# Development and Initial Validation of the Treatment Barrier Index Scale A Content Validity Study

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Distance delivery systems are being developed to increase access to mental health care. Although development is progressing rapidly, there has been little work delineating the differences between distance and face-to-face interventions from the participants' viewpoint. This article describes scale development and a content validity study of the Treatment Barrier Index (TBI). The TBI scale has acceptable content validity (Content Validity Index = 0.96). The TBI scale will be used to examine delivery system differences. Evidence of the differences between systems may help to inform delivery system designs, ensuring that participant needs are met by enhancing access to evidence-based care. **Key words:** accessibility, barriers to treatment, Content Validity Index, delivery systems, disinbibition, distance treatment, scale development, self-disclosure, stigma, visual anonymity

NOVEL distance mental health delivery systems are being developed as access solutions. Varied technology such as telephone, 1 videoconferencing, 2 the Internet, 3,4 and e-mail 5 have been used to deliver evidence-based distance mental health

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This research study was conducted in association with the Strongest Families Program (formerly know as the Family Help Program) at the IWK Health Centre, Halifax, Nova Scotia, Canada.

This study was supported by research funds from the Canadian Institutes of Health Research: Team Grant and a Canada Research Chair held by Dr McGrath. The authors thank the families who shared their experiences with them.

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DOI: 10.1097/ANS.0b013e3182186cc0

treatment to adults and children. Distance treatment systems eliminate the need to travel, a common barrier with face-to-face services. Moreover, distance treatment systems that do not permit the exchange of visual cues (eg, the telephone) provide visual anonymity to the participant and the therapist. Visual anonymity, or physical identity concealment, can reduce the stigma often associated with receiving mental health care. Fewer treatment barriers may increase utilization of child mental health services. However, some individuals may prefer the physical presence with their therapist in face-to-face treatment. Although distance treatment can help enhance access to care, little is known, from the participants' perspective, about differences that may exist between system delivery modalities.

In a distance treatment study, Lingley-Pottie and McGrath<sup>6</sup> designed an open-ended questionnaire to explore participant experiences. We asked participants to describe the advantages and disadvantages of distance versus face-to-face treatment. Content analysis was employed to identify themes that

described the participants' distance treatment experience as well as their opinions about face-to-face treatment. The themes emerging from the disadvantages of face-to-face interventions were inaccessibility, feeling uncomfortable or intimidated, lack of privacy, being stigmatized, feeling inhibited, and the participants' judgment of the therapist. More than half of the sample (82 of 131) shared concern about the stigmatizing and inhibiting effects of face-to-face therapy. These results suggested barriers or obstacles to treatment imposed by the mode of treatment delivery. There has been little examination of differences in treatment barriers between different delivery systems (eg, face-to-face vs distance treatment) in child mental health.

The perceptions of users should be evaluated when new approaches to care are introduced. Gaining an understanding of differences in treatment barriers may inform selection of treatment options to best address participant needs,<sup>7</sup> enhancing service access and utilization.

The purpose of this study was to develop a scale, grounded in the participants' experiences, designed to measure differences in treatment barriers between child mental health delivery systems, in the contexts of distance versus face-to-face treatment. Phase 1 of this article includes the scale development methodology employed to develop the Treatment Barrier Index (TBI) scale. Phase 2 details the Content Validity Index (CVI) study conducted to evaluate TBI content validity.

#### PHASE I: SCALE DEVELOPMENT

A comprehensive approach to scale development was used for construct and theme definition, item generation, and content validation. Our goal was to ensure that scale content was derived from the participants' experiences<sup>11</sup> and was complemented by the literature, clinician, and expert opinion.<sup>10</sup> Scale development methodology was guided primarily by Streiner and Norman<sup>10</sup> but also informed by Nunnally, <sup>12,13</sup> Lynn, <sup>8</sup> and

DeVellis.<sup>14</sup> For new research areas, Streiner and Norman<sup>10</sup> suggest that preliminary data be used as a basis for item generation because existing scales may be theoretically incongruent with the new research findings.

