

Occupational Engagement and Quality of Life in Occupational Therapy Students and Professionals during Coronavirus Pandemic

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Abstract

This nationwide study addressed how occupational engagement and quality of life (QoL) were affected in occupational therapy (OT) students and professionals during the 2019 Novel Coronavirus (COVID-19) pandemic. Research questions addressed: 1) if daily occupations changed; 2) how QoL was affected; 3) in what manner OT background influenced coping; 4) recommendations to OT students, practitioners, and the profession. Although 198 students and 249 professionals responded initially to the survey, an average of 161 professionals and 95 students completed the critical questions described herein. Six students and eight professionals participated in interviews. Separate online surveys via SurveyMonkey gathered quantitative and qualitative data from the students and professionals, and interview guides facilitated qualitative data collection from both groups. The anonymous surveys included rating scales, multiple-choice, ranking, and open-ended questions. The interviews, using open-ended questions, occurred via telephone or Skype audio calls in the summer and early fall of 2020. Both professionals and students reported their occupational engagement drastically changed due to the Pandemic. Similarly, they indicated a decrease in their own QoL compared to before the Pandemic. *Grounded Theory of Pandemic Occupational Adaptation and Engagement in OT Professionals and Students* emanated from the findings. The COVID-19 Pandemic affected millions in various ways. OT professionals and students reported telehealth as beneficial for treating clients and providing education to OT students. Mental health should be a priority for everyone to maintain good QoL and cope with pandemic-related and future life challenges. Participant commitment to the occupational therapy profession continues to be strong.

Keywords

Pandemic, COVID-19, Occupational Engagement, Quality of Life, Occupational Therapy, Mental Health

1. Introduction

In March of 2020, the COVID-19 worldwide Pandemic required a nationwide shutdown in the United States. Some entities that remained open on a limited basis provided curbside service while adherence to social distancing guidelines became the expectation. As of July 17, 2020, [World Health Organization \(WHO\) \(2020a\)](#) reported similar shutdowns in 216 countries, along with restrictions on nonessential international travel ([Centers for Disease Control and Prevention \(CDC\), 2021c](#)). As of April 6, 2021, there have been 131,487,572 confirmed cases and 2,857,702 reported deaths from COVID-19 ([World Health Organization, 2021](#)).

The Pandemic impacted people across the globe with recommendations for individuals and families to stay within their homes and wear masks if they ventured out in public. Many individuals currently remain unemployed due to businesses closing, furloughs, and lay-offs. Elderly individuals residing in nursing homes have been deeply affected by COVID-19, with many requiring intensive medical care and a large number dying from the virus. Health care professionals have arisen as global heroes as they bravely labor to save the lives of those affected by the virus. Grocery store workers and truck drivers are recognized and highly appreciated as the country continues to depend on them to provide needed resources. Homeless individuals have suffered a great deal as their access to food and living conditions has diminished.

Sadly, thousands of Americans have died as a result of COVID-19. As of April 5, 2021, there were 554,064 confirmed COVID-related deaths in the United States ([CDC, 2021a](#)). While many Americans lost their jobs and collected unemployment, many were able to work from home to reduce interactions with potentially sick individuals. Unfortunately, the COVID-19 Pandemic also caused a significant strain on America's healthcare system and its workers. Without adequate personal protective equipment (PPE), healthcare staff contracted the virus faster than many other groups, causing staff shortages and added stress on America's response to the Pandemic. Additionally, many non-emergent medical services temporarily closed, forcing healthcare workers to be re-deployed to provide essential health services, or stay at home without pay ([CDC, 2021f](#)).

Across the United States, at least 124,000 public schools closed due to the COVID-19 outbreak ([Education Week, 2021](#)). School closures deeply impacted the education system, forcing students to participate in online learning formats. Students of all ages completed the remaining 2020 school year remotely via Zoom or Google Classroom and continued with distance learning in the 2020/2021 aca-

demographic year. A majority of the nation's youth continue to rely on their parents and teachers for in-home online education. Yet, many children have limited or no computer access and are thus not receiving proper education.

Our study sought to determine how OT professionals and OT students responded to the global Pandemic in their own personal and professional lives via involvement in daily occupations. The fields of occupational science and the OT profession work collaboratively to investigate individuals' daily occupations. Occupational therapists apply concepts from occupational science to understand their clients' occupational needs and ultimately promote human engagement in the vital occupations needed for optimal QoL. The researchers hoped this study would identify critical strategies the OT professionals and students used to cope with the "stay-home" requirements of the shutdown via engagement in occupations. We aimed to summarize effective coping strategies recommended by our study's participants so they may serve clients who have been emotionally or physically affected by the shutdown.

Research Purpose and Questions

This study sought to identify how the COVID-19 Pandemic has been affecting the lives, occupational engagement, and QoL of OT professionals and OT students. The study examined how these individuals were coping with challenges caused by the Pandemic, such as fear of the virus, job stress, unemployment, educational curtailment, and social isolation. By understanding how OT professionals and students have been functioning during the Pandemic, we aimed to identify positive ways the OT profession can help others during future pandemics and other crises. This study sought to answer the following research questions:

- 1) How did the daily occupations of occupational therapists, OTAs, and OT students change once the Pandemic ensued?
- 2) How was the QoL of the participants affected by the Pandemic?
- 3) How did the participants' OT background affect their coping with the Pandemic and associated shutdowns?
- 4) What recommendations did the participants have for OT students, practitioners, and other individuals during this Pandemic?

2. Literature Review

2.1. Pandemic and OT Practice

OT is a holistic profession which delivers skilled health services to individuals of all ages. OT practitioners are equipped with specialized knowledge to help clients improve their ability to perform daily activities ([American Occupational Therapy Association \(AOTA\), 2014](#)) and promote occupational engagement in health-promoting activities to enhance their QoL. Many health and educational settings offer OT services, with hospitals being the most common OT practice setting ([AOTA, 2015](#)). Long-term care/skilled nursing facilities are among the

most common employment places for occupational therapy assistants (OTA) (AOTA, 2015). Other practice settings for OT practitioners include but are not limited to schools, home health, rehabilitation, and mental health. OT practitioners provide services dependent on the setting and the client's needs. Common interventions include assisting individuals with physical and mental disabilities to modify or adapt to tasks or environments and promote improved occupational performance (AOTA, n.d.b). Regardless of the setting, OT practitioners are responsible for helping clients in all life stages engage in meaningful occupations to improve their overall health and well-being.

The COVID-19 Pandemic marked an unprecedented time for the OT profession. OT practice adjustments depended on geographical location, practice setting, and public health officials' recommendations during this period. AOTA (n.d.a) urged practitioners to use clinical judgment to weigh the risks of providing or delaying client services. During the Pandemic, clients and professionals followed approved safety protocols to stop the virus's spread. Professionals wore PPE as recommended by the WHO, CDC, and Food and Drug Administration (FDA) as safety precautions when working in health care facilities (AOTA, 2020b). To help reduce viral spreading, practitioners evaluated clients in private disinfected rooms (AOTA, 2020b). To provide clients with essential skilled OT services and avoid interruptions that could adversely impact their health, practitioners adjusted their standard practice operations during COVID-19. Thus, practitioners in these settings followed increased infection control guidelines, donning available PPE, and limiting schedules to reduce virus transmission risk (AOTA, n.d.a).

