Perspectives of practicing school psychologists during COVID-19: A multi-country, mixed methods investigation

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Abstract
COVID-19 presented a range of challenges to the delivery of school psychology services in countries around the world. The current study aimed to investigate the practices of school psychologists from the United States of America, Australia, Germany, Canada, and the United Kingdom, including changes to practice and exploration of the factors that supported the delivery of school psychology services during the pandemic. Quantitative and qualitative data were collected from 1,030 school psychologists and analyzed using a mixed methods, multiple case study design. Differing impacts of the pandemic on the working hours of school psychologists were reported across countries. Participants in all countries reported a shift to online working, with an increased focus on consultation and intervention and a reduction in psychoeducational assessments. School psychologists from all nations emphasized the importance of self-care strategies, social connections and physical activity and the role of support via supervision or professional networks. Access to appropriate technology and responsive workplace policies and procedures were also identified as important. Results have implications for the internationalization of the school psychology profession and can inform international school psychology planning in response to future crises.

Keywords
COVID-19, school psychology, internationalization, student wellbeing

In early January 2020, the World Health Organization (WHO) announced that a highly contagious respiratory illness, known as coronavirus disease (COVID-19) had begun spreading in Wuhan, China (Viner et al., 2020). As COVID-19 continued to quickly

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proliferate across countries, WHO declared it a pandemic on March 11, 2020, to warn against the dangers of the illness (Viner et al., 2020). Subsequently, international leaders and government officials scrambled to prevent COVID-19 cases from further multiplying by rapidly closing school buildings across the world and moving learning online.

By mid-April 2020, 192 countries had closed their schools (Donohue & Miller, 2020; United Nations, 2020). Consequently, more than 90%, or nearly 1.6 billion, of the world’s elementary and secondary students were impacted, forcing educators to abruptly transition their services from in-person to online learning platforms (United Nations, 2020). Distance learning or virtual delivery of educational services involved the physical separation of students and educators, and the use of computers, tablets, or other technologies to facilitate staff-student communication, learning, and school-based supports (Viner et al., 2020).

**School psychological services**

One educational professional group that was impacted by school closures and distance learning were school psychologists. According to the International School Psychology Association (n. d.), school psychologists provide “psychological services to children and youth within the contexts of schools, families, and other settings that impact their growth and development” (para. 1). School psychologists engage in counseling, consultation, crisis preparedness and response, and development of academic, behavioral, and social-emotional interventions (Ritchi et al., 2021). A significant part of their role in many countries is completing assessments related to identifying students with disability, social-emotional concerns, or specific learning challenges (Walcott & Hyson, 2018). However, when schools closed due to COVID-19, school psychologists no longer had direct physical access to students (Brock & Holland, 2021), and accordingly, had to identify new ways to undertake their duties, support teachers and parents, and provide services to children.

**Impact of COVID-19 on school psychology services**

A small, but growing, number of studies have documented the impact that COVID-19 and school closures had on school psychology services. In Canada and the United States of America (USA), school psychologists reported working fewer hours, spending less time on assessment, but more time providing counseling services to students (Schaffer, et al., 2021; Ritchi et al., 2021). Likewise, a multi-country investigation of school psychologists across Germany, Australia, Canada, and the USA found that a greater proportion of participants from the USA and Canada reported a decrease in working hours during COVID-19 (Reupert et al., 2021). Additionally, results showed that school psychology services across the four countries shifted from completing psychoeducational assessments to virtual counseling, consultation with parents and teachers, and developing/posting online support directly to children or their parents (Reupert et al., 2021).
Current study

Results from previous studies suggest that school psychologists in many countries adapted rapidly to the challenges associated with COVID-19 restrictions in order to continue to support student wellbeing. Given the broad reaching impacts of COVID-19 on the delivery of school psychology services and the likelihood of future pandemics, it is incumbent on the profession to learn from the individual and collective experiences of school psychologists around the world and to understand the enabling factors that supported them to adapt their practice to continue to provide much needed services to students and school communities. The current study therefore aimed to provide a multi-country investigation of this area, involving participants from the USA, Australia, Germany, Canada, and the United Kingdom. These countries were selected to elicit the experiences of school psychologists across a number of continents and based on existing collaborative relationships across countries within the research team.

