"I had to adapt to continue being a student to the best of my ability": Identifying Occupational Therapy Students' Processes of Adapting to Academic Disruption

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Keywords

Occupational therapy students, COVID-19, occupational disruption

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ABSTRACT

In the wake of COVID-19, practitioners, educators, and students had to shift to virtual interactions while experiencing significant unknowns and valid fears. This project describes the lived experiences of 37 occupational therapy students who lived through this international pandemic examining their reflections of how occupational therapy theories and models of practice could inform approaches to adapt to the changing context of their lives. Narratives of students collected as part of routine educational assessments in an introduction to occupational therapy theory course were examined using methods of content analysis to understand the perspectives of students' needs, supports, and mechanisms of adaption as well as how students used personal experiences as part of transformative learning in the process of understanding approaches used clinically in occupational therapy practice. Three thematic categories emerged: 'the demand to adapt,' 'engagement,' and 'mastery/agency.' More students describe connecting to concepts from the model of Occupational Adaption (OA; Schkade & Schultz, 1992) versus other models of practice to achieve satisfactory engagement with occupations. Understanding these mechanisms of adaption may help faculty and university administrators effectively develop intervention strategies to help manage students' reactions to disruptions in the future.

Introduction

In the early months of 2020 the United States moved from eating out, going to work, and attending school to federal and local mandates for self-isolation, social distancing, and work/study from home due to the novel Coronavirus or COVID-19. Educational institutions across the globe including primary, secondary, and graduate levels all shifted drastically from in-person to virtual learning (König et al., 2020; Schuchat, 2020). Throughout the world over 150 countries closed schools and in total over 80% of students worldwide were impacted (UNESCO IESALC, 2020).

The faculty and staff of these institutions confronted unprecedented challenges in shifting from face-to-face to virtual teaching (Mishra et al., 2020; Young & Donovan, 2020). The immediacy of this transition forced students to make logistical and pragmatic decisions beyond how to continue to learn. Many returned to parents' homes thousands of miles away from their academic programs. Some students decided to stay in their university apartments - alone. At this same time incessant reports of rising cases and deaths across the nation and locally were coupled with concerns of lack of personal protective equipment (PPE), capacity to care for an onslaught of ventilator needs, and a call out to all healthcare providers, including occupational therapists to prepare to respond to a call for emergency front line workers. How all of this impacted the many students across the country is hard to fathom.

Traditionally, in medical and allied health professional education the first one to two academic years are spent with cohorts working closely together in experiential problem-solving groups and simulated lab practicums (Giles et al., 2014). This is a valued and a long-standing approach to preparing students for clinical fieldwork experiences (Giles et al., 2014). However, the pandemic made in-person learning impossible overnight. The lack of readiness and confidence of faculty and occupational therapy students to shift away from this traditional form of teaching/learning can produce mental health strain on both groups (Gloria & Uttal, 2020). The profession of occupational therapy has long understood the transactional influence of occupation, participation, and environment on the health and wellbeing of the person (Law et al., 1996). However, there is little to no research on the impact of international pandemics on the health and well-being of graduate students. If and how students adapted in response to this academic disruption is vital for the profession to understand to best support these students as they continue on their academic journey and to increase educators' readiness and confidence for the future.

Literature Review

Research of students in China, the first country to be impacted by the novel coronavirus, documented high levels of anxiety linked to economic, academic, and everyday life disruption (Cao et al., 2020). Research studying the relations of stay-at-home orders and the perceived impact of COVID-19 on daily life of citizens across the United States found a positive association with increased health anxiety and financial worry (Tull et al., 2020). Increased stress was also linked to forced isolation resulting from quarantine and separation from family members and significant others (Bavel, 2020; Stark et al., 2020).

Previous research of occupational therapy students in the aftermath of destructive hurricanes found diminished satisfaction with occupational performance as well as poorer mental health (Pizzi, 2015) specifically when notable disruption in habits, roles, and routines occurred (Smith et al., 2011). This literature stems from evidence following devastating disasters isolated to a singular region of the country with a clear beginning and end versus an international experience with many unknowns. There is a dearth of research on the impact of international pandemics on the health and well-being of graduate students and efforts they use to help them adapt to the demands to continue their occupational roles.

