

The Impacts of COVID-19 on the Profession of Psychology in Alberta



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Abstract

Over a six-month period, psychologists in Alberta were surveyed on the impacts of the COVID-19 pandemic on psychological practice. Results indicated increasing caseloads and growing confidence in telepsychology and practice stability. Psychologist respondents demonstrated negative personal and professional impacts but that these were perceived to be less significant than those experienced by their service recipients (clients, students, etc.). Despite concerns over the use of telepsychology, results in this longitudinal survey also demonstrated increasing perceived benefits from its use. Au cours d'une période de six mois, des psychologues de l'Alberta ont été interrogés sur les répercussions de la pandémie covid-19 sur la pratique psychologique. Les résultats ont indiqué une augmentation du nombre de cas et une confiance croissante dans la télépsychologie et la stabilité de la pratique. Les psychologues interrogés ont démontré des répercussions personnelles et professionnelles négatives, mais qu'elles étaient perçues comme moins importantes que celles vécues par leurs bénéficiaires de services (clients, étudiants, etc.). Malgré les préoccupations au sujet de l'utilisation des résultats de télépsychologie dans cette enquête longitudinale a également démontré des avantages perçus croissants de son utilisation.

Abbreviations: PAA: Psychologists' Association of Alberta; ANOVA: Analysis of Variance

Keywords: COVID-19; pandemic; professional practice; psychology; telepsychology; Alberta; Canada

Introduction

The Impacts of COVID-19 on the Profession of Psychology in Alberta COVID-19 is more than a global pandemic, having morphed into a massive global health crisis. This pandemic posed a significant psychological burden on individuals and health care providers along with large-scale social and behavioral change needs setting the stage for robust psychological intervention [1]. In addition to psychological considerations for COVID-19, this pandemic impacted professional psychological practice and had notable impacts on those that we serve. There have also been impacts, and implications, for the responses of professional associations such as the Psychologists' Association of Alberta (PAA). Currently, there are no known models on how to operate as a psychologist or as a professional association during a pandemic. The PAA conducted a series of research surveys aimed to help PAA understand, and respond to, the impacts of this pandemic on psychological practice in Alberta.

COVID-19 & Psychology

March 2020, the World Health Organization declared COVID-19 to be a global pandemic. With unprecedented strain on health, social, and economic systems, worldwide efforts have targeted the epidemiology, clinical features, vaccine development and other aspects of global health with little attention paid to the significance of psychological health [2,3]. And yet, COVID-19 necessitated an understanding of the psychological factors that influence pandemic-related roles and psychological needs. Behavioral health psychology had a pivotal role in understanding the response and adaptation of people [3,4,5]. Equally critical is psychological health.

The unpredictable and uncertain nature of this pandemic threatened both physical and psychological health [2,3], challenging psychological resilience of individuals and

communities worldwide [3] fostering fear, sadness, and anxiety [2,6]. COVID-19 fostered intense psychosocial issues cultivating a secondary health concern with significant impacts on psychological health [3], particularly for those who were quarantined [5,7].

In Canada

COVID-19 had negative psychological impact on over half of Canadians with almost 25% reporting fair or poor mental health, compared to 8% prior to the pandemic [8]. Depression and anxiety were already the most prevalent mental health problems in Canada [9] but Canadians reported heightened anxiety and fears that COVID-19 would overload the health care system. Depression rates appear to have doubled [9] but the greatest psychological impacts appear to be anxiety [8] with up to 25% reporting moderate to severe anxiety levels [9,10]. There are also increased rates of domestic violence, substance use (including binge drinking), depression, and loneliness [9-11].

Canadian psychologists are well placed to respond to the social-psychological implications of COVID-19 [12]. Psychological leadership benefits Canadians by supporting clear, honest, and open communication to offset fears and uncertainties. Adequate psychological support from qualified providers bolsters psychological response and recovery, and most psychological services can be delivered with pandemic-safe protocols by leveraging online technology [13]. Most Canadians (71%) say they are willing or somewhat willing to use technology to receive care provided by psychologists [14] but access remains a primary issue.

