Parental Interest in Parent-Delivered Online Therapy for Child Anxiety in Rural Areas

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Abstract

Anxiety is the most common childhood onset psychological disorder worldwide. To date, treatments such as Cognitive Behavioural Therapy (CBT) and Internet-Delivered Cognitive Behavioural Therapy (ICBT) have been found to be effective in alleviating children’s anxiety symptoms (Vigerland, Serlachius, Thulin, Andersson, Larsson, & Ljotsson, 2017). Recently, studies have found that CBT that is facilitated and delivered by parents can also be an effective treatment for child anxiety. There is reason to believe that developing interventions that can be delivered via the internet is a way to improve accessibility for children and families, particularly for families living in rural areas. However, we do not know whether or not parents living in rural areas are interested in accessing this type of treatment. This study looked at rural parents’ likelihood to participate in parent-delivered ICBT. We conducted telephone interviews with four parents from rural Saskatchewan and obtained information regarding their attitudes, subjective norms, and perceived barriers in participating in this type of treatment. Using thematic analysis, we found that rural parents are indeed interested in participating in parent-delivered ICBT. Eight themes emerged from the study: minimization of child’s anxiety, stigma, convenience, access to information, parent involvement, lack of child’s compliance, program format, and uncertainty of anxiety. This study contributes to the extant, albeit limited, research on rural parents who have children with anxiety; it allows future researchers to determine essential factors in program recruitment, while giving a more detailed information on the target population for parent-delivered ICBT.
Parental Interest in Online Therapy for Child Anxiety in Rural Areas

Anxiety is the most common childhood onset psychological disorder worldwide. Approximately, anxiety disorders affect 5-10% of children (Vigerland, Serlachius, Thulin, Andersson, Larsson, & Ljotsson, 2017). In Canada, an estimated 4% of children suffer from anxiety disorders, which translates to roughly 204,400 children (Waddell, Shepherd, Schwartz, & Barican, 2014). In order to be clinically diagnosed with an anxiety disorder, there are various, specific criteria that individuals must meet. Thus, there are children who still suffer symptoms of anxiety but do not officially have a diagnosis. Anxiety can be harmful because it disrupts children’s social, emotional, and academic development, and it also puts them at risk for developing further psychological disorders in adolescence like substance misuse (Thirlwall, Cooper, Karalus, Voysey, Willetts, & Creswell, 2013). This is why tackling anxiety disorders is relevant and important in society today. To date, treatments such as Cognitive Behavioural Therapy (CBT) and Internet-Delivered Cognitive Behavioural Therapy (ICBT) have been found to be effective in alleviating children’s anxiety symptoms (Vigerland et al., 2017).

Cognitive Behavioural Therapy (CBT)

CBT is currently the most renowned psychological intervention for anxiety. Throughout the years, extensive research has been done on the efficacy of CBT in treating children with anxiety symptoms, and findings have consistently supported CBT’s effectiveness on treating child anxiety (Waters, Ford, Wharton, & Cobham, 2008). CBT places a huge emphasis on children’s erroneous thought patterns, which is believed to be the cause of the development or maintenance of their psychological symptoms (Ollendick & Seligman, 2018). Thus, CBT focuses on the present and how to alleviate or eradicate those existing symptoms. In order to do so, therapists use cognitive strategies to help the child be cognizant of their anxious cognition, and they also teach them effective coping styles (Ollendick & Seligman, 2018). Typically, CBT is
conducted face-to-face with a therapist, and it includes a homework component to allow participants to practice the skills they learned in therapy (Ollendick & Selligman, 2018). It is also a fairly short program, lasting no more than six months (Ollendick & Selligman, 2018).

Although CBT is an effective treatment for anxiety, fewer than 1/3 of children actually seek and get the professional help that they need (Creswell, 2017). Amongst many different possibilities, one probable explanation for this finding might be the shortage of CBT trained professionals (Jolstedt, Ljotsson, Fredlander, Tedgard, Hallberg, Ekeljung, Hogstrom, Mataix-Cols, Serlachius, & Vigerland, 2017). Furthermore, seeking treatment is particularly problematic for families living in rural areas, as CBT services are more likely to be provided in urban centres. CBT also poses many other problems. It can be costly, stigmatizing, and it can be difficult to find a mutually convenient time for all of the parties involved. These can all put a strain on both the child and his/her family.

**Internet-Delivered CBT**

One way to remedy the above problems is to deliver CBT treatments via the internet in order to increase the availability, accessibility, and dissemination of evidence-based treatments for anxiety. This option is called Internet Delivered Cognitive Behavioural Therapy (ICBT). ICBT has a number of advantages over traditional methods of delivering CBT. First of all, it is less therapist-intensive because it does not completely rely on the limited number of CBT trained professionals (Vigerland, Ljotsson, Thulin, Ost, Andersson, & Serlachius, 2016). Second, ICBT reduces waiting time, and it also decreases the dependency on geographical proximity since it is not restricted by location (Jolstedt et al., 2017). Clients can easily access their modules through their computer and contact their therapist through e-mails using secure servers. Lastly, ICBT has been shown to be an effective treatment for children, and participants in various randomized
control trials have maintained significant results or even continued improvement after treatment (Vigerland et al., 2017).

