Proactive changes in clinical practice as a result of the COVID-19 pandemic: Survey on use of telepractice by Quebec speech-language pathologists

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Abstract

**Background:** The coronavirus disease 2019 (COVID-19) pandemic has led to important challenges in health and education service delivery.

**Aims:** The present study aimed to document: (i) changes in the use of telepractice by speech-language pathology (SLP) professionals in Quebec since the start of the COVID-19 outbreak; (ii) perceptions of the feasibility of telepractice by SLPs; (iii) barriers to the use of telepractice; and (iv) the perceptions of SLP professionals regarding the main issues of telepractice.

**Methods & Procedures:** An online survey with closed and open, Likert scale and demographic questions was completed by 83 SLPs in Quebec in June and July 2020.

**Outcomes & Results:** The survey responses showed that within the cohort responding, telepractice use has increased significantly as a response to the COVID-19 pandemic. Most respondents planned to continue using telepractice after the pandemic ends. In addition, the respondents considered telepractice to be adequate for many clinical practices but less so for others (e.g., swallowing disorders, hearing impairment). Most of the reported barriers to the use of telepractice concerned technological problems and a lack of clinical materials for online use. Confidentiality and privacy issues were also raised.

**Conclusions & Implications:** SLP professionals rapidly took advantage of existing technologies in their clinical settings to cope with the pandemic’s effects on service delivery. The discrepancy between their perceptions and the evidence in the literature for some practices and populations strengthens the need for more information and education on telepractice.

**KEYWORDS**

pandemic, speech-language pathology, survey, telehealth

What this paper adds

*What is already known on the subject*

- The proportion of speech-language pathologists (SLPs) in Canada who use telepractice for clinical activities is unknown. Knowing this information
became crucial in the context of the coronavirus disease 2019 (COVID-19) pandemic because non-essential activities were interrupted to halt the spread of the disease.

What this paper adds to existing knowledge

- The findings from this survey study confirmed that the use of telepractice in SLP in Quebec increased significantly during the COVID-19 pandemic. Moreover, the majority of the respondents began using telepractice because of the pandemic, and most planned to continue doing so after it ends. This demonstrates how SLP professionals rapidly took advantage of existing technologies in their clinical settings to cope with the pandemic’s effects on service delivery.

What are the potential or actual clinical implications of this work?

- Although the SLPs expressed an overall positive perception of telepractice, they also highlighted barriers to its optimal use. The findings of this study should help employers and regulatory bodies in Quebec to bring down those barriers and make telepractice in SLP a durable, effective and efficient service delivery model.

INTRODUCTION

Service delivery in speech-language pathology (SLP) is mostly provided via one-on-one assessment or treatment sessions. However, travelling to an outpatient clinic, rehabilitation centre or private clinic is sometimes a major issue for people with mobility problems. A growing body of literature has shown that telepractice is an efficient and effective SLP service delivery method (Molini-Avejonas et al., 2015). Telepractice has been used for the assessment of language in neurodegenerative diseases (Adams et al., 2020), intelligibility in dysarthria (Ziegler & Zierdt, 2008), dysphagia from various aetiologies (Ward et al., 2012) and childhood speech disorders (Waite et al., 2006).

The efficacy of treatment interventions delivered remotely through telepractice has been studied in many clinical populations, such as individuals with stuttering (McGill et al., 2019), post-stroke aphasia (Macoir et al., 2017), dysphonia (Rangarathnam et al., 2015), developmental reading and spelling difficulties (Kohnen et al., 2020), and children with language disorders (Wales et al., 2017). However, the adoption of this service delivery mode represents a significant change in SLP practice, which is based on direct communication, interaction, continuous adjustment with the interlocutor, corrective feedback and encouragement. Hence, studies have highlighted the need for information and education on the implementation and use of telepractice in SLP (Keck & Doarn, 2014; Overby, 2018). Moreover, there are barriers to the use of telepractice in SLP, including limited access to technology and a lack of information technology support (Henry et al., 2017; Kim et al., 2020; Nittari et al., 2020).

