

Contents lists available at [ScienceDirect](http://ScienceDirect.com)

Internet Interventions

journal homepage: www.invent-journal.com/

A qualitative examination of psychology graduate students' experiences with guided Internet-delivered cognitive behaviour therapy



Lindsay N. Friesen, Heather D. Hadjistavropoulos*, Nicole E. Pugh

Department of Psychology, University of Regina, Regina, SK S4S 0A2, Canada

ARTICLE INFO

Article history:

Received 10 March 2014

Received in revised form 16 April 2014

Accepted 16 April 2014

Available online 24 April 2014

Keywords:

Training

Clinical psychology graduate students

Internet cognitive behavior therapy

Email communication

ABSTRACT

Guided Internet-delivered cognitive behaviour therapy (ICBT) is efficacious for the treatment of a variety of clinical disorders (Spek et al., 2007), yet minimal research has investigated training students in guided ICBT. To contribute to the training literature, through qualitative interviews, this study explored how ICBT was perceived by student therapists ($n = 12$) trained in guided ICBT. Additionally, facilitators and challenges encountered by students learning guided ICBT were examined. Qualitative analysis revealed that students perceived training to enhance their professional skills in guided ICBT such as how to gain informed consent, address emergencies, and facilitate communication over the Internet. Students described guided ICBT as beneficial for novice therapists learning cognitive behavior therapy as asynchronous communication allowed them to reflect on their clinical emails and seek supervision. Further, students perceived guided ICBT as an important skill for future practice and an avenue to improve patient access to mental health care. Specific facilitators of learning guided ICBT included having access to formal and peer supervision as well as technical assistance, ICBT modules, a functional web application, and detailed policies and procedures for the practice of guided ICBT. Challenges in delivering guided ICBT were also identified by participants such as finding time to learn the approach given other academic commitments, working with non-responsive clients, addressing multiple complex topics over email, and communicating through asynchronous emails. Based on the feedback collected from participants, recommendations for training in guided ICBT are offered along with future research directions.

© 2014 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

1. Introduction

Depression and anxiety are among the most commonly experienced mental health disorders (Health Canada, 2002). These debilitating disorders create a significant burden at various levels—from personal difficulties (e.g., Dewa et al., 2002) to the overuse of healthcare resources (Jacobs et al., 2008). Research consistently shows that individuals with depression and anxiety often encounter difficulties accessing treatment for reasons including mobility challenges as well as time and financial constraints (Collins et al., 2004). Unfortunately, while evidence suggests that even a minor improvement of depressive symptoms can result in a major impact on the disease burden, evidence-based interventions are not widely accessible, particularly in rural and remote communities (Andersson and Cuijpers, 2008).

The integration of Internet technology with the practice of psychotherapy is an innovative method for increasing accessibility and affordability of mental health treatment. Recently, attention has

turned to the delivery of cognitive behavior therapy (CBT) via the Internet, often referred to as Internet-delivered Cognitive Behaviour Therapy (ICBT; Andersson and Titov, 2014). ICBT involves clients reviewing cognitive and behavioral treatment strategies over the Internet. These materials are commonly presented on a weekly basis in modules (Hadjistavropoulos et al., 2011). ICBT can be either self-directed or guided by a therapist. When ICBT is guided, a therapist provides support and encouragement, and directs therapeutic activities via e-mail or telephone. Considerable evidence indicates that ICBT is efficacious for depression and anxiety. A meta-analysis that reviewed 12 randomized controlled trials of ICBT for anxiety and depression reported a moderate mean effect size ($d = .40$; Spek et al., 2007). More recently, a meta-analysis of computer-based psychological treatments for depression reported high participant treatment satisfaction, and a moderate post-treatment effect size ($d = .56$), with therapist-guided interventions yielding better outcomes and greater retention when compared to self-directed interventions (Richards and Richardson, 2012). Moreover, similar effect sizes have been reported for guided ICBT and traditional face-to-face therapy (Cuijpers et al., 2010).

Given the strong empirical evidence for the efficacy of guided ICBT, there is a movement to incorporate ICBT into clinical practice

* Corresponding author at: Department of Psychology, University of Regina, Regina, SK S4S 0A2, Canada. Tel.: +1 306 585 5133.

E-mail addresses: lindsay.friesen@uregina.ca (L.N. Friesen), hadjista@uregina.ca (H.D. Hadjistavropoulos), Nicole.pugh@vch.ca (N.E. Pugh).

(Andersson and Titov, 2014). There is a growing awareness of the importance of translating evidence-based research into clinical practice (Barwick et al., 2009). Training students in ICBT has the potential to accelerate the knowledge transfer process. Students, for instance, generally hold fewer preconceived notions regarding particular treatments and are often more open to explore novel ideas (Meyers et al., 1998). Arguably, if students are trained in guided ICBT, they would potentially bring this experience into the workforce, facilitating the incorporation of guided ICBT into routine clinical practice. Further, introducing students to novel therapeutic techniques, such as guided ICBT, is ideal given the supervision available in graduate training programs (Cardenas et al., 2008). Preliminary research has also shown that student therapists generally have positive evaluations of the teaching–learning process and report satisfaction with using Internet therapy (Cardenas et al., 2008).

Despite expanding literature in the area of ICBT, there is currently no standard method to train therapists in this novel form of treatment. To illustrate, in a survey of 93 counselors, 94% reported that their professional program did not include training in e-counseling and 92% stated that personal reading on the subject was their primary education in the provision of Internet-delivered therapy (Finn and Barak, 2010). The lack of training programs focused on Internet-delivered therapy and the paucity of research with regard to these programs are concerning. Indeed, some researchers have questioned the assumption that face-to-face therapy skills can be fully transferred to Internet-delivered therapy skills (Shandley et al., 2011). It has been noted that without formal training and professional guidelines, Internet-delivered therapy will be based upon individual perceptions resulting in a wide variation in the delivery of this type of therapy (Finn and Barak, 2010).