To ensure that the TBI item pool would adequately examine concepts relevant to distance and face-to-face treatment, scale content was grounded in the participants' experience. After an extensive review of the data collected in the Lingley-Pottie and McGrath<sup>6</sup> study, definitions were developed and items created by the authors. We will introduce main construct and theme definitions followed by a literature review and finally item generation.

# MAIN CONSTRUCT AND THEME DEFINITION

The main themes that emerged from the original participant data<sup>6</sup> included how the mode of treatment delivery influences the participants' perception of (1) their own personal safety or comfort, (2) privacy or anonymity, (3) stigma or the judgment by others (public and therapist), (4) their own judgment of the therapist, and (5) treatment accessibility. These 5 themes comprise the overall treatment barrier construct. We will briefly define each theme in the context of our research, present a few sample participant excerpts that support these themes, and provide a summary of the relevant literature.

# Safety and comfort theme

Definition: The participant's perception of their personal comfort or safety when receiving treatment via a face-to-face versus a distance, visually anonymous delivery system. How the patient responds in treatment may be influenced by feelings of personal comfort/safety. This includes the impact that personal safety/comfort in the treatment setting may have on the client's feelings of inhibition (ie, hold back information) and comfort level with

talking freely, openly, and honestly with the therapist.

# Sample participant excerpts

Distance: "More comfortable being not face-toface"; "'coach' is thinking about me when on the phone and not worried about who is waiting next in the waiting room"; "More relaxed...you have time to think"; "I could cry on the phone didn't have to worry and feel uncomfortable."

Face-to-Face: "You are less relaxed; not comfortable; uptight in the clinical environment"; "Uncomfortable as if every move is analyzed"; "Some of the things we talked about may have been uncomfortable face-to-face."

Literature on face-to-face treatment explains that the context of the mental health setting can have beneficial or hampering effects on the participants' treatment experience. While a welcoming, comfortable, and protective treatment environment helps a person feel safe, an unfamiliar and confined setting can produce a negative experience.<sup>15</sup> Similarly, Greenberg and Pascual-Leone<sup>16</sup> report that a calm, safe treatment environment can help an individual gain better control of emotions that are typically difficult to regulate such as anxiety, shame, or embarrassment, which are often associated with the effects of stigmatization prevalent in the faceto-face setting. The distance treatment setting can provide comfort to the participant being within one's "safe haven: own home" 17,18 and provides visual anonymity, eliminating social anxiety caused by the exchange of visual cues.

# Privacy/anonymity

Definition: The participant's perception of their personal privacy or visual anonymity (ie, whether their identity is known or not).

# Sample participant excerpts

Distance: "Privacy of your own home; didn't have to be seen going in or out of a psychologist's office"; "more willing to say more over the phone than she would have in person; she could write a list and say it over the phone and 'coach' would never know."

Face-to-Face: "If you disagree they are seeing your reaction"; "On the phone feels more confidential"; "When you meet someone you see everything and the body language you react to it so it may have been more intimidating and harder to get a good fit."

In the computer-mediated communication literature, research by Joinson<sup>19</sup> has shown that the private versus public self-awareness theory seemed to explain the effects that visual anonymity has on personal disinhibition. If an individual feels less vulnerable and less intimidated because of visual anonymity, he/she is more likely to disclose information openly.<sup>20</sup> Concern about public awareness in face-to-face treatment can inhibit participant responses by suppressing self-disclosure21 as a mechanism of privacy protection.<sup>22</sup> Perhaps the reverse is true with distance treatment that provides increased privacy through visual anonymity, which may positively influence client self-disclosure.

# Stigma by others (public and therapist)

Definition: The participant's perception of public awareness that he/she is receiving therapy. This includes the influence the delivery system has on the participant's perception of how others (public/peers) and therapist judge or view him/her.