The coronavirus disease 2019 (COVID-19) pandemic has resulted in serious public health concerns. The confinement and social/physical distancing practices implemented in many countries have led to important challenges in health and education service delivery. To reduce the impact of this pandemic, professionals of various domains, including SLP, have adopted or increased the use of telepractice (Finkelstein et al., 2020; Hincapie et al., 2020; Tenforde et al., 2020). Professional regulatory bodies, such as the American Speech-Language-Hearing Association (ASHA) and Speech-Language & Audiology Canada (SAC) quickly adapted and intervened, providing clinicians with telepractice guidelines through webinars (Speech-Language and Audiology Canada, 2020), courses (Speech Pathology Australia, 2020) and various information resources (American Speech-Language & Hearing Association, 2020a, 2020b).

Canada is an extremely large country, and telepractice has typically been used in SLP to provide services to populations in remote and rural areas (Picot, 1998). However, the proportion of SLP professionals in Canada who use telepractice for clinical activities is unknown. This information is even more crucial in the context of the COVID-19 pandemic because non-essential activities have been interrupted to halt the spread of the disease.
In this context, the main goal of the present study was to estimate the number of SLP professionals who have adopted telepractice in order to avoid issues, such as service breaks and long waiting lists. More specifically, the objectives were to document: (i) changes in the use of telepractice by SLP professionals in Quebec since the COVID-19 lockdown on 11 March 2020; (ii) the perceptions of the feasibility of telepractice by SLPs for clinical activities, practices and populations; (iii) the perceived barriers to the use of telepractice; and (iv) the perceptions of SLP professionals regarding the main issues with telepractice.

METHODS

Study population and recruitment procedure

A non-probability sampling method was used to recruit French-speaking SLP professionals in Quebec. Participants were sought through the June 2020 monthly newsletter of the Ordre des orthophonistes et audiologistes du Québec (OOAQ; ‘College of Speech-Language Pathologists and Audiologists of Quebec’) which has an estimated membership of 2900 SLPs. In addition, an invitation to participate in the study was emailed to all lecturers and practicum supervisors at Laval University (n = 350). Participants were excluded if they had a student status, never used telepractice or did not complete the survey. Since the study aimed to collect non-nominative information about respondents’ professional practices, it was exempted from institutional ethical approval.

Survey questionnaire

The survey was developed by the authors of this article, who are all SLP professors at Laval University. In total, 55 closed, open, Likert scale and demographic questions were created based on similar surveys and guidelines established by professional regulatory bodies (American Speech-Language & Hearing Association, 2020a, 2020b). The closed questions focused on clinical aspects of telepractice, and some were followed by open questions designed to obtain clarifications and detailed answers. Other open questions focused on preferred communication platforms and software, tests used in telepractice assessments, and pros and cons of telepractice use. A 5-point Likert scale, from strongly disagree to strongly agree, was used for questions about attitudes toward telepractice. Finally, multiple-choice demographic questions included type of clinical practice, type of establishment (public or private), clinical populations served, Quebec administrative region of practice and years of practice. The survey was available online via Limesurvey (limesurvey.org) for 6 weeks, and a reminder was sent to potential respondents after 4 weeks.

Data analysis

Descriptive statistics were used to analyse the data. Responses to open questions were analysed through thematic grouping following the method proposed by Braun & Clarke (2006). An undergraduate student, familiar with qualitative methodology, first conducted all the steps of the analysis, namely the identification of the pattern of meaning and issues of potential interest in the data, the identification of the main and less prevalent themes, and the codification of the responses. All along with the analysis, the first author reviewed the thematic identification, the coding process and the respondents’ responses, and codes were adjusted as required. Finally, the three co-authors proceeded to the final revision, and a consensus was obtained through discussion with the entire team.

RESULTS

The results sketch out the portrait of the use of telepractice by SLPs in Quebec, approximately 4 months following the COVID-19 first wave of lockdown, declared on 13 March 2020. The main survey results are presented in five sections: (i) demographics of respondents; (ii) changes in the use of telepractice in SLP in the context of the COVID-19 pandemic; (iii) perceived feasibility of telepractice in SLP; (iv) perceived barriers to the use of telepractice in SLP; and (v) perceptions of the respondents on the main issues surrounding the use of telepractice.