**Parent-Delivered.** Recently, studies have found that cognitive behavioural therapy that is facilitated and delivered by parents can also be an effective treatment for child anxiety. Since parents are usually children’s primary caregivers, children feel a strong sense of safety, security, and consolation with their parents. After all, children have relied on them for basic necessities like food since birth, resulting in a formation of strong attachments of children to their parents. These tenets have resulted in a new delivery method of CBT called parent-delivered CBT.

Parent-delivered CBT has shown promising results. There has been strong empirical evidence suggesting that child anxiety has significantly reduced when CBT is delivered by parents (Thirlwall et al., 2013). In a study done by Thirlwall et al. (2013), they found that 3/4 of their participants who received parent-delivered CBT were at least ‘much improved’, which was three times the improvement rate of those who were in the waitlist condition. Parent-delivered CBT has also presented an important benefit. Since children and their parents are usually living under one roof, parents are in a position to recall and continuously implement strategies learned in treatment in an ongoing basis, which allows for continued improvement even after therapist support (Thirlwall et al., 2013).

Since parent-delivered CBT has shown promising results, the development of its equivalent computer-based therapy has inspired some researchers. For example, the Child and Family Research Group in the University of Regina has developed the Anxiety Treatment for Children through online Education (ACE) Course. This is a pilot program that aims to provide parents and caregivers with simple and effective techniques to manage their child’s anxiety symptoms. It is a parent-facilitated program, which means that the parent acts as the therapist and facilitates the intervention with the help of an online coach or therapist. Parents can also
contact their coach whenever they would like using a secure message system. Parent-delivered ICBT programs like ACE will hopefully recede the aforementioned treatment gap in mental health care.

Parent Interest

There is reason to believe that developing interventions via the internet will increase accessibility to treatment for children and their families, particularly those living in rural and remote areas; however, it remains unclear if parents are willing to partake in this kind of treatment. There have only been a few studies that assessed parents’ interest in using internet treatments to reduce their children’s anxiety. For instance, March, Day, Ritchie, Rowe, Gough, Hall, Yuen, Donovan, & Ireland (2018) conducted a study that found that individuals living in rural areas had a lower preference for online services than those living in urban areas. Moreover, another study found that computer-based therapies were reported to be the least likely service that parents would access if their child needed professional help (Sweeney, Donovan, March, & Laurenson, 2017). Specifically, out of the 66% parents that reported having a child with a mental health problem, only 6% had accessed online interventions (Sweeney et al., 2017). Given these findings, it is important to examine whether or not parents living in rural areas are interested in accessing internet-based treatment programs for their children’s anxiety.

Theory of Planned Behaviour

One way to identify factors associated with parents’ interest in participating in this type of treatment is by using the Theory of Planned Behaviour. The Theory of Planned Behaviour (TPB) is a model that uses attitudes, social norms, perceived behavioural control, and intentions to understand and predict people’s behaviour (Bohon, Cotter, Kravitz, Cello Jr, & Fernandez, 2016). TPB places a strong emphasis on an individual’s intentions because they theoretically have a direct influence on his/her behaviour (March et al., 2018). Through the assessment of an
individual’s attitudes, social norms, and perceived behavioural control, TPB suggests that we can predict their intention to perform a particular behaviour, which, in turn, predicts whether they perform that behaviour (Ajzen, 2011).

TPB Factors. Previous research has shown that attitudes is the strongest predictor of help-seeking intention (Hammer, Parent, & Spiker, 2018). In this study, to determine parents’ attitudes of parent-delivered ICBT, the researcher will ask parents about their previous treatment-seeking behaviours, their self and public stigma of seeking treatment, and their child’s degree of psychological distress, which are believed to be indicative of one’s attitudes (Hammer et al., 2018). Furthermore, they will also be asked questions about their interpersonal openness about their child’s anxiety problems and their confidence in mental health practitioners (Bina & Glasser, 2017). On the other hand, to determine parents’ subjective norms, they will be asked questions regarding their perceived role in their child’s mental health as well as their family’s perceptions about parent-delivered ICBT. Lastly, to determine parents’ perceived barriers in participating in parent-delivered ICBT, they will be asked about their perceived relevance of the treatment, stressors and obstacles that compete with treatment, treatment demands and issues such as time, energy, and scheduling concerns (Gresl, 2014).