#### Sample participant excerpts

Distance: "Good for child to not have to see someone and feel stigmatized...Didn't feel looked-down on."; "More objective over the phone, not seeing how someone is dressed, etc"; "I never felt that 'coach' was being judgmental."

Face-to-Face: "You would recognize me on the street and might judge me, would be a worry"; may be bias (body language, etc), worry about opening up. On phone you have anonymity."

Stigma associated with receiving mental health services is a well-known treatment barrier. This psychological phenomenon can cause concern, even for those with mild mental health issues, if they perceive that others may stereotype them or socially reject them because of their problems.<sup>23</sup> Similar to Perlick et al,<sup>23</sup> the data in our study<sup>6</sup> suggested that stigma concerns associated with treatment are prevalent and should be more widely addressed. The effects of perceived stigma, such as avoiding rejection by peers and/or therapist,<sup>15,23</sup> can deprive many of needed services, resulting in untreated mental health conditions.

# Therapist judgment by the participant

Definition: The participant's personal judgment and acceptance of the therapist. Therapist verbal (eg, voice quality, tone, inflection, and what the therapist says) and nonverbal (eg, therapist appearance, body language) cues can influence the participant's opinion of the therapist.

#### Sample participant excerpts

Distance: "Developed a better trust. No judgment. Appearance or body language will make a difference. Developed a bond quicker"; "No distractions from 'coach' body language; focused on voice."

Face-to-Face: "You can take physical appearance and change how you feel about a person"; "Coach may have body language you don't like"; "You may not think person is so friendly when you meet them"; "You look to see approval in their eyes, judgments."

The participant's judgment of the therapist, specifically negative opinions based on appearance and body language as a barrier to treatment, was an emerging theme in our data.<sup>6</sup> There is a scarcity of literature in this area. Fenigstein et al's<sup>24</sup> theory explains two aspects of self-consciousness as social stigma or perception of public judgment concerns but also one's own private concerns. The latter would explain the cognitive nature of an individual's own judgment of a therapist. Wheeless's<sup>25</sup> theory of interpersonal solidarity (ie, closeness or trustworthiness) in a relationship has been shown to correlate positively with self-disclosure, which parallels closely with our data emerging about personal judgment of the therapist.

# Treatment accessibility

Definition: The participant's perception of treatment accessibility. Perceived treatment barriers imposed by the delivery system can impact treatment acceptance and attendance.

Sample participant excerpts

Distance: "Don't have to travel; easier to talk on the phone than to get out and make appointment, no travel or babysitter needed; "Never had to worry about the weather"; "Could do the dishes while talking. Don't have to drive or pay."

Face-to-Face: "Travel, inconvenience, time and expense to go someplace"; "Not convenient for most families, having to drag him out of class in front of friends to appointments. Time off work. No evening/weekend service. Strange environment for child; sends message to child that something is wrong with them".

# **Scale Review**

Gaining and maintaining access to traditional face-to-face mental health treatment services can be impeded by obstacles to treatment. <sup>26</sup> The health belief model, <sup>27</sup> developed to predict an individual's health behavior, includes a construct which hypothesizes that perceived barriers to behavioral change may affect an individual's readiness to seek or to accept services.

Existing scales did not cover these dimensions. For example, the Distance Communication Comfort scale<sup>28</sup> measures comfort with 3 modes of psychotherapy (ie, face-to-face, telephone, video) in the context of adult therapy. The Barriers to Care Questionnaire, 29 developed by professional opinion, evaluates participants' perception of how well the clinic and doctor met their needs, in the context of face-to-face child mental health services. The Barriers to Treatment Participation scale,<sup>30</sup> also based on professional opinion, measures treatment barriers in the context of face-toface treatment with a focus on accessibility and treatment participation. Colonna-Pydyn et al31 acknowledged the importance of developing new treatment barrier scales that capture the participants' opinions and can be utilized across settings.