The study also aimed to promote the internationalization of the field of school psychology within the context of a global pandemic. Internationalization can be defined as an intentional and intercultural collaborative process to understand how school psychologists apply their practices, address psychological phenomena, and synthesize knowledge generated through research on a global scale (Begeny, 2018a). One of the goals of internationalization is to show how the practice of school psychology may differ and extend beyond a particular nation, region, or culture to promote the international expansion of the field (Arfken, 2012). Therefore, internationalization seeks to create a culturally informed, inclusive, and internationally applicable profession to enhance training, improve international relations, and synthesize theories, practices, and/or data across countries (Begeny, 2018b). Through the lens of internationalization, the overarching goal of this research was to identify the individual and collective strengths and learnings across countries that could be shared to further enhance the delivery of school psychology services. The specific research questions which guided this inquiry included:

1. What changes to practice were reported by school psychologists in each country in response to COVID-19 restrictions?
2. What factors supported school psychologists in the delivery of services throughout the COVID-19 pandemic in each country?

Method

Research design

A mixed methods multiple case study design drawing on the collated qualitative and quantitative data collected across countries was used to answer the research questions (Yin, 1984). A case study design was chosen to draw together information from different data sources in order to contextualize the experiences and responses to COVID-19 by school psychologists across participating countries and to identify individual and collective strengths and learnings. Case study design is an appropriate research design where the
Aims of research are to investigate complex contextual conditions as opposed to isolated individual variables (Yin, 1993).

Participants

Table 1 summarizes the demographic information of the participants who took part in the study, including their working locations during the COVID-19 pandemic. A total of 1030 participants took part in the study (UK, \( n = 92 \); USA, \( n = 665 \); Germany, \( n = 140 \); Canada, \( n = 48 \); Australia, \( n = 85 \)). Variation in participant numbers between countries generally reflect broad differences in school psychologist numbers across countries due to differing population sizes\(^1\). The majority of participants were female (90.7%) and aged between 31 and 50 years of age (59.1%). Almost 60% of participants had between 0 and 10 years of experience (57.2%), with 42.8% of participants reporting more than 10 years’ experience in their role.

Data regarding ethnicity were collected differently across countries. In Australia, information regarding Aboriginal or Torres Strait Islander background and languages other than English spoken at home was collected, with two participants (2.4%) from an Aboriginal or Torres Strait Islander background and one participant (1.2%) reporting speaking a language other than English at home. The majority of participants from the USA (85.1%) and Canada (93.8%) reported their ethnicity as White, with a smaller proportion of participants reporting their ethnicity as Hispanic/Latino (USA: 6.9%; Canada: 0.1%), Black or African American (USA: 3.9%; Canada: 0.1%), Indigenous or Alaskan Native (USA: 0.3%; Canada: 0.1%), Asian (USA: 2.1%), Native Hawaiian or other Pacific Islander (USA: 0.2%) and mixed race (USA: 1.0%)

In the United Kingdom study, the majority of participants reported their ethnicity as White British (80.4%), with a smaller proportion of participants reporting their ethnicity as Other White (6.5%), Asian/British/Indian/Pakistani/Other (4.4%), Black/ British (African/Caribbean) (3.3%) and multiple ethnic groups (1.1%). Ethnicity data were not collected from participants in Germany.

Procedure

Survey administration. Ethics approval was sought from relevant committees in each country, with the exception of Germany on the advice of the Goethe University ethics committee (due to the anonymous nature of the data collected and the lack of conceivable harm to participants). Following ethics approval, the survey was pilot tested with a small group of school psychologists (\( n \leq 15 \)) in each country. No changes to the survey content or design were required following pilot testing. Responses to the pilot study were excluded from the analysis of data for the main study. A convenience sampling method was used to recruit participants in each country. Psychologists working in schools were invited to participate, with surveys distributed within the networks of research teams, through professional associations and via a range of social media channels (Instagram, Facebook, Twitter and LinkedIn). Data were collected from participants in the USA and Canada from April 21, 2020 to 20 May, 2020. In Germany, the data
Table 1. Participant demographic information (N = 1030).

