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The Benefits and Challenges of Using Virtual Technology

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Abstract

This research study was completed by the University of British Columbia (UBC) School of Social Work, in collaboration with the MCFD. In March of 2020, BC declared a state of emergency in response to the pandemic. To address the challenges of the pandemic, MCFD child protection response workers were allowed to use virtual technology to meet with families when necessary. A literature review was conducted to obtain existing research on the benefits and challenges of using virtual technology to complete child protection risk assessments. The findings helped form the conceptual and theoretical framework which produced two research questions, (1) What are the benefits and challenges that child protection response workers faced in their practice with families when using virtual technology during the COVID-19 pandemic. (2) What tasks under the child protection response can be continued virtually post-pandemic. This is exploratory research, using an ecological and trauma informed framework. The eligibility criteria included MCFD child protection response workers. Data was collected through an online survey through UBC Qualtrics. Descriptive statistics analysis and inductive thematic analysis were conducted to determine themes and patterns around the benefits and challenges of the use of virtual technology amongst child protection response workers. This study found that majority of child protection response workers supported a hybrid model. Certain tasks were not recommended to be completed virtually, specifically intake risk assessments and working with younger children. Tasks that were generally supported to continue virtually were larger external and family meetings, and court proceedings. Majority of the participants highlighted the need for policy clarification, managerial support, digital accessibility and training for both service users and workers. After analyzing the data there were three key limitations to this research relating to insufficient sample size, selection bias, and errors in instrumentation. Based on this research process, there are three implications for policy and practice, which include, 1) intake child protection assessments are not recommended to be done virtually, (2) a need for specific policy on a hybrid approach for certain tasks and guidelines around the recommended tasks that can be done virtually, and (3) virtual technology training for child protection workers and service users. To enhance existing research, further research should be conducted in rural parts of BC and other provinces of Canada. Additional research needs to be completed to help better understand the experiences of virtual technology use with Indigenous populations, and experiences of service users that utilize child protection related services. Furthermore, this research provides MCFD's Operational Child Welfare Policy Team with significant findings that may be beneficial to guide potential policy development. The findings of this research indicate that there are both benefits and challenges with virtual technology use in child protection response related to work within family support and child safety service line of MCFD.

Keywords: Virtual technology, COVID-19 pandemic, child protection work, British Columbia



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Introduction

In March 2020, the province of British Columbia (BC) declared a Public Health and a Provincial State of Emergency in response to the novel coronavirus (COVID-19) pandemic (Government of British Columbia, 2021). To address the challenges of the pandemic and social distancing, MCFD implemented interim COVID-19 Child Protection and Guardianship Practice Guidelines (MCFD, 2021a) to align with the provincial COVID-19. This included making amendments to the Child, Family, and Community Service Act (CFCSA) in fall 2021 to enable the use of virtual technology. This allowed for child protection response workers to meet with families using virtual technology when in-person was not necessary and approved by a director of operations (MCFD, 2021a). Virtual technology includes using social media platforms such as Skype, Microsoft Teams, and telephone to conduct planning, complete assessment, mediation, conferences, and other means of work.

With the lessening of the provincial health order restrictions, MCFD wants to focus on how the use of virtual technology can be incorporated into child protection response work post-pandemic. This research will include responses from MCFD child protection response workers which have been obtained through an online survey. These responses have helped identify the benefits and challenges of using virtual technology in their work during the pandemic. With the responses, recommendations have been developed on how virtual technology can assist with specific tasks in child protection response in a way that expands tools and streamlines workflow post-pandemic. The results of this research and the experiences of participants during the pandemic may provide valuable insight for the Operational Child Welfare Policy Team to help inform potential policy development on which tasks can continue post-pandemic.

Conceptual Framework

With the onset of the pandemic, a paradigm shift had occurred within MCFD where child protection response workers had to change the way they practiced. The term “child protection response workers” is used to incorporate Intake Workers, Family Services Workers, Guardianship Workers, and

Collaborative Planning and Decision-Making facilitators as they are involved in executing tasks under MCFD’s Chapter 3: Child Protection Response Policies (MCFD, 2021b). They are responsible for conducting assessments for reports pertaining to the safety and wellbeing of children/youth as well as providing ongoing monitoring and support to families. The safety and wellbeing of a child/youth is defined differently across provinces, countries, and jurisdictions, and there is no universal definition that fits best. Within this research, the safety and wellbeing of a child/youth means having the right to live in an environment free from neglect, physical, emotional, and sexual abuse.

The roles of child protection response workers are heavily involved with in-person contact when there are suspected child safety concerns. This helps to build relationships with families while ensuring that a child/youth is safe to remain in the home environment. While the COVID-19 pandemic was occurring and other professions were working from home, child protection responses workers needed to continue to assess and mitigate concerns related to child/youth safety. MCFD implemented specific COVID-19 guidelines to align with the provincial health orders. This allowed for virtual technology to be used to assist with certain tasks within child protection practices in BC.

We have conducted this research and analyzed the data by using an ecological framework to explore the impacts on the micro, mezzo, and macro levels. This will include incorporating a trauma-informed practice framework, as trauma is often prevalent in child protection and the families they work with.

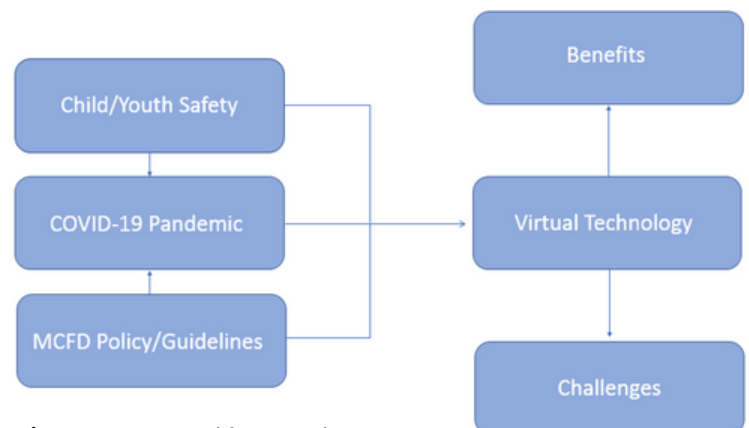


Figure 1. Conceptual framework

Figure 1 shows the conceptual framework for this study. There were multiple factors that influenced the use of virtual technology. MCFD policy/guidelines, COVID-19 pandemic, and considerations of child/ youth safety were all factors that supported and led to the increased use of virtual technology. COVID-19 pandemic is the main factor leading to increased virtual technology use, and the pandemic led to adaptations in MCFD policy/ guidelines and ways of ensuring child/ youth safety. This research study will explore the benefits and challenges of using virtual technology during the COVID-19 pandemic.

Theoretical Framework

The ecological framework is applied to this study as it expands the interpretation and understanding of child protection work beyond parent-child relationship, but to community and social levels (Stockhammer et al., 2001). In reviewing existing literature, we examine virtual technology use at micro, mezzo and macro levels. At the micro level, we considered the impact of virtual technology use on therapeutic alliance between workers and clients, and the challenges in working with certain populations. At the mezzo level, considerations were discussed regarding organization level such as, the lack of training and support to workers. At the macro level, digital inclusion and accessibility to technology were discussed.

Child protection response workers work with vulnerable populations and may experience secondary trauma. Therefore, this study will incorporate a trauma-informed practice framework and explore how virtual technology may or may not align with trauma-informed practice. Voith et al. (2020) proposed that researchers taking a trauma-informed and socially justice framework must consider power dynamics. It also aims to establish safety, transparency, choice, empowerment, and collaboration at all stages of the research study. The goal is to ensure that the use of virtual technology use will not re-traumatize individuals, with the awareness that trauma is widespread in the population we serve. Through surveys, individuals

can participate in our research anonymously and voluntarily. Participants will be empowered to share their experiences with the understanding that their responses may influence the development of new policies for virtual technology.

Literature Review

Limited research has been conducted on how virtual technology has impacted child protection response workers in BC. Due to this gap in literature, a review was completed in other jurisdictions. The majority of the research reviewed was completed between March 2020 to October 2020. Four themes emerged from this literature review including, a) therapeutic alliance, b) accuracy of risk assessment, c) privacy and confidentiality, and d) digital accessibility.