#### ITEM GENERATION

Caution was used when creating the items so that the wording was clear, concise, and relevant with current-day language<sup>10,14</sup> and applicable to both treatment delivery settings. To be inclusive, preventing the omission of an essential item, many items were generated to ensure theme content coverage.<sup>10,12,32</sup> Although the authors edited the participant responses, caution was taken to ensure that the meaning was captured. The literature was reviewed to determine if important items were missing but no new items emerged.

Between 16 and 20 items per theme were created for an item pool of 94 items. Some of the items were reverse-scored to address the potential of response bias. <sup>14</sup> Once the authors established the initial item pool, grounded in the participants experience, we proceeded to the next phase to conduct a content validity study.

#### PART II: SCALE VALIDATION

A CVI study was conducted to evaluate the content validity of the TBI scale.<sup>8,10,33</sup> A CVI is an indicator of content relevance interrater agreement.<sup>33</sup> Emphasis was placed on development of strong theme definition; comprehensive instructions; clear, unambiguous, and relevant items; and a select variety of qualified content judges.

The sample size was determined a priori to be 6 to 10 participants per group to optimize the opportunity to gain information about the measure<sup>9</sup> by ensuring variability within expert groups<sup>8</sup> and to decrease chance agreement between judges.<sup>35</sup>

# **Participants**

We targeted participants from 3 specific content expert groups: (1) psychometric experts, (2) therapists and coaches, (3) community members. Although content validity studies do not typically include community members in the expert panel, we included them, because we considered the participants as

experts with the phenomenon of interest.<sup>3436</sup> Professional opinions about perceived barriers could vary from participant opinion,<sup>35</sup> especially when dealing with stigma and judgment of the therapist. Exclusion of the participant opinion in this phase could introduce professional bias, risking loss of items that are very important to the participant and the underlying phenomenon of interest.

To ensure representation from both distance and face-to-face treatment perspectives, at least 50% of the latter 2 groups were required to have distance therapy experience. Participants in groups 1 and 2 were recruited through local universities and hospitals. Group 3 members with distance treatment experience were recruited from a sample of convenience through the Strongest Families Program (formerly the Family Help Program), a distance treatment program.<sup>1,6</sup> Other community members with face-to-face treatment experience were recruited through word of mouth.

Twenty-three participants, from Canada, took part in this study—psychometric/academic experts: 8 (mean age = 42, standard deviation [SD] = 11.8); therapists: 6 (3 distance experience) (mean age = 28, SD = 2.8); community members: 9 (5 distance experience) (mean age = 42, SD = 8.6)—between October and December 2008. The majority of the sample was female (n = 3 males). Eighty-seven percent were Caucasian (n = 20), 9% African Canadian (n = 2), and 4% Hispanic (n = 1). Sixty-five percent (n = 15) had completed university, including 8 with a graduate-level degree.

Ethical approval was granted by the IWK Research Ethics Board. Participants received a \$25.00 honorarium for the return of the completed initial questionnaire evaluation and a \$10.00 honorarium for follow-up item revision reevaluation.

#### **METHODS**

Participants received a package that contained:

• study introduction cover letter,

- study information form introducing the study and detailing study purpose and design, and
- questionnaire package (included a cover page explaining the contents and an example of how to complete the CVI sections, an instruction sheet about how to complete the CVI sections, the theme definition table, and the TBI scale).

The 5 scale themes were defined. Item rating scales were provided for content relevance or fit (CVI: 1 = item does not fit; 2 =item somewhat fits; 3 = item fits quite well; 4 = item definitely fits), item clarity (1 = notclear; 2 = major revision; 3 = minor revision; 4 = is clear), and item inclusion (1 = delete item; 2 = retain item) with a comment section to make recommendations. The participant ratings were calculated to yield a CVI for each item (I-CVI) and an overall Scale CVI (S-CVI). To identify scale deficiencies,<sup>32</sup> participants were encouraged to add comments or suggestions corresponding to each item, suggestions for additional items to be added per theme and suggestions for other themes not covered by the scale.