Canada has a longstanding crisis of access to psychological care, and this worsened during the pandemic [10,13]. Canadians with depression and anxiety have reported that the quantity and quality of mental health support decreased since the pandemic started [9]. Since COVID-19, nearly 20% of Canadians have sought psychological help [10], yet over half have reported a negative or somewhat negative impact on their ability to access a psychologist [14]. Access issues are primarily due to inadequate funding for psychological health [10,14].

In Alberta

Alberta is Canada's fourth most populous province with over 4 million residents [15] and was reeling from an economic downturn prior to the first identified COVID-19 case in March 2020 [16]. The pandemic added a significant negative impact on the psychological health of Albertans increasing signs of stress and depression [15,17]. Similar findings came from provincial studies of health care workers indicating higher rates of stress, anxiety, depression, and obsessive-compulsive symptoms [17].

Alberta health services have been rapidly integrating social science into the province's COVID-19 response to improve their preparations and communications [16]. In Alberta most (73%) Albertans are willing or somewhat willing to use telepsychology

to receive services from psychologists [18] and psychologists are essential health service providers [19]. The College of Alberta Psychologists has a Practice Guideline specific to navigating psychological practice for this pandemic targeting related knowledge, judgement, skills, diligence, and responsibilities promoting informed use of telepsychology except when it is safe and necessary to offer services face-to-face [19]. There are over 4000 psychologists in Alberta, and they are well equipped to respond to psychological needs, however, many Albertans struggle with access to services.

Access to a psychologist was difficult before but COVID-19 worsened Albertans' access to qualified psychological support. Alberta lacks the necessary policies, programs, and services in place to meet the impending, and growing, demand for psychological services. Over half (57%) of Albertans have reported that COVID-19 had a negative or somewhat negative impact on their ability to access psychological health care by psychologists [18].

Impacts on the Profession of Psychology

The COVID-19 pandemic had multiple and abrupt impacts on professional psychologists. Initially, psychologists reported a decrease in patients served with numbers ranging from 30% [20] to over 50% [21] initially impacting job security and productivity measures, particularly for non-salaried psychologists [20].

An unexpected practice transformation was the rapid, large-scale adaptation to telepsychology (online video, telephone, or text-based services) in a profession which had been primarily face-to-face practices [20,22]. Estimates suggest increases from 7% to nearly 86% of clinical psychological practice [20,23] with over 97% reported in some areas [21].

It is not uncommon for practice standards and service provisions to be impacted by large-scale crisis. There are no pre-existing models for psychological practice during a pandemic, requiring psychologists to rely on imperfect information to determine applicable standards [21]. Fortunately, in Canada the pandemic fostered consensus-based ethical decision making and a noteworthy focus on defining professional psychology priorities [22,24].

As with so many areas, the pandemic had transformational impacts on training and professional development in psychology [22]. There are growing concerns over knowledge and skills-gaps, particularly in relation to telepsychology and distance learning. Financial difficulties, funding, training, and career opportunities have been negatively impacted and these are exaggerating where there are systemic inequities to educational, economic, and other barriers to entering the profession [25]. Positives have included enhanced communication within the training community [22]. COVID-19 impacted psychology's research, applied work, education, and training [24], creating challenges but also acting as a catalyst for change for the profession [22]. Long term effects of these professional practice impacts remain to be seen [20].

Professional Association Impacts

For many nonprofits, COVID-19 was a call to action and their work became even more critical as individuals and communities struggled with well-being [26,27]. Nonprofits continued to provide essential and effective services across Alberta and Canada [26,28] despite crippling challenges that included growing demands, decreasing resources, and increasing concerns about staff and volunteer psychological health [28]. Many nonprofits are concerned about their viability with significant financial losses in revenue from events and membership dues [28,29].

Sammons and colleagues [20] have predicted that organizations who support, or provide services to, psychologists will experience negative impacts including reductions in membership and reduced attendance at meetings, conventions, and other professional events. There has, however been identification of some of the benefits of psychological professional association support during this pandemic. For example, a recent survey of psychologists in Manitoba indicated that members found it helpful to have pandemic-specific association resources [21]. The Psychologists' Association of Alberta (PAA) is a voluntary, nonprofit, professional association representing psychologists in the province of Alberta. We have approximately 3000 members and our mission is to advance the science-based profession of psychology and to promote the well-being and potential of all Albertans.