Therapeutic Alliances

Research suggests that technology has enhanced relationships, increased client engagement, and increased client's accessibility for services. The use of virtual technology provided clients a sense of control over the environment which helped create stronger therapeutic relationships and increased engagement from families (Braune et al., 2021; Cook & Zschomler, 2020a; Ferguson et al., 2021). Cook and Zschomler (2020a) suggested that social workers found that technology and text message was an effective way to communicate with youth efficiently. Font (2021), Goldberg et al. (2021), and Seay and McRell (2021) found that virtual court had increased accessibility for parents' attendance as it reduced travel, limited time away from work, or finding childcare. Families felt that attending court through virtual technology was less stressful

On the contrary, Ashcroft et al. (2021) and Cook and Zschomler (2020a) reported that the lack of in-person contact could negatively impact therapeutic alliance, including challenges in establishing new relationships online for social workers. The challenge was related to the inability to read social cues or body language. Additionally, Jentsch and Schnock (2020) and Pink et al. (2021) highlighted challenges in building relationships with young children, under ages of three or four, as children might not engage with a screen or become easily distracted by the surrounding environment.

Accuracy of Risk Assessments

The primary focus of child protective services is to assess abuse and neglect of children and youth. Literature has identified areas where virtual technology might be inappropriate to use in child protection assessments due to a family's vulnerability and risk level. Ashcroft et al. (2021) reported that participants doing assessments over virtual communication had left more room for "errors and misses" (p. 14) and found it challenging to read body language/subtle social cues when conducting assessments. Self-Brown et al. (2020) also found that it was difficult to truly assess a parent's implementation of skills over virtual technology, as the full view of the home was not seen, and the parent could control what was being seen.

Privacy and Confidentiality

Mishna et al. (2020) reported that most of their participants had concerns about protecting the privacy and confidentiality of their clients when using virtual modes of communication, such as text messages, and video calls. Within the research, social workers reported that it was difficult for them to ensure conversations with clients would not be overheard by people in clients' homes (Baginsky & Manthorpe, 2020; Banks, et al., 2020; Cook & Zchomler, 2020a; Cook & Zchomler, 2020b; Mishna et al., 2020). Cook and Zchomler (2020b) added that "in the cases of domestic abuse, workers did not know whether the call was being monitored and if so, whether this would place the caller at additional risk" (p. 405).

Digital Accessibility

Mishna et al. (2020) found that the use of virtual technology enhanced the accessibility of service for clients who experienced anxiety, lived in a remote location, or were dependent on others for transportation. Mishna et al. (2020) also indicated that clients with fewer digital resources and literacy skills experienced barriers to services. In terms of access to digital resources, Jentsch and Schnock (2020) identified that not all families have the equipment necessary for virtual technology communications such as webcams, laptops, phones, or access to stable Wi-Fi. Furthermore, social workers unfamiliar with virtual technology were unable to provide adequate support

to families. Cook and Zchomler (2020a) suggested that social workers needed to consider four barriers, digital inclusion, skills, confidence, and motivation.

Recommendations from the Literature Review

Research by Pink et al. (2021) suggested incorporating a hybrid approach in the future to include the use of virtual technology as a means of communication in child protection practice. Several studies recommended that new referrals, initial assessments, and tasks requiring an immediate response or crisis intervention required in-person contact (Cook & Zschomler, 2020b; Jentsch & Schnock, 2020; Seay & McRell, 2021). For continuous development of virtual technology use in child protection, the research suggested the necessity to provide the required technology and corresponding training to increase social workers' confidence and competence in using virtual technology in practice (Jentsch & Schnock, 2020; Pink et al., 2021).

This literature review has suggested other areas for research that helped shape a framework that enables child protection response workers to continue using virtual technology for specific tasks when appropriate in BC (Cook & Zchomler, 2020a; Jentsch & Schnock, 2020; Mishna et al., 2020; Pink et al., 2021). These include, 1) new mechanisms for relationship building, 2) understanding the impacts of using virtual technology in risk assessment, 3) limitations and practical solutions safeguarding confidentiality, 4) understanding barriers to digital inclusion, 5) policies/guidelines for a hybrid approach, and 6) training opportunities around virtual technology for child protection response workers. It is evident that there are various gaps in the literature in the subject area of virtual technology use in child protection related work therefore, we have developed the following research questions:

1. What are the benefits and challenges that child protection response workers face in their practice with families when using virtual technology during the pandemic?
2. What tasks under the child protection response can be continued virtually, post-pandemic, to expand tools and streamline workflow with the child protection response?

Methodology

This research study was a class-based project for UBC Social Work Course SOWK 554C 002: Qualitative Methods in Social Work Research: Research and Evaluation in Child, Youth and Family Services. This class-based research was completed with MCFD sponsors Elise Handley, Colleen MacPherson, instructor Dr. Barbara Lee, and five student researchers. This mixed-method study collected quantitative and qualitative data through non-probability sampling. This research obtained approval from MCFD Research Ethics and UBC Ethics Review.

Sampling & Recruitment

This study utilized non-probability, voluntary sampling. The aim was to gather the experiences of workers' use of virtual technology during the pandemic, and the impact on their practice. The first criteria for inclusion were MCFD child protection response workers, who are currently employed and have worked for at least 3 months in the past 1.5 years by the time of participating in the research. This was to ensure that the participants had opportunities to use virtual technology during the pandemic and could provide relevant information in their survey responses. Secondly, as pre-approval was required from Executive Directors of Service (EDSs) for staff to participate in research, only child protection response workers within the participating SDAs were included in this study. Individuals who did not fit the criteria outlined above were excluded from the research.

The MCFD sponsors, Colleen MacPherson and Elise Handley, presented this research project to EDSs in MCFD to recruit participation. Student researchers, Tanya Theriault, Priya Verma, and Athina Lai, extended invitations to their own EDSs for the SDAs that they worked for as part of recruitment effort. Two emails were sent to staff within the identified SDAs with an invitation to participate at the beginning and middle of the data collection period. Interested participants were able to participate in the survey through a web link and review the study information letter included in the email invitations. A consent form was embedded in the beginning of the survey, which participants needed to review and agree to prior to responding to the survey questions. The survey was

available for three weeks from February 3 to 25, 2022. The sample size was 62 participants by the end of the data collection period.

Data Collection and Analysis

Data was collected through a 15-minute online survey using the UBC Qualtrics survey platform. The survey consisted of multiple-choice with open-ended text responses with the option to choose multiple answers for some questions (see Appendix A). Student researchers analyzed the quantitative data by conducting bivariate analysis and descriptive statistics analysis. Independent-samples t-tests were conducted to explore if there was a significant difference in the mean score of management support experienced, and the mean percentage of child protection tasks that could be done virtually. This was rated among participants who used virtual technology to complete work tasks more frequently and those who used less. Descriptive statistics analysis was applied to explore participants' experience of using virtual technology to complete child protection tasks and their opinions towards continuous use of virtual technology across distinct roles within child protection response.

For the qualitative data from open-ended text responses, student researchers conducted a thematic analysis by coding the data inductively and identifying possible themes. This research study was exploratory and there were no preconceived themes. Student researchers did anticipate that similar themes might arise as discussed in our literature review, as well as themes specific to challenges and benefits of virtual technology use in BC child protection work.

Findings

Regarding challenges, benefits, and opinions of using virtual technology to complete child protection tasks, similar themes emerged from descriptive statistical analysis of quantitative data and thematic analysis of qualitative data. Therefore, the results of both the quantitative and qualitative data analysis will be presented thematically.

Sample Description

Of the 62 completed surveys collected, participants mainly worked in urban areas (82%), in South Fraser, North Fraser, and Vancouver/Richmond, while some of them worked in combination of urban and rural

areas (12.9%) and only one participant worked in rural area. The sample included child protection workers involved in various roles and a few of them involved in more than one role – intake child protection workers (29%), family services child protection workers (27%), collaborative practice facilitators (8%), guardianship workers (7%), and management and team leaders (27%) (see Table B1).