A 5-point Likert scale was chosen as the response rating scale for the TBI questionnaire because we felt it would be more comprehensive for telephone administration. Although the 7-point Likert scale offers more precision in measurement, <sup>10</sup> it can be cumbersome to administer over the phone and can cause respondent confusion if anchor differences are ambiguous. <sup>32</sup> We found no consensus in the literature supporting the assumption that a 7-point scale is substantially superior to a 5-point scale <sup>32</sup> with telephone administration. Therefore, two 5-point response rating scales (with different anchors) that fit the TBI items were selected for participant evaluation.

The TBI scale telephone administration instructions were as follows: "I would like for you to think about your experience with the help you received in <face-to-face> or <distance> treatment (staff state the relevant treatment delivery term). Based on your experiences with the help that you received <face-

to-face> or <distance>, please respond to the following questions".

#### **ANALYSIS**

#### **Item Content Validity Index**

Criteria for evaluating feedback from the participants were established *a priori*. I-CVI was calculated by the number of participants who rated the item relevancy as 3 or 4 divided by the total number of participants.<sup>33</sup> Items with a minimum I-CVI of 0.78 would be retained.<sup>8,33</sup> Any items deemed to be important to include in this scale were revised and reevaluated to yield at least the minimum recommended I-CVI value.

# **Scale Content Validity Index**

The method proposed by Polit and Beck<sup>33</sup> was used in this study to evaluate S-CVI as a measure of average item quality by summing the I-CVIs and dividing by the number of scale items (S-CVI/Ave). An S-CVI/Ave of 0.90 or higher indicates excellent content validity.<sup>33</sup> Once the S-CVI was at an acceptable level, the scale would be ready for use in the next phase.

# Item inclusion

We reviewed the rationale participants provided for item deletion to insure that items, identified as important to the participants, were not deleted<sup>8</sup>

# Item clarity

Any items deemed unclear by more than 20% of the reviewers were revised for reevaluation.

#### **RESULTS**

Although a few new *items* were suggested, no additional *themes* were suggested. Reevaluation was required for 19 revised items and 8 new items (see Table 1). Some low I-CVI ratings were related to inappropriate theme categories. Such items were reevaluated under the recommended theme. All members

 Table 1. Revised Items

Revised Item	Original Item (Original I-CVI)	Revised I-CVI	Retained Y = Yes/ N = No
Theme 1: Personal comfort/safety			
I found it hard to focus during my sessions	Distracted by other things going on around me (0.78); It was easy to think and focus on what I needed to (0.73)	0.81	N
I felt uncomfortable when people made notes about what I said	Self-conscious or uncomfortable when others write things about me (0.86)	1.0	Y
I felt relaxed enough in this setting to dress any way I wanted to	Like I could dress any way I wanted to and no one would know (0.65)	0.95	Y
I felt as though I was being analyzed	Like my every move was being watched or analyzed (0.78)	0.87	Y
I felt uncomfortable when asked personal questions	New item suggested to be added under theme	0.96	Y
Theme 2: Privacy/anonymity		• •	**
I worried that someone would find out that I was getting counseling	As if no knows I am getting help (0.83)	1.0	Y
The privacy I felt in the treatment setting helped me to admit my problems openly	Easy to admit that you have a problem because no one knows you (0.91)	0.96	N
I felt that what I talked about was confidential	Like my discussions or what I say is private (0.96)	1.0	Y
I felt that what I did during my treatment sessions was private	That how I act or what I do is secret (0.68)	1.0	Y
I felt that my identity was protected	I felt sort of anonymous (0.61)	0.96	Y
The privacy I felt in the treatment setting helped me open-up about things I would usually keep to myself	That I could open-up about things I would usually keep to myself because it was private (0.91)	0.96	Y
The treatment setting provided me with enough privacy	As if my problem is private (0.95)	0.96	Y
I was concerned that people talked about me when my sessions were over	Self-conscious because my therapist and others may talk about me when I am not there (0.90)	1.0	Y
Theme 3: Judgment by others Stigma			
I felt that I was accepted for who I am	Accepted by my therapist (0.91)	1.0	Y
I felt as though no one cared how I looked	Like I could dress any way or have my hair anyway I wanted to and no one would judge me for the way I looked (0.87)	0.91	Y
I felt that people looked down on me for needing counseling	Nervous that other people would judge me because I was getting help (0.91)	0.96	Y
			(continues)