| Demographic Information | United Kingdom | United States of America | Canada | Germany | Australia |
|-------------------------|----------------|--------------------------|--------|---------|-----------|
|                         | n  | %  | n  | %  | n  | %  | n  | %  | n  | %  |
| Age                     |    |    |    |    |    |    |    |    |    |    |
| < 30/ 21–29             | 20 | 21.7 | 171 | 25.7 | 5  | 10.4 | 19 | 13.6 | 20 | 23.5 |
| 31–40/ 30–39            | 31 | 33.7 | 248 | 37.3 | 19 | 39.6 | 44 | 31.4 | 27 | 31.8 |
| 41–50/ 40–49            | 17 | 18.5 | 147 | 21.1 | 9  | 18.8 | 30 | 21.4 | 30 | 35.3 |
| 51–60/ 50–59            | 17 | 18.5 | 78  | 11.7 | 14 | 29.2 | 24 | 17.1 | 5  | 5.9  |
| > 60/ > 60              | 3  | 3.3  | 21  | 3.2  | 1  | 2.1  | 11 | 7.9  | 0  | 0    |
| NA                      | 4  | 4.4  | 0   | 0    | 0  | 0    | 12 | 8.6  | 3  | 3.5  |
| Gender                  |    |    |    |    |    |    |    |    |    |    |
| Male                    | 10 | 10.9 | 52  | 7.8  | 3  | 6.3  | 18 | 12.9 | 6  | 7.1  |
| Female                  | 79 | 85.9 | 612 | 92.0 | 45 | 93.8 | 118| 84.3 | 76 | 92.0 |
| Gender variant/ non-conforming | 1 | 1.1  | 1   | 0.2  | 0  | 0    | 1  | 0.7  | 0  | 0    |
| NA                      | 2  | 2.2  | 0   | 0    | 0  | 0    | 3  | 2.1  | 3  | 3.5  |
| Years of Experience     |    |    |    |    |    |    |    |    |    |    |
| 0–4 years               | 25 | 27.2 | 202 | 30.4 | 17 | 35.4 | 46 | 32.9 | 43 | 50.6 |
| 5–9 years               | 11 | 11.9 | 171 | 25.7 | 10 | 20.8 | 40 | 28.6 | 17 | 20.0 |
| 10–19                   | 30 | 32.6 | 181 | 27.2 | 14 | 29.2 | 33 | 23.6 | 15 | 17.6 |
| ≥ 20 years              | 21 | 22.8 | 111 | 16.7 | 7  | 14.6 | 18 | 12.9 | 5  | 5.9  |
| NA                      | 5  | 5.4  | 0   | 0    | 0  | 0    | 3  | 2.1  | 5  | 5.9  |
| Highest Level of Education Completed |    |    |    |    |    |    |    |    |    |    |
| Specialist level        | 0  | 0    | 420 | 63.2 | 1  | 2.1  | 0  | 0    | 0  | 0    |
| Advanced Diploma/ Diploma | 0  | 0    | 0   | 0    | 0  | 0    | 86 | 61.4 | 1  | 1.2  |
| Bachelor’s degree       | 0  | 0    | 0   | 0    | 0  | 0    | 1  | 0.7  | 2  | 2.4  |
| Graduate Diploma/ Honors/ Official Exam in Psychology | 0  | 0    | 0   | 0    | 0  | 0    | 1  | 0.7  | 21 | 24.7 |
| Master’s                | 38 | 41.3 | 134 | 20.2 | 29 | 60.4 | 44 | 31.4 | 48 | 56.5 |

(continued)
### Table 1. Continued

| Demographic Information                  | United Kingdom | United States of America | Canada | Germany | Australia |
|------------------------------------------|----------------|-------------------------|--------|---------|----------|
|                                          | n   | %     | n   | %     | n   | %     | n   | %     | n   | %     |
| Ed.D/ D.Ed/ Psy.D                        | 0   | 0     | 11  | 1.6    | 1   | 2.1    | 0   | 0     | 0   | 0     |
| PhD/ Prof Doctorate                      | 49  | 53.3  | 46  | 6.9    | 16  | 33.3   | 5   | 3.6    | 9   | 10.5   |
| Other                                    | 0   | 0     | 12  | 1.8    | 1   | 2.1    | 0   | 0     | 0   | 0     |
| NA                                       | 5   | 5.4   | 42  | 6.3    | 0   | 0     | 3   | 2.2    | 4   | 4.7    |

| Working location †                      | United Kingdom | United States of America | Canada | Germany | Australia |
|------------------------------------------|----------------|-------------------------|--------|---------|----------|
|                                          | n   | %     | n   | %     | n   | %     | n   | %     | n   | %     |
| Working from home                        | 85  | 92.4  | -   | -     | -   | -     | -   | -     | 33  | 38.8   |
| Working from a regional office           | 21  | 22.8  | -   | -     | -   | -     | 20  | 14.3   | -   | -     |
| Working from regional office and schools | -   | -     | -   | -     | -   | -     | 29  | 20.7   | 34  | 40.0   |
| Working from home and regional office   | 21  | 22.8  | -   | -     | -   | -     | -   | -     | -   | -     |
| Working from home, regional office and schools | 21  | 22.8  | -   | -     | -   | -     | 51  | 36.4   | 12  | 15.0   |
| NA                                       | -   | -     | -   | -     | -   | -     | 40  | 28.6   | 6   | 6.8    |