Method

The purpose of this repeated survey was to assist with understanding, and responding to, the impacts of the COVID-19 pandemic on psychological practice in Alberta. The same online survey was sent to members of the PAA six times: April, May, June, July, August, and October 2020 [30-33].

Each survey asked about the impact of the pandemic on members professionally, personally, and about their perception of impacts on those to whom they provide psychological services. It also asked about members' use of telepsychology, their practice clarity, and the effectiveness of PAA's communications and professional support. Surveys had 3-4 questions in each of 7 areas with opportunities for member's comments and qualitative feedback, covering use of telepsychology, practice clarity, and the effectiveness of association communications and professional support. The response rate varied from a high of 519 (26.2%) to 191 (9.7%) participants of the 1980 registered psychologists surveyed. Margin of error was calculated to be 5% making 341 respondents a statistically representative sample of the 3000 psychologists registered in Alberta [34-36].

Result

The results of this survey illustrate the impact of the COVID-19 pandemic on the practicing psychologists in the province of

Alberta. The results of this study will both have immediate and short-term applicability for the PAA, in understanding members and tailoring support, but also direct transferability. These results tell an important story about the profession of psychology in practice during a unique context – a global pandemic.

To test the hypothesis that coping-related activities and attitudes varied throughout the pandemic, longitudinal tests were performed on each question with an additional variable titled 'Overall Adaptation Score.' Several considerations with the data encouraged us to use non-parametric testing whenever possible, including the fact that not all surveys recorded IP addresses (a true repeated measures ANOVA was not possible) and that in several instances the homogeneity of variance assumption was violated. As well, questions did not include negations, so it is possible that answers are skewed. Finally, sample size varies widely between surveys, and not all questions required a response. For these reasons, longitudinal testing on a Likert scale was performed using a Friedman test, [yes/no] questions were analysed using logistic regression, and multi-point nominal data were tested using a chi-squared test of independence.

For post-hoc testing, the Bonferroni p-value correction was used whenever possible, to lower Type I error due to the large family-wise error rate, and as it is robust against assumption violations. While the final report findings are short of being representative, this report instead should be seen as a snapshot of a particular time and as part of an iterative data collection that builds on itself, complemented by a longer-term, more comprehensive strategy undertaken by the PAA. Even so, these data analyses need to be understood as general trends of the data, and our membership throughout the pandemic, and not necessarily reflective of, or generalizable to, individual members.

Part One: Overall Adaptation Score

For a greater understanding of wellbeing throughout the pandemic, we created a post-survey variable labelled 'Adaptation Score'. This score was accumulated using data means of each month. For the Likert scale, the mean value on the 1-10 scale was converted to a decimal percentage, while for [yes/no] or [yes/no/unsure] questions, the decimal percentages of the most positive form were collected - for most, this was the percentage who answered 'yes.' Question specific to agreeing to the survey, working from a home office, and using telepsychology were omitted from this score, as they did not exemplify "adapting well" or "not adapting well". Results indicated a significant main effect of month on adaptation score (Friedman test result $\chi^2(5) = 27.25$, $p < .001$) with a large effect size, Kendall's $W = 0.86$. Using the Bonferroni correction, Conover's post-hoc comparisons indicated significant mean differences between April-July, $p = .001$; and May-July, $p < .001$ further supporting the hypothesis (Figure 1).

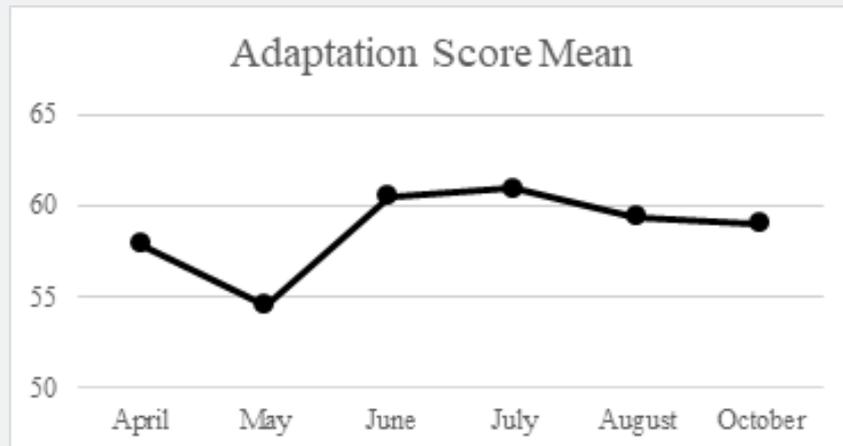


Figure 1: Adaptation score mean.