Before COVID-19, OT provided telehealth services in both primary and secondary education. Telehealth sessions allow the client to receive OT intervention in locations where OT professionals are scarce (AOTA, 2018). OT practitioners suggest adaptive equipment, home modifications, and school-based practice interventions to improve telehealth performance (Cason, 2014). In real-time sessions, the therapist performs evaluations, interventions, consultations, monitoring, and supervision services for students (Rortvedt & Jacobs, 2019). An OT practitioner works with teachers, speech and language pathologists, physical therapists, coordinators, and family members in an interdisciplinary team. Within this team, an OT practitioner delivers services while addressing needs and goals based on an individualized education plan (IEP) or a 504 plan (United States Department of Education (USDE), 2020b). OTs in telehealth focus on developing and delivering a therapy plan based on skills needed to participate in primary school-related tasks, including education, play, social, and leisure skills. OTs address similar skills in secondary education. However, therapy is adjusted to meet the age-appropriate school-based skills of a secondary education curriculum and be successful in communities. AOTA (2020c) found more practitioners, primarily in the early intervention, school, and outpatient settings, adopting telehealth to deliver services to their clients during the Pandemic. The

AOTA also noted, however, that fewer practitioners in hospital and long-term care/skilled nursing settings providing telehealth services. One Pandemic challenge has been the need for OT practitioners, who may have limited computer technology expertise, having to deliver intervention sessions virtually. Although telehealth has been an emerging manner of OT service delivery, it does have potential limitations. For example, CDC (2021g) noted clients might be unable to participate in virtual sessions due to limited access to the required technology. They also said some clients and therapists might find the virtual platform impersonal, ineffective, and undesirable due to the absence of physical contact.

Before the Pandemic, the CMS provided limited funding for telehealth. During the Pandemic, a waiver allowed Medicare and Medicaid telehealth billing, allowing virtual services to patients (AOTA, 2020b). OTAs and physical therapists were also allowed to provide telehealth services for Medicare beneficiaries. To assure reimbursement, therapists utilized the appropriate coding. Healthcare workers need to address the effects of social isolation on mental health. Additionally, they must encourage and educate their patients on the importance of following recommended protocols (Huckman, 2020). According to AOTA (2020b), telehealth is taking off in the mental health world. It provides discretion and convenience to the client in their own safe and private space. Telehealth will support clients suffering from mental health, depression, and isolation and help prevent COVID-19 exposure. After the Pandemic, healthcare providers will continue offering services in safe and multiple environments via various delivery methods (AOTA, 2020b). Huckman (2020) noted that telemedicine technology provides a secure environment.

2.2. Pandemic and Higher Education

The National Conference of State Legislature (NCSL, 2020) described the negative effects of COVID-19 on higher education in the U.S., including class cancellations, a switch to on-line education, and diminished athletic programming. Numerous admission and enrollment policies were altered as well. Many high school students were unable to take admission exams for entry into college, therefore a number of colleges removed American College Testing (ACT) and Scholastic Assessment Test (SAT) requirements for admission (Selingo, 2020). Sahu (2020) stated that during the COVID-19 Pandemic, higher education institutions had to provide students with adequate support to continue their academic endeavors successfully. To ensure the quality of the education delivered remotely, higher education institutions had to train faculty members to manage online learning platforms effectively.

Abruptly changing from the traditional way of receiving education to remote learning presented challenges for the college students, which likely negatively impacted their QoL. For instance, the demand for a fast adaptation to an online platform may not have been attainable for some students (e.g., lack of high-speed internet). Moreover, NCSL (2020) explained that many students re-

lied on college dorms, dining halls, and work-study programs for their housing, food, and income. According to the NCLS, the sudden closure of campuses caused unplanned financial burdens for the students because they had to leave college on short notice and find a different living place. To help alleviate this problem, [USDE \(2020a\)](#) made over 6 billion dollars in grants available to college students in need. Another primary concern reported by the NLCS was that college students have different learning styles that could not be accommodated remotely. Past studies demonstrated that some students, especially those who have learning challenges, struggle with online courses and develop increased anxiety due to grading pressures ([NCLS, 2020](#)).

[Zhai and Du \(2020\)](#) stated that before the COVID-19 Pandemic started, when looking at colleges worldwide, one in five college students reported having one or more mental health disorders. They said that issues related to the students' mental health likely increased during the Pandemic. [Suicide Prevention Resource Center \(2020\)](#) reported that before the COVID-19 Pandemic there was increasing evidence that college students, especially in graduate programs, experienced mental health issues that could lead to higher anxiety levels, suicide rates, and depression when compared to the general population. During the Pandemic, college students' mental health continues to be an even graver concern.

The Pandemic drastically impacted OT education, causing new regulations and policy changes in fieldwork. Due to the Pandemic, entry-level OT students completed level I fieldwork virtually, for example, via case studies. For level I fieldwork, the fieldwork institution determined the number of hours required for completion ([AOTA, 2020g](#)). It was challenging for students to capture the reality of fieldwork experience and comprehend the clients' needs virtually. On the other hand, the students' ability to adapt and be flexible increased due to persevering through a complicated time; thus, making them more resilient to future changes and challenges. Level II fieldwork requirements prohibited virtual case studies, but telehealth fieldwork was allowed, with many students taking advantage of this option ([Accreditation Council for Occupational Therapy Education \(ACOTE\), 2020](#); [AOTA, 2020d](#)). Recent international research recommended inclusion of multidisciplinary learning groups in on-line education ([Mouneer, 2021](#)), and this is an important consideration for OT educational programs both during the pandemic and in the future.

In the spring and summer of 2020, the Pandemic delayed OT graduates' ability to complete the National Board Certification of Occupational Therapy ([NBCOT](#)) exam to become licensed occupational therapists due to a temporary closure of Prometric, the testing center. On March 9th, 2020, the Cybersecurity and Infrastructure Security Agency (CISA) provided guidelines regarding "Essential Critical Infrastructure Workers." Prometric included the NBCOT exam in the essential services program that resumed testing in a limited capacity via these guidelines, allowing recent OT graduates to take the NBCOT Board Examination and become licensed occupational therapists during the Pandemic.

This promoted occupational therapists as essential care providers to the public and enhanced health care provision (Krebs, 2020). Thus, Prometric centers resumed testing in a limited capacity to provide testing for certification of essential healthcare professionals; test-takers have been required to comply with social distancing guidelines and use face-covering (masks) while inside of the Prometric centers (Prometric, n.d.).