Use of Virtual Technology of Child Protection Response Workers

Email, text messages, telephone calls, Microsoft Teams, and Skype were the most common forms of virtual technology used by over 98% of the participants, followed by Zoom (77%). Other forms of virtual technology such as social media applications and Virtual Health were also mentioned. Many participants used virtual technology for 2 to 3 hours per day (30.6%) or 4 hours or more per day (40.3%), which varied by the roles (see Figure B1). Intake child protection workers relatively used less virtual technology within their work role than child protection workers whose roles involved more collaboration and partnership. Most intake child protection workers (41%) reported using virtual technology for 2 to 3 hours per day to complete work tasks, while the majority of family services child protection workers (41%), guardianship workers (50%), collaborative practice facilitators (60%), and supervisory role (65%) reported using virtual technology for 4 hours or more per day to complete work tasks (see Figure 2). External agency meetings and family meetings were the tasks for which most of the participants used virtual technology, followed by court proceedings, court mediation, and meeting with a child or youth's care plan team (see Figure 3). Tasks that were mostly reported to remain in-person were child and parent intake interviews, seeing a child/youth in care, and viewing the home environment of clients (see Figure 4).

Concerns or Considerations of Using Virtual Technology

Challenges Related to Risk Assessments. The data shows that there are three key challenges of using virtual technology to complete child protection risk assessments (see Figure 5). The result revealed concerns for privacy and confidentiality (58%), as child protection response workers were never sure who was present or listening during an online meeting. In addition, there were concerns raised about the

vulnerability/risk level of the client (47%), especially in cases of domestic violence, abuse, or neglect. Lastly, participants had difficulties with the accuracy (45%) of risk assessments pertaining to the safety of a child or youth. Throughout the qualitative data, participants recognized that using virtual technology posed an ethical issue when it involved discussing sensitive and private client information. One participant shared: "I am never 100% sure if the client is alone and in a confidential space to share (especially a concern with intimate partner violence)". While another spoke to concerns regarding legislation: "Considering the layers of privacy legislation around our work and not being sure if trying to use a new method will accidentally put sensitive information at risk".

Challenges related to relationship building. There were also challenges in shifting from in-person practice to remote practice, around 87% of the participants encountered challenges in relationship building with clients (see Figure 6). The lack of social and physical cues was frequently reported as a factor affecting relationship building (68%). While half of the participants found that privacy and confidentiality was an issue affecting relationship building. Around 55% and 57% of the participants found that shifting to virtual technology affected their ability to build rapport with new clients, and decreased engagement of clients.

Child protection response workers were asked to rate their experience of using virtual technology with various population groups. The mean rating of the effectiveness of using virtual technology to work with young children aged from 0 to 4, school aged children aged from 5 to 12, youth aged from 13 to 19, adults aged older than 19, and clients with developmental or cognitive disability were 1.8, 3.0, 5.6, 6.6, and 2.3, respectively (see Table B2). Child protection response workers generally indicated that virtual technology is more effective with adults aged 19 and over, and its effectiveness declined with age, with virtual technology being least effective with young children ages 0 to 4.

From a trauma-informed framework, it was vital to capture information about whether virtual technology can be done in a trauma-informed manner that would ensure safety and relationship building for the families we work with. One participant identified that work with Indigenous families should not be done virtually at

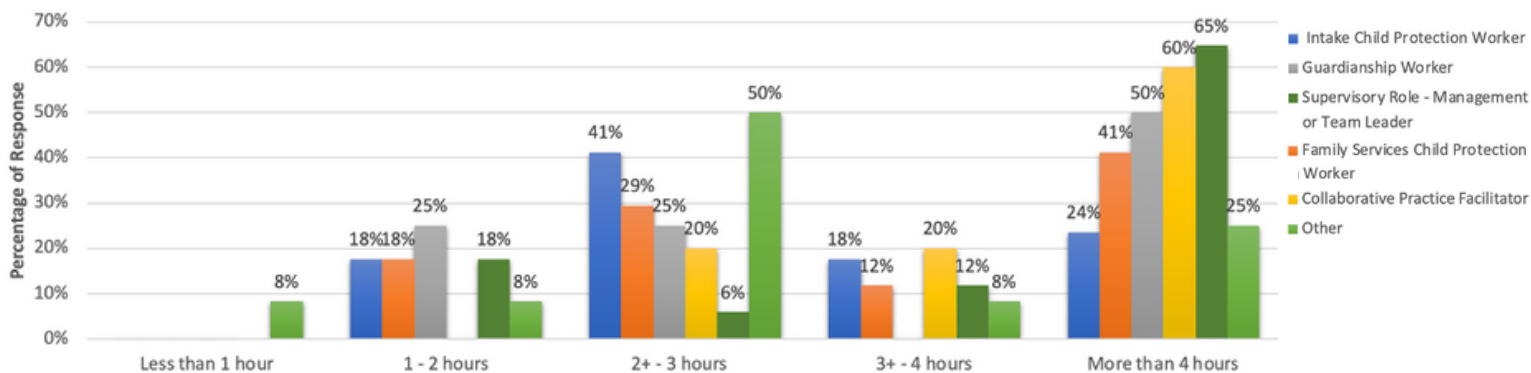


Figure 2. Comparisons of average hours of using virtual technology to complete work task per day among participants in different roles

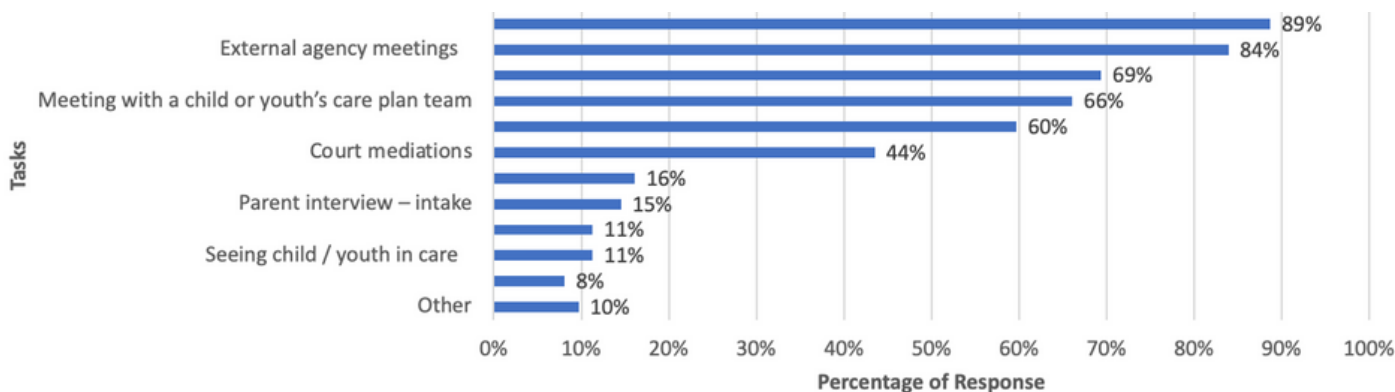


Figure 3. Child protection response tasks for which the participants used virtual technology