Demographics of respondents

The survey completion time was 30 min on average. A total of 85 SLP professionals completed the survey. The average length of SLP practice for the 85 SLP professionals was 11.3 years (SD = 8.7 years). Of these SLP professionals, 83 (98%) used telepractice; therefore, only their responses were included in the analysis. Although the majority of the respondents came from Capitale-Nationale (n = 16), Montreal (n = 16) or their metropolitan regions, 14 of the 17 regions of Quebec (i.e., the province of Quebec is officially divided into 17 administrative regions) were represented in the survey results.
As shown in Table 1, the 83 respondents were a fairly accurate representation of the entire SLP profession in Quebec in terms of practice setting and case type. The majority worked in public sector and private clinics in proportions similar to those reported by OOAQ for all SLPs in Quebec (OOAQ, 2020) (public: present study = 77.6%; OOAQ = 65.8%; private: present study = 21.2%; OOAQ = 19.1%).

### Table 1: Description of the survey respondents

| Survey variable | n (%) |
|-----------------|-------|
| **Practice setting** |       |
| Public          | 64 (77.6) |
| Private         | 18 (21.2) |
| Academic (University) | 1 (1.2) |
| **Work setting** |       |
| Private clinic  | 33 (38.8) |
| School          | 31 (36.5) |
| Rehabilitation centre | 22 (25.9) |
| Local community service centre (primary care) | 14 (16.5) |
| Hospital (secondary and tertiary care) | 6 (7.1) |
| University clinic | 2 (2.35) |
| Long-term nursing home | 0 (0) |
| **Case types** |       |
| Pre-literacy and literacy skills | 61 (71.8) |
| Developmental language disorders | 55 (64.7) |
| Acquired deficits of language | 13 (15.3) |
| Motor speech disorders | 12 (14.1) |
| Fluency disorders | 11 (12.9) |
| Voice and laryngeal disorders | 10 (11.8) |
| Dysphagia/feeding disorders | 9 (10.6) |
| Orofacial myofunctional Disorders | 7 (8.2) |

As shown in Figure 1, the use of telepractice in SLP in Quebec has increased considerably since the start of the pandemic (World Health Organization, 2020) compared to the immediate pre-pandemic situation. Interestingly, 70 respondents (84%) began to use telepractice during the pandemic. Among the 13 responders who had used telepractice before the COVID-19 pandemic, six indicated 6-month experience, while the remaining seven indicated more than 1-year experience. Therefore, it is important to stress that most of the survey responses were provided by users with limited experience of telepractice. This pandemic-linked increase was observed for all clinical activities (mean number of respondents using telepractice: before pandemic = 10.14, SD = 4.6; since pandemic = 51.4, SD = 22), with a greater proportion for treatments, assessments and examination result reporting.

As shown in Table 2, respondents also used telepractice for other reasons, such as providing services to patients...
with reduced mobility or patients in geographically remote areas.

**Perceived feasibility of telepractice in SLP**

Respondents were invited to give their opinion on the clinical activities, practices and populations for which telepractice is deemed reasonably appropriate and practical or infeasible and impractical. Telepractice was judged to be appropriate for most clinical activities, including therapeutic interventions, assessments, result reporting, discussions with parents and relatives, and counselling. It was also considered feasible for clinical practices dealing with articulation processing, oral and written language, reading and spelling disorders, grammatical skills and developmental language disorders.

However, telepractice was considered less feasible for clinical practices requiring touch and proximity (e.g., oral peripheral mechanism examination) and practices related to swallowing, dysphagia and feeding disorders, orofacial myofunctional disorders, childhood apraxia of speech, phonological skills and hearing loss. Finally, respondents believed that telepractice can be used for all clinical populations except hospitalised patients, people with hearing or visual impairment, people with little or no access to technology, children whose parents do not speak or speak little French, children with autism spectrum disorders who have little or no expressive speech skills, and populations unfamiliar with technology.

**Perceived barriers to the use of telepractice in SLP**

Overall, the respondents had a very positive perception of telepractice, and most of them wanted to continue using it after the pandemic. In total, 82% (n = 68) reported having experienced a positive change in their opinion of the use of telepractice in SLP since the start of the pandemic.