Aims of the Study

Although there are a myriad of studies looking at child anxiety and treatments such as CBT and ICBT, there is still an enormous gap in the literature. previous studies have not concentrated on the difference in uptake or accessibility between individuals in rural areas and individuals in urban areas. This study aimed to examine the intentions of parents living in rural areas to participate in parent-delivered ICBT to help reduce anxiety in their children. More specifically, it addressed the following research questions:

1. Are rural parents likely to participate in parent-delivered ICBT?
2. What are the attitudes, subjective norms and perceived behavioural control factors identified by rural parents when asked about their likelihood of participating in parent-delivered ICBT?

Methods

Participants

Participants in this study were parents from rural Saskatchewan, Canada, who have at least one child from the ages of 7-12 with elevated levels of anxiety. Living in a rural area was operationalized as residing in towns or municipalities in Saskatchewan with the exception of major cities such as Regina and Saskatoon. The researcher used a combination of recruitment techniques. First, the University of Regina Faculty and Staff email list serve was used to send a mass email inviting any parent who met the above criteria to self-refer themselves (See Appendix A). Second, the researcher also used Facebook and posted recruitment posters on different profiles or groups including her own (See Appendix B). This ad was also posted on the University of Regina Psychology Student’s Association, which has over 500 members. Snowballing techniques were employed. Recruitment ended when saturation was reached.

Eight participants contacted the researcher via e-mail, but only four completed the interview. The participants were all mothers who were married. Their children ranged in age from 9 to 12 years ($M = 10.5$). 50% of the children were male, and one mother reported that her three kids had anxiety comorbid with other psychological disorders including autism spectrum disorder (ASD).

Procedure

This study was granted ethics approval by the University of Regina Research Ethics Board. The recruitment materials (emails, posters, etc.) included the primary researcher’s e-mail address as well as the laboratory phone number, so participants had the information to contact the researcher if they were interested in participating. Once they contacted the researcher, they
collaboratively scheduled a time for the phone interview. The consent form was sent approximately one week before the scheduled interview time, so participants had time to review it (See Appendix C). Participants either scanned or took a picture of the signed consent form and emailed it back to the researcher. After the researcher called the participant at the scheduled time, the researcher reviewed the consent form with the participant. Then, the interview began and lasted anywhere from 20 to 40 minutes.

**Measures**

**Demographic Information.** Participants reported on their sex, age, employment status, marital status, education level, and income levels. The researcher also asked what town participants lived in to ensure that they reside in rural areas.

**Interview.** The researcher developed a semi-structured interview consisting of fourteen questions that assessed TPB factors (See Appendix D). First, to examine participants’ attitudes towards parent-delivered ICBT, the researcher asked them what previous treatments, both face-to-face and online, they have participated in and whether they worked or not. Next, subjective norms, which are a person’s own beliefs about what others think of the behaviour, were addressed. For example, participants were asked what their loved ones thought of treatments like parent-delivered ICBT, and they were also asked what role they thought they played in their child’s mental health. To look at perceived behavioural control, perception of barriers pertaining to technology, scheduling, stress, cost, time, fatigue, and access were addressed. For instance, parents were asked about their confidence in using computers and whether or not they thought they had the time, energy, and ability to successfully act as their child’s therapist if they chose to participate in parent-delivered ICBT. Lastly, to assess parents’ likelihood to participate in parent-delivered ICBT, a 5-point Likert scale was used (1 = “not at all likely” to 5 = “extremely likely”).

**Data Analyses**
Participants’ responses were analyzed using thematic analyses. Thematic analysis is a method used to identify, analyze, and report common patterns or themes within a set of data (Braun & Clarke, 2006). These themes can be identified in two different ways: inductively or deductively. Because this study was interview-based, an inductive, data-driven approach to thematic analysis was utilized. All of the interviews were audio-recorded and later transcribed verbatim by the researcher (See Appendix E for transcript notation). After transcription, thematic analyses were conducted based on the guidelines outlined by Braun and Clarke (2006).

Unlike statistical analysis, writing is considered as a crucial part of thematic analysis, so this was done throughout the entire coding or analysis process (Braun and Clarke, 2006). In addition, it was important for the researcher to be immersed in the data; therefore, the researcher actively and repeatedly read the data, which was the first stage of the thematic analysis process (Braun & Clarke, 2006). The researcher read the transcripts several times and made notes before the initial coding process.

After familiarizing herself with the data, the researcher moved on to stage two, which was the coding process. Essentially, codes identify interesting features of the data and serve as a way to organize the data in meaningful groups (Braun & Clarke, 2006). The researcher identified codes based on common themes across the data sets, related to the research questions. After, the researcher attempted to sort the different codes into possible themes and collated all the remaining and relevant coded data within the identified themes (Braun & Clarke, 2006). To ensure that all the data in a specific theme cohere meaningfully, two different researchers reviewed the data sets and individually coded and classified the content of all four interviews. Then, all three researchers deliberated and tried to reach a consensus with all of the identified themes. Inter-rater reliability was at 95%. 