Part two: Question by Question

Pandemic Professional Impacts

Over the course of this study there was found to be a significant main effect on professional workload as a psychologist. Friedman test results were $\chi^2(5) = 92.96, p < .001$, with a small effect size,

Kendall's $W = 0.18$. Using the Bonferroni correction, Conover's post-hoc comparisons indicated significant mean differences between April-July, $p = .007$; April-August, $p < .001$; April-October, $p < .001$; May-July, $p = .004$; May-August, $p < .001$; May-October, $p < .001$; June-October, $p < .001$; and July-October, $p < .001$ (Figure 2).

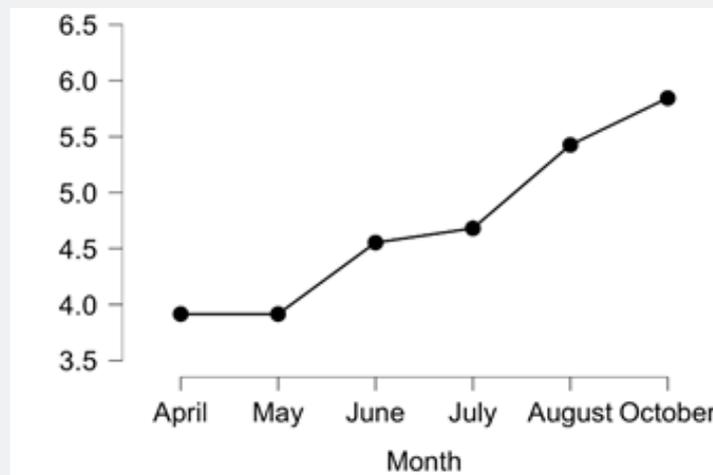


Figure 2: There was minor support for the hypothesis that transition to a home office changed over the reporting period ($\chi^2(1814) = 39.21, p < .001, McFadden R^2 = 0.02$).

There was minor support for the hypothesis that transition to a home office changed over the reporting period ($\chi^2(1814) = 39.21, p < .001, McFadden R^2 = 0.02$). There was a significant positive relationship between August and likelihood of being online, Odds Ratio = 1.49, $p = .023$, 95% CI = 1.06 to 2.10. Additionally, there was a significant positive relationship between October and likelihood of being online, Odds Ratio = 2.57, $p < .001$, 95% CI = 1.81 to 3.64. All six months had overlap in 95%

confidence interval range (Table 1).

There was also minor support for the hypothesis that members felt they had sufficient access to required professional resources. Friedman's test showed significant results ($\chi^2(5) = 12.25, p = .032$, with a small effect size, Kendall's $W = 0.16$), but Conover's post-hoc tests with the Bonferroni correction indicated no significant comparisons (Type II error may be present) (Figure 3).

Table 1: graph codes yes = 1, no = 2. Higher means indicate less home office use.

	Online					
	April	August	July	June	May	October
Valid	500	210	239	383	304	184
Missing	4	3	1	3	0	2
Mean	1.276	1.362	1.31	1.261	1.27	1.495
Std. Error of Mean	0.02	0.033	0.03	0.022	0.025	0.037

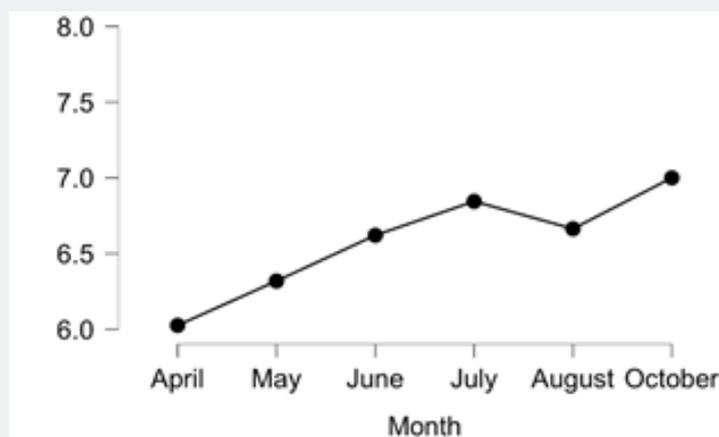


Figure 3: Several other hypotheses were not supported. Ease of addressing personal privacy did not differ significantly.