**Table 1.** Revised Items (Continued)

Revised Item	Original Item (Original I-CVI)	Revised I-CVI	Retained Y = Yes/ N = No
Theme 4: Client's judgment of therapist			
My therapist annoyed me during my sessions	Like my therapist does things that annoy me (0.82)	0.96	Y
I formed a negative opinion of my therapist (eg appearance, voice, or what he/she did)	Like I judged my therapist for how he/she looked or behaved (0.91)	1.0	Y
I felt that my therapist knew what he/she was doing	New item suggested to be added under theme	1.0	Y
I got the help I needed from my therapist	New item suggested to be added under theme	1.0	Y
Theme 5: Accessibility/convenience			
There were costs to me to have counseling sessions (eg financial, time or psychological)	As though there was a financial burden to have the sessions (1.0)	1.0	Y
It was easy to commit to making my sessions.	New item suggested to be added under theme	0.96	Y
I would be worried about missing a session if something came up (bad weather, childcare issues, illness, work)	New item suggested to be added under theme	0.87	Y
The wait to get counseling was too long	New item suggested to be added under theme	1.0	Y
My sessions kept me from getting important things done	New item suggested to be added under theme	0.86	Y
The treatment location was convenient for me	Like sessions were easy to get to (0.91)	0.96	Y
There was a lot to organize to make the sessions	New item suggested to be added under theme	0.91	Y

Abbreviation: I-CVI, item Content Validity Index.

participated in the revision evaluation. In the end, 102 items were evaluated, 52 deleted, yielding a final scale of 50 items.

Among the items retained, each yielded a content validity index rating of greater than 0.80 (see Table 2 for the final TBI scale with content validity ratings). The I-CVI ranged from 0.83 to 1.0 and subtheme CVI from 0.94 to 0.96, all with acceptable ratings regarding clarity. The overall S-CVI rating of 0.96 suggests that this initial scale design yields excellent evidence of face and content validity.

The majority of the members in each group (62% overall) preferred the *Strongly Disagree* to *Strongly Agree* response rating system for the TBI scale compared to the *Not at all* to *Always* rating scale.

#### DISCUSSION

If perceived barriers to treatment affect decisions to receive services, it is essential to gain an understanding of any differences between treatment modalities, from the

**Table 2.** Final Scale Items: Item Content Validity Index<sup>a</sup> (Continued)

Personal Comfort/Safety	Privacy/Anonymity	Judgment by Others Stigma (Public/Therapist)	Client's Judgment of Therapist	Accessibility/ Convenience
8. I felt relaxed enough in this setting to dress any way I wanted to <b>0.95</b>	8. I felt that if I had tears, I would not feel embarrassed <b>0.91</b>	8. I felt that I was accepted for who I am 1.0	8. I formed a negative opinion of my therapist. (eg, appearance, voice or what he/she did) 1.0	8. My sessions kept me from getting important things done <b>0.86</b>
9. I felt as though I was being analyzed <b>0.87</b>	9. The privacy I felt in the treatment setting help me to open-up about things I would usually keep to myself 0.96	9. I felt as though no one cared how I looked <b>0.91</b>	9. My therapist truly cared about my situation 1.0	9. The treatment location was convenient for me 0.96
	10. The treatment setting provided me with enough privacy <b>0.96</b>	<ul><li>10. I felt that people looked down on me for needing counseling</li><li>0.96</li></ul>	<ul> <li>10. Issues important to me to talk about were avoided by my therapist</li> <li>0.87</li> <li>11. I felt that my therapist knew what he/she was doing 1.0</li> </ul>	<ul><li>10. There was a lot to organize to make the sessions 0.91</li></ul>
Score: 0.97	Score: 0.97	Score: 0.95	Score: 0.95	Score: 0.94 Overall Scale Score: 0.96

<sup>a</sup>Item Content Validity Index (I-CVI) noted in bold font.