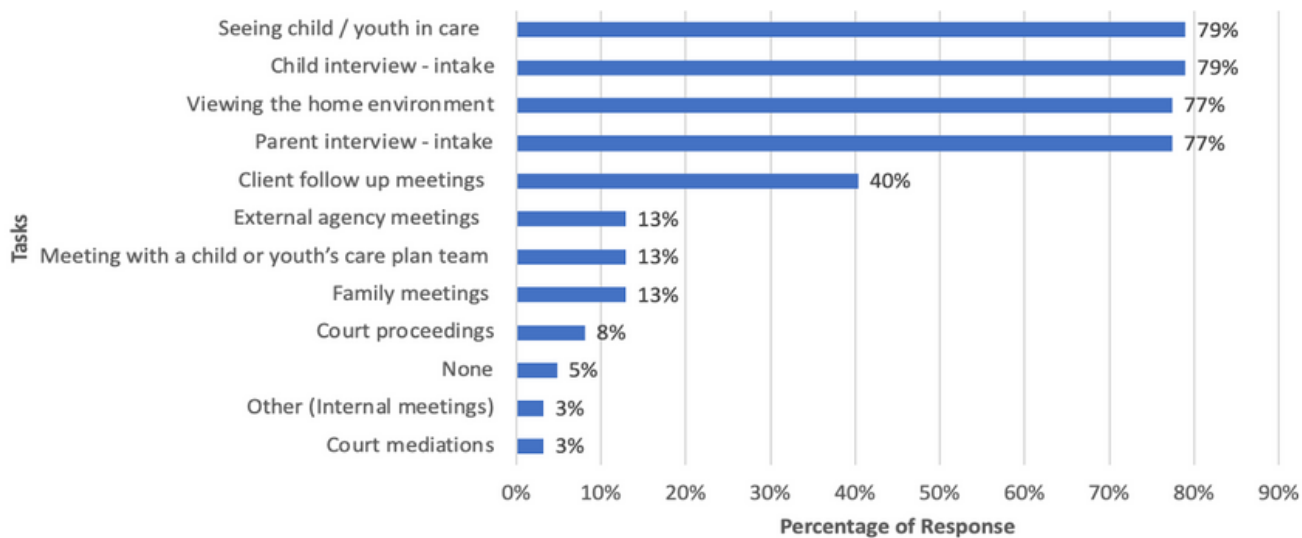


Figure 4. Child protection response tasks remained in-person

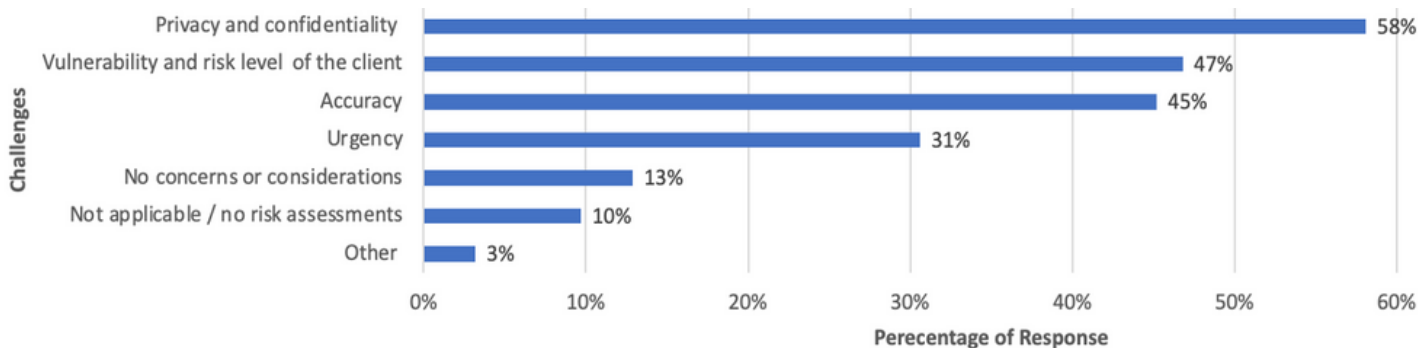


Figure 5. Participants' concerns when using virtual technology to complete child protection risk assessments

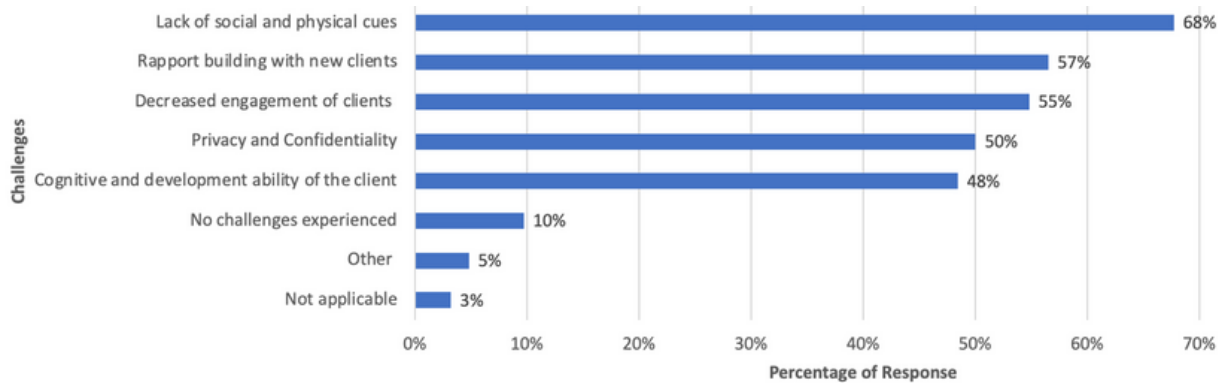


Figure 6. Challenges of using virtual technology to build client relationships experienced by the participants

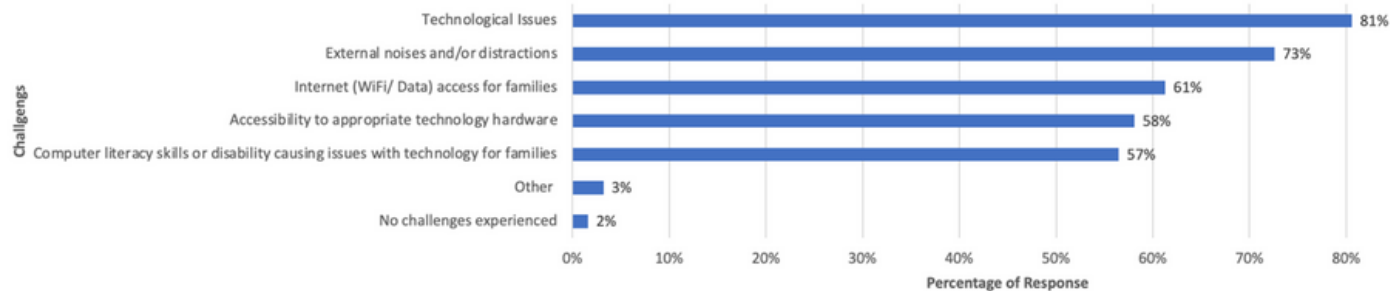


Figure 7. Challenges of digital inclusion when using virtual technology to complete child protection tasks

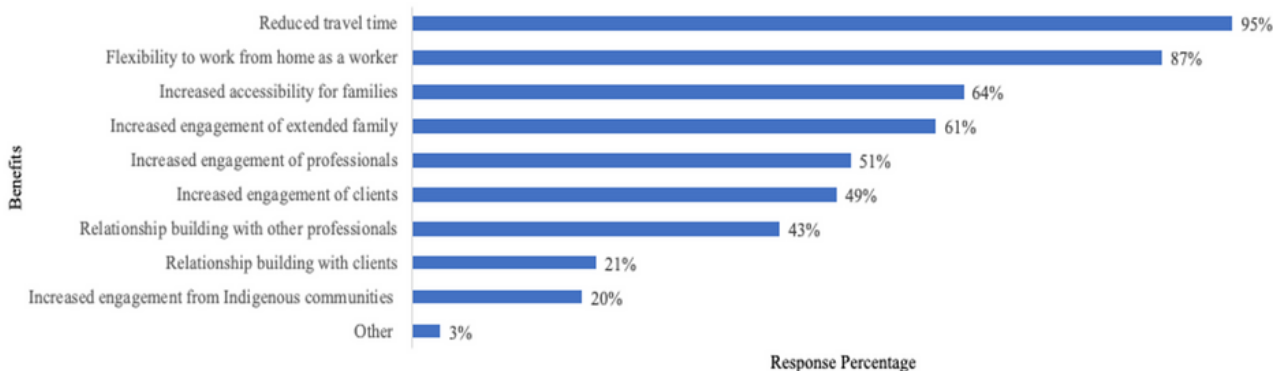


Figure 8. Benefits experienced by the participants when using virtual technology in child protection work

all as it is difficult to build relationships which is paramount when working with Indigenous families.

“Indigenous social work cannot be done effectively through digital platforms. I have seen nothing positive grow from this approach. If anything, it has prevented us from moving forward in accomplishing any real change in Indigenous Social Work. I would say that this current state destroys any hope of truth and reconciliation.”

Challenges related to digital inclusion

The majority of the participants (95%) reported challenges of digital inclusion when shifting to virtual practice. The major challenge was about technological issues (81%) followed by external noises and/or distractions (72.6%), internet access for families (61%), accessibility to appropriate technology hardware

(58%), and computer literacy skills or disability causing issues with technology for families (56.5%). There were similar findings within the qualitative data as one participant wrote: “Our facilitated family case conferences have a 1.5 hour time limit but often the first 30 minutes are geared towards making sure everyone is on the call and addressing tech issues that come up. It takes away very valuable time.”