The researcher tried to refine the themes further. For example, some proposed themes had insufficient data, and some themes were later found to actually fit better to a different category. Refinement of these themes eliminated any irrelevant information and helped solidify the important, overarching themes. Lastly, all the refined themes were defined and named in order to concisely capture what each theme was about. To keep confidentiality, each participant was given a number in the order that they participated (i.e. P1). Participants’ comments were identified in the results section using these numbers.

**Results**

Eight main themes emerged from the analysis. The themes are as follows: minimization of child’s anxiety, uncertainty of anxiety, lack of child’s compliance, program format, convenience, access to information, parent involvement, and stigma. These themes encompass the participants’ previous experiences with mental health services and their perceptions of what would happen if they chose to partake in parent-delivered ICBT. Specifically, minimization of child’s anxiety related to attitudes towards parent-delivered ICBT; stigma related to subjective norms; lastly, the remaining six themes related to perceived behavioural control. Since none of the parents were familiar with parent-delivered ICBT programs, their answers were based on their understanding of what this intervention was like. The themes were based on the researcher’s subjective interpretation of the parents’ responses.

**Likelihood to Participate**

Participants rated their likelihood to participate with the question “How likely would you participate in parent-delivered ICBT” from 1 = “least likely” to 5 = “extremely likely.” The parents in this study reported being “very likely” to “extremely likely” to participate ($M = 4.75$, $S.D = 0.50$) in parent-delivered ICBT.

**Minimization of Child’s Anxiety**
Rural mothers who have sought mental health services for their child before described their experience negatively. A few of them were not able to receive services because they were told that their child’s anxiety was not severe enough. For example, P1 stated, “They had a social worker and a psychologist through the [school division], but they told me that’s only for hard cases, so they were unable to… help me in any way.” P1 and her daughter eventually got referred to a psychologist, but unfortunately, it was not until the daughter’s condition had escalated to the point of self-harming. P1 stated, “At that point, [my daughter] had been… doing a little bit of self-harming (hhh), and so we got in quite quickly to see the people at [Local town mental health] and spoke to a psychologist.” P1 believed that they would have never had access to a psychologist if it did not reach that climactic point in her daughter’s mental health.

Like P1, P4 also reported the first time she tried accessing mental health services as a negative experience. P4 is a mother of three boys who all suffer from anxiety. P4 has had a long-standing battle with seeking professional help. When she was asked about her first encounter with seeking mental health services, she stated:

I just got patted on the back and was told I’m just a tired mom of 3 busy boys and got sent on my merry way. It took me another two years to get somebody to actually take me seriously.

P4 now has extensive experience with the mental health system as all her children have been diagnosed with other psychological disorders. Her first child was diagnosed with attention deficit hyperactivity disorder at age three and then later with major depressive disorder, oppositional defiant disorder, and Tourette syndrome. Her second child has been diagnosed with anxiety and autism spectrum disorder. Lastly, her third child has been diagnosed with ADHD and anxiety.

Stigma
In general, mothers who were interviewed reported a lack of concern regarding other’s perceptions of their participation in parent-delivered ICBT. For example, when P4 was asked if the reduced stigma associated with online therapy was appealing to her, she stated, “Oh. I don’t care […] Everybody can take that stigma and shove it because I live it every day and it makes me really angry that it’s still a stigma. That’s why we have so much trouble getting help.” Like P4, P1 was also indifferent with other’s perceptions about participating in parent-delivered ICBT. P1 stated:

I generally don’t care ((laughing)). I understand there’s a stigma about that sort of thing, but I mean, [my daughter] is an 11-year-old kid. (hhh) I’ve had my own struggles with mental health, and I don’t… judge people for it, and I don’t… if people are going to judge us for it, then they’re not worth my time anyways.

However, unlike P4 and P1, P3 reported the reduced stigma associated with parent-delivered ICBT as appealing to her:

_With online therapy there’s reduced stigma because you don’t have to go into an office, and no one would know that you’re engaging in therapy. Is that part appealing to you at all?_

P3: “That is appealing to me, that part cause I guess, like… there’s certain people that I certainly wouldn’t probably tell. And I don’t think I would want any of [my daughter’s] friends to know that she was doing it […] I don’t think that I would want her…… just cause you don’t want anybody to bug them, right? Or take it the wrong way.”

**Perceived Behavioural Control**

Rural mothers identified several factors that might make it easy and difficult for them to participate in parent-delivered ICBT. The convenience, easy access to information, and ability to be involved were seen as benefits to participating. On the other hand, lack of child’s compliance
and program format were potential barriers that mothers identified in participating in parent-delivered ICBT. Uncertainty of anxiety, albeit not explicitly identified by mothers, could be a potential barrier in participating in parent-delivered ICBT as well.