The literature is clear that the first year of transition from one level of education to a more advanced degree produces high levels of stress and anxiety (Bewick et al., 2010; Conley et al., 2014). There is also literature (Lewis-Kipkulei et al., 2021; Soja et al., 2016) that align high levels of occupational therapy student stress on pressures to achieve the high academic standards (Accreditation Council for Occupational Therapy Education [ACOTE], 2018) set by the profession in these intense programs of study. In fact, a scoping review examining stress experienced by occupational therapy students found stress was prevalent and the primary source of stress was related to academics (Lewis-Kipkulei et al., 2021). However, these researchers identified there were individual factors such as student coping strategies and contextual factors such as methods of teaching and faculty assessment that correlated to perceived levels of academic stress. This review also found that educational programs offered minimal pedagogical approaches to address student stress. This might be explained by findings from a recent study by Grab et al. (2021) that the majority of occupational therapy students did not believe their professors had awareness of their stress despite professors' perceptions that they were aware. With minimal in person interactions the capability for faculty to assess student stress levels during the shift to virtual teaching may have become even more inaccurate.

The trajectory of student negative mental health experiences during the first year of college also increases the concern for the impact of COVID-19 on first year students. Research identifies that on average students experience moderate increases in anxiety and depression from entry into college through the spring quarter of their first year (Conley et al., 2014; Kroshus et al., 2021). Finally, research finds that one of the most commonly used strategies by occupational therapy students when dealing with stressful situations includes seeking social support (Mitchell & Kampfe, 1993). It is quite clear that with shelter-in-place and social distancing orders the tactic of seeking social support was significantly impacted. While virtual socializing provides students with options, the evidence suggests these experiences are less gratifying than in-person social connectedness (Clark et al., 2018).

Reflecting Upon Occupation-Based Models of Practice
Theories of disablement come from many perspectives to understand the causes and impact of a lack of participation, exclusion, and disfranchisement of individuals, groups, and communities. Occupational therapy curricula require students to develop an understanding of foundational conceptual practice models that are fundamental across

all contexts of the profession (ACOTE, 2018). Conceptual models of practice are used in the profession to define aspects of occupation and act as a guide for practitioners in explaining clinical phenomena and informing intervention design (Creek, 2008). The theories students are exposed to provide explanations for the use of occupation-based practice and inform them on different approaches for developing client-clinician relationships as well as the application for interventions. During their exposure to models of practice students are challenged to reflect on their past knowledge and experiences to reframe perspectives through a theoretically based occupational therapy lens.

Processes for understanding theory at a level that it can be applied to assist them in clinical decision making and inform intervention design begins in the first years of OT programs and continues into the early years of practice (Nash & Mitchell, 2017). Research shows the ability to translate academic learning into confident application can be reinforced when the student is able to personally relate to the concepts (Bryan et al, 2009). However, there are critiques that gaps exist between models of practice and their utility in practice (Towns & Ashby, 2014). Although literature exists, there is a lack of research that examines occupational therapy student uptake, synthesis, and use of conceptual practice models. One study exploring student perspectives of using occupational therapy frames of reference (FOR) as a means to link theory to practice found that at 15 months post-entry into their academic program and following their Level I fieldwork experiences, students were questioning the value of FOR in practice (Nash & Mitchell, 2017). Another study by Towns and Ashby (2014) found that fieldwork supervisors can have a positive or negative role in shaping a student's attitude and perception of the clinical utility of occupation-focused and professional theoretical knowledge. These researchers found that students embraced models of practice more when their clinical supervisor was able to articulate and demonstrate the integration of models of practice into professional reasoning (Towns & Ashby, 2014).