Few researchers have investigated training therapists in the provision of Internet-delivered therapy. Cardenas et al. (2008), at the University of Mexico, offered a clinical practicum focused on developing skills in Internet-delivered therapy to six clinical psychology students occurring over three academic semesters. The students had previously completed several comprehensive clinical psychology courses and were familiar with the use of information technologies. The first semester consisted of a 16-week (12 h per week) intensive training program, including an introduction to Internet-delivered therapy and a discussion of program content and varying CBT techniques. In the second and third semesters, students provided guided ICBT under supervision to three simulated clients and subsequently to actual clients (the authors did not report the number of clients treated). The clinical skills of the students were evaluated using the Cognitive Therapy Scale developed by Young and Beck (1980), and it was found that students showed a significant improvement in therapeutic skills over the three semesters. The student therapists further reported positive evaluations of the teaching–learning process and reported satisfaction with providing guided ICBT in both a simultaneous manner (i.e., real time via text, audio, and video) and delayed manner (i.e., via email; Cardenas et al., 2008). Additionally, the students reported that their clients accepted the Internet modality as an acceptable form of psychological treatment. While this research shed light on a specific approach to training students in guided ICBT, it did not provide an in-depth understanding of students' perceptions of guided ICBT or barriers or facilitators of the students' learning experience. This type of information is needed to further inform the development of strategies for training students in guided ICBT.

Since 2009, Shandley et al. (2011) reported that they have trained postgraduate psychology students to deliver a 12-module ICBT program to individuals with anxiety. While student experiences were not directly examined, the researchers regarded guided ICBT training as a valuable learning experience, as students are afforded more time to reflect on their emailed therapeutic responses and can seek supervision as necessary. Finally, given that the process of writing client

emails occurs in a relatively non-pressured environment, the authors highlighted that students often gained confidence and mastery in their face-to-face clinical skills through ICBT training (Shandley et al., 2011).

Adding to this literature, Hadjistavropoulos et al. (2012) recently developed a workshop that provided research evidence and practical information about the delivery of guided ICBT to 20 graduate level students. All students had previous CBT training and clinical experience. In addition to providing background literature and research on ICBT, the workshop integrated an experiential component with students formulating and discussing responses to client emails. Pre and post workshop measures revealed that the workshop was successful in improving knowledge and understanding of ICBT research and practice. Furthermore, the researchers observed a positive change in students' attitudes toward the utility and professional practice of ICBT and improved confidence in the delivery of guided ICBT. While this study examined initial student perceptions of an ICBT training workshop using self-report measures, the researchers did not survey the students after they gained clinical experience delivering guided ICBT. Perceptions of ICBT could be quite different after students gain experience and may provide further insight into factors that facilitate or hinder the training process.

1.1. Objectives

The present study was a follow-up to the study conducted by Hadjistavropoulos et al. (2012). The objectives of this study were to contribute to the literature on training in guided ICBT by investigating perceptions of ICBT reported by clinical psychology graduate students, who provided guided ICBT for the treatment of depression, anxiety, and/or panic disorder and also to examine students' perceptions of factors that facilitated their training as well as variables that made learning and delivering guided ICBT challenging. A qualitative approach was utilized to gain comprehensive first-hand perspectives on the subject that could be used to develop practical recommendations for training in guided ICBT.

2. Method

2.1. Participants

Twelve graduate students volunteered to participate in this study. Participant recruitment concluded when the richness of information gathered from participants had been saturated (Glaser and Strauss, 1967). All participants were enrolled in the clinical psychology doctoral program at the University of Regina and had participated in the Online Therapy Unit for Service, Education, and Research's eight-hour training workshop. As described by Hadjistavropoulos et al. (2012), the topics covered in the workshop included: (1) research on ICBT; (2) information on ICBT for depression, generalized anxiety, and panic; (3) ethical and professional issues related to the delivery of guided ICBT; and (4) written communication skills in delivering guided ICBT. The workshop also involved a pragmatic component including participants formulating responses to sample client emails on provided laptop computers. Following the workshop, participants treated at least one client in guided ICBT. The average number of clients treated by participants was three ($SD = 1.51$). Interviews were conducted seven to 12 months after participants ended ICBT training and first began offering guided ICBT.

To contextualize their experience with ICBT, clients who were treated by the participants were either self-referred or referred by a healthcare professional to the Online Therapy Unit for Service, Education, and Research at the University of Regina (see Hadjistavropoulos et al., 2011 for a description of the Unit). Clients were first screened by a coordinator over the telephone using the MINI International Neuropsychiatric Interview (MINI; Sheehan et al., 2006), which is a structured

clinical interview assessing psychiatric disorders. The interview was used to ensure that the potential client met threshold or subthreshold criteria for generalized anxiety disorder (GAD), panic disorder (PD), or depression, and did not report current or recent problems with psychotic disorders, manic episodes, alcohol or substance dependence or abuse, or suicide plan or intent (see Hadjistavropoulos et al., 2011 for detailed description of inclusion and exclusion criteria). In addition, the interview was used to ensure that the clients were at least 18 years of age, Saskatchewan residents, had access to a computer with Internet, and were comfortable reading and writing in English. Eligible clients were assigned to a graduate student Internet therapist. The clients incurred no cost for this service as the Unit was grant funded. Participants volunteered their time as Internet therapists in the interest of gaining supervised clinical experience. Communication between the participant and client was supervised by a Ph.D. level clinical psychologist and expert in guided ICBT (co-author H.H.).