**Convenience.** Most mothers identified parent-delivered ICBT as convenient. Specifically, participating in online therapy eliminates their need to travel, reducing time and cost normally allocated for transportation. For instance, when P4 was asked what benefits she thought were associated in participating in parent-delivered ICBT, she responded:

First of all, it’s way more accessible […] When you’re in rural, you also have to factor in the cost of transportation and everything else. Because instead of being gone for an hour, you’re gone for four and a half. Uhm, so definitely the actual ease of it.

P3 echoed P4’s sentiments. She said:

If I have to go into Saskatoon, I’m an hour and a half away… so… I… that’s a huge amount of time to schedule in, right? That’s like a whole day with driving. So just being able to have half an hour at home or whatever it would take is a significant difference.

Most mothers also reported parent-delivered ICBT as convenient due to its flexibility regarding time and location. P3 stated:

I think it- I definitely feel it is something I would use because we live so far from any major centre. So and we-our our schedule is insane as most families are. […] For me to schedule in, you know, an appointment somewhere is pretty much impossible. […] We can do it- I’m assuming that we can do it at our own time like do it in the evenings. Doesn’t have to be done during business hours.

**Access to Information.** Along with convenience, most mothers also identified having access to information as a benefit to participating in parent-delivered ICBT. They liked the idea
of having an empirical, reliable resource that will teach them techniques and strategies that will allow them to help their child. P1 indicated:

I’d like to know how to help [my daughter] when she’s stressed out at night and can’t sleep because her anxiety’s kicked in […] To help her with that sort of thing, and for me to have those tools available? It would be really… I think it would be awesome… and excellent.

P2 also expressed the same point as P1. P2 stated:

First of all, it’s the access. Period. Like accessing something? That can help you help your kids when it comes to mental health? It’s like really non-existent, so that appeals to me greatly. […] Uhm just the help and the strategies are basically what drew me to it.

When P3 was asked about what benefits she associated with participating in online therapy, she said, “Of course, the techniques. I mean, we, you know, we’ve tried some of our own, and they worked, and you know, things are always changing. […] So yeah, the strategies, that’d be great!”

**Parent Involvement.** Based on participants’ responses, it became evident that most of them want to be involved in their child’s treatment. Because parent-delivered ICBT allows them to be their child’s primary source for help, they viewed this aspect as an advantage in participating. P1 said, “I like the idea of being a part of it (hhh) and uhm being the one to help… my child work through these issues […] I want to help [my daughter]. I would like to be part of it.” Moreover, when P3 was asked what other aspects of parent-delivered ICBT makes her want to participate, she stated, “I think it’s a nice experience for [my daughter and I] to do together.”

**Lack of Child’s Compliance.** Because parent-delivered ICBT requires both the parent and the child’s combined efforts, two mothers expressed concern that their child might not acquiesce or comply with the requirements of the program. To illustrate, P1 stated, “I think that the issue would be the mother-daughter dynamic […] I think that would be sort of something
to… to struggle with. It’s the fact that kids don’t listen to their parents because… they’re kids.”

Similarly, P4 raised the same concerns. She said that her three children do not react well when they are made aware that they are, in fact, participating in therapy. Precisely, P4 said:

As [my children] got older and they discovered that all these things, you know, were therapies? They don’t… particularly- my oldest shuts down right away […] The psychologist told us basically not to bother coming back cause he’s basically going to run in circles anyway, and we’re wasting our money.

Evidently, like P4’s previous experience with face-to-face interventions, online therapy would not be able to produce its desired effects if the child is not willing to cooperate.

**Program Format.** One parent identified the program’s format as a potential barrier to participating in parent-delivered ICBT. To be specific, when P4 was asked about aspects of online therapy that makes her reluctant to participate, she responded:

Do I have to read all of these techniques? Or is some of it like, audio? Is there video, or is it all simply reading? If it was all reading, that would be where it would lose me […] My learning style is not just one that absorbs words.

**Uncertainty of Child’s Anxiety.** Another overarching theme that emerged was parents’ uncertainty of anxiety. Surprisingly, mothers who were interviewed were unsure if their child had anxiety, or they were unable to associate some of their children’s behaviours with anxiety. For instance, at the beginning of the interview with P3, P3 stated, “Uhm, there’s just things… that concern me… like she cries very easily… I don’t know if it qualifies as anxiety.”

Furthermore, P3 stated, “I think [my daughter] has also told me she’s like, ‘Mom, I just don’t feel happy. Nothing makes me happy.’” Also, there was a point in time when her daughter incessantly had stomach-aches, so she took her to the doctor to get tested for Celiac disease, but
the test came out negative. As an alternative measure, P3 decided to take her daughter to a naturopath. P3 stated:

So what the naturopath did is she talked to her for a very long time and got out a lot of, you know, nervousness that she experiences at school… and uhm, you know the things that cause her anxiety at school and a lot of that came out and uhm since then, she never complains about stomach—like her tummy hurting.