Most of them, however, mentioned barriers to the use of telepractice in SLP. A total of 137 barriers were identified by the respondents. Seven barriers were mentioned by at least 5% of participants, hereafter presented in descending order: (i) limited technical equipment (tablet, computer, microphone, headset) available (n = 33; 24.1%); (ii) absence of a reliable internet connection (n = 23; 16.8%); (iii) problems related to sound and bandwidth quality (n = 21; 15.3%); (iv) limited clinical materials available for online use (n = 19; 13.9%); (v) difficulties in accessing confidential, calm and closed premises (n = 15; 10.9%); (vi) an increase in the time needed to prepare for the sessions (n = 12; 8.8%); and (vii) insufficient number of licenses for telepractice platforms (n = 7; 5.1%). Less frequent responses included patient wariness, employer resistance and lack of training on the optimal use of telepractice.

**Perceptions of the respondents on the main issues surrounding the use of telepractice**

The respondents were invited to give their general impression of the use of telepractice in SLP and share their perceptions of confidentiality, technological, clinical practice, organisational, environmental and workspace issues.

**General impression of the use of telepractice in SLP**

In general, the respondents were satisfied (82.2%; agree = 62.2%; strongly agree = 20%) with their telepractice experience. Many mentioned being surprised by the ease of telepractice (84%; agree = 67%; strongly agree = 17%) and its benefits, such as seeing patients in their living environment and better involvement of caregivers. However, despite its effectiveness, 51.3% (agree = 37.2%; strongly agree = 14.1%) believed that assessments performed remotely via telepractice will never be as valid as those performed in person.

**Confidentiality issues**

Most respondents (83%) used secure platforms recommended by their employer or organisation, such as Zoom or Microsoft Teams. As shown in Table 3, they believed that telepractice platforms were ethical and safe and ensured the confidentiality of interventions. Nevertheless, 68% of the respondents would like to have examples of informed consent forms for telepractice at their disposal. Regarding security, 23% of the respondents relayed that they performed connection security verifications. Moreover, 35% mentioned recording meetings on secure platforms or with a password to facilitate rating, assessment and verbatim transcription; and most of them deleted the recordings following their analysis.

**Technological issues**

As shown in Table 4, the respondents were largely familiar with technology and computers (64%), but some of them thought that the clinical population that they served is not. Many of them (73%) felt comfortable in front of the camera. Most (65%) considered computer equipment flexible
Table 3  Respondents’ level of agreement toward confidentiality issues

| Statement                                                                 | n (%)     | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---------------------------------------------------------------------------|-----------|-------------------|----------|---------|-------|----------------|
| I think telepractice can ensure the confidentiality of the patient’s file | 0 (0)     | 3 (3.85)          | 17 (21.8)| 42 (53.85) | 16 (20.5) |
| I think telepractice presents ethical risks                               | 10 (12.3) | 27 (33.3)         | 28 (34.6)| 14 (17.3) | 2 (2.5) |
| I would like to have at my disposal examples of informed consent for telepractice in SLP | 9 (11.1)  | 4 (4.9)           | 14 (17.3)| 30 (37)  | 24 (26.6) |

Note: The number of respondents varied slightly; some of them decided not to answer specific questions.

Table 4  Respondents’ level of agreement toward technology issues

| Statement                                                                 | n (%)     | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---------------------------------------------------------------------------|-----------|-------------------|----------|---------|-------|----------------|
| I am very familiar with technology and computers                         | 1 (1.2)   | 10 (12)           | 19 (22.9)| 33 (39.75) | 20 (24.1) |
| The clinical population I work with is not comfortable with the use of computers and technology | 4 (4.9)   | 32 (39)           | 21 (25.6)| 17 (20.7) | 8 (9.8) |
| I am not comfortable with the camera; I feel embarrassed or I do not like to see myself | 40 (48.2) | 21 (25.3)         | 18 (21.7)| 4 (4.8)  | 0 (0) |
| The computer equipment to which I have access is flexible                | 2 (2.4)   | 13 (15.7)         | 14 (16.9)| 38 (45.8) | 16 (19.3) |
| I am concerned that the image quality is not good                        | 6 (7.2)   | 27 (32.5)         | 23 (27.7)| 24 (28.9) | 3 (3.6) |
| I am concerned that the sound quality is not good                        | 3 (3.6)   | 15 (18.1)         | 11 (13.25)| 38 (45.8) | 16 (19.3) |