2.3. Pandemic and Employment

USBLS (2020c) reported that U.S. employment dropped by 700,000 jobs in March of 2020, two-thirds of which were in the hospitality and service industries. Many ambulatory services retained only skeleton crews and adopted telehealth for medically appropriate patients and situations (CMS, 2020). As of April 2020, U.S. workers experienced decreased job opportunities and hiring and increased termination and lay-offs (USBLS, 2020d). The July 2020 employment report indicated a larger than usual spike in employees voluntarily leaving their positions (USBLS, 2020e).

Before COVID-19, the United States Bureau of Labor and Statistics (USBLS) (2020b) reported that healthcare careers, OT included, represented one of the chief employment opportunities for individuals within the country, projecting 14% industry-wide growth from 2018 to 2028. During the Pandemic, as the number of positively tested COVID-19 cases increased, USBLS (2020a) noted that employment related to direct and acute patient care rose too. Although OT practitioners widened their scope of practice in recent history, each service area is unique and requires different types of interaction with clients. Thus, an OT practitioner employed in a telehealth rehabilitation service may not be affected by COVID-19 in the same way as a community-based practitioner (AOTA, 2020f). Statistics on how the Pandemic affected OT employment are not yet available, however, this forecast provides hopeful optimism that the profession will continue to thrive in the future. In particular, the current forecast is that the pandemic will have little effect on future health care practitioner employment opportunities (USBLS, 2021).

Thus, this literature review demonstrated the profound effect of the Pandemic on OT practice, OT higher education, and OT employment. OT practitioners in all settings rose to the challenge of social distancing, masking, and the implementation of other stringent infection control standards. At the same time, they continued to practice on the “home front” during this pandemic threat. OT students and OT faculty faced similar challenges, including quickly learning how to engage in many components of the higher education process on-line. OT higher education also dealt with many fieldwork cancellations and postponements as best as possible. Employment prospects for new OT graduates declined, yet at the same time opportunities for OT employment in telehealth blossomed. These current challenges warrant further investigation of these issues, and thus our study was launched.

3. Method

IRB approval for the study was obtained at the co-authors' university. This mixed-method study included descriptive quantitative surveys and phenomenological qualitative interviews. Throughout the research process the research team adhered to all IRB requirements, including informed consent, privacy, confidentiality, and data storage protocols.

3.1. Participant Recruitment

The intended study participants were a purposive mixed sample of OT professionals and students from various geographic and practice backgrounds, obtained from the researchers' university and practice settings across the U.S. The PI sent IRB-approved professional and student email invitations containing a link to the professional and student surveys. A final question on each of the surveys asked respondents to contact the faculty PI if interested in participating in an interview and provided the PI's email address. A total of 2328 survey invitations were sent to OT professionals, including 955 OT/OTA program faculty, 153 OT/OTA program directors, 982 university OT alumni and fieldwork supervisors, and 238 OT journal report authors. The program directors were asked to forward the student survey invitation to their students. Additionally, 244 entry-level OT students in the researchers' university OT program received the survey invitation. The professional and student survey invitations were also posted on seven social media websites. These included the researchers' university OT student club *Facebook*; the researchers' university OT department "*Facebook*"; "*Geriatric OT, PT, and SLP Collaborative Group*"; "*Geriatric Occupational Therapists-Clinical Discussions*"; "*Occupational Therapy Community*"; "*Occupational Therapy Treatment Ideas and Information*"; and "*Occupational Therapy*." Additionally, professional and student invitations to the survey were posted on the American Occupational Therapy Association (AOTA) "*CommunOT*" discussion boards: "*General Forum*" and "*Academic Education*." The student survey invitation was also posted on the AOTA "*CommunOT*" student discussion board.

Inclusion criteria required participants to be over 18 years of age and living in the United States at the time of the survey and interview. Additionally, all participants needed to be able to read and write in English. All OT professionals were required to be certified by the NBCOT. All students were required to be enrolled in an educational program accredited by the ACOTE.

3.2. Participants

A total of 198 OT students completed the online student survey, with 6 OT students also completing the interview. Additionally, a total of 249 OT professionals completed the online professional survey, and 8 OT professionals completed the interview as well. Additional information about the participants is provided in the results section of this report.

3.3. Instruments

The following instruments were developed by the research team and used to collect the data:

- 1) Pandemic Occupational Engagement SurveyMonkey for OT Professionals;
- 2) Pandemic Occupational Engagement SurveyMonkey for OT/OTA Students;
- 3) Pandemic Occupational Engagement Interview Guide for OT Professionals;
- 4) Pandemic Occupational Engagement Interview Guide for OT/OTA Students.

The Professional and Student Online Surveys collected quantitative and qualitative data via rating scales, multiple-choice, ranking, and open-ended questions. The Professional and Student Interview Guides collected qualitative data via open-ended questions.

3.4. Procedure

Survey and Interview Data Collection

Each respondent filled out a survey about how the coronavirus pandemic affected their life, occupational engagement, and QoL. The survey also asked for their recommendations to others regarding the Pandemic.

The graduate student researchers on the research team used the Professional and Student Interview Guides to collect qualitative data via open-ended questions. All interviews were voice recorded on the interviewers' password-protected phones or computer devices and then moved to encrypted flash drives. Via a telephone or Skype audio call, each interviewee responded to questions about how the coronavirus pandemic affected their life, occupational engagement, and QoL. They were also asked for any recommendations they may give to others regarding the Pandemic. The interview took approximately 30 minutes. The recordings were transcribed in de-identified Word documents.

3.5. Data Analysis

Online anonymous survey quantitative data were analyzed via descriptive statistics in a private password-protected SurveyMonkey instrument that produced the findings in an Excel document for the researchers to review, analyze, and present in the final report. All SurveyMonkey qualitative open-ended question responses and all de-identified interview data Word transcripts were organized in Excel sheets for content analysis. The qualitative content analysis sought to determine frequent, profound, and unique responses to both the SurveyMonkey open-ended and interview questions. Five graduate students initially co-analyzed the *professionals'* data, and the other five graduate student co-authors initially analyzed the *students' data*. Data analysis responsibilities were then reversed between these two co-author groups for verification, with the faculty co-author also verifying the findings. Relevant quotes were identified and described by the research team. All researchers conducted a final review of both the quantitative and qualitative data, discussed the findings' narrative report, and made any

needed modifications.

3.6. Survey Rigor: Validity and Reliability

To enhance the quality of research and ensure a more rigorous research design, validity and reliability were addressed in developing the student and professional survey instruments in a limited yet meaningful manner. The PI created the first drafts of both surveys based on the literature review and her experience as an occupational therapy clinician and educator. She then presented survey drafts to the 10 graduate student members of the research team for their input and recommendations. The team continued the dialogue and created final versions of the surveys. The face validity of both surveys, by which instruments appear to be appropriate when viewed by others, was achieved from the research team's standpoint. To ensure that the student and professional survey questions accurately measured all aspects of the research questions, the research team engaged in in-depth dialogue to critique and revise the instruments. At the end of this process all researchers unanimously agreed that both survey instruments contained valid content. They were organized, short, clear, and followed a well-defined thought progression, seeking to produce the desired information. All survey participants responded to the same set of questions and response options. The researchers reviewed the surveys to ensure that question wording and possible response options were clear and understandable, to enhance all respondents' comprehension. Admittedly, optimal testing of the surveys' internal and external validity and intricate reliability testing were incomplete due to the limited time allowed for development and implementation of the study, as well as limitations brought about by the Pandemic crisis.