Before talking to the naturopath, P3 did not readily associate those behaviours with her child being anxious; for some reason, she associated those with the season. P3 stated that she thought “maybe it’s more of a winter thing because it was kind of a long, hard winter.”

Like P3, P1 also had the same experience with her daughter experiencing stomach-aches. P1 stated, “we went through a thing a few years ago… she got a bad stomach bug […] for about a year we had to go to the children’s hospital.” During their time at the children’s hospital, healthcare providers told P1 that physically, there was nothing wrong with her daughter. P1 concluded that looking back, she now knows that “it was just [her daughter’s] anxiety that was making her so sick that she couldn’t really function.”

In the beginning, P2 also seemed uncertain if her child had anxiety. When the researcher asked her if she has sought any treatments for her child’s anxiety, P2 stated that she has not. She explained by saying that her child, who is in fifth grade, “started sort of doing these little funny, quirky things… and [she] didn’t really know what they were.” She said that at times, her daughter “would blink her eyes really fast and like really hard, and she would do it >over and over and over again.<” As a result, P2 immediately took her daughter to the optometrist, but the optometrist told her that her daughter actually had optimal vision. P2 also said that her daughter just cries very easily. The turning point for P2 was when her daughter burst into tears when her dance class was cancelled. She stated:
There was a time when I was supposed to pick her up from school. She was supposed to go to dance, and… dance was cancelled, and she panicked. Because she didn’t know what to do. Her teacher said she just like burst into tears and didn’t know… how to deal with it […] For some reason, it just clicked in my head. I wonder if she’s suffering from anxiety […] I don’t know anything, very, very little about mental illness.

From this extract, P2 explicitly admitted that her knowledge about mental illness or psychological disorders like anxiety is very limited, which seemed to be the case for P1 and P3 as well. Based on their experiences, when their children exhibited somatic symptoms like stomach-aches, their first instinct was to take them to the physician.

Discussion

This study contributes to the current gap in the literature by exclusively focusing on rural parents and their interest in parent-delivered ICBT. The results emphasize important findings regarding rural mothers’ attitudes and understanding of potential benefits and barriers in participating in parent-delivered ICBT. Surprisingly, despite March et al. (2017)’s findings that “living outside of a major city was associated with a lower preference for online services,” in this sample, results suggest the opposite: rural parents, in fact, prefer online services; based on the Likert scale, they are extremely interested in participating in online therapy, specifically parent-delivered ICBT. In cases where rural mothers have not sought professional mental health services for their child, they have reported trying alternative methods to help their child manage their anxiety. It was also evident that rural parents have had struggles with accessing mental health services, which might have impacted their attitudes towards any type of mental health intervention.

Attitudes
Based on this study’s findings, rural parents have had a negative previous experience with seeking mental health services for two primary reasons: long wait times and minimization of their child’s anxiety. Long wait times are expected with face-to-face interventions due to the ratio of clients to therapists. As Jolstedt et al. (2018) have concluded, there is a shortage of CBT-trained professionals, which potentially contributes to the problem of prolonged wait times. For some mothers, it took them several years until they were able to see a psychologist, which have exacerbated both their stress levels and their child’s anxiety levels. Mothers also reported that when they did make the serious effort to seek mental health services for their child, they were discouraged by others, saying that their child’s anxiety was not severe enough. This way of thinking could be problematic; it might lead people to think that the only way they can get the help that they need is if their mental health severely declines or deteriorates. This finding signifies that it might be beneficial to create ICBT programs that are targeted towards children suffering from mild to moderate anxiety symptoms. By doing so, the problems regarding wait times and minimization of child anxiety can be significantly reduced.

**Subjective Norms**

Results showed that, in this sample, the majority of rural mothers were apathetic and indifferent towards the stigma surrounding mental health and seeking therapy. It is important to note that this might be related to the fact that most of these parents, too, have had their own personal experiences and struggles with mental health, which could have affected their outlook on anxiety and mental health in general. One mother in this study noted that the stigma regarding mental health is one of the reasons they have trouble getting help. In other words, for this participant, stigma is one of the many hurdles they have to overcome in order to gain more access to programs and interventions that could help them as well as their children. Even though the majority of mothers have destigmatized psychological disorders, there was one anomaly in
the sample. One mother expressed concern about other’s perceptions of their participation in parent-delivered ICBT. Based on her response, she revealed that she values other people’s opinions. Specifically, her concern stemmed from not wanting her child to be picked on or bullied by kids her age. Thus, as expected, the reduced stigma associated with parent-delivered ICBT can be beneficial to some participants.

**Perceived Behavioural Control**

This study’s findings highlighted various factors that affect parents’ perceived behavioural control. Specifically, one mother reported that the program’s format could be a potential barrier to participating in parent-delivered ICBT. She said that personally, she cannot effectively learn material through only reading; moreover, if the program was mostly reading, it might make her not want to participate. According to this parent’s responses, program format might have the ability to influence program uptake as well as drop-out rates. This signifies that different learning styles should be considered when creating parent-delivered ICBT programs. Perhaps, programs can include a combination of videos and audio-recordings. Charts and graphs could be included in modules for visual learners, and having children recite or repeat information out loud might work for auditory learners.