Note: The number of respondents varied slightly; some of them decided not to answer specific questions.

enough to address all clinical needs. Some feared that technical problems related to sound quality and, to a lesser extent, image quality disrupt or interfere with remote interventions. In the event of a technical interruption, approximately 60% communicated with their patients via phone to try to solve the problem. Finally, 98% evaluated the general hearing and visual abilities of their patients before and during sessions, and approximately 45% evaluated the session quality at the end of each remote meeting.

Clinical practice issues

As presented in Table 5, only a minority of respondents noted the increase in the ecological validity of remote assessments. Half of the respondents believed that telepractice limited qualitative observations. In addition, creating and maintaining a therapeutic alliance with patients was an issue for approximately half of the respondents. Most respondents believed there was a lack of assessment tests for the French-speaking population in Quebec for telepractice and standard use. Finally, most (73.5%) would like to have access to training sessions on telepractice in SLP.

Organisational, environmental and workspace issues

A relatively low proportion of respondents believed that telepractice saved work time (Table 6). However, approximately 60% believed that this service delivery option made it easier for schedule management to accommodate patients. The advantages of using telepractice to provide SLP services to people with reduced mobility and people in geographically remote areas was widely acknowledged. The majority of the respondents stated that they had adequate working space for telepractice. However, approximately half stated that the patients’ environment was not optimal for telepractice.
### TABLE 5 Respondents’ level of agreement toward clinical practice issues

| Statement                                                                 | n (%)   |
|---------------------------------------------------------------------------|---------|
| **Strongly disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly agree** |
| Telepractice increases the ecological validity of assessments in SLP | 4 (5.5) | 14 (19.4) | 30 (41.7) | 21 (29.2) | 3 (4.2) |
| Telepractice in SLP limits my qualitative observations and I lose some of the non-verbal information | 1 (1.2) | 17 (20.7) | 14 (17.1) | 32 (39) | 18 (21.95) |
| The use of telepractice makes establishing and maintaining the therapeutic alliance difficult | 7 (9) | 35 (44.9) | 17 (21.8) | 18 (23.1) | 1 (1.3) |
| I sometimes wonder about the safety of my patients during a telepractice session | 28 (38.4) | 18 (24.7) | 15 (20.5) | 11 (15.1) | 1 (1.4) |
| There are enough tests available in French for telepractice in SLP | 21 (29.6) | 35 (49.3) | 9 (12.7) | 4 (5.6) | 2 (2.8) |
| I would like to have access to specific training sessions in telepractice | 1 (1.2) | 2 (2.4) | 19 (22.9) | 28 (33.7) | 33 (39.75) |

Note: The number of respondents varied slightly; some of them decided not to answer specific questions.

### TABLE 6 Respondents’ level of agreement toward issues related to work organisation, environment and workspace

| Statement                                                                 | n (%)   |
|---------------------------------------------------------------------------|---------|
| **Strongly disagree** | **Disagree** | **Neutral** | **Agree** | **Strongly agree** |
| Telepractice saves me work time | 13 (15.7) | 25 (30.1) | 18 (21.7) | 20 (24.1) | 7 (8.4) |
| Telepractice allows me to better accommodate patients for consultation schedules | 3 (3.75) | 11 (13.75) | 16 (20) | 24 (30) | 26 (32.5) |
| Telepractice is a good way to provide SLP services to people with reduced mobility | 0 (0) | 1 (1.2) | 4 (4.9) | 25 (30.9) | 51 (63) |
| Telepractice allows people who are geographically isolated to have access to speech therapy services | 0 (0) | 1 (1.2) | 3 (3.6) | 11 (13.25) | 68 (81.9) |
| The patients’ environment is not optimal (distraction, no desk, etc.) for telepractice | 3 (3.6) | 17 (20.2) | 20 (23.8) | 30 (35.7) | 14 (16.7) |
| I do not have the adequate workspace for telepractice (brightness of the room, professional setting) | 30 (36.1) | 26 (31.3) | 10 (12.05) | 15 (18.1) | 2 (2.4) |

Note: The number of respondents varied slightly; some of them decided not to answer specific questions.