The COVID-19 pandemic was a devasting event that happened to correspond with the final weeks of 37 occupational therapy students' academic first year and their participation in the course *Foundational Theories of Occupational Therapy*. To assess their knowledge of occupational models of practice they were asked as part of their final examination to reflect upon how the abrupt and unexpected events of COVID-19 had disabled them from being able to perform their everyday occupations and to articulate how a model of practice explained their own methods of adaption. This question aimed to further the integration of models of practice into the development of professional reasoning of students and affirm the utility and value of models of practice as a means to describe adaptive processes. However, the student responses to this question also provide insight into the lived experiences of students during a time of occupational disruption such as national disasters and international pandemics.

Purpose

Understanding the perspectives of students' needs, supports, and mechanisms of adaption can help faculty and university administrators to effectively develop intervention strategies to help students manage and regulate their emotions and reactions to disruptions in the future. Additionally, they might also expose how students use personal experiences as part of transformative learning in the process of understanding approaches used clinically in occupational therapy practice. Therefore, the purpose of this study was threefold:

- To identify and describe what needs, supports, and mechanisms of adaptions students use to manage and regulate emotions, stressors, and obstacles when disruptions in academic education are encountered.
- To examine and understand if and how students use personal experiences to facilitate a transformation in their knowledge of how conceptual practice models function in the process of adaption to disablement.
- To identify which models of practice students ascertain as most useful in their own work to participate in meaningful life occupations.

Methodology

This study was a retrospective analysis of data collected as part of routine educational experiences. The Institutional Review Board at the researchers' university determined the study had exempt status.

Participants

Participants in this study were first year students enrolled in an ACOTE approved entry level clinical doctorate program in Spring 2020. Narratives were student responses to the Foundations of Occupational Therapy Theory course's final examination question: *In the middle of this course we had an immediate and abrupt unexpected event disable how we perform the occupations of our lives. Considering the many occupation based conceptual practice models we have explored during this course please describe which model best aligns with how you have adapted <u>and</u> how concepts from that model explain your capacity to continue to participate and be engaged.* Prior to beginning this research study and analysis of the narratives, students were informed of the use of these responses for this project and given the option to have their narrative removed from analysis.

Procedures

Data Collection

Student written narrative responses to the final exam test question were collected one month after experiencing local stay-at-home orders and a shift to on-line learning. These narratives were stored on a secure password protected computer. Narratives were collected into one large working document by the first author who was also the course instructor. All identifiers were removed in this working document prior to distribution of narratives for analysis.

Data Analysis

Content analysis was used in analysis of narratives to achieve the first two aims of this study by identifying common themes across narratives and defining the essence of these themes. We used the steps of content analysis described by Erlingsson and Brysiewicz (2017) to systematically analyze the raw data to form themes. This approach had two distinct phases of analysis. In phase one the first author condensed or shortened meaningful text to hone in on the core meaning of the narrative. Each researcher then independently assigned a code they believed best represented the meaning of the condensation. The researchers then came together in a consensus meeting to discuss their individual interpretation of code meanings and iteratively develop a mutually agreed upon meaning of a code, ultimately developing a code dictionary. See Table 1 for an example of an early phase of analysis as we moved from text, to condensed text, to code.

Table 1

Early Phase Coding Analysis Example

ORIGINAL Text: *The current status of our world has greatly changed how I perform occupations in my daily life. In order to adapt to these uncertain times, I mainly used the Occupational Therapy Intervention Process Model (OTIPM).*	
CONDENSATIONS	**CODES**
Changes to how I perform occupations in daily life	adapting
Uncertain times	uncertainty

In the second phase of analysis researchers again worked independently to group codes that shared similar underlying meanings based on the code dictionary developed in phase one of analysis with the goal to organize these into thematic categories (Erlingsson & Brysiewicz, 2017). We followed this with a second consensus meeting to achieve mutually agreed upon theme categories. During this second consensus meeting, original code categories from one researcher included 'initial impact,' 'mentality,' 'occupation,' and 'performance patterns' with accompanying subthemes while the other researcher had three large theme categories of 'impact,' 'adaption,' and 'occupation' with accompanying subthemes. Through a process of reviewing definitions informed by the Occupational Therapy Practice Framework 4th edition (OTPF4; AOTA, 2020) and models of practice the overarching themes with associating subthemes were finalized.