3.7. Interview Rigor: Trustworthiness

The trustworthiness of the interview process was ensured in a variety of ways, in keeping with recommendations for qualitative research rigor (Schwandt et al., 2007). *Reflexivity* was obtained via thorough examination and discussion of both survey and interview data during the six-month data collection and analysis period. Similar to reflexivity, the study utilized *triangulation* by using different data sources (professionals and students), diverse data collection strategies (surveys and interviews), and multiple data analyzers (the 11-member research team). *Credibility* was achieved by the thorough application of all elements of the informed consent process and adhering to the research protocol. *Transferability* was achieved by including OT therapists, OT assistants, and OT students from a diverse nationwide and regional sample, representing different professional development stages and various clinical and fieldwork experiences. *Dependability* was maintained by consistent adherence to the approved research protocol at all times under the close supervision and guidance of the PI. *Confirmability* was assured via an audit trail which includes the informed consent forms, transcripts, and data analysis Excel sheets maintained by the PI according to the IRB

required time frame.

4. Results

4.1. On-Line Surveys

4.1.1. Student Survey

A total of 198 students agreed to complete the survey. The majority of the students were enrolled in an entry-level master's degree OT program (50.79%) or an entry-level OT doctoral program (40.21%). The remaining students disclosed their enrollment as OTA associates degree (6.88%), OTA baccalaureate degree (0.53%), or "other" (1.59%).

Table 1 displays the percentage of time the students reported they spent in each performance area in a typical week before the Pandemic. The majority of students said they engaged in education (28.83%) the most prior to the Pandemic. A significant amount of student time was also spent in rest and sleep (21.28%) before the Pandemic. They reported a lesser amount of social participation at that time (9.01%). Time spent in play (2.16%) was the least before the Pandemic. As shown in **Table 1**, most students reported their performance during the Pandemic was spent on rest and sleep (25.29%) and education (21.39%). They also said they allocated little time on social participation (5.82%) and play (2.63%) after the Pandemic began.

In **Table 1**, more than half of the students claimed they had very good QoL (50.48%) before the Pandemic, while a small percentage said they had excellent QoL (2.86%) before the Pandemic. Some students reported they had fair QoL (13.33%) pre-pandemic, and no students (0.00%) said they had poor QoL before the Pandemic. **Table 1** also displays a decrease in the students' reported QoL during the Pandemic. At the time of the survey (during the Pandemic), the majority rated their QoL as good (48.57%), and a smaller number rated it very good (17.14%), while a small minority reported poor QoL (6.67%).

4.1.2. Professional Survey

A total of 249 professional participants responded to the survey. Of the 249 professionals, 244 reported their certification as an occupational therapist or OTA. The majority of professionals (34.43%) reported 1 - 10 years of certification, followed by 11 - 20 years (22.95%), 21 - 30 years (17.62%), 31 - 40 years (15.57%), and 41 or more years (4.92%). Lastly, a small number of the professionals said they had less than 1 year of certification (4.51%). Five professionals refrained from answering the question about their years of experience.

The top three practice areas which the 242 responding professionals disclosed as having the most experience were: physical disabilities (25.21%), school-based (18.18%), and academia (17.77%). Additionally, professional respondents identified working in the practice areas of long-term care (10.33%), home health (6.61%), mental health (3.31%), hand therapy (2.89%), private practice (2.48%), community-based (1.65%), hospital-based pediatric rehabilitation (1.65%), and prevention and wellness (0.83%). Some of the professionals categorized their experience

Table 1. Professionals & Student survey monkey results.

Question	Response	Professional Percentage	Student Percentage
Q3. On average, PRIOR to this current Pandemic, state the percentage of time you engaged in each performance area in a typical week. The total of all 8 areas should equal 100. (Enter 0 if you did not engage in that area.) Number of Professional Respondents: Answered: 172 No response: 77 Number of Student Respondents: Answered: 116 No Response: 82	Activities of Daily Living	17.31%	11.55%
	Instrumental Activities of Daily Living	13.35%	10%
	Rest and Sleep	19.94%	21.28%
	Education	5.82%	28.83%
	Work	25.39%	8.90%
	Play	3.57%	2.16%
	Leisure	7.43%	8.28%
	Social Participation	7.19%	9.01%
Q4. On average, DURING this current Pandemic, state the percentage of time you are typically engaging in each performance area in a typical week. The total of all 8 areas should equal 100. (Enter 0 if you are not engaging in that area.) Number of Professional Respondents: Answered: 158 No response: 91 Number of Student Respondents: Answered: 105 No Response: 93	Activities of Daily Living	15.76%	11.50%
	Instrumental Activities of Daily Living	13.92%	10.92%
	Rest and Sleep	20.63%	25.29%
	Education	7.96%	21.39%
	Work	23.89%	9.34%
	Play	4.16%	2.63%
	Leisure	9%	13.10%
	Social Participation	4.68%	5.82%
Q5. On average, PRIOR to this Pandemic, how would you have rated your quality of life? Number of Professional Respondents: Answered: 158 No Response: 91 Number of Student Respondents: Answered: 105 No Response: 93	Poor	1.27%	0.00%
	Fair	3.80%	13.33%
	Good	20.89%	33.33%
	Very Good	57.59%	50.48%
	Excellent	16.46%	2.86%
Q6. On average, CURRENTLY during this Pandemic, how would you rate your quality of life? Number of Professional Respondents: Answered: 158 No Response: 91 Number of Student Respondents: Answered: 105 No Response: 93	Poor	3.80%	6.67%
	Fair	23.42%	27.62%
	Good	33.54%	48.57%
	Very Good	32.28%	17.14%
	Excellent	6.96%	0.00%

as “other” (9.09%), and within this group, a fair number noted their predominant experience was in the early intervention practice area.

As seen in **Table 1**, approximately 1/4 of the 249 professionals who responded to the survey and reported their credentials did not complete the remainder of the survey questions. (It is our conjecture that they were curious and clicked on the survey to see what it was about, but did not complete it due to time constraints.) As presented in **Table 1**, 172 of the 249 responding professionals re-

ported their occupational performance before the Pandemic. The professionals noted that prior to the Pandemic, they spent the most time engaged in work (25.38%) and rest and sleep (19.94%). They reported spending less time in leisure (7.43%), social participation (7.18%), education (5.82%), and play (3.57%) before the Pandemic. **Table 1** shows that 158 professionals responded to the item asking about their occupational performance during the Pandemic. During the Pandemic, there was a slight decline in the time they spent at work (23.89%), followed by a slight increase in rest and sleep (20.63%). Also, during the Pandemic, leisure time (9%) and play (4.16%) increased slightly for the professionals, while there was, surprisingly, only a slight decline in their social participation (4.68%).