Several other hypotheses were not supported. Ease of addressing personal privacy did not differ significantly (Friedman test $\chi^2(5) = 5.83, p = .323$, with a small effect size, Kendall's $W = 0.17$). Ease of addressing client privacy did not change (Friedman test results $\chi^2(5) = 2.95, p = .708$, with a small effect size, Kendall's $W = 0.16$). Ease in addressing current working conditions did not change significantly (Friedman test result, $\chi^2(5) = 4.11, p = .534$, with a fair effect size, Kendall's $W = 0.22$). And, east of addressing security of information did not change significantly (Friedman test results, $\chi^2(5) = 3.39, p = .640$. Kendall's W indicated a fair effect size, 0.21).

Pandemic Impacts on Self

Questions in this section asked member respondents to reflect on pandemic impacts on themselves as a person, and their family, over the reporting period. There was no significant change in the impacts on personal psychological health (Friedman test results, $\chi^2(5) = 3.38, p = 0.64$, with a small effect size, Kendall's $W = 0.17$), on personal functioning in employment and relationships (Friedman's test results, $\chi^2(5) = 6.82, p = .235$, with a small effect size, Kendall's $W = 0.15$), nor on self-care (Friedman's test result, $\chi^2(5) = 2.73, p = .742$, with a small effect size, Kendall's $W = 0.14$).

Pandemic Impacts on Others

All questions in this category referred to clients, students, research participants, organizations, or others that may be served by the member psychologists who completed the study. No significant difference was found in perceptions of impact of the pandemic on the health of those served over the duration of this study (Friedman test result $\chi^2(5) = 6.35, p = .274$, with a fair effect size, Kendall's $W = 0.23$), on the impact of the pandemic on their functioning (employment and relationships (Friedman's test results, $\chi^2(5) = 9.27, p = .099$, with a small effect size, Kendall's $W = 0.14$), or on the perceived self-care of those others (Friedman test result, $\chi^2(5) = 7.61, p = .179$, with a small effect size, Kendall's $W = 0.15$).

Telepsychology

To investigate the hypothesis that month could predict telepsychology use, a logistic regression was used and provided minor support ($\chi^2(1708) = 11.17, p = .048$, McFadden $R^2 = 0.06$). There was a significant positive relationship likelihood of using telepsychology (June, Odds Ratio = 2.30, $p = .012$, 95% CI = 1.20 to 4.39, July Odds Ratio = 2.72, $p = .017$, 95% CI = 1.19 to 6.19) (Figure 4) (Table 2).

Table 2: Excluded row that corresponded to the missing values of the split-by variable Month

	Telepsychology					
	April	August	July	June	May	October
Valid	473	192	231	365	280	173
Missing	46	27	24	48	43	18
Mean	1.078	1.068	1.03	1.036	1.054	1.058
Std. Error of Mean	0.012	0.018	0.011	0.01	0.013	0.018

There was no support found for perceived change in connectivity with those served.

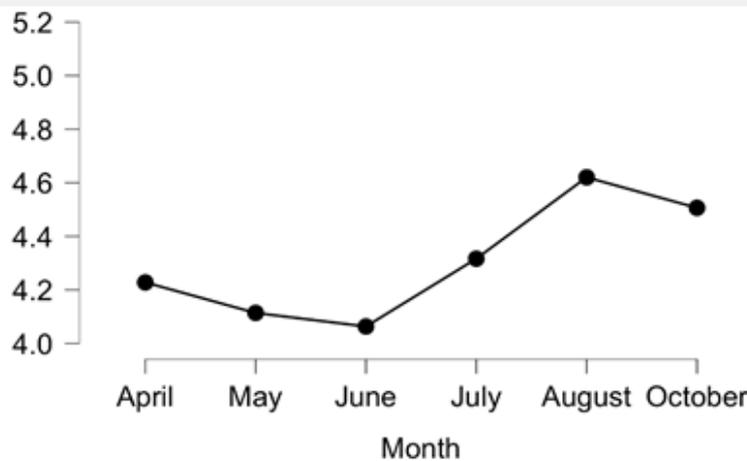


Figure 4: There was no significant finding that related between month and telepsychology platform (Skype Enterprise/WebEx/Adobe Connect/Zoom RegulatedPlatform/Doxy.me/Regular, Encrypted Email/TherapyLive/Other) used. A chi-squared test of independence indicated non-significant results.

