

# What are Clients Asking Their Therapist During Therapist-Assisted Internet-Delivered Cognitive Behaviour Therapy? A Content Analysis of Client Questions

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**Background:** Although internet-delivered cognitive behaviour therapy (ICBT) yields large clinical outcomes when accompanied by therapeutic support, a portion of clients do not benefit from treatment. In ICBT, clients review treatment materials online typically on a weekly basis. A key component of therapist-assistance involves answering questions as clients review and work on assignments related to the treatment materials. **Aims:** The goal of this study was to enhance understanding of the nature of client questions posed during ICBT and examine potential associations between the number of questions asked and treatment outcomes in order to provide insight into how to improve ICBT for future users. **Method:** Content analysis was used to qualitatively analyse and identify questions that 80 clients asked

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their designated therapist over the course of an 8-week ICBT programme for anxiety and depression. **Results:** On average, clients sent six emails during the course of treatment, of which less than two questions were asked. Of the 137 questions posed by clients, 46.72% reflected questions designed to enhance understanding and apply the material and techniques reviewed in the programme. Additional questions were categorized as clarifying the therapeutic process (22.62%), addressing technical challenges (18.25%), and seeking assistance with problems outside the scope of ICBT (12.41%). Number of client questions asked was not significantly correlated with the number of lessons completed, symptom change, or perceptions of therapeutic alliance. **Conclusions:** Findings can inform future practitioners who deliver ICBT of what to expect with this treatment approach and also assist in the development of future ICBT programmes.

*Keywords:* anxiety, client questions, depression, internet-delivered cognitive behaviour therapy, online communication, therapeutic process

## Introduction

Mental health disorders are global, prevalent, and disabling conditions (Kessler et al., 2009) that can be effectively treated with cognitive behaviour therapy (CBT) delivered in individual (e.g. Hofmann et al., 2012) and group (e.g. Moore et al., 2017) formats, with growing research also supporting internet delivery (e.g. Păsărelu et al., 2017). Internet-delivered CBT (ICBT) is attractive as it increases the accessibility of CBT for those who may experience difficulties attending face-to-face services (Andersson, 2010).

ICBT involves clients accessing online lessons that describe cognitive and behavioural strategies (Andersson, 2016). While ICBT can be entirely self-directed, it is common for lessons to be accompanied by weekly therapist support. Therapeutic support often involves short email messages sent approximately once a week (Andersson, 2016). Most commonly, ICBT therapists offer support to clients by answering questions, providing feedback on homework exercises, and giving encouragement (Andersson, 2016). Therapist support is typically associated with lower attrition and larger treatment effects than self-directed ICBT (Baumeister et al., 2014).

Recent reviews of therapist-assisted ICBT for depression suggest that participants, on average, completed 80.8% of treatment programmes; comparatively, non-completers complete, on average, only 42.1% before drop out (e.g. Van Ballegooijen et al., 2014). Although outcomes are generally reported as large and comparable to face-to-face CBT, with gains maintained up to 3 years (Andersson et al., 2016), there is variability in response to therapist-assisted ICBT. In a recent study of therapist-assisted ICBT in clinical practice, examination of reliable recovery rates showed a significant proportion of clients who reported clinically elevated symptoms at pre-treatment did not report significant symptom improvement and experienced clinically elevated symptoms at post-treatment (53% reliable recovery for depression and 64% reliable recovery from generalized anxiety; Hadjistavropoulos et al., 2016).

In an attempt to better understand client experiences with ICBT, several researchers have examined the content of client correspondence exchanged with the ICBT therapist. For example, Dirkse et al. (2015) examined the linguistic dimensions of client emails in ICBT for generalized anxiety. Over treatment, the frequency of negative emotion, anxiety, causation, and insight words decreased, while the frequency of past tense words increased. In a study that examined changes in word use during an online treatment for depression, Van der Zanden

et al. (2014) found that higher use of discrepancy words (e.g. would, wish, should) predicted symptom improvement. In another study, reductions in depressive symptoms were positively associated with written statements about alliance (e.g. ‘*Thank you for your reflection*’) and observing positive consequences (e.g. ‘*When I tried the new behaviour, I discovered it puts me in a better mood*’; Svartvatten et al., 2015).