To achieve the third aim of this study, to identify the models of practice students ascertained as most useful in their own work to participate in meaningful life occupations, we used a simple frequency count. Student reports were counted and grouped into the different models of practice discussed in the course content.

Reflexivity and Trustworthiness

Methods and procedures used to enhance the rigor and trustworthiness of the study included using member checking of findings with students from the cohort with previous qualitative research experience to determine credibility of the themes and their definitions (Krefting, 1991). Additionally, researchers used critical reflection to examine how our own experiences of adapting to the restrictions of the pandemic were potentially informing our interpretations (Yin, 2016). During the consensus meetings we had extensive discussion on this potential bias and worked to analyze data from an objective perspective. Lastly, the primary researcher had prolonged engagement with the data, keeping a reflective journal of meanings of the student experience connecting it to existing and emerging literature regarding the experiences of students across the world during the pandemic (Finlay, 2011).

Results

Participant narratives came from 37 first year occupational therapy doctorate (OTD) students who were all female and the majority identified as White. Demographics of students can be seen in Table 2.

Table 2

Demographics

Gender	
Female	37
Male	0
Gender non-conforming	0
Not disclosed	0
Race/ethnicity	
White	28
Black	0
Asian	2
Hispanic	4
Multiple	1
Not disclosed	2

Content Analysis of Narratives

During content analysis of the narratives three overarching themes emerged with associated subthemes: *Impact - the effect of COVID* with subthemes of *performance patterns* and *mental health*; *Self-assessment* with subthemes of *motivation and volition,* and *influence of routine*; and t*he role of valued occupations* with subthemes of *adapting and engaging,* and *mastery*.

Theme One: Impact – The Effect of COVID-19

Across all narratives, students recognized that how they performed daily occupations had dramatically changed. One student described it as having a *"ripple effect on everything and everyone"* across the world. The definition of this theme was simply identified as the effect of COVID-19 on the student. Two subthemes of 'performance patterns' and 'mental health' while interconnected, highlight a recognition of how broad the impact was.

Performance Patterns

The subtheme of performance patterns emerged as a common assessment by students that structures shaping their previous everyday life were severely affected. An epitomizing quote highlights the most notable change: "[I am] *no longer able to socially participate face to face with my classmates and professors."* Students recognized how everyday habits, roles and routines needed to be adapted: "*I was able to create a routine and schedule surrounding online schooling that allowed for me to find end times…allowing for my work-life balance to continue."* Importantly, at this point in time students held onto the belief this disruption in their lives was short lived: *"every challenge and series of rocks that interrupt our life flow are only temporary."*

Mental Health

Students' narratives showed conscious reflection of the impact that moving to remote learning was having on their mental health. This statement represents a common description from across student narratives and provides insight into how anxiety and stress producing the shift was: *"I was not mentally responding in a manner that was adaptive, preventing me from participating in this occupation [being a student]."* As graduate students often hold high expectations for academic achievement the barriers created by virtual learning may have produced extreme strains on mental health and wellness. Students appeared to be acutely aware of this impact as echoed by this student: **"***I knew that this shift in our world could have an enormously negative impact on my mental health."*

Throughout much of the narratives that fell into this subtheme of mental health was a resonance of hope that appeared to support student resilience through the experience. Students described looking forward to returning to normal: *"I look forward to when it will be safe to participate in in-person social gatherings and classes"* but they also described how important having hope was to them. A heartfelt statement from a student embodied how important this was: *"I have leaned on the practice of gratitude during this time, and it has allowed me to adapt my mindset from one of despair to one of hope."*

Theme Two: Self-assessment

Students all described a process of recognizing the need to consciously evaluate how effective they were in adapting to being a student in a virtual world. However, they identified different factors that signaled if they were being successful or not. The definition of this theme was informed by Schkade and Schultz (1992) and was

determined to be the students' assessment of factors that were impacting their own efficiency, effectiveness, and satisfaction with occupational performance. These factors emerged as two subthemes: 'motivation and volition' and the 'influence of routine'.