**Table 2.** Final Scale Items: Item Content Validity Index<sup>a</sup>

Personal Comfort/Safety	Privacy/Anonymity	Judgment by Others Stigma (Public/Therapist)	Client's Judgment of Therapist	Accessibility/ Convenience
1. I felt intimidated by my surroundings 1.0	1. I worried that someone would find out that I was getting counseling 1.0	1. I worried about what my therapist thought of me 0.96	1. I got the help I needed from my therapist 1.0	1. The session was scheduled at a time that was convenient to me 1.0
2. I felt comfortable in the treatment setting 1.0	2. I felt that my problems were private 0.95	2. I worried that I was judged negatively because of my appearance 0.96	2. My therapist's expressions made me feel good about myself <b>0.91</b>	2. I had to hurry to make my session on time <b>0.91</b>
3. During my session I felt rushed, like someone else was next in line waiting 0.96	<ol> <li>I felt that what I talked about was confidential</li> <li>1.0</li> </ol>	3. I worried that my therapist judged me because of how I act 1.0	3. I felt intimidated by my therapist <b>0.87</b>	3. There were costs to me to have counseling (eg, financial, time or psychological costs) 1.0
4. I felt relaxed enough in this setting to show my true emotions 1.0 5. I felt safe to talk openly about private things 0.96	<ul> <li>4. I felt that what I did during my treatment sessions was private 1.0</li> <li>5. I felt that my identity was protected 0.96</li> </ul>	<ul> <li>4. I worried that if I told the truth my therapist would judge me 1.0</li> <li>5. I was at ease telling my therapist if I disagreed about something because he/she would not judge</li> </ul>	<ul><li>4. I felt confused by my therapist's reactions 0.87</li><li>5. I felt that I could trust my therapist 1.0</li></ul>	4. I felt that I had access to someone at anytime 0.96 5. It was easy to commit to making my sessions 0.96
6. I felt uncomfortable when people made notes about what I said 1.0	6. I was open about answering embarrassing questions 1.0	me <b>0.96</b> 6. I held back telling my therapist things because he/she would judge me 0.91	6. My therapist annoyed me during sessions <b>0.96</b>	6. I would be worried about missing a session if something came up (eg bad weather, childcare isone illose mod). 6.7
7. I felt uncomfortable when asked personal questions <b>0.96</b>	7. I was concerned that people talked about me when my sessions were over 1.0	7. I felt I was judged by others as if our problems were worse than they actually were <b>0.83</b>	7. My therapist paid attention to what I said 0.96	7. The wait to get counseling was too long 1.0 (continues)

participants' perspective, so that solutions for improvements can be implemented.

To examine perceived obstacles to treatment differences between modes of service delivery, a scale reflective of the participants' perspective was developed. This initial scale development research phase was the foundation of establishing face and content validity of the TBI scale. The final TBI scale has been shown to have excellent content validity and is acceptable for the intended use in a future study to examine treatment delivery differences from the participants' perspective. Because the purpose of scale development was not intended to establish psychometric properties, some item redundancy was maintained and will be reviewed in later development and testing stages. 10 In addition, the number of items retained (50) is excessive and burdensome to be useful in clinical care. Future developments will include using factor analysis to reduce the item set.<sup>10</sup>

#### **CONCLUSION**

Although there is a need for rapid integration of new service delivery options, we do not yet fully understand the effects that different modes of treatment delivery may have on the participant. The TBI scale will be utilized to examine differential characteristics between distance treatment and face-to-face, as perceived by the participant. Knowledge gained about perceived obstacles to treatment and treatment delivery differences/influences may inform health systems design and evidence-based clinical care. Ideally, health delivery system options should be designed to meet the participants' needs without posing personal obstacles.

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