Although prior research has classified and evaluated client statements in an attempt to explain variability in treatment outcome (e.g. Svartvatten et al., 2015; Van der Zanden et al., 2014), the findings do not necessarily provide practical insight into how to improve ICBT. Given that answering client questions is one of the primary methods therapists offer support in ICBT (Paxling et al., 2011; Schneider et al., 2016), understanding the types of questions clients ask may provide useful insight, especially in terms of therapist training and content development and improvement. Therefore, the aim of this study was to identify common questions clients asked in emails with ICBT therapists and examine whether the number of questions asked was correlated with treatment outcomes. Assuming that number of questions asked would be an indication of client engagement in the therapeutic process, we hypothesized that the overall number of client questions asked would be related to treatment outcome. We did not hypothesize that specific types of questions would be related to treatment outcome as we did not have knowledge of client questions at the time the hypotheses were formulated. It was anticipated that the research would offer an improved understanding of client needs during ICBT that could lead to further development of ICBT as well as be useful for training therapists in ICBT.

## Method

### *Participants and recruitment*

This study was approved by the institutional research ethics boards. Data were obtained from a previously published trial investigating the effectiveness of therapist-assisted transdiagnostic ICBT for depression and anxiety (ISRCTN42729166; Hadjistavropoulos et al., 2016); in this trial, ICBT resulted in large symptom improvement (effect sizes 1.17–1.31).

Participants learned of ICBT through various methods (e.g. physician, word of mouth, media, online searching). To determine eligibility, interested individuals first completed an online screener and (if eligible) then completed a telephone-screening interview (see Hadjistavropoulos et al., 2016). The programme was offered to individuals with mild to moderate symptoms of depression and anxiety, who were 18 years of age or older, were residing in Saskatchewan, Canada, and had access to a computer and the internet. Clients were excluded and referred to appropriate services if they were at high risk for suicide, reported seeking help for a condition outside the scope of the course (e.g. psychosis, bipolar disorder, post-traumatic stress disorder, obsessive-compulsive disorder, or substance use problems), were receiving regular face-to-face treatment, or were not interested in ICBT.

Between January to December 2014, 260 eligible participants received treatment. From this pool, 214 participants completed at least the first lesson and the post-treatment questionnaires. Based on a statistical power calculation (Faul et al., 2007), a random sample of 80 participants was selected; messages that were sent from these patients to therapists were analysed. Randomization was conducted by an independent researcher using <http://www.randomizer.org>.

### *ICBT programme*

Eligible participants were offered the *Wellbeing Course*, which is a transdiagnostic ICBT programme for anxiety and depression that was developed at Macquarie University in Australia (see Titov et al., 2013a,b, for a review). The course consists of five structured online lessons that are released gradually over 8 weeks. Using text and images, the lessons describe: (1) the cognitive behavioural model; (2) thought monitoring and challenging; (3) de-arousal strategies and pleasant activity scheduling; (4) graduated exposure; and (5) relapse prevention. At the end of the lesson, clients download a summary of the materials and are encouraged to complete homework assignments. In addition to core lessons, clients have access to additional resources on topics relevant to depression and anxiety (e.g. assertiveness, communication, problem-solving, worry time, sleep), as well as client-based stories that facilitate understanding of skills. Programme content is supplemented with weekly therapeutic support that is provided through secure asynchronous messaging.

### *Therapist assistance*

Twenty-eight therapists delivered ICBT, with each therapist treating on average 2.86 clients. The majority of therapists were either registered social workers ( $n = 13$ ) or psychologists ( $n = 7$ ), with the remaining sample consisting of psychology and social work graduate students under supervision ( $n = 8$ ). Therapists worked either in a Unit specializing in ICBT delivery ( $n = 11$ ) or in a community health clinic in the province ( $n = 17$ ).

Prior to delivering ICBT, all therapists participated in a one-day workshop (Hadjistavropoulos et al., 2012). This workshop was both didactic and experiential in nature and covered research and professional practice issues related to ICBT. In each weekly email, therapists were advised to: (1) comment and provide feedback on symptom improvement; (2) highlight lesson content; (3) address questions; (4) assist with skill implementation; (5) reinforce progress and skill practice; (6) offer support and normalize client challenges; (7) assist with engagement with the course; and (8) clarify administrative procedures. All graduate students were supervised on their client emails and received weekly supervision. Registered providers sought supervision as needed from the Unit coordinator. Each week, therapists logged in to review client use of the website and reviewed and responded to client emails as outlined in the training.