Motivation and Volition

Many of the students described an initial loss of motivation to participate not only in the role of student but in other occupations. One student stated their **"motivation for all occupations, declined initially"** while another said their *"motivation to do schoolwork has decreased since transitioning to an online format, but I still do value my education and being successful in classes.**"** From many students their volition to be successful or to remain engaged emerged as an important factor in their assessment of their adaptive process. From a student's description of their own self-assessment one can see how important their will to be successful was:

> *During the first part of self-quarantining, I was very lazy, with no schedule, and was not engaging in my normal occupations. I noticed my mental health starting to suffer and I was struggling to engage in many of my roles and occupations. This is when I realized I needed to actively adapt to my new environment and context in order to be successful in my occupations. I needed to self-assess and realized I wasn't satisfied in a few areas and I was being inefficient and ineffective.*

Influence of Routine

Another factor that was a common subtheme in this larger theme of self-assessment was the recognition of the influence of routine or importantly the loss of routine in their lives. One routine that was identified by the majority of the participants was their participation in exercise or leisure activities as a way to balance their lives. Exercise was a common routine as this student described: *"After identifying my issues, needs, and goals, I created an exercise routine by going on walks twice daily with my dad and practicing yoga every night. Having exercise as a regular part of my day helped me decompress and renewed my focus."*

Theme Three: The Role of Valued Occupations

An overarching theme was the role of valued occupations or the capacity to participate in occupations that students had previously prioritized as part of their everyday life pre-COVID-19. This theme was defined by the researchers as the things a student needed to, wanted to, or were expected to do. Many students discussed actively recognizing occupations they had lost or were dissatisfied with and the contributing factors. This student described their disruption in the occupation of being a student and the impact of context:

> *When I moved home, I experienced a noticeable disruption in my sleep schedule; I was surrounded by distractions from my family; and I no longer had access to a designated study space. All of these changes in my physical and social environments, now made the tasks of being a student like studying, reading, and paying attention more challenging.*

This theme had two subthemes: 'adapting and engaging' and 'mastery'.

Adapting and Engaging

Students described the processes they engaged in to adapt their context or their manner of doing in order to continue to engage in priority occupations. This student stated: *"[I went through] a process of making personal and environmental changes continuously until I determined what has worked best."* The occupation of being a student was described by most as the most important and biggest challenge:

> The thing that had defined me most recently, being a student, needed to be changed. I was no longer going to class every day or studying with my roommates each night. Instead, I found myself in a situation with an unprecedented amount of free time, independence, and solitude…so what was I to do with all of it now?

Being a student was a prioritized occupation for most but other occupations were also important such as: leisure, exercise, socializing, and the value of participating in creative outlets. In fact, some students saw the shift to virtual learning as an opportunity to revisit occupations they had stopped due to the demands of graduate school:

> I took this pandemic as a momentous opportunity to redirect my occupational engagement back to these areas of my life in which I had begun to lose focus. I hike with my dog every day, exploring new trails and open spaces. I have engaged in new culinary adventures including breads and pastry. Each week I zoom with college friends and participate in a virtual family game night.