The website the participants and clients used is available at www.onlinetherapyuser.ca and the module content was licensed from Swinburne University's National eTherapy Centre in Australia (www.swinburne.edu.au/lss/swinpsyche/etherapy/). There is evidence in support of the efficacy of and client satisfaction with these programs (for a review see Klein et al., 2010). The clients were

encouraged to work through one of the 12 modules every week. Each program includes psychoeducation on the relevant disorder, cognitive and behavioral strategies for managing the disorder, and information on relapse prevention. After each module, clients are asked to complete offline exercises related to the module content and are invited to email their therapist regarding their progress and any potential questions. In turn, participants were required to log on to the secure web application on a specific day each week and review client emails and program progression. Following the review, participants then composed a weekly email to the client offering support and encouragement, answering questions, and providing suggestions for therapeutic activities.

2.2. Procedure

Email notices were distributed to invite eligible clinical psychology student therapists to participate on a voluntary basis. Consent was not limited to the initial signing of the consent form but was ongoing throughout the research process (Hadjistavropoulos and Smythe, 2001). In order to ensure confidentiality, each participant was assigned an identification number. Each participant took part in a semi-structured interview that lasted 45 to 60 min. The same

Table 1
Consolidated Criteria for Reporting Qualitative Research (COREQ; Tong, Sainsbury, & Craig, 2007).

No. item	Guide questions/description	Reported in section
<i>Domain 1: research team and reflexivity</i>		
Personal characteristics		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	Method
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	Method
3. Occupation	What was their occupation at the time of the study?	Method
4. Gender	Was the researcher male or female?	Method
5. Experience and training	What experience or training did the researcher have?	Method
Relationship with participants		
6. Relationship established	Was a relationship established prior to study commencement?	Method
7. Participant knowledge of the interviewer	What did the participants know about the researcher? E.g. personal goals, reasons for doing the research	Method
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? E.g. bias, assumptions, reasons and interests in the research topic	Method
<i>Domain 2: study design</i>		
Theoretical framework		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? E.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	Method
Participant selection		
10. Sampling	How were participants selected? E.g. purposive, convenience, consecutive, snowball	Method
11. Method of approach	How were participants approached? E.g. face-to-face, telephone, mail, email	Method
12. Sample size	How many participants were in the study?	Method
13. Non-participation	How many people refused to participate or dropped out? Reasons?	N/A
Setting		
14. Setting of data collection	Where was the data collected? E.g. home, clinic, workplace	Method
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	Method
16. Description of sample	What are the important characteristics of the sample? E.g. demographic data, date	Method
Data collection		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Method
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	N/A
19. Audio/visual recording	Did the research use audio/visual recording to collect the data?	Method
20. Field notes	Were field notes made during and/or after the interview or focus group?	Method
21. Duration	What was the duration of the interviews or focus group?	Method
22. Data saturation	Was data saturation discussed?	Method
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	Method
<i>Domain 3: analysis and findings</i>		
Data analysis		
24. Number of data coders	How many data coders coded the data?	Method
25. Description of the coding tree	Did authors provide a description of the coding tree?	N/A
26. Derivation of themes	Were themes identified in advance or derived from the data?	Method
27. Software	What software, if applicable, was used to manage the data?	Method
28. Participant checking	Did participants provide feedback on the findings?	N/A
Reporting		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? E.g. participant number	Results
30. Data and findings consistent	Was there consistency between the data presented and the findings?	Discussion
31. Clarity of major themes	Were major themes clearly presented in the findings?	Results/Discussion
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Discussion

interview guide was used for each participant; however, the individual interviews were unique due to the open-ended nature of the questions and follow-up questions that could be induced by participants' responses. Participants were asked about their perceptions of the training workshop, the screening process, the modules, forming a therapeutic relationship through text, supporting a client in cognitive and behavioral tasks through text, the web application, supervision, policies and procedures of the Unit, and any ethical issues that were encountered. Additionally, participants were asked about their ideas for improving any of the above, as well as barriers and facilitators of delivering guided ICBT, and their perception of the utility of guided ICBT for clients. Participants were also queried about their perceptions of learning guided ICBT in terms of their education and their thoughts on guided ICBT in future practice. Participants' gave consent to obtain information about the number of clients they treated from the Unit.

The interviews were conducted by a female Master's student in the clinical psychology program at the University of Regina, who was also a research assistant and Internet therapist with the Online Therapy Unit for Service, Education, and Research (author L.F.). In an effort to be transparent, the interviewer kept an electronic field journal to record thoughts, feelings, concerns, and ideas throughout the research process. The fact that the interviewer was a graduate student and worked with the Online Therapy Unit for Service, Education, and Research was considered a benefit in terms of easily establishing rapport with the participants and understanding their experiences with graduate school and guided ICBT without the participants having to provide detailed explanations. However, because the interviewer held multiple roles and may have held beliefs or biases, she made a conscious effort to be welcoming of divergent opinions and beliefs. When participants responded to a question with a different opinion than the interviewer, she was mindful to ask participants to elaborate on their answers to promote understanding of their viewpoints. Overall, the participants' responses were deemed candid and open given that both positive and negative opinions were shared and participants expressed comfort with the procedures put in place to keep their responses confidential.

The interviews were conducted either in-person ($n = 11$) or via Skype ($n = 1$) with no non-participants present during the interview. A recording device audio-recorded all interviews and they were transcribed verbatim. Participants were sent a copy of their transcribed interview and were encouraged to email the researcher if interested in excluding or adding information. No participant made amendments to their interview. The consolidated criteria for reporting qualitative research (CORSEQ) was used to guide the reporting of important aspects the current qualitative study (Tong, Sainsbury, & Craig, 2007; see Table 1).