## DISCUSSION

Most governments throughout the world have rapidly adopted drastic measures (e.g., social and physical distancing, curfew, lockdown, self-quarantine) to face the COVID-19 pandemic. These measures have led to major side-effects on health and rehabilitation service delivery. In SLP, for example, service delivery in the UK during the acute COVID-19 period, changed dramatically with approximately 62% reduction in clinical caseload, 50% reduction in referrals and 50% reduction of clinical activities delivered face-to-face (Chadd et al., 2021). Telepractice was shown to be useful for coping with public health emergencies (Lurie & Carr, 2018) and has been used in many disciplines to minimise the impact of the pandemic on health and educational service delivery (Daniel, 2020; Hare et al., 2020; Mann et al., 2020). This is the first study to investigate the use of telepractice among French-speaking SLP professionals in Quebec and the first to address the change in their telepractice use during the COVID-19 pandemic.

In total, 83 respondents, who represented the entire SLP profession in Quebec fairly well, participated in this study, which was conducted during the pandemic’s first wave. The study findings confirmed that the use of telepractice in
SLP in Quebec increased significantly during the COVID-19 pandemic. Moreover, the majority of the respondents began using telepractice because of the pandemic, and most planned to continue doing so after it ends. This demonstrates how SLP professionals rapidly took advantage of existing technologies in their clinical settings to cope with the pandemic’s effects on service delivery. Similar findings have been reported in studies of SLP professionals in other countries (Aggarwal et al., 2020; Chadd et al., 2021; Fong et al., 2021; Kraljević et al., 2020).

The survey included no question about the clinicians’ knowledge of the literature on telepractice in SLP. Their responses must therefore be considered as a basic understanding of this field of practice, thereby reflecting common perceptions in SLP. According to the respondents in the present study, telepractice lends itself well to many SLP-related clinical activities and practices but less so to others. For instance, the assessment and treatment of swallowing disorders were considered less feasible in telepractice. These activities must be performed safely, as dysphagia is known to contribute significantly to mortality, especially in elderly people (Nawaz & Tulunay-Ugur, 2018). The reluctance of SLP professionals to use telepractice for dysphagia is therefore legitimate. However, a growing body of literature has shown that the clinical assessment and management of swallowing disorders through synchronous or asynchronous telepractice is safe, reliable and effective, provided that conditions for safety are met (Borders et al., 2021; Burns et al., 2019; Malandraki et al., 2013, 2021). COVID-19 is a highly contagious respiratory syndrome, that can be transmitted by aerosol during coughing, sneezing or loud speaking. In this context, the treatment of dysphagia is particularly critical for professionals across disciplines, including SLP. However, according to a recent guidance document, the assessment and treatment of dysphagia in SLP can be provided efficiently, without in-person consultations and proximity procedures through telepractice (Miles et al., 2020). Although instrumental assessments of swallowing (e.g., videofluoroscopy) can be remotely supported by clinicians via telepractice, patients still need to attend the clinical service to be present for the assessment (Burns et al., 2016).

The remote assessment of phonological skills in children was also considered less feasible by the respondents. This could be explained by the necessity to conduct an oral peripheral exam and closely observe the articulators’ positions while producing speech sounds during assessments, namely actions that are difficult to carry out via telepractice (McLeod et al., 2013). Although previous studies have demonstrated the potential of telepractice for this clinical population (Constantinescu, 2012; McCarthy et al., 2010), the respondents in the present study judged telepractice as less adapted to providing treatment sessions to patients with hearing impairment. Compromised sound signals as well as difficulty maintaining the focus on the face required for lip reading are key factors in the reluctance to use telepractice for impairments associated with hearing loss.

