution and relationship with attachment in psychotherapy*. *Rev. Argent. Clín. Psicol.* 26 (1), 19–30. <http://dx.doi.org/10.24205/03276716.2017.1002>.
- Rozental, A., Boettcher, J., Andersson, G., Schmidt, B., Carlbring, P., 2015. Negative effects of internet interventions: a qualitative content analysis of patients' experiences with treatments delivered online. *Cogn. Behav. Ther.* 44 (3), 223–236. <http://dx.doi.org/10.1080/16506073.2015.1008033>.
- Rozental, A., Magnusson, K., Boettcher, J., Andersson, G., Carlbring, P., 2017. For better or worse: an individual patient data meta-analysis of deterioration among

- participants receiving internet-based cognitive behavior therapy. *J. Consult. Clin. Psychol.* 85 (2), 160–177. <http://dx.doi.org/10.1037/ccp0000158>.
- Rubin, A., Dolev, T., Zilcha-Mano, S., 2016. Patient demographics and psychological functioning as predictors of unilateral termination of psychodynamic therapy. *Psychother. Res.* <http://dx.doi.org/10.1080/10503307.2016.1241910>. (in press).
- Sharf, J., Primavera, L.H., Diener, M.J., 2010. Dropout and therapeutic alliance: a meta-analysis of adult individual psychotherapy. *Psychother. Theory Res. Pract. Train.* 47 (4), 637–645. <http://dx.doi.org/10.1037/a0021175>.
- Sinclair, C., Holloway, K., Riley, G., Auret, K., 2013. Online mental health resources in rural Australia: clinician perceptions of acceptability. *J. Med. Internet Res.* 15 (9), e193. <http://dx.doi.org/10.2196/jmir.2772>.
- Skinner, B.F., 1958. Reinforcement today. *Am. Psychol.* 13 (3), 94–99. <http://dx.doi.org/10.1037/h0049039>.
- Sucala, M., Schnur, J.B., Constantino, M.J., Miller, S.J., Brackman, E.H., Montgomery, G.H., 2012. The therapeutic relationship in e-therapy for mental health: a systematic review. *J. Med. Internet Res.* 14 (4), e110. <http://dx.doi.org/10.2196/jmir.2084>.
- Sucala, M., Schnur, J.B., Brackman, E.H., Constantino, M.J., Montgomery, G.H., 2013. Clinicians' attitudes toward therapeutic alliance in e-therapy. *J. Gen. Psychol.* 140 (4), 282–293. <http://dx.doi.org/10.1080/00221309.2013.830590>.
- Swift, J., Callaghan, J.L., 2011. Decreasing treatment dropout by addressing expectations for treatment length. *Psychother. Res.* 21 (2), 193–200. <http://dx.doi.org/10.1080/10503307.2010.541294>.
- Swift, J.K., Greenberg, R.P., 2015. What is premature termination, and why does it occur? In: *Premature Termination in Psychotherapy: Strategies for Engaging Clients and Improving Outcomes*, pp. 11–31 (doi:<https://doi.org/10.1101/gr.032102.O>).
- Taylor, S., Abramowitz, J.S., McKay, D., 2012. Non-adherence and non-response in the treatment of anxiety disorders. *J. Anxiety Disord.* 26 (5), 583–589. <http://dx.doi.org/10.1016/j.janxdis.2012.02.010>.
- Titov, et al., 2013. Improving adherence and clinical outcomes in self-guided internet treatment for anxiety and depression: randomised controlled trial. *PLoS One* 8 (7), e62873. <http://dx.doi.org/10.1371/journal.pone.0062873>.
- Tong, A., Sainsbury, P., Craig, J., 2007. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int. J. Qual. Health Care* 19 (6), 349–357. <http://dx.doi.org/10.1093/intqhc/mzm042>.
- Vermeire, E., Hearnshaw, H., Van Royen, P., Denekens, J., 2001. Patient adherence to treatment: three decades of research. A comprehensive review. *J. Clin. Pharm. Ther.* 26 (5), 331–342. <http://dx.doi.org/10.1046/j.1365-2710.2001.00363.x>.
- Wallin, E.E.K., Mattsson, S., Olsson, E.M.G., 2016. The preference for internet-based psychological interventions by individuals without past or current use of mental health treatment delivered online: a survey study with mixed-methods analysis. *JMIR Mental Health* 3 (2), e25. <http://dx.doi.org/10.2196/mental.5324>.
- Westmacott, R., Hunsley, J., Best, M., Rumstein-McKean, O., Schindler, D., 2010. Client and therapist views of contextual factors related to termination from psychotherapy: a comparison between unilateral and mutual terminators. *Psychother. Res.* 20 (4), 423–435. <http://dx.doi.org/10.1080/10503301003645796>.
- Wilhelmsen, M., Lillevoll, K., Risør, M.B., Høifødt, R., Johansen, M., Waterloo, K., ... Kolstrup, N., 2013. Motivation to persist with internet-based cognitive behavioural treatment using blended care: a qualitative study. *BMC Psychiatry* 13, 296. <http://dx.doi.org/10.1186/1471-244X-13-296>.
- Wittchen, H.U., Jacobi, F., Rehm, J., Gustavsson, A., Svensson, M., Johnsson, B., ... Steinhausen, H.C., 2011. The size and burden of mental disorders and other disorders of the brain in Europe 2010. *Eur. Neuropsychopharmacol.* 21 (9), 655–679. <http://dx.doi.org/10.1016/j.euroneuro.2011.07.018>.
- Yardley, L., Morrison, L., Bradbury, K., Muller, I., 2015. The person-based approach to intervention development: application to digital health-related behavior change interventions. *J. Med. Internet Res.* 17 (1), e30. <http://dx.doi.org/10.2196/jmir.4055>.
- Zilcha-Mano, S., Keffe, J.R., Chui, H., Rubin, A., Barrett, M.S., Barber, J.P., 2016. Reducing dropout in treatment for depression: translating dropout predictors into individualized treatment recommendations. *J. Clin. Psychiatry* 77 (12), e1584–e1590. <http://dx.doi.org/10.4088/JCP.15m10081>.