Another participant expressed concerns around decreased engagement for clients, as they stated: “Some clients have not participated in family planning meetings because technology has been inaccessible or hard to navigate and join the call.”

Benefits of Using Virtual Technology

The most significant benefits of shifting to virtual technology was reduced travel time and flexibility to

work from home, which was agreed upon by 87% and 95% of participants (Figure 8). A substantial proportion of participants also found that the use of virtual technology in child protection could increase accessibility for families (64%), engagement of extended family (61%), professionals (51%), and clients (49%).

In relation to the benefits of court proceedings taking place virtually, several participants reported higher efficiency and less time involved for all parties. One participant identified the use of virtual technology as helpful in some court proceedings: “For example people who are fleeing violence are able to attend court remotely, without risking their safety by coming out to a public location.”

Like the findings for court proceedings, a few participants indicated the benefits of using virtual technology as being able to include parties that are out of town or cannot attend meetings due to distance. It is therefore, consistent with the general benefit of using virtual technology that it can reduce travel time and increase family accessibility.

Opinions and recommendations on which tasks to be continue virtually by participants

On average, the participants supported that 40% of child protection-related work could be done virtually. Participants who used more virtual technology within their work role (> 3 hours/day), recommended a slightly greater percentage of child protection related work to be completed virtually, compared to participants who used less virtual technology within their work role (<1-3 hours/day) [$M = 42.50$ vs. $M = 38.08$, $t(56) = -0.97$, $p = .37$] (see Table B3). However, this finding was not statistically significant.

Across distinct roles of child protection workers, family services child protection workers, guardianship workers, and Collaborative Planning and Decision-Making facilitators are inclined to a 50-50 ratio between in-person and virtual practice. However, intake child protection workers and supervisory staff preferred to have fewer tasks being done virtually. Most intake child protection workers suggested 20% to 50% of tasks being done virtually while most supervisory staff suggested 30% to 50% (see Table B4).

Regarding what tasks can be done virtually, 87% of the participants recommended external agency

meetings. More than half of the participants also recommended meetings with a child or youth’s care plan team, family meetings, client follow-up meetings, and court proceedings could be done virtually. By analysing additional qualitative responses of participants, internal staff meeting was repeatedly recommended by them to do virtually.

From the qualitative data, several participants expressed that viewing the home environment is recommended to be done virtually for low-risk assessments. While a few participants suggested that virtual technology can be used to complete intakes and/or see a child/youth in care if someone in the home is sick. However, there were limited qualitative responses supporting this. One participant mentioned: “Virtual technology has been a lifesaver during the pandemic (literally and figuratively!).”

While participants recommended some tasks to be continued virtually, some participants indicated that virtual work should be considered an option and not a rule. They expressed that the tasks can be done virtually some of the time, but not all the time. For example, one participant expressed that parent interviews, seeing child/youth in care and family meetings can be done virtually, as needed. Within the data, some participants identified the positive outcomes of virtual work and recommended using virtual technology in some tasks but under certain conditions such as, on the need basis or for low risks assessments.

A few responses also expressed that if a hybrid form is maintained, some tasks are recommended to be continued virtually. Consistent with the response that a partial of child protection work is suggested to be done virtually, participants expressed that a hybrid model is desirable with their experience as a participant stated: “Incorporating a balance of technology and in person work was amazingly successful.”

Supports Needed to Continue Use of Virtual Technology in Child Protection Work

On an individual level, about half of intake child protection workers, family services child protection workers, guardianship workers, and supervisory staff reported that they had received sufficient training and education in using virtual technology. However, all

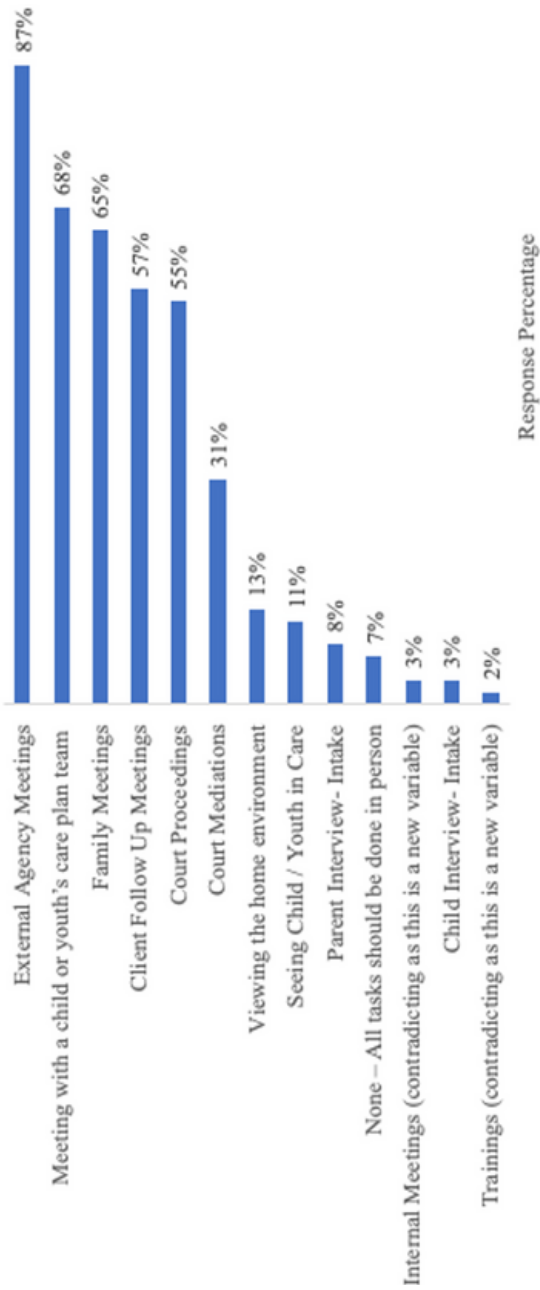


Figure 9. Tasks recommended continuing virtually post pandemic by participants

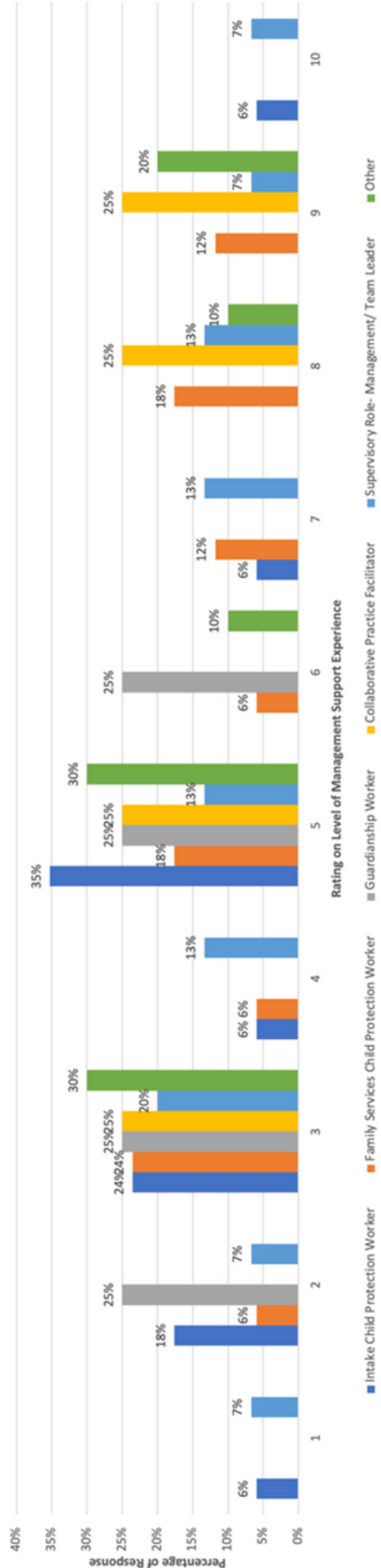


Figure 10. Comparison of level of support from team leader(s) and management to use virtual technology in work experienced among participants in different roles

Collaborative Planning and Decision-Making facilitators reported that they did not have enough training and education. Of the participants who had received training, 62% engaged in self-training while 26% of them received training from employers. The mean score for the effectiveness of self-training was 8 out of 10 while the mean score for the effectiveness of training provided by employers was 4.7 out of 10, which was much lower than that the former.