Mastery

Relative mastery is often associated with the Occupational Adaption model (OA; George et al., 2004) and was a common concept described by students who identified using OA as well as those who did not. Students applied it to their role as student as well as their everyday life as mentioned by this student: *"At this time, mastery in leisure and virtual social participation is just as important as mastery in coursework in order to have the most balanced, positive days."* Many strategies were used by students to improve their satisfaction with occupational participation that include changing their context to achieve mastery: *"I modified my study space by moving my computer and study materials to the kitchen counter every morning instead of studying while in my bedroom"* or using old strategies in this new world: *"I restored my practice of creating a daily productivity chart to make sure I was meeting the expectations of my role."* Many students described new strategies or tools to help remain successful. This student identified a new online app that assisted them: *"I learned to recognize when I am feeling overwhelmed, and I downloaded the Headspace app to practice meditation during these times."*
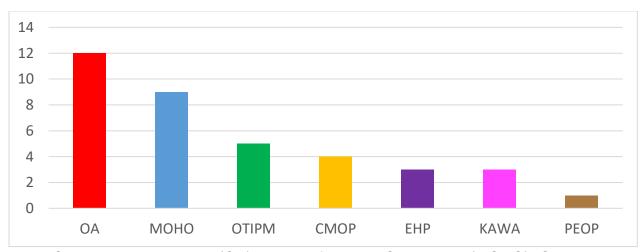
Students also identified supports they felt were important to maintaining their occupational identity and mastery over their everyday life. These included support from faculty and university staff: *"Fortunately, through the aid of technology and effective problem-solving on behalf of the University staff, I do not think that this occupation has been critically jeopardized"* as well as family and access to resources: *"I feel supported by my family, our physical home, and the resources we have during this uncertainty."* Some students recognized they had supports when many others in the world did not.

One student stated: *"In a moment of despair, it is easy to lose sight of all the supports and resources that we have"* and another *"Personally, I have fortunately not been as severely affected [by the pandemic] as some."*

Use of Models of Practice
The other aim of this study was to identify which conceptual models of practice students identified as most helpful in their reflection on how they responded to the disruption in their lives. Occupational Adaption was clearly the model most students preferred with 12 students describing use of this model followed by the Model of Human Occupation (MOHO) (9). See Table 3.

Table 3

Frequency of Models of Practice Used

Note: Occupational Adaption (OA), Model of Human Occupation (MOHO), Occupational Therapy Intervention Process Model (OTIPM), Canadian Model of Occupational Performance (CMOP), Ecology of Human Performance (EHP), Kawa, Person Environment Occupation Performance (PEOP)

Discussion
This study's findings highlight the significant impact of shifting to virtual learning and social isolation on student mental health similar to other recent research related to the impact of COVID-19. A recent study by Wang et al (2020) on the mental health of students during the pandemic showed the majority of participants reported increased depression and stress/anxiety and importantly also found less than half of the students reported having adequate coping strategies. Another study (Son et al., 2020) describe similar results and identified multiple stressors such as worries about health, difficulty in concentration, disrupted sleep, decreased social interaction, and concerns about academic performance as major contributors to their stress.

Occupational Disruption of Students
Occupational disruption is the interruption to a person or community's capacity for engaging in prioritized purposeful and meaningful occupations (Whiteford, 2010). In a study by Sima et al. (2017) researchers explored the occupational recovery process of individuals post-natural disaster who had experienced occupational disruption. These researchers identified their participants experiencing profound disruption in both leisure and productive occupations similar to the narratives of this study's participants. However, unlike research on occupational disruption caused by natural disasters that destroy the physical landscape (Pizzi, 2015; Sima et al., 2017), this study's participants described how valuable it was to be able to engage or re-engage with occupations tied to the natural environment such as taking walks; alone or with others they were isolating with. In fact, for many students the occupation of exercise or outdoor activity seemed to be the strategy they used to achieve occupational balance and adapt to the new way of life. The value of the occupation of leisure in supporting health and wellness is supported by the newest OTPF (AOTA, 2020) and by research that sport as a leisure occupation has positive outcomes on health and wellness (Costalonga et al., 2020). Considering these findings leisure, exercise, or engaging with nature might be one method academic institutions include in recommendations for students in times of occupational disruption.