Therapists monitored client symptoms prior to each lesson using the Generalized Anxiety Disorder-7 items (GAD-7; Spitzer et al., 2006) and the Patient Health Questionnaire-9 items (PHQ-9; Kroenke and Spitzer, 2002), which clients completed weekly. The GAD-7 assesses the severity of seven anxiety symptoms over the past 2 weeks on a scale from 0 ('*Not at all sure*') to 3 ('*Nearly every day*'). Total scores range between 0 to 21, with a score of 10 or higher indicating clinically significant levels of anxiety (Spitzer et al., 2006). The PHQ-9 assesses the severity of nine depression symptoms on a scale ranging from 0 ('*Not at all*') to 3 ('*Nearly every day*'). Total scores range between 0 and 27, with a score of 10 or higher indicating clinically significant levels of depression that warrant intervention (Kroenke and Spitzer, 2002). Treatment outcome was assessed by calculating change in anxiety (i.e. GAD-7 scores) and depression (i.e. PHQ-9 scores) from pre- to post-treatment (Hadjistavropoulos et al., 2016). The *Working Alliance Inventory-Short Revised* (WAI-SR; Tracey and Kokotovic, 1989) measured therapeutic alliance using 12 items at post-treatment (Cronbach's  $\alpha = 0.94$ ).

**Table 1.** List of categories and sub-categories for content analysis of participant emails

Category	Number of categorized questions (% of total categorized questions)	Sub-category	Number of sub-categorized questions (% of total sub-categorized questions)
Facilitate understanding and application of material and techniques	64 (46.72%)	Thoughts	29 (45.31%)
		Behaviours	13 (20.31%)
		Making changes	8 (12.50%)
		Lapses and relapse	6 (9.38%)
		Intense physical symptoms	5 (7.81%)
		Additional resources	3 (4.69%)
Therapy process	31 (22.62%)	Frequency of contact, nature of contact and therapist knowledge	16 (51.61%)
		Course timeline and expectations	15 (48.39%)
Technical issues	25 (18.25%)	Technical issues	25 (100%)
Request for additional information outside of programme	17 (12.41%)	Additional resources	12 (70.59%)
		Problem-solving	5 (29.41%)

Percentages are rounded to two decimal places.

### *Coding of client emails*

Identifying information was removed from all emails by an independent researcher and then imported into NVivo 10 software (NVivo qualitative data analysis software; QSR International Pty Ltd, version 10, 2012). Although therapist emails were not coded, they were read alongside client emails in order to obtain contextual information. Client emails were coded following a content analysis process, which involves classifying text into smaller meaningful categories (Elo and Kyngas, 2008; Hsieh and Shannon, 2005). Given that no prior research to the authors' knowledge has been conducted on the types of questions clients ask their internet therapist, conventional content analysis was employed to develop the initial coding scheme. Following Hsieh and Shannon (2005), codes were first derived by repeatedly reading the data for patterns; data were then organized into broader categories. As a pilot study, the coding scheme was developed by one of the authors (J.N.S.) using a different random sample of 35 participants treated during the same time period. Once the initial coding scheme was developed, directed content analysis was employed (Hsieh and Shannon, 2005). Data were then coded by three coders (J.N.S., M.M.N., H.D.H.) following the initial coding scheme; data that did not fit within the scheme was assigned a new code (Hsieh and Shannon, 2005). Raters met to discuss discrepancies and reach consensus on a final coding scheme (see Table 1). To confirm reliability, two of the coders rated four randomly selected client transcripts. Inter-rater reliability between the two coders was strong ( $K = 0.94$ ). Following coding, the frequency of questions clients asked their internet therapist was calculated using a query function in NVivo.

## Results

### *Sample characteristics and treatment outcome*

This sample ranged in age from 19 to 66 years (mean = 39.28 years,  $SD = 11.78$ ). The majority were female ( $n = 53$ ; 66%), of Caucasian ethnicity ( $n = 73$ ; 91%), employed ( $n = 55$ ; 69%), and married ( $n = 55$ ; 69%). Approximately half the sample reported at least some university education ( $n = 43$ ; 54%) and residing in a large city with a population over 200,000 people ( $n = 44$ ; 55%). Approximately half of the sample indicated taking medication for symptoms of anxiety and/or depression ( $n = 41$ ; 51%). Mean group scores for the GAD-7 and PHQ-9 decreased from pre- (mean = 12.35, mean = 12.53, respectively) to post-treatment (mean = 5.33, mean = 5.65, respectively). The majority of participants completed all core lessons ( $n = 70$ ; 87.5%).