2.3. Data analysis

Using the procedure described below, thematic content analysis was conducted individually by two researchers to identify themes and ideas that surfaced during the semi-structured interviews (Hsieh and Shannon, 2005). The interviews were reviewed several times to obtain an overall sense of their meaning and the qualitative software NVivo (Woods, 2002) facilitated this process. Initially, all text relevant to the objectives of the study was highlighted. The text was then sorted into six content areas based on the interview questions (i.e., positive aspects, challenging aspects, facilitators of the experience, barriers of the experience, usefulness and future utilization, and suggested improvements). To generate initial themes, microanalysis was utilized, which involved reviewing the interviews within the content areas line-by-line. The relevant text was then divided into meaning units that comprised of condensed sections of the interview, which were then labeled with codes. Meaning units were separated by a break or change in meaning. Following this process, the two researchers came together to compare and contrast

common themes derived from the interviews. Another researcher, independent from this research, reviewed their findings to ensure that the document contained no identifying information before being reviewed by the Online Therapy Unit supervisor (co-author H.H.) who confirmed the organization of themes.

3. Results

3.1. Perceptions of ICBT training

3.1.1. Understanding perceptions of guided ICBT

Analysis of interviews revealed that participants saw considerable value in receiving training in guided ICBT. Participants shared that the training increased not only their knowledge of the importance of guided ICBT, but also the limitations of the approach for clients. Echoing the research literature, participants saw value in the approach for clients who had difficulty accessing face-to-face treatment for various reasons (e.g., limited client mobility, concerns about stigma, limited access to providers due to inadequate community resources, rural or remote location, or client time). Participants were enthusiastic when discussing how guided ICBT has the potential to increase access to mental health resources for a broader population. As one participant reported:

I was really hopeful that this might be kind of the best of both worlds for her, you don't have to go to a person, you don't have to leave your house, but there's more feedback than from a book.

[Interviewee 12]

Participants also found it appealing to provide guided ICBT to individuals on waiting lists who were experiencing minimal to moderate symptoms. Overall, participants reported that guided ICBT was a valuable service to community clients with a shorter time commitment on the part of the therapist. This point was articulated by one participant:

I think it's a nice kind of like easy to follow. They can go at their own pace which is nice. Comprehensive. There's not as much work required from the therapist, which is nice. You know we don't have to meet them for an hour. I do think it's a good service for certain clients.

[Interviewee 6]

Through training in guided ICBT, participants also reported an enhanced understanding of relationship building over the Internet and how clients are able to not only gain knowledge, but also acquire cognitive and behavioral skills through this treatment. The participants emphasized how they saw this to be the case especially for clients who completed homework, and engaged with their therapist over the Internet (e.g., sharing life details, asking questions, responding to suggestions).

Participants also emphasized, however, that training in guided ICBT increased their understanding that ICBT is not a "one-size-fits-all" solution. That is, they perceived the approach as being appropriate for some clients, but not all clients. Clients with more severe depression or who were less engaged in the process (e.g., not completing homework, providing only minimal responses to homework, not responding to therapist emails) were seen as being less likely to benefit from guided ICBT. As one participant reported:

I found for my anxiety clients, it worked quite well. For the depression clients, who are more severe, I found that they tend to take way longer... there's less motivation... those clients, maybe it would be better for them to like see somebody in person because there's a lot of other issues....

[Interviewee 8]

This view was also reflected in the following quote:

I think for some people it's really good, but for the other people it's just not. It seems like the more complex problems clients have, you know just the harder it is. So I think it's helpful for a good portion of people that would be on a waitlist and if they're willing to try it, why not and they're appropriate so I think I would use it in some form especially for people who are like in a remote area or who just don't really have much access to like a psychologist who does CBT, and for those other reasons who may not you know be embarrassed about going.

[Interviewee 9]

3.1.2. Skill in Internet-delivered therapy

Participants also reported how training in guided ICBT provided them with skills in providing Internet-delivered therapy generally. They described, for instance, having a greater appreciation for screening clients for Internet-delivered therapy, the key components of informed consent, handling emergencies, and maintaining client confidentiality. Beyond these practices, they reported learning about various strategies to facilitate communication with clients, such as avoiding complex language and lengthy emails, and using appropriately placed CAPS, colored text, and emoticons to emphasize emotions. They also described learning how to compose therapeutic emails that: 1) facilitated the therapeutic alliance, 2) responded to client questions and misunderstandings, 3) prompted clients to self-reflect on important topics and complete relevant homework tasks, and 4) reinforced client progress and self-efficacy.

3.1.3. Skill in CBT

Apparent through data analysis was that participants perceived their involvement with guided ICBT as beneficial clinical training for learning CBT generally. This is reflected in the following statement:

I have to speak to what a good training experience this was for me because I loved the modules for that reason. I've never really done a real structured CBT for depression before and ... I knew all about all those things, but I've never seen them laid out that way and I thought it was laid out very nicely with like a lot of nice behavioral activation up front to start getting people to feel better.

[Interviewee 1]

Reflecting their improved knowledge in CBT, many participants mentioned that they applied the information gained from guided ICBT to their sessions with face-to-face clients, as stated by the following participant: "I really wanted to go on and print off a lot of the information so that I also had it for my own work with clients and in my face-to-face stuff" (Interviewee 6). Furthermore, participants reported that this was a particularly efficient way to learn about CBT as all the materials were presented systematically on the Internet.