From the qualitative data, some participants shared that even when training was provided by the employer, it was insufficient and not specific to the child protection work. Some participants shared that it was also unclear which virtual platforms were approved for use and there was no clear policy outlining the parameters to which staff could use the platform. Additionally, participants voiced that there was often minimal to no training provided to use the various virtual platform(s): “Mostly we have been told to use a certain platform for virtual interaction then been expected to learn how to use that technology on

our own.”; “... we're all just "winging it" or trying to figure out the technology as we use it.”

In general, all roles in child protection reported receiving low level support from team leaders and management to use virtual technology in work, except collaborative practice facilitators (Figure 10). Participants who used more virtual technology within their work role rated a slightly higher score of management support (>3 hours/day), compared to participants who used less virtual technology within their work role (<1-3 hours/day) [$M = 5.52$ vs. $M = 5.17$, $t(53) = -5.3$, $p = .598$] (Table B5). However, this finding was not statistically significant.

On the organization level (see Figure 11), 71% of participants expected more clarity in policy and procedure of virtual technology use whereas 53% of participants had support and openness from management. Sixty percent of participants had education training in the use of communication applications that improved access to appropriate technology hardware for clients.

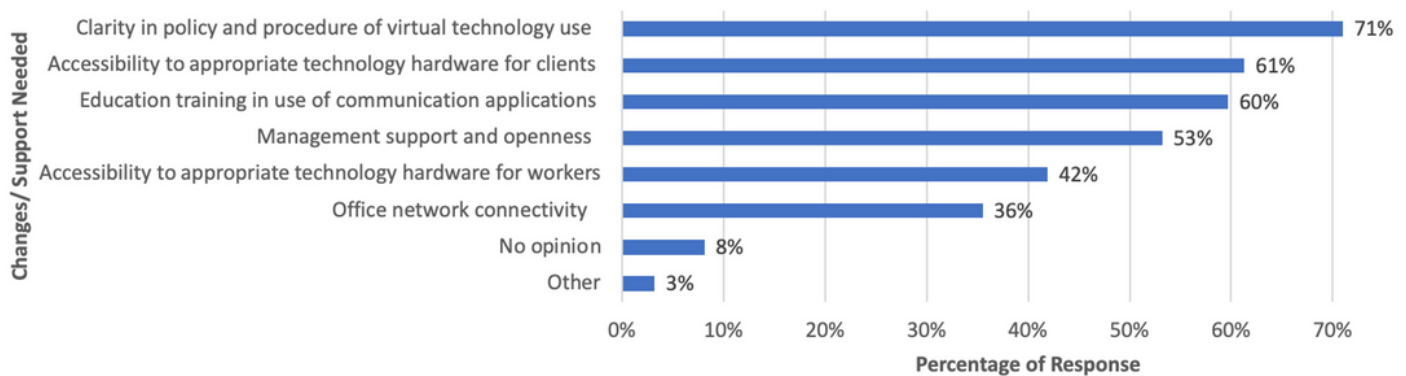


Figure 11. Organizational changes or supports needed to continue the use of virtual technology

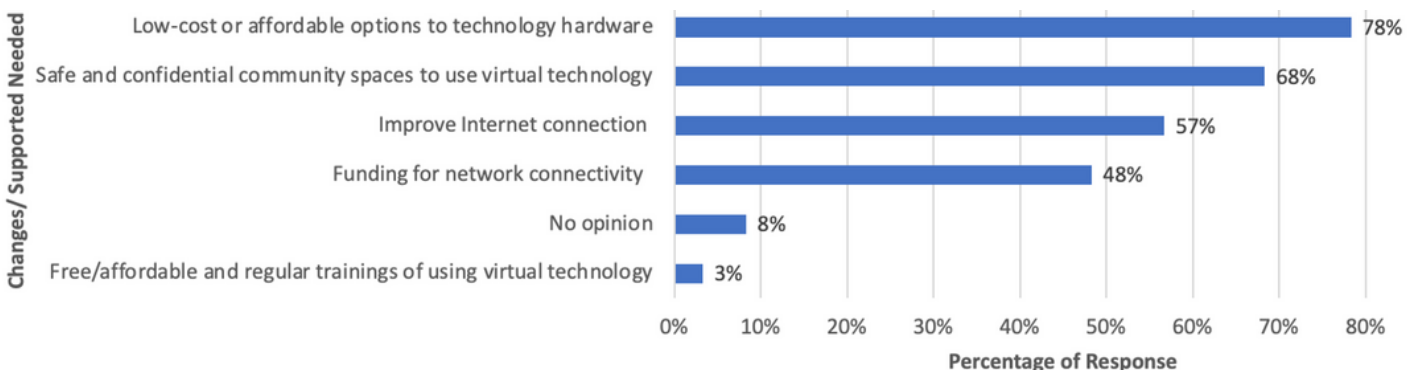


Figure 12. Community level changes or supports needed to continue use of virtual technology

Within the qualitative data, there were similar suggestions from participants that there is lack of support or clear direction from management to allow staff to work from home and continue using virtual technology. Several participants identified that the use of virtual technology supported staff in managing a caseload and work life balance due to the ability to work from home. Some participants identified wanting ergonomic support and ability to print and fax documents from home. "Management does not overly support the ongoing virtual work environment despite it having great success over the course of the pandemic. Work output did not decrease at all and work life balance increased so not sure why they struggle to support their employees to work more often from home. They speak about finding ways to retain and support staff and yet this is not a priority."

On a macro level (Figure 12), many participants supported the need for safe and confidential community spaces to use virtual technology (68%). Majority of participants (78%) identified that low-cost or affordable options for technology hardware is needed to continue virtual technology use. Accessibility to network connection was also identified as a recommendation for future changes, with 48% of participants identifying the need for funding for network connectivity and 57% identified needing improved internet connections.

The qualitative results similarly echoed the need for affordable internet options and technology hardware as several participants highlighted it as a major barrier to families utilizing virtual technology. One participant highlighted that not all former children in care (CICs) are eligible for the Telus discounted phones and internet plans if they did not age out of care: "Many who were former CIC's did not age out of care and so aren't eligible for the Telus phones. A lot of my clients can barely afford market rents, let alone an internet connection."

Some of the qualitative responses mentioned the need for free technology training for families: "Training sessions for families with regular tech support would be important to include in any kind of tech roll out to MCFD supported families - should not be left to frontline staff to help families navigate, because guaranteed things will get missed and the program

will not be working as intended."

Discussion

This current study examined the benefits and challenges that child protection response workers faced in their practice with families when using virtual technology during the COVID-19 pandemic, and what tasks under the child protection response can be continued virtually. The survey questions and data analysis were conducted utilizing an ecological framework and trauma informed framework, with goals to examine the micro, mezzo, macro systems and ensuring the use of virtual technology will not further traumatize the families they work with. Consistent with findings in the literature, the results found both benefits and challenges in building therapeutic alliances when using virtual technology. This research found the most identified benefit of using virtual technology was the worker's reduced travel time and flexibility to work from home. Ashcroft et al. (2021) also found that workers experienced positive impacts on reduced commute costs and increased flexibility in work schedules.

Similar to the research conducted by Ashcroft et al. (2021) and Cook et al. (2020), this research highlighted challenges in reading social cues and building new relationships virtually. Virtual technology with young children was also generally not recommended, which is consistent with Jentsch and Schnock (2020) and Pink et al. (2021)'s findings that virtual engagement with young children can be difficult due to their low attention span and distractibility.

We found privacy, confidentiality, vulnerability and risk as major considerations in using virtual technology, similar to discussions in literature (Ashcroft et al., 2021; Baginsky & Manthorpe, 2020; Banks et al., 2020; Cook & Zchomler, 2020a; Mishna et al., 2020). Intake workers who are responsible for completing initial safety and risk assessments generally did not recommend tasks to be completed virtually. This is consistent with literature recommendations that new referrals and initial assessments should remain in person (Cook & Zschomler, 2020b; Jentsch & Schnock, 2020; Seay & McRell, 2021).