As seen in **Table 1**, 158 OT professionals surveyed rated their QoL prior to the Pandemic as very good (57.59%), while a smaller number of professionals rated it excellent (16.46%). However, the professionals' QoL ratings declined during the Pandemic, as lesser numbers stated it was very good (32.38%) and excellent (6.96%).

4.2. Qualitative Findings

Six students and eight OT professionals were interviewed via Skype audio call or telephone. The questions posed and their responses are described below. Also included in this analysis are responses to open ended qualitative questions from the SurveyMonkey responses.

4.2.1. Education and Work

Student interviewees agreed their education was disrupted, with some experiencing more significant setbacks than others. These disruptions included lack of hands-on learning, fieldwork cancelations, and graduation postponement. As one student aptly stated, *“Ideally, without the Pandemic, I would have finished my fieldwork by June 2020, I would have been done, but I m still waiting.”*

The professionals identified the need to adjust to telehealth, changes in the workplace environment, and alterations in schedules. One professional addressed increased responsibilities by stating, *“I did everything from OT to nurse's aide to assisting, basically doing everything except giving out medications for quite a bit of time.”*

4.2.2. Daily Habits, Routines, and Occupational Performance

Some students expressed harmful disruptions in their daily habits, routines, and occupational performances due to the Pandemic. Remote learning was a significant disruption, and some students responded by procrastinating. Eventually, students implemented strategies learned in OT school to form new functional routines. A common approach was incorporating exercise into their daily routines. One student keenly described their experience, saying, *“I personally don't live by the school, so I had to suddenly move back home and just really everything...disrupted my daily routine to just the occupations I used to engage in*

because I was no longer in the environment where I participate in clubs or hang out with my friends.”

The professionals reported different work routines, physical activity changes, modifications in ADL and IADL participation, and alterations in social interactions. One of the professionals remarked, *“Even just the clothes I was choosing to wear changed, um, my eating habits, my exercise routine, um, a lot of my social life was stopped. Um, yeah, pretty, pretty much everything really changed.”*

4.2.3. Quality of Life

Students noted dips in their QoL because of the Pandemic. Anxiety regarding changes to academic delivery, the uncertainty of fieldwork resumption, and postponed graduation dates, along with changes in social interactions, increased their stress. A student relayed, *“I would say there are definitely ways in which my quality of life has gone down, the first being high levels of anxiety.”*

Some professionals also experienced a decrease in QoL. They disclosed adverse effects on their mental health, increased burnout, and alterations in social participation, with some noting the financial impact. One of the professionals stated, *“I think my job has become really overwhelming...the mental load of taking on telemedicine and being available all the time, trying to work with technology, and problem solve has become, you know, sometimes a huge burden.”*

During the Pandemic, many students noted unexpected benefits such as new self-care routines and renewed connections with family and friends that increased their QoL. One student remarked, *“I think there are ways that the quality of life is a little better...I definitely have prioritized a lot more self-care and reaching out to friends and family than I did before.”*

Similarly, professionals noted the focus on family and friends and changes in daily routines and roles during the Pandemic had improved their QoL. One professional stated, *“I think if anything, it has kind of strengthened my relationships so in a way that has bettered my quality of life, that it helped me form relationships with people like get closer to people.”*

4.2.4. Changes in Priorities and Life Perspectives

The Pandemic caused students to focus on their physical and mental health, increased adaptability by “going with the flow”, encouraged living in the moment, and heightened appreciation of what they have, including friends, family, and participation in school. A student reflected, *“I find that social interaction means more to me than I used to think. It is also a key part of my educational life and well-being.”*

The professionals noted they emphasized their families’ interests, accepted changes in daily life, prioritized the necessities of life, and avoided extravagances. A professional stated, *“I think truly if there is something that you want or there’s something that you need to say, or you know someone you want in your life, I think it’s the time now to take care of it and to try.”*

An increase in gratitude, greater appreciation of small things, and an in-

creased desire to spend time with family and friends were expressed by many. One professional stated, *“I feel I am in love with the present moment more than ever. I focus on right now... gratitude is what I've developed during this time.”*

4.2.5. Effect of OT Background and Training on Coping

Students reported their OT education helped them cope with the Pandemic. Developing new routines, recognizing environmental influences on occupational engagement, and creating new roles all helped support them. *One student reported, “I would say it helped me find ways to cope because this is one of the main things that we talk about in class which is helping clients who suddenly lose an occupation or they need help establishing a new routine when something happens and they can no longer engage in it.”*

Students also found that OT concepts helped sustain their mental health through continued engagement in meaningful occupations and increasing their understanding of the need for occupational balance. One student reported, *“I am able to devise creative ways to continue my participation because my OT background has taught me the effect participation has on quality of life and life satisfaction.”*

The professionals said their OT training and experience provided them with flexibility and adaptability, knowledge of the importance of engaging in occupations for improved well-being, and the ability to develop new and alternate routines. One of the professionals offered, *“It gave me the lens to look at all of the questions you're asking me, to look at occupation, to look at routines, to recognize when it was imbalanced, and then begin to problem solve and think about how to bring it back into balance.”*

Implementation of occupational balance, utilizing coping skills, creating a routine, and engaging in meaningful occupations were also noted as essential concepts gleaned from OT. One professional described four ways their background in OT impacted their coping during the Pandemic, stating, *“One, understanding how to form health-promoting habits; two, understanding the importance of occupational balance, three, understanding the importance of self-compassion, four, understanding that you can recover from any setback.”*

4.2.6. Planned Lifestyle Changes Resulting from Pandemic

Regarding lifestyle changes, some students planned on incorporating more physical exercise into their routines. A student remarked, *“I wanna work in an environment that focuses more on quality rather than quantity, so for me, that's one of the changes, and I think I will also be able to carry the exercise and healthy eating over.”*

The professionals proclaimed their plans for lifestyle alterations due to the Pandemic. These changes included living more simply and making work-related alterations. One of the professionals stated, *“Lifestyle changes, I would like to live more simply. I'd like to stay home more. I'd like to make more of my own food from scratch. I would say the most is, you know, going back to basics.”*

4.2.7. Planned Job and Career Alterations

One student focused on obtaining an advanced degree. Another student said she would like to advocate for patients' family members. In general, student participants reported not making significant changes in their careers because of the Pandemic. However, telehealth was seen as a growing field but not ideal for working full time. One student reported, "*I wouldn't want to do telehealth 100%, but I think this is the way it will be in the future, so I want to catch that wave.*"

One of the professionals stated, "*Yeah, haha, I love OT! I love how creative it is. There are occasions and times where I burned myself out like I said, I did twice during the Pandemic, and at that point, I did think about a different career.*"

4.2.8. Planned Work Changes with Patients and Clients

One student reported she would advocate for increased occupational engagement opportunities and more client/family communication for skilled nursing facility residents. Others suggested providing client education regarding infection control. Students reported they would educate clients regarding the importance of good mental health and coping skills. One student noted, "*I think now, more than ever, we realize that mental health is going to play a big role in the future.*"

The professionals emphasized offering additional OT advocacy and education, altering treatment plans, and increasing non-traditional OT roles. Additionally, the professionals said having less in-person contact and adhering to high PPE standards were future changes they foresaw in their work due to the Pandemic. One of the participants said, "*...I think one of the biggest things is just trying to advocate for OT with patients.*"

4.2.9. Interviewee Recommendations

The OT students' universal recommendation was to find creative ways to stay engaged in routines composed of meaningful occupations. The OT professionals' advice regarding occupational engagement during the current Pandemic was to enhance relationships, create or maintain a routine, exercise and engage in meaningful activities, and aim for balance. One professional said, "*Try something new. Challenge yourself to try something you haven't before.*"

The students advised practitioners to not be afraid of telehealth despite all the difficulties it can present (technical challenges). They recommended viewing the person as a whole while evaluating their access to basic needs and support systems. Additionally, they advised practitioners to engage in enjoyable activities while maintaining balance despite all daily demands, and they suggested devoting time to remain current with professional technology. Finally, the students recommended practitioners increase OT advocacy in mental health practice arenas.