3.1.4. Time for learning

Another positive aspect to training in guided ICBT reported by participants was that email communication with clients was perceived to be particularly conducive to training novice therapists, given that therapists were able to pause before responding to a client's email. This time lapse in response allowed participants to formulate the best responses and seek supervision and feedback. As this participant expressed: "What I really like was that I didn't have to respond to him right away and I had a chance to walk away and to regroup and then come back fresh and really think about it" (Interviewee 1).

3.1.5. Preparation for future

Finally, participants saw the training in guided ICBT as something they would need to practice in the future given the increasing use of technology in delivering psychological services. They also noted that

this was a unique learning opportunity that few clinical psychology students receive, noting the experience could set participants apart when applying for future competitive training or job opportunities.

3.2. Facilitators of ICBT training

3.2.1. Supervision and support

Participants mentioned that the guided ICBT training was facilitated by having support not only from the Unit supervisor, but also from staff members who provided technical support on the use of the web application and Unit policies and procedures (e.g., record keeping). It was noted that this supervision and support offered comfort and security as the therapists were new to delivering guided ICBT. Unexpectedly, participants repeatedly mentioned the importance of also having peer supervision from other student Internet therapists. It was noted that this peer supervision often reduced the amount of supervision required from the Unit supervisor as well as their comfort in seeking supervision. As one participant noted: "I think peer consultation, supervision, helps you maintain kind of a critical reflective position" (Interviewee 2).

3.2.2. Pre-existing computer expertise

Participants shared that their comfort with technology and computer experience made offering guided ICBT easier to learn as they already had basic knowledge of how to navigate the Internet and use email. It was noted that had they not had computer self-efficacy learning guided ICBT may have been overwhelming.

3.2.3. Quality of programs

Participants reported that the ICBT programs were logical and thorough and this facilitated their learning experience. They also praised the quality of the videos and printable documents that were available to clients as part of the ICBT program and shared that these documents reduced their need to explain concepts to patients directly. It was noted by several participants that, overall, the programs' modules were exemplary.

3.2.4. Functional web application

Participants described the website as functional and easy to use for both the client and therapist and thus a facilitator of learning guided ICBT. Participants reported appreciating that they could customize their emails to clients (e.g., colored font, emoticons, bold, italics) and also track client use of the ICBT program. One participant noted:

The fact that I can actually go through the modules and see exactly what they're seeing. That's been great because I open up two windows and I go through the module to see what it was that they were seeing that week before I read back my e-mails.

[Interviewee 12]

3.2.5. Clear policies and procedures

Participants expressed that having clearly articulated policies and procedures (e.g., informed consent, record keeping, amount of therapist contact, supervision, use of secure email on web application, handling emergencies) was an important facilitator for learning guided ICBT. The majority of participants described the policy and procedures to have "thought of everything", referring to multiple situations that could potentially occur between a therapist and client. To illustrate, one participant noted:

The policy and procedures actually were really helpful and I felt like I just knew what to do and made things flow very smoothly. I felt like every situation had been accounted for so that was really good... what we should be doing, what this should look like, I think that maybe gave me a good base to start from like you know this is kind

of what we expected in email or this is you know kind of the general procedures, knowing those expectations, that is helpful.

[Interviewee 1]

None of the participants reported encountering ethical issues while delivering guided ICBT, however, most reported feeling equipped to address ethical dilemmas as a result of learning the policies and procedures discussed during training.

3.2.6. Accessibility

Another prevalent theme derived from the interviews was the concept of flexibility that ICBT offered to the student therapist. Participants reported that having this training opportunity run within the university was helpful in terms of convenience, making it easily accessible to participants compared to off-campus training. Additionally, the ability of participants to log in to the secure site and compose client emails on their personal computer was considered a vital facilitator to the participants' involvement with ICBT. Participants also mentioned appreciating the ability to choose their own day within their schedule to write their client emails. As one participant noted: "You can kind of do it around your own schedules so yeah I think flexibility in that has been a really big facilitator" (Interviewee 4).

3.3. Challenges in guided ICBT training

While many factors were noted to facilitate their training, participants reported facing some challenges in learning and delivering guided ICBT.

3.3.1. Screening

Participants shared that it was challenging to begin working with clients who they had not screened for treatment. As noted in the method section, the clients were screened by the Unit staff. The screening was designed to collect basic information from clients and ensure that clients were appropriate for the service, but did not provide an in-depth assessment as participants are accustomed to conducting themselves. As a result, participants at times reported that the screening information was not sufficient to understand the "pulse" of the client, or that the screening information did not always provide sufficient context for the client difficulties. Some participants reported that they would have preferred to complete the screening themselves in order to establish rapport and a relationship earlier in the process. Of note is that participants were encouraged to request additional client information in an email or by phone, but these comments did not reflect an acknowledgment of this possibility.

3.3.2. Web application

Overall, participants not only described the web application as easy to use, but also identified some nonuser friendly features of the web application such as: (1) having to switch between windows to view the content of the modules and the client's emails, (2) the absence of a spell check within the email system in selected Internet browsers, (3) the website logging out therapists and clients after 60 min of non-activity without notice, resulting in loss of email drafts, and (4) clients at times are not accessing client emails because they were not sufficiently prominent on the web application.

3.3.3. ICBT modules

Although ICBT modules were positively evaluated, some participants noted that some modules were very lengthy, and contained too much information for clients to complete within a week. This was perceived as similar to attempting to cover too much information in a face-to-face session. The consequence was that the modules often took more than a week for clients to complete and participants found the messages to clients to be lengthy and difficult to compose. Participants reported that given the amount of content provided in the modules, some clients

took an extended period of time to complete the program (up to six months), which resulted in the treatment being lengthier than both the participants and clients had anticipated.