Note. a Response options in the USA/Canadian/Australian surveys. b Response options in the German survey. For the UK survey we grouped participants’ responses on their exact age to the response options used in the German survey. c NA = No response. d Response options regarding highest level of education varied substantially across countries due to differences in requirements for professional qualification. Where possible, we have combined response categories for comparable qualifications. e This response option was added in the German survey, as school psychologists in Bavaria are trained teachers with an additional official examination in psychology. f Participants from the UK were able to select more than one response option as relevant. Data regarding working location was not collected in the USA or Canadian surveys.
collection period was from October 10, 2020 to November 11, 2020 and in Australia, data were collected from May 18, 2020 until October 26, 2020. Data were collected from participants in the UK from January 27, 2021 to February 22, 2021.

Materials
An online survey developed by the research team in the USA (Schaffer et al., 2021) was employed in this study. Permission was provided by the developers to adapt and use the survey in each country for the purposes of this study. The survey was adapted to align with the specific context of each country, including translation of the survey to German and back-translation to English to ensure consistency of items. Items in the original survey were developed on the basis of a review of the scholarly literature in relation to the impacts of previous pandemics and crisis response (Schaffer et al., 2021). Survey items were designed to inquire about demographic information, any changes in participant working hours, mode of student attendance at school, services provided by school psychologists before and during COVID-19 (using ranking items in which participants were asked to rank the top three services provided before and during COVID-19 from a list of 16 school psychology services), method of delivering support services to students during COVID-19 (using a select all that applies item in which participants were provided with a list of five options and asked to select as many as applied), enablers for practice (which for the UK, Australian and German versions of the survey was measured using free-text response options, in which participants were asked to identify the factors that supported their practice during COVID-19 restrictions; and which was measured using a select all that applies item for the USA and Canadian version of the survey) and for participants from the United Kingdom, Germany and Australia, whether they anticipate any changes to practice over the longer term as a result of the pandemic (using a dichotomous ‘yes/no’ item and free text response in which participants were asked to identify what long term changes to practice they anticipate will occur). In responding to survey items, participants were prompted to reflect on their experiences specifically during the peak of COVID-19 restrictions.

Data analysis
A mixed methods multiple case study design was selected to respond to the research questions. Quantitative survey items were analyzed using IBM Statistical Package for Social Sciences 26 (SPSS-26). Descriptive statistics were calculated for all variables of relevance to the current study, including frequencies and percentages for categorical and dichotomous variables, and means and standard deviations for continuous variables. A conventional content analysis approach was used initially by individual research teams in each country to identify codes and themes across open-ended survey items (Hsieh & Shannon, 2005). Responses were read to establish familiarity with the data and then re-read to identify commonly occurring codes. Conceptually related codes were then combined into over-arching themes. Themes were accepted when they were conceptually different from other identified themes and when they represented an adequate proportion of responses. In the second phase
of analysis, members of research teams across different countries (AR, KA, EB, AvH, VH, FM, ZM, SP, DS, GW) jointly reviewed and refined themes where necessary to ensure the validity of identified themes and in order to identify cross-country patterns in participants’ responses. Finally, consistent with a mixed methods multiple case study approach, quantitative and qualitative data were integrated in response to each research question to enable the comparison of practices and enabling factors during COVID-19 restrictions across countries.

**Results**

*What changes to practice were reported by participants across countries in response to COVID-19 restrictions?*

**United Kingdom.** Thirty-eight percent of participants from the UK reported a change in their working hours during the pandemic, with 19% reporting either an increase or a decrease to their hours of work. School psychologists in the UK also identified a range of changes to their practice as a result of COVID-19 restrictions. Based on responses to ranking items in which participants listed the top three services provided before as compared to during COVID-19, fewer non-statutory assessments were conducted during the pandemic; however, the proportion of statutory assessments of a child’s special educational needs did not change substantially. School psychologists reported a reduced focus on group work with students, and the delivery of parent training during this period. However, the focus on the provision of consultation support to parents and individual professionals, including special educational needs coordinators, teachers and speech and language therapists, remained consistent during as compared to before the pandemic. As outlined in Table 2 drawing on data collected using a select all that applies item, much of the school psychology support was provided online during COVID-19 using online platforms (83.0%), other adaptations to practice included engaging in video observations (35.0%), or sending information about social emotional, behavioral or academic interventions to parents by email or post (70.0%). Most participants from the UK (84.0%) reported that they anticipated longer term changes to their practice resulting from the pandemic, especially regarding the delivery of online services and hybrid models of support which is expected to continue beyond the pandemic.