### *Client questions*

Clients sent, on average, 5.69 ( $SD = 3.64$ ) emails to their therapists over 8 weeks. A total of 137 client questions were identified among participant emails. On average, clients asked 1.71 ( $SD = 1.74$ ; range 0 to 8) questions to their internet therapists with 30% of participants asking no questions ( $n = 24$ ), 23.8% asking one ( $n = 19$ ), 21.2% asking two ( $n = 17$ ), and 25% asking three or more ( $n = 20$ ) questions.

As presented in Table 1, client questions were categorized according to the following four main themes reflecting questions that were designed to: (1) facilitate understanding and application of lesson material and techniques (mean = .80;  $SD = 1.07$ ; 50% of clients asked at least one question of this nature); (2) clarify the therapeutic process (mean = .39;  $SD = .68$ ; 28.70% of clients asked at least one question); (3) gain assistance with technical challenges (mean = .31;  $SD = .61$ ; 23.70% of clients asked at least one question); or (4) elicit assistance for issues outside the scope of the ICBT programme (mean = .21;  $SD = .66$ ; 13.70% of clients asked at least one question). Sub-categories emerged within three of the four themes. Below, we elaborate on the main themes and subcategories by using client quotations to illustrate the themes that were identified.

### *Questions about facilitating understanding and application of core techniques*

The majority of client questions (46.72%) were asked in order to facilitate understanding and application of material and techniques presented in the ICBT programme. Almost half of these questions focused on obtaining assistance with cognitive restructuring. At times, clients sought help with how to identify thoughts ('*Sometimes too it's still hard to identify thoughts but I'm working on it*'). Most commonly, however, clients requested assistance with identifying alternate helpful thoughts for their particular situation. For instance, clients described difficulties with believing their balanced thoughts ('*I have written down some thoughts that disprove my belief of "perfectionism". Yet, I do not believe them and second guess myself asking if these thoughts are really true*'). Furthermore, a number of clients found it difficult to identify alternate thoughts when they were dealing with health-related stressors, as illustrated by the following example:

*I have been trying to do lesson 2 but it's not going well. My physical health is really challenging to me now and I see no hope. I don't know if I am just falling through the cracks or they*

*just can't figure out what to do with me. I try to think of a positive thought but it just doesn't happen.*

Other times, clients described challenges with cognitive restructuring when it concerned relationship issues:

*I am wondering how to challenge my negative thought towards her and convince myself that she is okay and really not trying to ignore me or emotionally hurt me, that is just her way of doing things?*

General feedback about thought challenging was also requested. For instance, clients raised concerns about the number of unhelpful thoughts they identified and whether practice makes the process easier (*'I wonder if I can be consistent for long enough that it becomes more natural'*). Clarification was also sought when clients were uncertain about when they should be implementing the strategy:

*Would it be beneficial for me to challenge the Unhelpful Thoughts I discovered in Lesson 1 with the Thought Challenging Worksheet? My thinking is to have helpful and realistic information prepared that I can read over. Or, is it better to challenge the thought when it happens?*

Similarly, other clients described difficulties applying the strategy in the moment, as reflected by the following example:

*I found it difficult to challenge those thoughts. I also find it difficult to do something helpful because sometimes the negative thought does not last that long. Anything helpful that I have written down does not come to mind at the time.*

Additional questions within this category concerned asking for help applying graded exposure and activity to their situation. At times, clients reported difficulties with expanding on their fear hierarchies:

*Some of the things I avoid are difficult to break down into a ladder. There are some tasks at work that cause me anxiety and I avoid them sometimes, but I can't really take an approach to them. They are mostly all or nothing tasks.*

For other clients, however, difficulties arose when initially attempting graded exposure: *'My all time, biggest source of anxiety was work. This is the same work I have been off on long-term disability for over 10 years. I cannot see any realistic stepladder towards that goal'*.