3.3.4. Composing therapeutic emails

While participants reported generally being able to compose therapeutic emails, it was noted that therapeutic emails were more challenging when they involved assisting clients with cognitive restructuring. It was noted that it was challenging to be clear and not too directive. A further challenge that was noted was that it was at times difficult to determine which parts of a client's emails and check-in responses to focus on and address.

3.3.5. Asynchronous emails

Participants described instances in which email exchanges about a topic would extend back and forth between therapist and client over a number of weeks. It was noted to be challenging to keep track of the conversation when there were significant breaks in time between emails. The perception was that this resulted in slower progress than what could be achieved in face-to-face therapy.

3.3.6. Non-engaged clients

Participants indicated that perhaps the most challenging component of offering guided ICBT was working with clients who were not providing sufficient information in check-ins and emails, consequently making it difficult for the therapist to respond. It was noted that this could be the result of a variety of factors, such as client difficulties expressing their feelings in text, client reluctance to share information over the Internet, or lower client motivation. Participants further reported that if their clients did not provide detailed information or did not engage in email exchanges, it was more difficult to establish a therapeutic relationship and assist the client. These concerns were apparent in the following quotes:

I guess the biggest problem is you have less control over what the client chooses to answer. When you send them a big email, they get to choose what to answer and what not to answer and so they just may never bring it up again.... You're sort of bound to go more with the client where the client wants to go.

[Interviewee 10]

If they don't provide the information or if they're having trouble expressing exactly what the problem was, then it's obviously going to be more difficult.

[Interviewee 12]

3.3.7. Supervision delay

In terms of supervision, one challenge that was noted was the lag time between sending the therapeutic email for supervision and receiving feedback on that email before forwarding it onto the client, as sometimes this was up to 8 h. The reality of the program's current incarnation involves some delay between email submission and supervisory feedback as the ICBT supervision position is not full-time.

3.3.8. Time investment

Another theme that surfaced from the interviews was the significant time investment on the part of the participant to learn guided ICBT, similar to the time required to learn any other form of therapy:

It takes a little bit to learn and it takes a time investment and I've done one client with each program. I'm far from proficient. I think people need to understand that it takes a little while to get a hold of it, and enjoy it.

[Interviewee 2]

It was also noted that finding this time was particularly challenging given the participants' academic commitments and that the time commitment varied considerably from week to week (15 min to a few hours), depending on the module and client circumstances. Positively, participants highlighted that the length of time to respond to client emails decreased with comfort and familiarity with the ICBT modules.

4. Discussion

Given the increasing demand for therapy services delivered over the Internet, clinical psychology graduate programs have been encouraged to incorporate training in this area (Mallen et al., 2005). In the literature, there has been a call for further research on the perceptions and practice of Internet therapists (Finn and Barak, 2010). Currently, there is no standard for how to train therapists in guided ICBT. A study by Finn and Barak (2010) found that 94% of counselors reported that their professional program did not include training in e-counseling and 92% stated that personal reading on the subject was their main means for educating themselves to be an Internet therapist. In the current study, using qualitative analysis of open-ended interview questions, we sought to understand student experiences in learning guided ICBT. Using this feedback, we offer some recommendations for training clinical psychology students in guided ICBT.

Our findings suggested that students benefit significantly from training in guided ICBT. Almost all students described guided ICBT training as advantageous in terms of improving their knowledge and skills in guided ICBT as well as their understanding of clients who are more or less likely to benefit from this modality. They also described improved understanding of CBT generally. Arguably, the education and training in CBT basics offered through guided ICBT might be a motivating factor for graduate programs to incorporate ICBT training into existing training programs, as the majority of clinical psychology programs are CBT oriented (Sayette et al., 2011).

Another positive aspect of learning guided ICBT reported by participants was that email communication with clients was advantageous for training novice therapists. Indeed, former research suggests that asynchronous therapeutic emails allow students a detailed understanding of the CBT therapeutic process, opportunities to seek supervision as necessary, and gain confidence and mastery in clinical skills (Shandley et al., 2011). In addition, many participants described applying the psycho-educational material, CBT skills, and client experiences gained through guided ICBT to their subsequent face-to-face clinical work. Our results also indicated participant interest in continuing to use guided ICBT as many considered Internet-delivered therapy as a growing area of clinical practice. This finding is in line with research that suggests a noticeable shift toward acceptance and use of Internet-delivered psychological services across the profession of psychology (Finn and Barak, 2010; Shandley et al., 2011) and supports incorporating ICBT training in graduate psychology programs.

While students recognized learning guided ICBT as beneficial, they identified numerous factors that were essential to facilitating their learning experience, including: support and supervision in the delivery of guided ICBT, pre-existing computer expertise, quality of ICBT programs, functional web application, detailed policies and procedures, and accessibility of the web application. Additionally, they highlighted some important challenges regarding learning and delivering guided ICBT, including: not screening clients themselves, some nonuser friendly aspects to the web application, lengthy ICBT modules, working with non-engaged clients, asynchronicity of emails between student therapist and client and student therapist and supervisor, and the time investment required to learn a new treatment approach given other academic and clinical commitments.

4.1. Recommendations for ICBT training

With the exception of a few studies, limited literature is available on how ICBT should be incorporated within graduate programming. Given the findings of the current study, we offer the following recommendations for training students in the provision of guided ICBT.

To begin, the results of this study support the implementation of training in guided ICBT within clinical programs. Guided ICBT training was perceived as providing knowledge and skills not only in guided ICBT, but also in CBT generally. Moreover, the training was described as being particularly safe for novice therapists as well as advantageous for preparing for future practice. Given additional feedback from participants, future training programs could also consider training students in the screening process for ICBT. Formalizing students' role as Internet therapists, such as in a practicum or incorporating into an intervention course, may provide students with in-depth training, supervision, and practice in guided ICBT.