The OT and OTA professionals offered recommendations for future practitioners, stating they should maintain their mental/emotional health, take the same advice that we give patients, be creative, and adapt and accept new changes.

They also suggested returning to our roots while emphasizing the basics of life. One of the OT professionals stated, *“Walk the walk. Everything that you’re learning, apply to yourself. Be a problem solver. Be creative. Be results-oriented. Be disciplined.”*

Student interviewees recommended educators realize that students are living in difficult times. They said this whole situation could negatively impact a student’s mental health and stated the professors should be flexible and supportive. They said students should be patient and keep in mind that this Pandemic is temporary and, in the meantime, students should focus on their studies.

The professionals also offered advice for OT and OTA students and educators, stating they should have patience, engage in lifelong learning, and accept new changes/roles. One of the respondents recommended, *“Just be patient and understand that although it’s uncomfortable for you, it’s uncomfortable for everyone. Having to go through mass change and mass pressure to continue producing under such circumstances. Um, and understand that you’re learning something that everybody is learning at the same time.”*

The students wanted to see the telehealth practice setting integrated into the OT curriculum and for OT educators to recognize the more pronounced need for understanding, flexibility, and adaptation within the new classroom setting. A student stated, *“Be patient with us. These programs are challenging as it is, but to now have to do a lot more of the learning on our own and without ‘being in the classroom’ is difficult. It is harder to learn and retain information online so please be patient.”*

Recommendations for OT practice from the professionals included being flexible and adaptive, supporting mental health, teaching coping skills, embracing telehealth and technology, advocating for reimbursement, and providing clients with engagement in occupations. As stated by one professional, *“OTs are definitely valuable in this time whether it be working with patients that are recovering from COVID or maintaining other forms of practice in new ways such as using telehealth to complete sessions. We need to remain confident in what we do and provide comfort and education to our patients not just during times of this Pandemic but also after this passes. We have to be ready to help our patients and each other cope with such a large-scale event like this.”*

4.3. Grounded Theory of Pandemic Occupational Adaptation and Engagement in OT Professionals and Students

After meeting in five biweekly Zoom sessions over a 6-week period to examine the data, write and verify the results, the research team reflected on the study’s findings and engaged in “focused coding” (Charmaz, 2006: pp. 57-60), examining the study’s aforementioned qualitative analysis. Via open and active discussion, the entire research team identified 3 prevailing concepts (or “codes”) and several associated sub-concepts (or “sub-codes”) emanating from the data reported in the results section of the report. The primary investigator proposed a grounded theory diagram to show how the concepts could be portrayed picto-

rially. The research team members reviewed the figure and provided written feedback for ongoing revision. Revisions were made accordingly. The result is seen in **Figure 1**, which shows the core concept (*Self Adaptation and Changed Perspectives*) and its relationship to the other concepts (*Changes in Life Satisfaction, QoL, and Optimism*, and *Future OT Career*). This grounded theory shows that initial slight declines in life satisfaction and quality of life due to the Pandemic were followed by increased optimism. These transitions led to changes in participant life perspectives and priorities, with increased concern for their own physical and mental health. Additionally, the participants projected the need for increased attention to client mental health and an increased emphasis on telehealth. They remain committed to the occupational therapy profession. These perspectives are illustrated in the resultant theory (see **Figure 1**), which the researchers named the “*Grounded Theory of Pandemic Occupational Adaptation and Engagement in OT Professionals and Students.*”

5. Discussion

As described in-depth in the paragraphs which follow, the results of this study demonstrated a decline of both student and professional QoL during the Pandemic, including diminished socialization. However, both groups reported high recognition of the importance of meaningful occupations, family, and friends; these important factors helped them deal with the Pandemic’s challenges. This self-awareness contributed greatly to their successful coping and positive outlooks for the future.

Findings from the students highlighted interesting shifts in their occupational performance from before the Pandemic to during it. The students reported that before the Pandemic they spent most of their time on education and the second-largest amount on sleep and rest. During the Pandemic, these top categories were reversed. Additionally, students spent half the time in social participation during the Pandemic compared to prior. Less than half of the students interviewed reported their QoL was very good during the Pandemic. QoL ratings

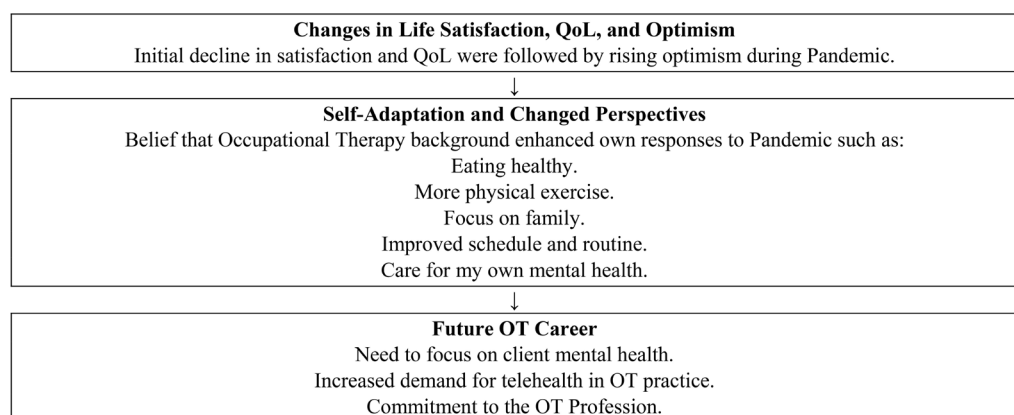


Figure 1. “Grounded theory of pandemic occupational adaptation and engagement in ot professionals and students.”

of the students declined during the Pandemic, with twice as many students reporting fair QoL during the pandemic compared to prior, and a few even reported poor QoL during the Pandemic. A number of the interviewed OT students identified the need for increased occupational engagement during the pandemic and described how they began to experiment with new occupations. Some of them expressed success in regaining satisfaction and QoL after the initial shock of the Pandemic subsided. Our study's students contemplated how to spend their time and maintain their own mental health, QoL, and occupational balance. Students reported their life changed due to the Pandemic and described how they adapted to new routines. Many students expressed how important it was to appreciate time with family and friends and not take little things for granted. Some students also reported how difficult it was to learn in the new format and asked that professors and educators simply be patient with them. Many students felt that engaging in meaningful occupations and maintaining a schedule/routine significantly helped QoL.