Lack of child’s compliance was also identified as a potential barrier by some mothers in participating in parent-delivered ICBT. Some mothers reported that their children might go completely against the grain and refuse to cooperate and participate in the program. This finding highlights the need for parent-delivered ICBT programs to include a component that can increase or retain child’s compliance. It is important to take into consideration that each child’s situation is unique; parents should not completely rely on the program in this aspect. Since they know their child well, they can also possibly include a reward system that might increase their child’s
cooperation and likelihood to comply to the program requirements. Other options and possibilities should also be considered by parents.

**Limitations**

Even though this study highlights some important findings and suggestions regarding parents and their participation in parent-delivered ICBT, there are some caveats which concern the generalizability and validity of its results. First and foremost, mothers who were interviewed have never seen or participated in a parent-delivered ICBT program; thus, their responses were hypothetical in nature, and responses solely relied on their understanding of the program based on the researcher’s explanation and description of parent-delivered ICBT. Second, this study’s sample size was small and strictly consisted of mothers, so the results might not entirely be generalizable to rural parents. Lastly, the flexibility of thematic analysis makes it challenging to test its validity. Even if this was a common issue associated with thematic analysis, the researcher took additional measures to improve the study’s accuracy by enlisting the help of two independent researchers to review the whole data set and went through the entire coding process to enhance reliability.

**Implications**

Knowing and understanding the factors that affect rural parents’ intentions to participate in parent-delivered ICBT is important as it gives future researchers insight regarding what parents value in a program for their child. By honing in on these factors, researchers can develop ICBT programs that cater to rural parents’ needs, and doing so can affect uptake of programs. For example, it appears that rural parents are concerned with child compliance and program format, which is pertinent information that researchers should be cognizant of. Developing programs that target these aspects not only allows parents to feel more comfortable in participating but also allows the program to run more smoothly and efficiently.
Knowing the population that is interested in parent-delivered ICBT is also valuable, especially when it comes to program recruitment and program making. Based on this study, rural mothers who have either had previous troubles with seeking mental health services or have tried alternative methods which did not have a prolonged effect on their child’s anxiety are interested in parent-delivered ICBT. Furthermore, it is also important to note that although anxiety has garnered a lot of attention in recent years, based on this study, it appears that some rural mothers are still not knowledgeable or well-informed about anxiety and its symptoms. Therefore, researchers should disseminate information about anxiety during program recruitment. In light of this knowledge, researchers can also target this specific population that seem to be interested in parent-delivered ICBT.

To conclude, this study highlights the importance of examining rural parents’ intentions to participate in online therapy such as parent-delivered ICBT. Undoubtedly, parent-delivered ICBT is still very much in its infancy, so having this information as early as possible allows future researchers to improve on existing programs or help in the creation of upcoming ICBT programs. As previously mentioned, one of the main purposes of ICBT programs is to increase accessibility; therefore, researchers should pay close attention to the rural population. Knowledge gained from this study can enhance researchers’ perspectives on their programs’ target audience.
References


Appendix A

Recruitment E-mail

Subject:
Wanted: Rural parents interested in participating in an interview about anxiety treatment for their child

Body:
Are you a parent of a child with anxiety between 7-12 years of age? We are looking for parents living in rural areas who are interested in participating in a brief phone interview regarding a parent-facilitated online treatment for their child’s anxiety.

For more information or if you wish to participate, please contact torres3n@uregina.ca.

This project has been approved on ethical grounds by the Research Ethics Board of the University of Regina.

Thank you for your time,
Dr. Lynn Loutzenhiser
Child and Family Research Group
University of Regina
http://uregina.ca/~loutzlyn/
306-585-4800
Appendix B
Recruitment Poster

Are you a parent of a child (ages 7-12) who experiences anxiety?

We are looking for parents living in rural areas who are interested in partaking in an interview about their likelihood to participate in a free, online treatment program that will teach them effective techniques on managing their child’s anxiety with support from an online coach.

As a participant in this study, you will be asked to participate in a telephone interview.

For more information or to volunteer for this study, please contact:

Nizanne Torres
Child and Family Research Group
at
Email: torres3n@uregina.ca or child.clinic@uregina.ca

This study has been approved on ethical grounds by the University of Regina Research Ethics Board.
Parental Interest in Delivering Online Therapy to Children with Anxiety Living in Rural Areas

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Below is an explanation of the research project. Please read carefully and if you agree to participate, please sign on the next page.