Regarding supervision, participant feedback suggested that it is essential to have accessible and supportive supervisors and technical staff when offering training in guided ICBT. Such supervision can provide students with immediate support should challenging clinical situations or computer difficulties arise. One challenge identified by participants was a supervision delay, in which the time lag might be as long as 8 h for a supervisor to review an email before it can be forwarded to the client. While initially perceived as a weakness, this in fact might be faster than supervision typically provided in a practicum where supervision is often scheduled once per week and may also not be available on a daily basis. This appears to be a problem only in the sense that expectations of the Internet are for instantaneous or rapid responses, and appropriate supervision takes time. To assist with supervision, it may be advantageous to formalize the peer supervision process that was present informally among students we interviewed. Perhaps creating a peer supervisory program, pairing a senior student with a junior student, would not only be beneficial for students, but also decrease the work-load for the formal supervisor. This, in turn, could potentially provide senior students with the opportunity to gain experience in the supervisory role and may also decrease the lag time between when students send emails for supervision and receive feedback.

To facilitate the learning process, it is essential that students have access to not only ICBT modules, but also a functional web application that allows for delivery of guided ICBT modules, secure email exchanges and monitoring of client and student therapist use of the web application. It is also essential to establish clear policies and procedures regarding the delivery of guided ICBT to facilitate students learning guided ICBT.

Given the feedback from participants, it is recommended that training programs spend significant time assisting students with therapeutic email skills. Specific attention should be given to assisting students with composing emails of a more challenging nature, such as emails addressing cognitive restructuring, nonresponsive clients, or clients struggling with low motivation.

In terms of organization, we suggest that training programs offer students flexibility with respect to when and where they respond to client emails. At the same time, it is important to implement some limits on when students respond to clients in order to ensure that the supervisor can be available to provide supervision in a timely manner. Also important in terms of the organization of the training is that students allocate sufficient time to learn this novel therapeutic approach; similar to other forms of therapy, the approach takes time to learn and experiential practice is required to develop competency.

4.2. Limitations of current study

As this is a relatively new area of research, several limitations should be acknowledged. To begin, the training was only offered to students in clinical psychology at one university, limiting the generalizability of the findings. The perceptions of guided ICBT held by clinical psychology

student therapists may differ from other student populations (e.g., social work, clinical nursing) and could have been influenced by the fact that this research was conducted under the supervision of the ICBT supervisor. It should be noted, however, that this limitation was directly addressed in the study design as the supervisor was not privy to the identities of the graduate students who were interviewed and did not directly view the transcripts. Reflecting student comfort in sharing opinions, it should also be noted that students shared multiple challenges faced in learning and delivering guided ICBT.

There are some characteristics of qualitative methodology that could impact the findings. Correlational or causal relationships cannot be established among variables with qualitative analyses. Semi-structured qualitative interviews lack standardization across participants due to differences in open-ended and follow-up questions. It is impossible for the interviewer to be completely objective in the interviews. Coming into the interview, the interviewer (who in this study was also the researcher) had her own biases and reactions to responses from participants. In order to attempt to rectify this situation, the interviewer sought to respond with neutral reactions to the participants' answers. Finally, it is recognized that text involves multiple meanings; consequently, the results are dependent on the interpretation of the researcher (Graneheim and Lundman, 2004). To address the issue of bias, the data analysis was conducted by two coders to achieve some objectivity in generating the results.

4.3. Directions for future research

The results of the current study have generated pedagogical questions for training students in guided ICBT. For example, how much training is needed to achieve competency in guided ICBT? Future studies comparing effectiveness of therapists with varying amounts and types (e.g., coursework versus practicum, in person or delivered via the Internet) of training would assist in answering this question. An additional question that could be examined experimentally concerns whether the effectiveness with clients improves when guided ICBT training is offered before or after students obtain face-to-face clinical experience. An important question to facilitate this research, however, is how should guided ICBT competency be assessed? Development of tools to assess competency similar to face-to-face competency scales (Young and Beck, 1980) would be extremely valuable.

Acknowledgments

This research was funded through a grant awarded to Heather D. Hadjistavropoulos by the Canadian Institute of Health Research (CIHR – reference number 101526) and the Saskatchewan Health Research Foundation. Lindsay N. Friesen also received scholarship funding through CIHR and the Faculty of Graduate Studies and Research of the University of Regina. Program materials described in this study were licensed from Anxiety Online at Swinburne University of Technology in Melbourne, Australia with the assistance of Drs. David Austin and Britt Klein. We would like to extend our thanks to the graduate students who participated in this research as well as Marcie Nugent, Max Ivanov, and the staff of the Online Therapy Unit for Service, Education, and Research at the University of Regina.

References

Andersson, G., Cuijpers, P., 2008. Pros and cons of online cognitive-behavioural therapy. *Br. J. Psychiatry* 193, 270–271. <http://dx.doi.org/10.1192/bjp.bp.108.054080>.