We investigate the hypothesis that month could predict changes in relation to the PAA COVID-19 resource page. No significant change was found in access to these resources ($\chi^2 (1692) = 11.02, p = .051, \text{McFadden } R^2 = 0.01$), the perception of sufficient resources ($\chi^2 (5) = 6.71, p = .244$, with a small effect size, Kendall's $W = 0.15$) or for their perceived utility for those served ($\chi^2 (5) = 3.28, p = .657$, with a small effect size, Kendall's $W = 0.13$).

Access to the liability insurance pandemic communications over time, however, yielded significant results (logistic regression $\chi^2 (1685) = 23.88, p < .001, \text{McFadden } R^2 = 0.01$). And more useful resources were not found elsewhere across the study duration (logistic regression $\chi^2 (1554) = 7.96, p = .158, \text{McFadden } R^2 < 0.01$).

Table 3: graph codes yes = 1, no = 2. Higher means indicate less access.

	Access					
	April	August	July	June	May	October
Valid	463	190	228	354	274	169
Missing	55	29	27	58	49	22
Mean	1.378	1.384	1.325	1.308	1.299	1.42
Std. Error of Mean	0.023	0.035	0.031	0.025	0.028	0.038

Over the study duration there was variation in the access of related PAA ENews (emailed pandemic member briefs). A logistic regression determined significance ($\chi^2 (1673) = 23.02, p < .001, \text{McFadden } R^2 = 0.03$). However, there were no significant

findings in rating of the efficacy of this means of communications (Friedman's test results, $\chi^2 (5) = 5.28, p = .383$, with a small effect size, Kendall's $W = 0.18$) (Table 3).

Staff Support

Staff support quality was found to be increasingly accessed (logistic regression indicated significance $\chi^2 (1555) = 27.03, p < .001, McFadden R^2 = 0.02$). May, June, and July all demonstrated significant increases in access to staff support (May, Odds Ratio = 1.72, $p = .005, 95\% CI = 1.18$ to 2.50; June, Odds Ratio = 1.92, $p < .001, 95\% CI = 1.35$ to 2.73; July, Odds Ratio = 2.39, $p < .001, 95\% CI = 1.56$ to 3.66).

Business Sustainability

Business sustainability impressions increased over time. A Friedman test indicated significant results ($\chi^2 (4) = 65.89, p < .001$, with a small effect size, Kendall's $W = 0.19$). Conover's post-hoc tests with the Bonferroni correction indicated significant differences between May-June ($p < .001$), May-July ($p < .001$), May-August ($p < .001$), and May-October ($p < .001$) (Table 4&5).

Table 4: graph codes yes = 1, no = 2. Higher mean indicates less awareness.

	Aware					
	April	August	July	June	May	October
Valid	463	190	153	320	269	169
Missing	55	29	101	92	54	22
Mean	1.168	1.111	1.052	1.072	1.078	1.142
Std. Error of Mean	0.017	0.023	0.018	0.014	0.016	0.027

Table 5: graph codes yes = 1, no = 2. Higher means indicate less access.

	Access					
	April	August	July	June	May	October
Valid	460	190	153	320	269	169
Missing	58	29	101	93	54	22
Mean	1.843	1.847	1.693	1.738	1.758	1.793
Std. Error of Mean	0.017	0.026	0.037	0.025	0.026	0.031

Result Summary

From April to October 2020, PAA members were surveyed on the impacts of the COVID-19 pandemic on psychological practice in Alberta. By the 6th and final survey respondents reported increases in workloads and social commitments (close to pre-pandemic levels) compared to the initial survey. The majority had already transitioned to telepsychology and reported increased confidence in their working conditions and personal privacy. There was also an increase in the number of respondents who became confident in their ability to sustain their practices for the next year (70%).