Our student responses showed their belief that occupations have an important effect on everyday life. When occupational engagement diminishes, one's well-being, QoL, and occupational balance are severely affected. Our participating students observed that the unique perspective of occupational therapists was needed during this challenging time to help people engage in meaningful occupations and achieve well-being. Our students reflected the thoughts of [Kamalakannan and Chakraborty \(2020\)](#) who maintained that occupational therapists could provide substantial help to many populations, including those who are COVID positive.

The importance of adapting to the Pandemic and engaging in meaningful occupations was noted throughout our survey and interview findings. An individual's ability to participate in occupations is vital. Occupational involvement gives meaning to life. According to [AOTA \(2014\)](#), OT process outcomes include gains in occupational performance, prevention, QoL, participation, role competency, health and well-being, and occupational justice. Enabling meaningful occupational participation increases overall mental health and well-being. OT practitioners can incorporate interventions designed and tailored to the client's specific needs and help them participate in the activities which are most important to them, giving them a sense of purpose and motivation. QoL, for OTs, is defined as the "dynamic appraisal of the client's life satisfaction" (p. S35), which increases as participation in meaningful occupations increases. Well-being is "contentment with one's, health, self-esteem, sense of belonging, security and opportunities for self-determination, meaning, roles, and helping others" where validation emanates from participation in occupations (p. S35). OT services are focused on a client-centered, strength-based approach, "resulting in optimal levels of community participation, daily functioning, and quality of life" ([AOTA, 2016: p. 3](#)). OTs provide the client with opportunities to experience occupational justice, which offer them skills and adaptations needed to access meaningful oc-

cupations. A person's health, well-being, self-perception, mental health, and overall QoL can improve by increasing social participation, accessibility, and participation in desired occupations.

Graduating OT practitioners may use the Pandemic crisis as an opportunity to expand their scope of practice further. In March 2020, strict measures slowed the spread of COVID-19, advocating social distancing and self-quarantine (CDC, 2021d). OT is founded on the guiding principle that active participation in meaningful occupations breeds good health, well-being, and high life satisfaction (AOTA, 2014). Due to the Pandemic, individuals worldwide endured social isolation to protect physical health, yet this isolation may cause future physical and mental decline (Smallfield & Molitor, 2018). OT practitioners are skilled and trained to help individuals maintain health through occupational engagement (AOTA, 2014), and therefore, should be at the forefront of the recovery efforts of this Pandemic, treating those directly and indirectly affected by COVID-19.

The OT and OTA professionals showed intriguing changes in occupational performance before versus during the Pandemic. Professional respondents reported both their social participation and QoL declined during the Pandemic. The professionals described how their OT background affected their coping skills and how their perspective on life has changed due to the Pandemic. They also shared their recommendations for others regarding occupational engagement. Their responses indicated that the professionals' backgrounds in OT helped them utilize their coping skills, create a routine, and recognize the overall importance of continued engagement in occupations during this time. Our findings support an observation from McKenna (2020: p. 6) which stated, "Occupational therapy practitioners pivoted quickly to applying their skills in adaptation to assist as best as possible their clients, communities, and families, as well as themselves", allowing them to adapt to the changes that the Pandemic brought about.

It is significant that the professionals' expressed how their view on life changed as a result of the Pandemic. Many explained they had an increased sense of gratitude, greater appreciation for the small things in life, and wanted to spend more time with the people most important to them. The professionals expressed positives and negatives surrounding the Pandemic. As a result of COVID-19, they reported increasing their focus on relationships with family and friends. The professionals attributed their flexibility, adaptability, creativity, and engagement in occupations to their OT background, leading to improved well-being. However, they still conveyed alterations in social interactions, negative impacts on mental health, and financial hardship. The professionals' recommendations included finding a routine, maintaining balance, spending time outside, exercising, building relationships, and exploring new hobbies.

Ultimately, the professionals reported how their work and daily routines changed, including the need to adjust to providing telehealth. Many professionals foresaw additional work changes, including altering treatment plans, in-

creasing non-traditional OT roles, and the need to adhere to heightened PPE standards. There may also be increased opportunities for occupational therapy employment in the future as a result of the Pandemic. In particular, there may be much potential for OT involvement in mental health practice. A [World Economic Forum \(2020\)](#) report showed that 34% of adults felt adverse effects on their mental health when the country was in lockdown. Occupational therapists have much to contribute in the mental health setting. Roles include leading programs in substance abuse, coping skills, stress reduction, and behavioral management to help clients re-engage in meaningful occupations. OT practitioners bring a unique skill set to treating clients with mental health impairments, including “expertise in occupational performance, activity analysis and design, environmental analysis, neurophysiology, psychosocial development, and group dynamics” ([AOTA, 2016: p. 1](#)). This distinct combination of knowledge and skills makes OT practitioners instrumental in treating mental health conditions. The OT practitioners can help clients learn or relearn skills, facilitate their ability to adapt to their environment, provide education, and suggest adaptations for the best possible outcomes ([AOTA, 2013b](#)). OTs engage clients using a client-centered approach that focuses on client strengths to build healthy habits and routines.

Due to the closing of schools and social distancing requirements, it is predicted the demand for OT services in telehealth will continue to increase during and after the Pandemic. At the beginning of the Pandemic, [AOTA \(2020e\)](#) provided a guide for OT service delivery during COVID-19. This guide included determining whether the client’s needs can be met through telehealth if available. Telehealth has allowed OT practitioners to provide services through technology without in-person contact in almost any practice setting. [Verma \(2020\)](#) reported that during the Pandemic, the CMS added 135 allowable services, including OT, which more than doubled the benefits that beneficiaries could receive via telehealth. Before the Pandemic, approximately 13,000 beneficiaries enrolled in fee-for-service Medicare received telemedicine in a week, whereas nearly 1.7 million beneficiaries received telehealth services in the last week of April 2020 ([Verma, 2020](#)). The Centers for Medicare & Medicaid Services (CMS) announced a waiver on April 30th, 2020, under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) which allowed occupational therapists to bill for telehealth services provided to Medicare recipients during the Pandemic ([AOTA, 2020a](#)). Under Medicaid, each state chooses whether telehealth is covered ([Medicaid.gov: Keeping America Healthy, n.d.](#)). Although the waiver was only effective during the Pandemic, there may be future considerations for OT to continue to expand its role, bill, and be reimbursed for telehealth services.