Finally, even though there is evidence of the efficacy of telepractice for motor speech disorders in adults and in children (Hill et al., 2006, 2009; Molini-Avejonas et al., 2015), respondents expressed reluctance to use telepractice for this population. Acoustic integrity issues as well as concerns about the clinical validity of practices requiring touch and proximity are potential reasons for the reluctance of the respondents. The discrepancy between the perceptions of SLP professionals and the evidence in the literature for some practices and populations strengthens the need for more information and education on telepractice, which was expressed in previous studies (Keck & Doarn, 2014; Overby, 2018) as well as by many respondents of the present study. The results of the present study also point out the importance to ensure clinicians have access to the most up-to-date evidence to support telepractice. Additionally, they prompt researchers to adopt and test methods adapted to the actual clinical practice.

Many of the barriers to the use of telepractice identified by the respondents are similar to those reported in previous studies (Chadd et al., 2021; Mashima & Doarn, 2008; Molini-Avejonas et al., 2015) and include problems with technology and the internet as well as a lack of clinical materials for online use. Organisational barriers included access to appropriate premises and a longer time required to prepare sessions. Some respondents reported a lack of support from employers, which was manifested in an insufficient number of individual licenses available for telepractice or a resistance to change. Similar organisational barriers were identified in a recent systematic review on telemedicine around the world (Kruse et al., 2018). Barriers related to optimal service delivery conditions included management of the patients’ environment, patients’ loss of interest or wariness, and patients’ compliance with treatment. These factors are still poorly understood in the literature on telehealth and some are linked to user acceptance of telepractice (Huise in ’t Veld et al., 2010), resistance to technology (Kamal et al., 2020), and equipment training and support (Wade et al., 2012).

Finally, respondents addressed confidentiality and privacy. Their belief that confidentiality and privacy are preserved in telepractice platforms might explain the low proportion of respondents who performed connection security verifications before and during sessions. However, it is the responsibility of organisations and clinicians to protect confidentiality and privacy in the context of telepractice, as is the case in traditional face-to-face practice. This not only involves using secured networks but also providing
patients with information on the type of data that is collected and for what purpose (Chaet et al., 2017). The large proportion of respondents who would like to have examples of informed consent forms for telepractice at their disposal certainly represents a step in the right direction.

CONCLUSION

Like professionals in other domains, SLP professionals have proved responsive to the changes and turbulence brought on by the COVID-19 pandemic. They expressed an overall positive perception of telepractice, although they also highlighted barriers to its optimal use. This study had some limitations, especially the sample size. Although we consider this sample to be representative of SLP professionals in Quebec who have used telepractice for service delivery since the start of the COVID-19 pandemic, our results must be interpreted with caution. Moreover, most of the survey responders began to use telepractice during the pandemic and thus it is possible that their responses may not reflect perceptions of clinicians with experience of telepractice. Further studies are therefore needed to supplement and confirm our results. Moreover, further studies should also be conducted once the COVID-19 pandemic is over to document the continued use of telepractice in SLP and to find lasting solutions for the barriers to its use, using for example a qualitative approach with focus groups including SLPs, managers and patients. The training of SLP students to the optimal use of telepractice should also be enhanced in university programs.

Another limitation lies in the absence of data collected from the clinicians on their familiarity and experience with telepractice at the time of the survey. This would have allowed us to better appreciate the novelty of the change in the delivery of SLP services. Our study must therefore be considered as a global picture of the challenges and barriers to the use of telepractice, perceived by Quebec SLPs at a particular point in time during the COVID-19 pandemic.

Nevertheless, it is hoped that employers and regulatory bodies in Quebec will use the findings of this study to help SLP professionals bring down barriers and make telepractice a durable, effective and efficient service delivery model. The management of the work environment (e.g., access to confidential, calm and closed premises), the provision of technical equipment, software licenses and reliable internet connections are avenues that employers should explore for minimising or reducing the barriers to telepractice. The development of assessment and treatment tools adapted to telepractice in SLP should be encouraged and stimulated by regulatory bodies, in collaboration with researchers and SLP academic programs.

CONFLICTS OF INTEREST

The authors report no conflict of interest. The authors alone are responsible for the content and writing of the paper.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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