**United States of America.** Approximately two-thirds of school psychologists (61.7%) in the USA reported a decrease in their working hours, with 18.7% reporting an increase in their hours. Consistent with findings from the UK and drawing on responses to ranking items in which participants listed the top three services provided before as compared to during the pandemic, participants in the USA reported spending a greater proportion of time providing consultation services to parents and teachers, as well as developing interventions and supports related to student wellbeing to assist teachers and parents during COVID-19. Participants in the USA also reported spending a greater proportion of their time on Individual Education Plan (IEP) meetings and on providing counseling to students during COVID-19, as opposed to before the pandemic.
Table 2. School psychology service delivery methods during COVID-19.

| Service delivery method (n, %) | Telehealth interventions via webcam or telephone | Mailing packets or newsletters with social, emotional, behavioral, or academic interventions | Developing or posting videos on common social, emotional, behavioral, or academic concerns for parents/caregivers | Use of a databases to post social, emotional, behavioral, or academic interventions to children | Other |
|-------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------|
| USA                           | 321 (48.2%)                                    | 114 (17.1%)                                                                             | 205 (30.8%)                                                                                                       | 259 (38.9%)                                                                                                                  | 149 (22.4%) |
| Canada                        | 21 (43.8%)                                     | 8 (16.7%)                                                                               | 16 (33.3%)                                                                                                        | 13 (27.1%)                                                                                                                   | 14 (29.2%) |
| Germany                       | 118 (84.3%)                                    | 62 (44.3%)                                                                              | 8 (5.7%)                                                                                                          | 13 (9.3%)                                                                                                                     | NA * |
| UK                            | 76 (83.0%)                                     | 64 (70.0%)                                                                              | -                                                                                                                  | -                                                                                                                            | -    |
| Australia                     | 66 (77.7%)                                     | 18 (21.2%)                                                                              | 20 (23.5%)                                                                                                        | 22 (25.9%)                                                                                                                   | 16 (20.8%) |

*Participants could select more than one response option. *NA = No response.
As summarized in Table 2 and based on data collected using a select all that applies item, almost half of participants from the USA (48.2%) reported providing telehealth interventions or telecounseling using webcam or telephone during COVID-19, with 30.8% of participants reporting that they developed or posted videos on interventions for parents to use to address the social-emotional, behavioral, or academic challenges of their children during the pandemic. Over a third of participants from the USA (38.9%) also reported using databases or websites to post social-emotional, behavioral, or academic interventions to support students’ mental health during COVID-19.

Canada. Over half of participants from Canada (57.5%) reported a decrease in their working hours, with just 4.3% reporting an increase in their working hours. As with the USA and the UK, based on responses to ranking items in which participants listed the top three services provided before as compared to during COVID-19, participants in Canada reported no change in the proportion of time spent on the provision of counseling services for students during the pandemic; however, a greater focus on the provision of services involving consultation and collaboration with parents and teachers, as well as the development and sharing of resources. Using data collected by a select all that applies item, participants in Canada reported providing psychological services using a range of delivery methods throughout COVID-19, including telehealth interventions or telecounseling to students via webcam or telephone (43.8%), developing or posting videos on approaches to address common social, emotional, behavioral, or academic concerns of students that parents/caregivers can use with their children (33.3%), and the use of databases, such as Google classroom, to post social, emotional, behavioral, or academic activities to children (27.1%).

Germany. Only 2.9% of school psychologists in Germany reported an increase to their working hours and 5% reported a decrease to their working hours. Drawing on responses to ranking items in which participants listed the top three services provided before as compared to during COVID-19, participants in Germany reported no change in the proportion of their time spent on the provision of counseling services and consultations with parents during COVID-19; however, (as collected via a select all that applies item), they described a shift in the mode of delivery of these services. As outlined in Table 2, a large proportion (84.3%) reported providing telehealth interventions or telecounseling to students via webcam or telephone during the pandemic, with almost half (44.3%) of the participants in Germany reporting mailing packets or newsletters to parents with advice about social, emotional, behavioral, or academic strategies for students.