While less frequent, clients also enquired about how to manage both intense physical emotions (*'Would some sort of meditation work in concert with the controlled breathing when symptoms spiral too high too quickly?'*) and relapse (*'I was worried about what to do if I started to fall back into my old pattern. I really don't want that to happen'*), as well as about additional resources on the website, such as sleep hygiene (*'I also like the information in the sleep resource, however, with my schedule it isn't really possible to apply most of the tools'*). Lastly, there were a small number of questions aimed at understanding how to remember (*'I really like the thought challenging, breathing and graded exposures exercises, I find they help me the most, although I still struggle to remember to use these strategies'*) and apply the aforementioned skills in practice (*'Sometimes I feel like it's so hard to put what I am learning into practice'*).

### *Questions about therapy process*

Another main category that emerged concerned the process of therapy (22.62%). These questions were subdivided into questions that focused on the course generally or on the relationship with the therapist. Questions related to the course typically came up during the beginning of the programme or alternatively as the programme was coming to an end. For example, clients sought clarification about what they should do after they completed the first lesson (*'I need to know what you would like from me after completing the 1st lesson'*) or what they would be learning (*'It was helpful to review but in the coming weeks will I learn more stuff than basic anxiety/depression information?'*). Clarity was also sought regarding termination, particularly when the client was uncertain as to whether they would continue to have access to the material.

Questions about the therapeutic relationship were most commonly related to scheduling times to connect with the designated therapist. Clients, for instance, reached out to their therapist in order to confirm (*'I'm just wondering which day works best for you as far as maintaining contact?'*), change (*'I really want to get a message to you this week and wonder if you would be able to check tomorrow. I'm busy now for a while but don't want to miss you! Is that an option?'*), or postpone appointment times (*'Could we postpone till [date] or till the following Tuesday?'*). Moreover, clients also connected with their therapist in order to discuss treatment (*'I like your idea of using a phone call as part of the graded exposure. Would [date] work for you? Or please suggest a time that works best for you and I will make it work?'*).

Additional questions were designed to better understand the nature of the therapeutic contact. Clients sought clarification regarding the process of therapeutic correspondence, including details about email length (*'A couple questions: Are my emails to you too long? Do you want more or less detail? Also, is there more I should be doing that I've not thought of?'*) and email frequency (*'I can message you during the week but do you only reply to any e-mails I send once a week? I was a bit confused about that?'*). Others questions, however, were less specific and aimed at understanding how clients seek therapeutic contact in ICBT (*'With the upcoming therapy sessions are they going to be longer in length, as in a traditional therapy session of hour?'*). Occasionally, clients also asked questions in order to gather more information about the therapist's background and experience with ICBT. For example, information regarding the therapist's personal struggles with mental health (*'Just out of curiosity, have you ever gone through anxiety or depression?'*) or whether they have worked with other clients in ICBT with similar symptoms (*'Do you have many women in my similar situation postpartum?'*).

### *Questions about technical issues*

Clients posed diverse questions related to technical issues (18.25%). Some clients emailed therapists to enquire about how to download and save documents within the program (e.g. *'How can I download the lesson content so that I have access to it after this course is over?'*). Other times, clients had questions about where to find material on the website (*'Where do I find the handout on sleep?'*) or about why they could not open material on the website (*'I am having some technical problems accessing lesson 2. Could you please give me a call when you get a chance?'*). Clarity was also sought regarding measures used to monitor client symptoms over treatment. For instance, one client wrote: *'by questionnaires are you meaning the depression and anxiety measures done at the beginning of each lesson?'*



### *Questions about requesting assistance outside scope of programme*

Approximately 13% of client questions were classified as wanting information outside the scope of the programme. The majority of these questions were client requests to find additional support, either in the form of group or individual therapy for concurrent symptoms (e.g. ‘Do you know anyone who specializes in addiction and withdrawal?’) or additional text-based material (‘If you have any tips or book suggestions for me to continue on down this road of self-mental health improvement please feel free to let me know’). While less frequent, clients also asked about medication (e.g. ‘Any thoughts about the suggestion of Wellbutrin’), exercise (e.g. ‘I also wonder about switching the workout activities I do normally’), or diet (e.g. ‘I wanted to know your thoughts on going back to my nutritionist for an updated eating plan’).

### *Correlations between the number of questions asked and outcomes*

Correlations were conducted in order to examine whether the number of questions asked were associated with changes scores on the GAD-7 and PHQ-9, number of lessons completed, and self-report ratings of therapeutic alliance. No statistically significant associations were reported between the number of questions asked and the aforementioned treatment outcomes ( $p$  range: 0.18–0.65).