- Andersson, G., Titov, N., 2014. Advantages and limitations of Internet-based interventions for common mental disorders. *World Psychiatry* 13, 4–11. <http://dx.doi.org/10.1002/wps.20083>.
- Barwick, M.A., Peters, J., Boydell, K., 2009. Getting to uptake: do communities of practice support the implementation of evidence-based practice? *J. Can. Acad. Child Adolesc. Psychiatry* 18 (1), 16–29 (Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2651208/>).
- Cardenas, G., Serrano, B., Flores, L.A., De la Rosa, A., 2008. Etherapy: a training program for development of clinical skills in distance psychotherapy. *J. Technol. Hum. Serv.* 26, 470–483. <http://dx.doi.org/10.1080/15228830802102180>.
- Collins, K.A., Westra, H.A., Dozois, D.J., Burns, D.D., 2004. Gaps in accessing treatment for anxiety and depression: challenges for the delivery of care. *Clin. Psychol. Rev.* 24, 583–616. <http://dx.doi.org/10.1016/j.cpr.2004.06.001>.
- Cuijpers, P., Donker, T., van Straten, A., Li, J., Andersson, G., 2010. Is guided self-help as effective as face-to-face psychotherapy for depression and anxiety disorders? A systematic review and meta-analysis of comparative outcome studies. *Psychol. Med.* 40, 1943–1957. <http://dx.doi.org/10.1017/S0033291710000772>.
- Dewa, C.S., Goering, P., Lin, E., Paterson, M., 2002. Depression-related short-term disability in an employed population. *J. Occup. Environ. Med.* 44 (7), 628–634.
- Finn, J., Barak, A., 2010. A descriptive study of e-counsellor attitudes, ethics, and practice. *Couns. Psychother. Res.* 10, 268–277. <http://dx.doi.org/10.1080/14733140903380847>.
- Glaser, B., Strauss, A., 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine Publishing Company, New York.
- Graneheim, U.H., Lundman, B., 2004. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ. Today* 24, 105–112. <http://dx.doi.org/10.1016/j.nedt.2003.10.001>.
- Hadjistavropoulos, T., Smythe, W.E., 2001. Elements of risk in qualitative research. *Ethics Behav.* 11 (2), 163–174 (Retrieved from <http://hdl.handle.net/10294/2635>).
- Hadjistavropoulos, H.D., Thompson, M., Ivanov, M., Drost, C., Butz, C.J., 2011. Considerations in the development of a therapist-assisted Internet cognitive behavior therapy service. *Prof. Psychol. Res. Pract.* 42, 463–471. <http://dx.doi.org/10.1037/a0026176>.
- Hadjistavropoulos, H.D., Thompson, M.J., Klein, B., Austin, D.W., 2012. Dissemination of therapist-assisted Internet cognitive behaviour therapy: development and open pilot study of a workshop. *Cogn. Behav. Ther.* 1–11. <http://dx.doi.org/10.1080/16506073.2011.645550>.
- Health Canada, 2002. *A Report on Mental Illness in Canada (Cat. No. 0-662-32817-5)*. Population and Public Health Branch, Ottawa, ON.
- Hsieh, H.F., Shannon, S.E., 2005. Three approaches to qualitative content analysis. *Qual. Health Res.* 15, 1277–1288. <http://dx.doi.org/10.1177/1049732305276687>.
- Jacobs, P.R., Yim, A., Ohinmaa, I., Eng, C.S., Dewa, R., Block, R., Slomp, M., 2008. Expenditures on mental health and addictions for Canadian provinces in 2003 and 2004. *Can. J. Psychiatr.* 53 (5), 306–313.
- Klein, B., Cook, S., 2010. Preferences for e-mental health services amongst an online Australian sample. *Electron. J. Appl. Psychol.* 6 (1), 27–38 (Retrieved from <http://ojs.lib.swin.edu.au/index.php/ejap/article/view/184/199>).
- Mallen, M.J., Vogel, D.L., Rochlen, A.B., 2005. The practical aspects of online counseling: ethics, training, technology, and competency. *Couns. Psychol.* 33, 776–818.
- Meyers, S.A., Reid, P.T., Quina, K., 1998. Ready or not, here we come: preparing psychology graduate students for academic careers. *Teach. Psychol.* 124–126. http://dx.doi.org/10.1207/s15328023top2502_11.
- Richards, D., Richardson, T., 2012. Computer-based psychological treatments for depression: a systematic review and meta-analysis. *Clin. Psychol. Rev.* 32, 329–342. <http://dx.doi.org/10.1016/j.cpr.2012.02.004>.
- Sayette, M.A., Norcross, J.C., Dimoff, J.D., 2011. The heterogeneity of clinical psychology Ph.D. programs and the distinctiveness of APCS programs. *Clin. Psychol. Sci. Pract.* 18, 4–11.
- Shandley, K., Klein, B., Kyrios, M., Austin, D., Ciechowski, L., Murray, G., 2011. Training postgraduate psychology students to deliver psychological services online. *Aust. Psychol. Soc.* 46, 120–125. <http://dx.doi.org/10.1111/j.1742-9544.2011.00034.x>.
- Sheehan, D., Janavs, J., Baker, R., Harnett-Sheehan, K., Knapp, M., Sheehan, M., 2006. M.I.N.I. Plus: Mini International Neuropsychiatric Interview (Version 1335). Retrieved from <http://wiki.case.edu/images/c/c9/2005MINI.pdf>.
- Spek, V., Nyklicek, I., Smits, N., Cuijpers, P., Riper, H., Keyzer, J., Pop, V., 2007. Internet-based cognitive behavioural therapy for subthreshold depression in people over 50 years old: a randomized controlled clinical trial. *Psychol. Med.* 37, 1797–1806. <http://dx.doi.org/10.1017/S0033291707000542>.
- Tong, A., Sainsbury, P., Craig, J., 2007. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care* 19, 349–357. <http://dx.doi.org/10.1093/intqhc/mzm042>.
- Woods, L., 2002. Qualitative data analysis: explorations with NVIVO. *Nurse Res.* 9 (4), 86–87.
- Young, J., Beck, A.T., 1980. *Cognitive therapy scale rating manual*. Retrieved from http://members.academyofct.org/files/documentlibrary/CTRS_Manual.pdf.