Mental Health, Hope, Coping and Resilience
The students in this study described how having hope and positive coping strategies provided a level of resilience to their occupational disruption and supported their mental health similar to other research. One recent study explored if grit and gratitude of students in a large urban university predicted how much impact the pandemic had on overall functioning and resilience of students (Bono et al., 2020). Grit was described as having passion and determination to achieve long-term goals when confronted with challenges (Duckworth et al., 2007) and gratitude for the emotion experienced when recognizing others' intentional concern for our wellbeing (McCullough et al., 2001). Bono et al. (2020) suggested these traits are modifiable and offered recommendations on interventions to help increase the grit and gratitude of students as a means to help facilitate uptake of coping strategies. Of interest, some of these methods include supporting students in their capacity to adapt, to persevere when challenged, and establishing goals. These approaches are similar to the methods many of the OTD students describe using in this current study as represented by the statement of this student: *"When faced with the challenge of not being able to go to the gym anymore, I had to self-assess and consider the many other ways I could find a way to exercise."*

Pedagogical approaches that utilize mindfulness (Dean et al., 2017) and self-reflection have been found to be associated with well-being, life satisfaction and stress management of students (Boyraz & Waits, 2015; Nakajima et al., 2017). Self-reflection involves examining the self and exploring potential adaptations one can make to themselves or their situation (Boyraz & Kuhl, 2015). However, other research on traditional protective factors used to cope with stress suggest these are not adequate or appropriate for dealing with the stressors created by a pandemic (Stark et al., 2020). It

is unknown whether or not asking the students to reflect upon their adaptive processes impacted their grit or gratitude however, many of the narratives of students describe their capacity to persevere as well as recognize the availability they had to resources and supports.

Self-assessment and self-reflection have also been found to be associated with academic performance in students (Andrade & Valtcheva, 2009). Research also shows positive thinking and resilience mediated the negative impact of the social restrictions created by COVID-19 on mental health in college students in Wuhan, China (Yang et al., 2020). We identified that many of the students in this current study appeared to use approaches of positive thinking, self-assessment/reflection to maintain resilience as epitomized by this narrative from one student: *"[Everyday] I ask, what is motivating me each day to wake up with a grateful attitude and positive outlook?"*

However, another form of self-assessment is self-rumination; this form of self-assessment tends to focus on the negative and leads to decreased life satisfaction (Boyraz & Efstathious, 2011; Boyarz & Kuhl, 2015). Ayduk and Kross (2010) conducted a review of self-reflection styles when individuals were confronted with negative experiences. They found that when individuals used a self-immersive perspective to reflect on a situation, an approach where they see themselves in the experience as if it were happening at that moment, these individuals tended to ruminate more, focusing on the negative thoughts and emotions, leading to increased depression and anxiety. However, when individuals used a self-distanced perspective, having the ability to take a step back and view the situation as an observer, allows them to look more broadly at the situation and make more positive adaptions, leading to increased mental health and life satisfaction.

Based on the results of this study, it appears students were engaged in self-rumination when they first transitioned from in-person learning to the virtual environment. Many students reported that their motivation and engagement in habits decreased, along with social interactions, similar to what was occurring globally (Kleinberg et al., 2020). Based on the information presented by Ayduk and Kross (2010), it appears students were initially reflecting on this situation through a self-immersive perspective. The examination question analyzed in this study may have been the needed prompt for the students to take a step back and use the self-distanced perspective. Looking more globally at the situation allowed students to move beyond self-rumination to self-assessment, allowing themselves to accept their current situation and open themselves up to be more open to changes that needed to be made in their current environment, roles and habits in order to increase their overall well-being and life satisfaction.

Models of Practice
The students were asked to examine their own experiences of occupational disruption during COVID-19 and how their own responses to adapt might be explained by an occupational therapy model of practice. Exploring this type of use of student reflection on dealing with disruption might provide a useful approach for educators in facilitating understanding of these sometimes-abstract concepts. It is difficult to project as to why

OA is most cited by students but it may be as simple as exploring the wording of the question the students were presented with. However, Nayar and Stanley (2015) describe occupational adaption as more than a model but as a social process in the everyday that examines the role of occupation in supporting positive occupational identity. In fact, these authors suggest that their study's findings advance the notion that exploring the concepts of environmental press and relative mastery described in occupational adaptation might be used as strategies to proactively respond to altered situations and broaden occupational choices. It may be that when the students in this study were reflecting upon their own experiences and examining the models they were drawn to OA because of the social processes they identified experiencing. Further study on OA and adaption process to occupational disruption is strongly encouraged.