## **Discussion**

A key component of therapist assistance involves answering client questions (Paxling et al., 2011; Schneider et al., 2016), yet no research to the authors’ knowledge has explored the nature of client questions posed during ICBT. Although outcomes are generally reported as large when ICBT is therapist-assisted (Baumeister et al., 2014), there is variability in recovery rates, with a portion of clients not benefiting from treatment (e.g. Hadjistavropoulos et al., 2016). The purpose of this study was to garner a better understanding of the nature and frequency of questions clients ask during ICBT for depression and anxiety as well as investigate the potential associations between the number of questions asked and treatment outcomes. Identifying processes that could be related to therapeutic change is an important research avenue for maximizing client outcomes (e.g. Elliot, 2010; Hadjistavropoulos et al., 2018).

Results from the study suggest that, on average, clients sent approximately six emails during the course of treatment, of which less than two questions were asked. Given that answering client questions represents a key component of therapist assistance, it was quite surprising to find such a low number of questions posed during treatment. One interpretation of the number of questions asked is that there was low engagement with the programme; however, the majority of the sample completed the treatment programme, logged in an average of 27.3 times, and obtained good clinical outcomes. Alternatively, it could be that the programme materials were detailed, thorough, and addressed client questions within the programme content. It is important to note that the ICBT programme employed has been developed over numerous clinical trials, with client questions and feedback being used to guide revisions to the programme after each trial. Thus, it is possible that more questions might have been asked had the course not been developed in this way.

In terms of the 137 questions that clients asked, the following four main themes emerged from content analysis: (1) questions designed to facilitate understanding and application

of lesson material and techniques (46.72%); (2) questions aimed to clarify the therapeutic process (22.62%); (3) questions related to technical challenges (18.25%); and (4) questions related to obtaining assistance with issues outside the scope of ICBT (12.41%). The majority of questions posed to the internet therapist focused on the content of the ICBT programme and were conceptualized as an attempt of the client to enhance understanding and apply the material and techniques. While diverse in content, the majority of these questions were related to seeking assistance with cognitive restructuring followed by graded exposure. Given that thought challenging was the first coping strategy presented in the course, this finding may reflect that clients were new to CBT strategies and initially engaged and motivated in treatment; however, as they became more comfortable with the programme content, it is plausible that their level of questioning reduced with the subsequent materials. Reviewing the questions suggested that some programme content could be clarified to enhance client understanding, such as how to identify and manage unhelpful thoughts related to health conditions or relationships.

The second most common type of question pertained to the therapeutic process. While the internet therapist typically discussed the therapeutic process over the telephone prior to treatment, clarification was sought by clients regarding how materials would be released, the length of the programme, homework requirements, and the nature and frequency of communication with the therapist. Given that presenting health-related information in various modalities enhances learning (Wilson and Wolf, 2009), in the future, information regarding the therapeutic process could be presented by different methods at multiple time points throughout the programme, including during the telephone screening interview and as part of an introductory lesson online. Furthermore, given that a portion of the therapeutic process questions pertained to when and how one would gain access to the next lesson, timelines for each lesson could be more clearly presented to clarify when clients would gain access to materials. As online therapy is often a new modality of treatment for many clients (Gun et al., 2011), the current results suggest that therapists offering ICBT should be prepared to address client questions regarding the nature of the therapeutic process and also that it would probably be helpful to repeatedly and clearly incorporate this information into online treatment materials.

Results showed that approximately one-fifth of client questions were related to technical issues, although not all clients had internet-related concerns. These questions may reflect lower familiarity with navigating the online platform. Given that the average participant was middle-aged and had some university education, the number of questions concerning technical issues may be a function of the sample demographics. It is possible that if the sample were older and less educated, there would have been a greater frequency of technical questions. Future programmes should closely review technical instructions to reduce questions in this area. One option would be to incorporate instructional videos in ICBT as these have been shown to be an effective means of educating consumers (see Tuong et al., 2014, for a review). Future ICBT programmes could, for example, include videos on how to complete online questionnaires, where to access programme materials, and how to download homework and send emails. Interestingly, while our programme offers all clients a telephone number to call for technical assistance, the clients still seem to address these questions to the therapist. As such, reminders of technical assistance could also be employed throughout the programme to reduce such questions aimed at the internet therapist.