Purpose: We are interested in determining parent’s likelihood to participate in parent-facilitated internet cognitive behavioural therapy (ICBT) for child anxiety in rural areas. Parent-facilitated ICBT is an online program that will help teach you, the parent, effective techniques that will help you manage your child’s anxiety with support from an online coach. The interview will help us determine what your attitudes are towards this kind of intervention as well as identify what barriers might affect your intention to participate.

Procedures: You will be asked to participate in a phone interview that will last approximately 30-45 minutes. The interview will be audio-recorded.

Potential Risks and Benefits: There are no known or anticipated risks to you by participating in this research. As some of the questions are of a personal nature, it is possible that the questions will result in feelings of discomfort, anxiety, or stress. Resources will be available in the event that you are experiencing anxiety or distress.

Confidentiality: What you say in this interview will be kept confidential and will not be discussed outside of the research team. While the results of the research project may be used for conference presentations or journal articles, the fact that you participated will be kept confidential. There are a few situations in which the researcher will need to share information gathered in this interview in order to keep you and/or your child safe. If you provide information that makes us aware of abuse of a child or that you or your child is at risk of harming yourself and/or others, we may have an obligation to breach confidentiality.
Right to Withdraw:
- Your participation is voluntary, and you can answer only those questions that you are comfortable with. You may withdraw from the phone interview for any reason, at any time, without explanation or penalty of any sort. Data that is submitted will be assumed to be provided voluntarily. Responses cannot be withdrawn after completing the interview.

Follow up: Results from this study will be available on the research lab’s website (http://uregina.ca/~loutzlyn/ResearchFindings.html).

Questions or Concerns: Please contact the researcher using the information provided above. This research project has been approved on ethical grounds by the University of Regina Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee. You can call the Research Ethics Board collect at 306-585-4775 or e-mail them at research.ethics@uregina.ca.

Your signature below indicates that you have read and understand the description provided.

I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records.

_______________________________      _______________________
Name of Participant                  Signature                  Date

_______________________________     _______________________
Researcher’s Signature              Date
Appendix D

Interview Questions

Parent Demographics:

1) How old are you?
2) What gender do you identify with?
3) Are you currently employed? Full time/part time?
4) What is your marital status?
5) Next question is about your annual family income. Please feel free to stop me when I’ve reached your income: below $20,000 a year, between $20,000 and $40,000 a year, between $40,000 and $60,000, between $60,000 and $80,000, between $80,000 and $100,000, or above $100,000?

TOPB Questions:

1. Can you tell me about your child’s anxiety, specifically if you’ve sought any treatment for your child’s anxiety? (This can be any books they’ve read, any treatments or programs they’ve participated in, or times they’ve googled/search something too)
   - (if answer yes) What have you tried or what was your experience like? Did you think it was helpful? (depending on whether positive or negative experience) What was (un)appealing/ what made it a positive or negative experience? What did you like or dislike?

   - (if answer is no) Why haven’t you tried anything? Is it something you’ve considered/ thought about before?
2. What makes you think that your child has anxiety? Did he/she tell you, or does he/she exhibit any specific behaviours?

*Explanation of Parent-Delivered ICBT*

*Parent-delivered internet cognitive behaviour therapy is a form of therapy where parents facilitate the interventions to their child and teach them anxiety-reducing techniques based on the online modules of the program. This is done online with support from an online coach that you can contact through e-mail.*

3. What do you think would be the benefits in you and your child participating in online therapy?

4. Do you think you, as a parent, can effectively teach your child anxiety-reducing techniques with support from an online coach (based on modules)?

5. What are your family/friends’ opinions or thoughts about online therapy? What about their opinion of parent facilitating the intervention?

6. Is the reduced stigma associated with ICBT appealing to you?

7. How confident do you feel in using computers/technology?

8. What factors do you think would make it difficult for you to participate in online therapy for their child (ie. not used to computers, lack of child’s compliance, control)

9. What aspects of parent-delivered ICBT makes you not want to participate in it? (ie. time commitments, no access to reliable internet, lack of confidence, doesn’t believe in therapy) What are other things that might impact your decision in participating?

10. What aspects of parent-delivered ICBT make you want to participate in it? (ie. can do it at home)
11. Do you know what resources or places to go to if you wanted to seek mental health services?

12. Is there anything else you’d like to add?

13. On a scale of 1-5 with 1 being the least likely to 5 being most likely, how likely would you participate in parent delivered ICBT?
Appendix E

Transcript Notation

_I_ I and italics indicated the interviewer’s speech

_..._ Three periods indicated a discernible pause. More periods prolong the pause.

_-_ A dash shows a sharp cut-off of speech

_(hhh)_ This indicated audible inbreaths or outbreaths in the participant’s speech

_((*word*))_ Double round brackets enclosed the interviewer’s description of non-speech sounds [ie. ((laughing))]

_< >_ “Less than” and “greater than” signs indicated talk that was faster or slower than normal

_ATOM_ Words in bold were words that were emphasized by participants