Consistent with other countries, during COVID-19 participants in Germany reported an increased focus on consultation with leadership and web-based resource development in order to support student mental health as opposed to before the pandemic (based on responses to before and during COVID-19 ranking items). A large proportion (82.2%) of participants in Germany reported that COVID-19 will change the way school psychology services will be provided over the longer term, with many reporting a continued focus on the provision of online support and consultation using digital delivery methods beyond the pandemic.
**Australia.** Approximately one third (32.9%) of school psychologists in Australia reported an increase in their working hours during the peak of the COVID-19 pandemic, with 9.8% reporting a decrease in working hours. As with other countries, participants in Australia reported no change in the focus of their role in relation to the provision of counseling support throughout the pandemic (drawing on responses to ranking items in which participants listed the top three services provided before as compared to during COVID-19). Australian participants also reported no change in the focus of their role in terms of identifying students at risk, but a greater focus on researching interventions and supports and the provision of universal social-emotional supports to school communities during COVID-19 as compared to before the pandemic. Consistent with other countries and as collected via a select all that applies item, support was provided primarily via telehealth interventions or telecounseling to students via webcam or telephone (77.7%), with some (23.5%) reporting developing or posting informational videos on common social, emotional, behavioral, or academic concerns that parents/caregivers can use with their children. Some (25.9%) used databases such as Google classroom to post social, emotional, behavioral, or academic interventions to children and some psychologists (21.2%) adopted mailing packets or newsletters with social, emotional, behavioral, or academic interventions. Over half of participants from Australia (56.7%) reported that COVID-19 would result in long-term changes to practice, including increased provision of online service provision and use of online tools.

**What factors supported participants in the delivery of services throughout the COVID-19 pandemic in each country?**

**United Kingdom.** As summarised in Table 3 and as collected using a qualitative survey item, participants in the UK reported a number of factors that supported them in the delivery of services to students, parents and school communities during COVID-19. Content analysis of responses to open-ended survey items revealed two over-arching themes in terms of supportive factors: wellbeing of school psychologists and working practices and professional development. In terms of school psychologist wellbeing, a number of subthemes were identified including support from colleagues and connectedness to their team; support from virtual school psychology communities (i.e., through social media); keeping active and getting outside; support from family, friends and pets; and mindfulness or resilience approaches. The sub-themes identified within the working practices and professional development theme included creativity with online working; flexible working arrangements and support from management; professional development and webinars; ICT support and access to technology from local authorities; breaks from screen time; and support from virtual school psychology communities.

**United States of America.** Participants in the USA were asked to identify which self-care activity was most helpful in coping with stressful times during the COVID-19 pandemic, using a select all that applies item. As reported in Table 4, the largest proportion of participants identified exercise (40.0%) as the most helpful self-care strategy, followed by
spending time with family/significant others (13.1%), participating in outdoor activities (e.g., hiking, gardening) (11.6%), hobbies (e.g., crafts) (6.8%), videoconference meetings with friends (6.4%), watching television/movies (6.1%), meditating/mindfulness/yoga (4.7%) and pet care/adoption (3.0%).

Canada. Participants from Canada were also asked to identify which self-care activity was most helpful in coping with stressful times during the COVID-19 pandemic, using a select all that applies item. Consistent with those from USA and as summarised in Table 4, the largest proportion of participants from Canada identified exercise (47.8%)...
as the most helpful self-care strategy, followed by participating in outdoor activities (e.g., hiking, gardening) (15.2%), spending time with family/significant others (10.9%), videoconference meetings with friends (4.4%), pet care/pet adoption (4.4%), watching television (4.4%), meditating/mindfulness/yoga (2.2%) and watching television/movies (2.2%).

Germany. Thematic analysis of responses to qualitative survey items yielded a number of themes in relation to the factors that supported participants in Germany during COVID-19. These included having access to alternative communication pathways (including multiple means of connecting with students, parents, and staff); access to adequate resources; having a mobile workplace; effective collaboration with colleagues; efficient time management; work relief and motivation; and having access to additional information to support their practice.

Australia. Based on analysis of responses to a qualitative survey item, participants in Australia identified a number of factors that supported them during COVID-19, including access to a range of different communication pathways; peer support and supervision; the reduced requirement to conduct assessments (resulting in more time for the provision of other support to students, parents and school staff); increased collaboration with parents; having sufficient time to provide the support required; access to appropriate technology; access to a suitable work space (particularly if working from home); and workplace policies and procedure.

**Discussion**

COVID-19 related restrictions threatened to undermine the capacity of school psychologists to deliver their regular duties, prompting a need to understand how these professionals adapted their practices during these times and how such adaptations may have varied between countries. In addition to exploring the ways in which school

| Enabling Factor                                      | %  |
|-----------------------------------------------------|----|
| Exercise                                            | 47.8 | 40.0 |
| Participating in outdoor activities (e.g., hiking, gardening) | 15.2 | 11.6 |
| Spending time with family/significant others        | 10.9 | 13.1 |
| Videoconference meetings with friends               | 4.4  | 6.4  |
| Pet care/pet adoption                               | 4.4  | 3.0  |
| Watching television                                 | 4.4  | 6.1  |
| Meditating/mindfulness/yoga                         | 2.2  | 4.7  |
| Hobbies (arts and crafts)                           | 2.2  | 6.8  |
Psychologists adapted their practice to support students and their school communities throughout COVID-19 restrictions, this study makes a significant contribution to the knowledge base in the field by identifying important factors that supported school psychologists around the world during this time. Such insights can be used by the international school psychology profession to plan and prepare for future pandemics or other global events which may disrupt service delivery.