The results of this research recommended a hybrid

approach for certain child protection tasks, which is consistent with Pink et al. (2021) suggestion of a hybrid approach in child protection. This research findings primarily recommended larger meetings, such as family meetings, external agency meetings, and care plan meetings be completed virtually moving forward. The findings further suggested that internal team meetings and agency training could continue virtually post-pandemic. While this has not been directly discussed in the literature, we interpret that virtual technology is recommended for these tasks due to the benefits of accessibility, time efficiency, and more control for families virtually as mentioned by studies that have highlighted the benefits of using virtual technology (Braune et al., 2021; Cook & Zschomler, 2020a; Ferguson et al., 2021). Consistent with the literature, our research findings also recommended court proceedings as a hybrid task moving forward (Font, 2021; Goldberg et al., 2021; Seay & McRell, 2021).

This study also examined the suggested use of virtual technology at the mezzo and macro level. There were three key changes needed to continue with the use of virtual technology post-pandemic. First, there needs to be an increase in training for child protection response workers, which was highlighted in previous literature by Jentsch and Schnock (2020) and Pink et al. (2021). Secondly, this research identified the need for management support and policy development. This was like Cook and Zschomler (2020a) who identified four barriers to using virtual technology which is digital inclusion, skills, confidence, and motivation.

Child protection response workers may face similar barriers and may need support from the managerial level and support from policy to overcome these barriers. Lastly, on the macro level, participants identified the need for affordable technology hardware and internet connections. This was consistent with research highlighting the challenges and barriers to virtual technology being internet connection and hardware for clients (Ashcroft et al., 2021; Jentsch & Schnock, 2020; Mishna et al., 2020).

Limitations

There are three limitations impacting the generalizability of this research: 1) insufficient sample size, 2) sampling selection bias, and 3) errors in

instrumentation.

Firstly, the independent sample t-test was selected within the methodology to analyze data to see if there were any significant differences between rural and urban communities. However, sample size insufficiency was a limitation of this methodology due to the low response rate of one from rural communities. A comparative study was not completed, and a shift was required within the initial research question to be less specific to rural/urban communities and more comparative towards the use of virtual technology amongst the different roles.

Secondly, MCFD sponsors were able to recruit only three participants who had conveyed an expression of interest. Due to the insufficient sample size, three of the researchers needed to reach out to their own SDA to increase participation rates. As specific SDAs were asked to participate in the survey, this causes selection bias within the research where the responses are subjective to only South Fraser, North Fraser, and Vancouver/Richmond. In addition, the eligibility criteria required participants to be employed with MCFD for 3 months, however, this study did not take into consideration that newer workers would have not worked in a time before the pandemic without virtual technology.

Lastly, there were a few errors in the instrumentation. UBC Qualtrics recorded 70 surveys collected but only 62 of those surveys were completed, 5 had missing data, and 3 were completely blank. This could have skewed the validity where there are changes between the interacting variables such as the number of responses in roles to the benefits/challenges of virtual technology. We were able to address this limitation by excluding the incomplete and blank surveys within the final data analysis. The survey was also missing a question specifically about what tasks should be continued in person. Due to this error, a comparative analysis cannot accurately be completed regarding the recommendations of what tasks can be continued virtually. Participants were also unable to elaborate on the benefits of using virtual technology as an open-ended text box was not provided. This meant that participants were only able to choose the

options that were provided which can create response bias. Despite these limitations, the response rate of participants was higher than expected especially in terms of the written responses. Based on these challenges, recommendations and implications for future practice were made.

Recommendations for Policy and Practice

Based on our research findings, we recommend amendments be made to MCFD's Chapter 3: Child Protection Response Policies to support a hybrid approach of using virtual technology and in-person to complete child protection tasks. Amendments could include listing which tasks and under what circumstances virtual technology could be used, and which tasks must remain in person. Policy amendments could incorporate management's role in supporting virtual technology use, such as listing consultation points and guidelines for best practices using virtual technology based on existing literature and research findings from this study. By developing a policy specifically for virtual technology, it can help highlight virtual platforms/software that can be used while ensuring confidentiality, privacy, and safety.

There is a need for the implementation of child protection specific and comprehensive training for MCFD workers and families. Virtual training for MCFD workers should be incorporated in all new hire trainings and a yearly mandatory refresher training could be offered to all staff on the specific virtual platforms approved by MCFD. It would also be beneficial to provide training and educational resources to service users of child protection services.

MCFD should also consider allocating funding for digital inclusion, such as offering families affordable technology hardware and internet connection options, as this was highlighted as a significant barrier to families using virtual technology. This could be done by extending the eligibility and current arrangement with Telus which already provides youth aging out of care with free refurbished technology hardware, discounted internet plans and digital literacy courses.

Future Recommendations for Research

There are several gaps in our knowledge around virtual technology use in child protection related work in research that follow from our research findings and

that would benefit from further research. See recommendations below:

1. There has not been adequate research done in the area virtual technology use in child protection response related work during the pandemic in Canada. Our research study was completed during the pandemic and only focused on the province of British Columbia. Further research could explore the experiences of child protection response worker's use of virtual technology in other parts of Canada.
2. Research in virtual technology use in child protection response in rural parts of BC is scarce. Our research study was unable to obtain a good sample size of participants from rural areas of BC. Therefore, an in-depth exploration of the experiences of child protection response workers use of virtual technology, in rural areas of BC, would be extremely helpful. Researchers could explore the benefits and challenges of the use of virtual technology in rural parts of the province.
3. It would also be helpful to capture more research around virtual technology use in child protection response work and the impacts on working with Indigenous populations, as this was beyond the scope of this research study. Therefore, further research could focus on an in-depth inquiry into the experiences of child protection response workers use of virtual technology with Indigenous populations.
4. This research process was focused on understanding the experiences of child protection response workers and did not include the perspectives of clients using virtual technology when involved with child protection services. Further research might explore the benefits, challenges and the experiences faced by the service users of child protection response services.

Conclusion

MCFD child protection practices were impacted by the COVID-19 pandemic where child protection response workers shifted to using virtual technology to assist with assessing children and youth's safety. Therefore, this exploratory research study used an

ecological framework and trauma-informed approach to explore the benefits and challenges of using virtual technology during the pandemic while making recommendations on which tasks can continue virtually, post-pandemic, to expand tools and streamline workflow in child protection practice.

The research findings recommended a hybrid approach of using virtual technology for certain child protection tasks such as family meetings, external agency meetings, care plan meetings, and court proceedings. However, initial safety/risk assessments and engagement with young children was not recommended to be completed through virtual technology. Implications from this research study include amendments to policy incorporating a hybrid approach, training opportunities for workers and service users, and allocated funding for increasing accessibility to technology hardware and affordable internet options.

In closing, this research project provides MCFD's Operational Child Welfare Policy Team significant information that may be used to inform potential policy development under the Chapter 3 policies and practice changes within the MCFD child protection response. It also provides suggestions on future direction for research to enhance the current knowledge base.

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Appendix A

Survey Questions

1. How many months have you worked in MCFD from March 2020 to present?
 - Less than 3 months
 - 3 months or more

2. What is your current role within MCFD?
 - Intake Child Protection Worker
 - Family Services Child Protection Worker
 - Guardianship Worker
 - Collaborative Practice Facilitator
 - Supervisory Role- Management/ Team Leader
 - Other

3. What service delivery area (SDA) do you work in? (Open ended)

4. Which demographic are you primarily working with in your position?
 - Indigenous population
 - Non-Indigenous population
 - Both Indigenous and non-Indigenous
 - Prefer not to disclose

5. Do you identify as working in Urban or Rural setting?
 - Urban
 - Rural
 - Combination
 - Unsure
 - Prefer not to say

6. How many hours are you working in a week?
 - Full time- 30 hours per week or more
 - Part time- less than 30 hours
 - Prefer not to say

7. What form of virtual technology did you use since March 2020? (Select all that apply)
 - Skype
 - Microsoft Teams
 - Zoom
 - Call via Telephone
 - Text message
 - Email
 - Other (Specify)

8. How often do you use virtual technology on average in a day within your work role?

- Less than 1 hour
- 1 hour – 2 hours
- 2 + hours – 3 hours
- 3 + hours – 4 hours
- 4 hours or more