While less frequent than other types of questions, clients also requested information to assist with concerns outside the scope of the ICBT programme (e.g. medication, diet and

exercise-related questions) or sought a referral to a support group or face-to-face provider. Clinicians who deliver ICBT need to be aware that they may be asked information outside of programme content as well as outside their area of competence. In order to better help prepare future ICBT therapists, examples of these questions could be incorporated into ICBT therapist training, such that therapists can properly address these questions. These findings also suggest that ICBT therapists need to be aware of available face-to-face resources in their respective communities.

An additional aim of the current study was to explore the potential associations between the number of client questions and client outcomes. No significant correlations were found, however, suggesting that participant engagement in the form of posing questions in ICBT may not directly contribute to treatment gains or increase the likelihood of completing treatment. Alternatively, given that the largest portion of clients did not ask any questions, it is possible that the effect of asking questions in ICBT on treatment outcomes may have been mitigated in the current study. It would be valuable to explore if prompting clients to ask more questions of their therapists, especially with respect to treatment materials and techniques, could improve outcomes. Additionally, future research with a larger sample could explore whether the type of client questions (e.g. questions related to lesson material and techniques, the therapeutic process, technical challenges) are related to treatment outcomes. Another avenue for future research is examining the utility of developing additional resources to address the questions that clients asked to explore if this facilitates clients' learning and, in turn, enhances client outcomes. To further improve the efficiency and consistency of the ICBT programme, templated emails could also be created for therapists to send to clients who request additional information.

There are some limitations to the current study. First, this study was qualitative in nature and therefore could be influenced by coder bias. In order to reduce this bias, multiple coders were used and a high degree of inter-rater reliability was found. Given the nature of the study, the generalizability of the findings is limited. The questions extracted are related to a specific ICBT programme among a specific sample demographic. Of particular note, the majority of clients were educated, which may have influenced the type of questions asked. In the literature, therapist assistance is not frequently described and, thus, it remains unclear if the identified questions are unique to the current ICBT programme or common among ICBT programmes. It is possible, for example, that in programmes that involve more email exchanges between clients and therapists, more questions and different questions would be asked. As an aside, most studies we reviewed did not report the number of patient and therapist emails exchanged. The current study sets the stage for further research and provides a framework for examining client questions and therapist responses in ICBT. That is, since answering questions represents a key component of therapists' roles in ICBT, future research is warranted to determine how generalizable the questions are across ICBT programmes and samples. Additionally, future research could explore how responsive therapists are to questions (e.g. whether they respond to questions) as well as the quality of their responses to questions (e.g. clarity of responses), and in turn, examine whether therapist responses influence client outcomes.

In conclusion, the current study represents a first attempt at identifying the nature of client questions asked during the course of ICBT. From a methodological perspective, the study generates an interesting approach to examining therapist assistance during ICBT and exploring strategies to improve ICBT. Unexpectedly, while asking client questions represents a key component of therapist assistance, clients, on average, only asked two questions of their therapists during ICBT. Commonly, questions concerned CBT techniques. It was evident,

however, that therapists also need to be prepared to answer questions regarding the nature of online therapy, technical issues related to ICBT, and resources outside the scope of ICBT. The study provides helpful information for therapists, assisting them in understanding what questions clients have about ICBT. In particular, the results could be used when training therapists to deliver ICBT to ensure they are prepared to answer common client questions. Questions may also prove helpful to ICBT developers to ensure that their programme materials address common client questions. Furthermore, the paper provides insight into how clients engage with ICBT and the questions that emerge for clients as they work through this type of therapy.

### Acknowledgements

The authors would like to acknowledge the research staff, therapists, and clients associated with the Online Therapy Unit, University of Regina. The support of Saskatchewan Health in facilitating the delivery of ICBT in Saskatchewan is gratefully acknowledged. Professor Nickolai Titov and Dr Blake Dear from Macquarie University developed the ICBT Wellbeing Course.

*Conflicts of interest:* The authors have no conflicts of interest with respect to this publication.

*Ethical statement:* The authors have abided by the Ethical Principles of Psychologists and the Code of Ethics.

*Financial support:* This work was supported by funding provided by the Canadian Institutes of Health Research (reference number 293379; 152917) with matching funding provided by the Saskatchewan Health Research Foundation and the RX & D Health Research Foundation. Funders had no involvement in the study design, collection, analysis, or interpretation of the data.

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