When examining the impact of the pandemic on school psychologists’ work patterns, a number of differences emerged despite the considerable overlap in their roles (International School Psychology Association, n.d.). For instance, over half of participants in the USA and Canada reported a decrease in working hours, which previous studies have associated with reduced opportunities to perform psychoeducational assessments (Reupert 2021; Schaffer et al., 2021). Conversely, the pattern was different in the UK, Germany, and Australia, with more stability in working patterns observed due to a number of factors. For German school psychologists, the majority reported that their work patterns were largely unchanged. In the UK, participants were required to meet their statutory assessment responsibilities during the pandemic. In contrast, more than one third of Australian participants reported an increase in their workload during COVID-19.

In terms of changed practices, in all nations, school psychologists reported a shift to online working to support children, young people, their parents/carers, and school staff. Across countries, participants shifted their practice focus from psychoeducational assessments to consultation and intervention, and through this process, continued to support children’s social-emotional and academic needs. This shift may highlight the usually underutilised skills of school psychologists to work within a preventative framework (Hill, 2013; McNamara et al., 2019). When changes to practice were examined between countries, the findings indicate that as UK participants were required to continue to complete statutory assessments within legally defined time frames, the proportion of statutory work completed did not change during the pandemic. This requirement led to national professional associations offering prompt guidance about online working and the use of standardized assessments (Association of Educational Psychologists, 2020; British Psychologist Society, 2020). Working within this context provided the opportunity for UK school psychologists to embrace the creativity offered by online working, allowing them to take advantage of the opportunity to move away from formal standardized assessment approaches and to provide greater consultation.

Regarding school psychologists in the USA and Canada, there was a significant shift in the focus of their work, from a perceived dominance of psychoeducational assessments to consultation and counseling, as previously found (Reupert 2021; Schaffer et al., 2021). Yet, participants in the USA made similar observations as those in the UK about the changes and developments made to embrace a wider skill set. This included telecounseling and spending more time supporting students through IEP meetings. The shift in practice is an important response to the increased mental health needs of students associated with the psychological impact of lockdowns (Campbell, 2020; Tso et al., 2020) and as such, it is perhaps not surprising that Canadian participants reported similar
developments in online practice and described reaching a wider range of stakeholders in the school community to enhance their capacity to meet student’s mental health needs. Although German school psychologists reported no changes in the proportion of their time spent on the provision of counseling services and consultations with parents during COVID-19, the majority of participants described providing these services during the pandemic using webcam or telephone and through the posting of resources to students to support their social-emotional, behavioral and academic needs. As was the case with Canadian participants, they also reported an increased focus on consultations with school leaders to enhance their capacity to respond to students’ mental health needs. Finally, as far as Australian school psychologists were concerned, the majority of participants reported that they provided counseling services using telehealth and telecounseling via webcam or telephone, and developed online resources to support students’ learning, and social-emotional needs during the pandemic. The Australian participants were the only group to report their continued engagement with risk assessment, while working online. Although this crucial feature of the role may well be very challenging to operationalize while working remotely, given the global reports of increases in young people’s mental health issues (Sampogna et al., 2022), this finding might be of particular relevance for the internationalization of school psychology practices and effective online at-risk identification processes.

Participants from the UK, Germany and Australia were asked about the likelihood of practice changes becoming established ways of working, with many participants noting that online working had proved both effective and efficient. Most UK participants indicated that they anticipated adopting hybrid models of work by integrating the best features of face to face and online working, post pandemic. The majority of German school psychologists explained that their experiences of online consultation and digital delivery methods would be beneficial in extending their service delivery in the future. Likewise, many Australian participants reported that there would be an increased use of online service delivery and tools in the future.

School psychologists from all nations highlighted the importance of self-care strategies. Participants described the importance of remaining socially connected with family and friends, with those from Canada, Germany, USA, and the UK mentioning the importance of pets and/or animal adoption as part of their self-help and wellbeing strategies. Likewise, the majority of participants valued the role of physical activity and getting outside. In addition, participants highlighted the importance of maintaining connections with colleagues and the wider professional community via virtual professional networks, or by accessing supervision and support from line managers, seeing this as crucial to their wellbeing.