Despite Pandemic school closings, the Department of Education indicated schools must provide services to both general education students and children with disabilities (as cited in [AOTA, 2020h](#)). Through various virtual platforms, occupational therapists currently provide interactive and individualized tele-

health sessions to compensate for the lack of human interaction with therapists, teachers, and peers. Additionally, modifications and compensatory strategies augment the most effective telehealth services. Occupational therapists may offer assignment extensions, accurate video captioning, embedded sign language, and various languages via video conferencing (USDE, 2020b). USDE (2020b) noted the OT practitioner might use sign language, speech to text, or handwritten notes for deaf students to convey his/her peer responses for equal participation in virtual class discussion. Lastly, strong rapport is needed between client and practitioner while providing telehealth services. Building rapport virtually requires intentional effort and skill from the OT (Breedon, 2016). It is vital to consider both verbal and non-verbal communication when establishing a virtual connection. According to Seager van Dyk, Kroll, Martinez, Emerson, and Bursch (2020), an OT must allocate control for the student, use exaggerated gestures, and offer choices and opportunities for sharing. Additionally, beginning a session with a brief question and answer game facilitates a conversation between the practitioner and student while subconsciously establishing a relationship between the two (Seager van Dyk et al., 2020). Implementing these suggestions will educate the practitioner about each student's specific skills while creating a relationship with the child to deliver the most client-centered session.

Just as the U.S. citizens' lives were turned upside down by COVID-19, the OT field also had to adjust to new and uncharted territory. There may be many OT practice changes post-pandemic. As of July 2020, healthcare workers were required to wear goggles or a full-face shield, approved N95 filtering facepiece respirators or higher, non-sterile gloves, and gowns when working with patients who tested positive for COVID-19 (CDC, 2021d). Additionally, in-person OT services were limited when feasible. It is anticipated that occupational therapists will be required to follow more rigorous infection control standards in the future. These may include increased precautions such as temperature checks, additional handwashing stations, added hand sanitizer supplies, increased use of PPE, social distancing, and telehealth use. PPE may need to be purchased out of pocket by OTs serving the community, becoming costly. According to CDC (2021e), healthcare facilities should take steps to prepare for future health threats, including screening patients and visitors for fever, respiratory symptoms, and other symptoms before entering a healthcare facility and developing or reviewing the facility's emergency plan.

The Pandemic may set new opportunities in motion. As a result, there may be an increased demand for OT practitioners across settings. According to Marshall, during adolescence, the development of social skills, empathy, and a sense of identity occur through interactions with peers; unfortunately, COVID-19 has created a disconnect between social outlets and peers (Volkin, 2020). COVID-19 reshaped the way individuals behaved and participated in their daily occupations. As a result, we foresee an increased need for OT services enhancing social participation and social skills. Also, due to losing a job, the death of a loved one,

fear of the unknown, and exacerbation of pre-existing concerns, we anticipate an increased need for mental health services. *Mental Health America (2020)* reported a 19% increase in mental health conditions in the first weeks of February 2020 and a 12% increase in March 2020. Furthermore, June 2020's data in the United States found that 36.5% of adults reported symptoms of anxiety or depression (*Kaiser Family Foundation, 2021*). According to Rebecca Clay (2020) from the American Psychological Association, COVID-19's impact on suicide is still unknown; and it will likely take about two years before gaining the necessary data. However, the mental health field conveyed, "stress is a normal reaction to the current crisis and that routines, healthy habits, social connections and relaxation techniques can help ease that stress" (Clay, 2020: para. 7). OT practitioners can contribute significantly to suicide prevention. Ultimately, these new and emerging OT opportunities can positively aid those affected by COVID-19.

6. Conclusion

The study sample's geographic location was limited to the United States and consisted only of OT professors and students. Email invitations were sent only to OT programs in the United States. The use of other social media websites may have recruited more participants. The data were collected over a 6-week period. Extra time for data collection could have yielded more information. A study directed explicitly at practicing therapists may have added other findings. It may be valuable to conduct further studies from individuals with different social, cultural, educational, and professional backgrounds.

OT students urged professors to recognize the Pandemic's negative impact on students' mental health; thus, educators should be flexible and supportive without sacrificing education quality. Regarding the future, students recommended their peers be patient and try their best to fulfill their responsibilities during the Pandemic. They emphasized that students should keep organized and focus on their studies more than ever. Since the outbreak of COVID-19, the USDE (2020a) has taken measures to provide financial funding to college students; the U.S. Secretary of Education stated, "We do not want unmet financial needs due to the coronavirus to derail their learning" (para. 2). Similarly, the professionals called for OT/OTA students and educators to be resilient while engaging in lifelong learning and accepting new changes. Finally, they noted the stress of living through a pandemic is a universal experience.

Based upon the insights shared by students and professionals, the recommendation for future practice includes adhering to the roots of the profession, preserving both patient and practitioner well-being, refining skills, flexibility, and change to assisting others through advocacy. Therefore, future practice should focus on improving mental health services in becoming a role model for occupational balance, developing telehealth skills, and most importantly, demonstrating the value of OT to all.

Future research is needed to examine the effects of the Pandemic on OT stu-

dents, practitioners, and OT practice. Assuming the Pandemic persists, the researchers recommend re-administering a similar survey and interview to identify student and professional coping levels and strategies as time progresses. Re-administering this study in the future may also determine if occupational performance returns to pre-pandemic levels. Another recommendation is for a study to assess how the Pandemic affected OT/OTA students' and working OTs/OTAs' career situations, job plans, and lifestyles. Lastly, we recommend including resources from the [WHO \(2021\)](#), [CDC \(2021b\)](#), and [National Institutes of Health \(2020\)](#) in future OT research to identify international and domestic regions most affected by the Pandemic, which can aid the development of effective global OT intervention plans.

Dr. Tedros Adhanom, general director of the WHO, was quoted in March 2020 as saying, "Pandemic is not a word to use lightly or carelessly. It is a word that, if misused, can cause unreasonable fear or unjustified acceptance that the fight is over, leading to unnecessary suffering and death" ([WHO, 2020b: para. 7](#)). As Dr. Tedros articulated, the magnitude of COVID-19's devastation was dawning in the global community. Nearly every individual worldwide knows the debilitating effects that social distancing and quarantines produced, amplifying depression and isolation. In spite of these challenges, our study has shown that our profession's occupational mindset remained with OT students and therapists and helped them cope and function during this global Pandemic.

Positive effects may emerge for the OT profession as a result of the Pandemic. Occupational therapists may be more adept at quickly and efficiently adjusting to future unforeseen circumstances. As a result of COVID-19, many practitioners have acquired new skill sets, such as providing services with limited resources or in an alternate format. Occupational therapy practitioners may also have a deeper appreciation for their clients' perspectives having endured the COVID-19 Pandemic. Just as sickness and injury force clients to abandon previous habits, roles, and routines, the Pandemic uprooted the OT practitioners' practices. Practitioners may sympathize and be better equipped to guide clients when faced with challenges. Lastly, the Pandemic bred a sense of connection between the OT profession and other education and healthcare disciplines. Many worked closely together to serve the public, keep them safe, and fight COVID-19. As a profession, our challenge is to now proceed bravely into the future to strengthen alliances, deepen and expand our services, and ultimately serve humanity to the best of our ability.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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