Limitations and Future Research

A number of limitations should be considered when interpreting the findings of this study. Although the majority of participants in this study identified as being White and women, this is representative of the profession (AOTA, n.d.). Additionally, these findings may have limited transferability to other students from other academic settings or geographic regions. The demographic information collected was limited to gender and ethnicity/race and therefore understanding the impact of the role of socio-economic status, marital status, or social supports is unknown. Future studies on student adaptive processes to occupational disruption might examine the impact these factors play on positive thinking, resilience, and mental health. Data was also collected at one point in time and how students continued to adapt or not to the chronic stressors and ongoing demands created by the pandemic is unknown. Moreover, students were responding to a final examination question with the presumption of achieving an optimal final grade. Therefore, we must consider whether there was a response bias to this question geared toward what the student believed would achieve an optimal assessment from the course director. However, student responses seemed to be an honest reflection of the impact of COVID-19 and how they were adapting. Lastly, understanding if and how asking students to reflect upon their own use of a models of practice translates into their knowledge and use of it when working with clients is unknown. Exploring this approach as a means to reinforce the embracing of models of practice among working professionals would be important.

Implications for Occupational Therapy Education

In an *American Journal of Occupational Therapy* editorial on occupational therapy's role in times of disaster, Stone (2006) stated that an appropriate response to a disaster is "to put the life of a person as well as the community back in order" (p.7). Stone continued to outline how occupational therapy practitioners (OTPs) have the skills to address the occupational disruptions that occur to people's lives following a disaster. These include: providing choice about routines, building connections to social supports and resources, and providing an ability to exercise control over how best to organize their daily lives (Stone, 2006). Based on this study's findings and using recommendations from this editorial, faculty and staff might pro-actively develop specific protocols so that their academic programs can provide timely support for students in all types of natural disasters (viral or other). Some specific recommendations are to acknowledge the

existence of the new stressors that students are experiencing as they are layered upon pre-existing ones and consider how contextual factors of the academic program might be modified. Many of the stressors students expressed in their narratives were unrecognized by faculty. However, at the authors' academic institution OTD students worked together with faculty to identify ways to lessen the stressful contextual factors in an effort to compensate for the newly added stressors created by COVID-19. Some examples that were identified were to provide flexibility in assignment due dates or shifting grading to pass/fail. Another example was providing a mix of synchronous and asynchronous lectures so that students could have flexibility in their routines to accommodate their virtual context of learning.

In addition, the findings of this study suggest academic programs might proactively work to ensure students have ongoing social supports whether from members of their own cohort or otherwise. Providing opportunities for social connectedness during occupational disruption can also provide structure and organization to a student's schedule which was an area identified by many students as critical to their mental health and adaptive process. It may also be that academic programs could actively provide recommendations for daily leisure activities and encourage and support student engagement as part of their weekly schedules. Examples from this program include assuring students had the contact information of the University Wellness Center, having regular email, having town hall meetings to keep students up-to-date on COVID-19 related university requirements and the impact on their education, weekly mindful minutes, and engaging in non-academic faculty/student gatherings, i.e., trivia night. Finally, exploring new and innovative ways to allow students to examine how models of practice function in their own lives may be a strategy faculty might consider for increasing students embracing and understanding the value and power of occupation during times of unbalance and disruption.

Conclusion

Although it is imagined that most of the world hopes the coronavirus pandemic was a unique and rare international disaster, academic programs around the world must use the lessons of this experience to pro-actively prepare for the possibility that other viral pandemics may occur. Additionally, depending on geographic region, natural disasters can abruptly interrupt a student's course of study. The findings from this study highlight that students may initially ruminate and mourn the loss of predictable and expected routines and habits of everyday life. There is also the probability that disruption to their occupational identity as a student will produce increased stressors and impact their mental health. However, by reflecting upon how occupation works to impact their own health and wellness students might be able to use their own reflections in ways to self-assess their own capacity to adapt. Through examining their own experiences of occupational disruption and methods of adaption they may better embrace models of practice and translate this into effective theoretical occupation-based interventions with clients.

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