When reflecting on their experiences of working remotely during the pandemic, several key factors relating to resources were identified. Of critical importance was access to appropriate technology, IT support and training and identifying a suitable workspace in the home. Furthermore, having clear, consistent and responsive workplace policies and procedures in place was also important. For example, having guidance on data protection requirements and for conducting online assessments was highlighted by school psychologists, especially for participants in Germany and Australia. Once assessment
guidance was in place, an online mode of delivery facilitated creative responses for evolving school psychology working practices, including a shift to online consultation to support students, as well as using consultation to build the capacity of school staff and parents to support children and young people. These findings highlight how systemic structures and features, including appropriate resources, infrastructure, culture and leadership promote both individual and organizational resilience as suggested by Taylor et al. (2019). Broad systemic support is arguably even more important during emergency situations such as a pandemic and should therefore be part of future planning for such events.

**Implications**

This project explored how the COVID-19 pandemic impacted school psychologists working in five different nations around the world and how they adapted their practice to support their communities during this time. The findings can inform international school psychology research and planning in response to future crises, and highlights the importance of:

- Timely practice guidance from professional associations and/or employers,
- Access to adequate resources, technology, technical support and training in its use, to support the transition to different modes of practice,
- Supervision and support systems to allow individuals to remain connected with colleagues and to support the sense of belonging during remote working,
- Targeted support to promote individual self-care and wellbeing,
- Flexibility in working practices to support mental health and wellbeing, whilst managing the competing demands of home schooling and working and setting up a workstation in the home context,
- Evaluation of hybrid models of service delivery, including any impacts on student learning and wellbeing,
- Longitudinal research into the extent to which changes to school psychology practice across countries have been sustained beyond the pandemic.

**Limitations**

This study was conducted during the pandemic to capture the different national responses of school psychologists to school closures and COVID-19. Although participants have many common professional characteristics, there are differences in their roles and functions and as such the data is not consistent across each nation. There were also some variations in the wording of survey questions to reflect these differences and there were variations in the response types to some items for particular countries. Not all nations have qualitative data for all items and some items were not collected for all countries. Moreover, the results are limited to westernised and developed countries. Ethnicity data were collected differently to reflect national reporting systems, but given the small samples from each nation, they may not be representative. The use of retrospective survey items to elicit participant perspectives regarding changes in practice experienced
during COVID-19 restrictions also represents a limitation of the current study. However, consistent with the recommendations of Hipp and colleagues (2020), several strategies were incorporated into the study to improve the accuracy of participant responses to retrospective survey items, such as ensuring questions are short and easy to understand and by providing anchor points to support participants’ recall.

The successive waves of the pandemic impacted the nations involved this study at different times and with different levels of intensity, and this led to some differences in the timing of data collection. Some of the national responses reflect only the first wave of the virus, whilst others reflect their responses over two or three waves. Furthermore, given the convenience recruitment method, it was not possible to estimate the response rate or to ensure results are representative of the experiences of all psychologists across each country, including with respect to gender. However, the variation in participant numbers reflects broad differences in student and psychologist numbers across countries, due to differences in population size. The sampling methods may have introduced bias as links to the surveys were advertised on social media and some professional association webpages. Finally, this paper reports only on participants’ self-reported changes to practice and their perceptions of the factors that supported them to continue to deliver school psychology services during COVID-19 and does not include discussion of the potential challenges experienced by school psychologists during this time.

Conclusions

This study considered how the COVID-19 virus and associated school closures impacted on the practices of school psychologists in five countries. The majority of participants identified changes to the focus and delivery method of their practice that may remain as part of a future hybrid model of service delivery. The long-held desire in the profession to reduce the demands of assessment work to enable a relatively broader focus on consultation and intervention work has to some extent been achieved; however, it will be important to explore if this shift is sustained as a longer-term outcome of the pandemic and the potential impact of this shift on student learning and wellbeing outcomes. The increases in parent and teacher consultations may have enhanced the capacity of school psychologists to respond to children and young people’s needs. The need for travel will be reduced, if some consultations remain online, thereby reducing the profession’s carbon footprint and promoting access for those who may not be able to attend face to face meetings. It will be helpful to evaluate the impact of new ways of working over the coming years to ascertain what changes become embedded in practice.

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Note

1. As of October 2022, the population of the United Kingdom is 67.08 million (Office for National Statistics, 2022); the USA is 333.16 million (United States Census Bureau, 2022); Germany is 84.1 million (Destatis Statistisches Bundesamt, 2022); Canada is 38.65 million (Statistics Canada, 2022); Australia is 26.05 million (Australian Bureau of Statistics, 2022)

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