Psychologist respondents continued to be personally impacted by the pandemic but perceived those negative impacts to be even greater for those they served. Self-care, psychological health, and overall functioning were all reported as deficient in comparison to pre-pandemic levels and at even more negative rate for their students, patients, and clients.

Results indicated that telepsychology did not appear to improve efficacy or connectedness of services, but most respondents considered it a sufficient alternative under the circumstances. There was an increase in perceptions of

“connectedness” and “wellness” in using telepsychology and an increase in the intention to continue using telepsychology (79%) post-pandemic throughout the 6 surveys.

Respondents felt that they had good access to needed pandemic-specific resources, but some reported that the influx of information was overwhelming. The most accessed resources reported came from PAA and from the primary professional liability insurance provider (BMS). Advocacy continued to be considered important with responses indicating statistically significant increases in awareness of advocacy efforts, while resources such as infographics, social media, and ENews continued to have high usage rates. 20% of respondents reached out to PAA directly and those who did found the PAA staff team to be highly responsive and to have provided exceptional services under the circumstances.

Overall, the first 28 weeks of the pandemic appear to have negatively impacted psychologists and those they served. Respondents quickly migrated to home offices and telepsychology, and concerns about shifts in practice appear to have decreased over time. Targeted resources and PAA staff support were appreciated and rated highly during this period.

Discussion

Associations benefit members by being a source of learning, connection, and support, and these needs are highlighted during times of crisis such as the COVID-19 pandemic. Reviewing the results of six successive surveys provided an informative glimpse into the experiences and needs of Alberta psychologists over the first 7 months of this pandemic. Over that time, clear trends began to emerge suggesting increasing workloads, growing confidence in online working conditions and telepsychology, ability to sustain business and practice, good access of resources, growing awareness of advocacy work, appreciation of direct support from the association, and the increased likelihood of post-pandemic telepsychology use.

Recommendations

a) **Advocacy** – Continue active advocacy efforts. Members value the role of advocacy and being members of an association that creates a collective to both represent the voices of members, and those we serve, and tap into the wealth of experience and expertise of members to inform advocacy that matters.

b) **Connection** – Facilitate member networking and connectivity. This pandemic negatively impacted members in various ways, but especially in regard to community feeling. Given the benefits of associating with a group with similar experiences, it is key for members to be able to share, connect, and be validated – and to know that no one psychologist is in this alone. There is power in association membership and the associated sense of belonging.

c) **Member Support** -- Continue to develop, and prioritize, member supports. In a crisis, the association has a role in supporting members as they retool their professional practices to thrive. This means information, resources, and support to adjust to new practices are necessary. Key is providing reliable, relevant, and accessible information, training, and services. Highlighted in this was tools to optimize telepsychology practices and guidelines for return to in-person practices. Members are best served in this regard by a wide range of communication tools including website access, E-mail, social media, infographics, online meetings, and webinars. Psychologists are respected and essential health professionals. They deserve, and appreciate, a professional association that is highly responsive and member-service oriented.

d) **Research** -- Continue this research and employ knowledge transfer with the results. Not enough is known about telepsychology in Alberta. Members benefit from evidence-based practices and outcome-informed telepsychology service information. Even in non-pandemic times, telepsychology will continue to allow psychologists to serve those who might otherwise have limited access, such as individuals in rural or otherwise isolated communities, and our profession is well placed to lead in this regard.

e) **Collaboration** -- There is direct transferability to other psychology professional associations in North America and likely other professional associations in related fields; psychology, as a profession, can be a leader. The invitation to members and the survey itself was already been shared with the executive directors or CEOs of every psychology professional association in Canada and the USA (via the CPAP and CESPPA listservs of which I am a member).

Conclusion

COVID-19 altered psychological needs and service delivery in a way not previously experienced [23], the long-term outcomes of which are unlikely to be fully understood for some time. This study was a glimpse into those impacts for the practice of psychology in Alberta during the pandemic. Our profession is ideally placed to contribute via research and practice, and this is the time for us psychologists to comment on, and discuss, these impactful societal issues [24].

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