9. What tasks do you use for virtual technology? (Select all that apply)

- Child interview – intake
- Parent interview – intake
- Seeing Child / Youth in Care
- Viewing the home environment
- Family Meetings (e.g. Family Group Conference, Family Case Planning Conference, Traditional Decision Making, Child Protection Mediation, youth transitional planning)
- Meeting with a child or youth’s care plan team (e.g. school, support services, care givers, extended family etc.)
- Client Follow Up Meetings
- External Agency Meetings
- Court proceedings
- Court mediations
- Other (Specify)

10. What tasks of your role remain in person? (Select all that apply)

- Intake - Child interview
- Intake - Parent interview
- Seeing Child / Youth in Care
- Viewing the home environment
- Family Meetings (e.g. Family Gro Family Group Conference, Family Case Planning Conference, Traditional Decision Making, Child Protection Mediation, Youth Transitional Planning)
- Meeting with a child or youth’s care plan team (e.g. school, support services, caregivers, extended family etc.)
- Client Follow Up Meetings
- External Agency Meetings
- Court proceedings
- Court mediations
- Other (Specify)

11. When using virtual technology, please select any of the digital accessibility or inclusion challenges that you encountered? (multiple choice with open box after each question)

- Internet (WiFi/ Data) access for families
- Accessibility to appropriate technology hardware (e.g. computers, tablets, phones, etc.)
- Technological Issues (e.g. poor internet connection, application (MS teams, Skype) failure or lag)
- Computer literacy skills or disability causing issues with technology for families
- External noises and/or distractions
- Other – please elaborate
- No challenges experienced

12. In completing child protection risk assessments, what considerations do you have with using virtual technology? (Select all that apply)

- Accuracy
- Privacy and Confidentiality- e.g., lack of private space
- Urgency – response time
- Vulnerability and risk level of the client
- Other – please elaborate
- None – had no concerns or considerations

13. Please identify any challenges that you faced with building client relationships? (multiple choice with open box after each question)

- Rapport building with new clients
- Lack of social and physical cues
- Cognitive and development ability of client
- Privacy and Confidentiality (e.g. lack of private space)
- Decreased engagement of clients (e.g. attendance and participation)
- Other – please elaborate
- No challenges experienced

14. Please rate your experience of using virtual technology with the population groups below (0 – not effective/ not recommended; 10- very effective/ recommended)

- Young children - ages 0- 4
- School Aged Children – ages 5- 12
- Youth – ages 13-19
- Adults – age 19+
- Developmental or cognitive disability

15. Please select all benefits that you experienced when using virtual technology: (Select all that apply)

- Increased accessibility for families
- Increased engagement of clients (e.g. attendance and participation)
- Increased engagement of extended family
- Increased engagement from Indigenous communities (e.g. Bands & Nations)
- Increased engagement of professionals
- Flexibility to work from home as a worker
- Reduced travel time
- Relationship building with clients
- Relationship building with other professionals
- Other – please specify

16. What percentage of child protection-related work do you recommend being done virtually? (Sliding scale percentage)

17. Which tasks do you recommend continuing virtually post-pandemic? (multiple choice with open box after each question)

- Intake - Child interview
- Intake - Parent interview

- Seeing Child / Youth in Care
- Viewing the home environment
- Family Meetings (e.g. Family Group Conference, Family Case Planning Conference, Traditional Decision Making, Child Protection Mediation, youth planning)
- Meeting with a child or youth's care plan team (e.g. school, support services, caregivers, extended family etc.)
- Client Follow Up Meetings
- External Agency Meetings
- Court proceedings
- Court mediations
- None – All tasks should be done in person
- Other – please elaborate

18. Do you feel that you had sufficient training and education for using virtual technology?

- Yes (If selected, participants will go to questions 18a)
- No (If no, please elaborate)
- Prefer not to answer

18a. If participant picked Yes in 18- then they will be asked to answer the following.

What training or education for using virtual technology did you receive and please rate the effectiveness? (sliding scale question- 0: extremely ineffective; 10: extremely effective)

- Employer Provided Training
- Self training
- Others

19. To what extent you feel that you had adequate management and team leader support while using virtual technology ? (Sliding scale question- 0: very inadequate; 10- very adequate)

20. On an organizational level, what supports, or changes are needed to continue virtual technology use?

(Select all that apply and provide suggestions if possible) (multiple choice with open box after each question)

- Education training in use of communication applications e.g. MS teams, Skype
- Clarity in policy and procedure of virtual technology use
- Management support and openness
- Office Network Connectivity
- Accessibility to Appropriate Technology Hardware for workers (e.g. computers, tablets, phones, etc.)
- Accessibility to Appropriate Technology Hardware for clients (e.g. Computer, Tablets, phones, etc.)
- Other- please elaborate

21. On a community level, what supports, or changes are needed to continue virtual technology use? (Select all that apply and provide suggestions if possible) (multiple choice with open box after each question)

- Improve Internet connection (e.g. signal towers, high speed cables)
- Funding for network connectivity
- Low-cost or affordable options to Technology Hardware (e.g. Computer, Tablets, Phone)
- Safe, confidential community spaces to use virtual technology (e.g. library study rooms, community center rooms, etc.)
- Other – please specify

22. Please provide any additional information that is relevant for this study- open ended

Appendix B

Additional Tables and Graphs

Table B1. Demographic Characteristics of Participants

	n	%
Weekly Working Hours		
Full-time – less than 30 hours per week	61	98
Part-time – 30 hours or more per week	1	2
Area Setting		
Urban	51	82
Rural	1	2
Combination	8	13
Unsure	2	3
Current Role Within MCFD^a		
Intake child protection Worker	18	29
Supervisory role – management or team leader	17	27
Family services child protection worker	17	27
Collaborative practice facilitator	5	8
Guardianship worker	4	7
Other	12	19
Demographics Participants Working With		
Non-Indigenous populations	28	45
Both Indigenous and non-Indigenous	23	37
Indigenous populations	11	18

^a Participants could select more than one option, so sum of percentage might not be equal to 100.

Table B2. Mean and Mode of Participants' Rating on the Effectiveness of Using Virtual Technology to Work with Different Population Groups

	Mean	Mode
Young Children Aged 0-4	1.8	0
School Aged Children Aged 5-12	3	5
Young Aged 13-19	5.6	7
Adults Aged 19 or above	6.6	7 & 8
Clients with Developmental or Cognitive Disability	2.3	2

Note. The rating was on 0-10 scale, where 0 refers to not effective while 10 refers to very effective.

Table B3. Comparing Recommended Percentage of Child Protection Work to be Completed Virtually versus the Average Use of Virtual Technology

	Avg. Use of Virtual Technology a Day for Work Role				<i>t</i>	<i>p</i>
	<1 – 3 hours (n=25)		>3hours (n=32)			
	M	SD	M	SD		
Percentage of child protection work to be completed virtually	42.5	22.09	38.08	12.18	-0.97	0.37

Table B4. Participants' Recommendation on the Percentage of Child Protection-related work to be Done Virtually

Percentage of Work Recommended Virtually	Intake Child Protection Worker		Family Services Child Protection Worker		Collaborative Practice Facilitator		Guardianship Worker		Supervisory Role – Management or Team Leader		Other		Total Count	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
10%	0	0	1	6	0	0	0	0	1	6	0	0	2	3%
20%	5	29	1	6	0	0	0	0	1	6	3	30	9	16%
30%	3	18	3	18	0	0	1	25	4	24	3	30	13	22%
40%	3	18	1	6	0	0	0	0	5	29	0	0	9	16%
50%	3	18	9	53	3	75	3	75	4	24	3	30	17	29%
60%	1	6	0	6	1	25	0	0	2	12	0	0	4	7%
70%	0	0	1	6	0	0	0	0	0	0	1	10	1	2%
80%	1	6	1	6	0	0	0	0	0	0	0	0	2	3%
90%	1	6	0	0	0	0	0	0	0	0	1	0	1	2%
100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
													58	100%

Table B5. Comparing Level of Management Support Experienced versus Average Use of Virtual Technology

Level of Management Support Experienced	Avg. Use of Virtual Technology a Day for Work Role				<i>t</i>	<i>p</i>
	<1 – 3 hours (n=24)		>3hours (n=31)			
	M	SD	M	SD		
Level of Management Support Experienced	5.17	2.48	5.52	2.35	-5.30	.598

Figure B1. Average Number of Hours that Participants Used Virtual Technology Within Their Work Role Per Day

