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The Areas of Occupation Addressed by Utah's School-based Occupational

Therapy Practitioners and the Factors that Influence School-based Practice

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Defense August 17, 2021

Revised September, 6, 2021

In partial fulfillment of the requirements of the Occupational Therapy

Doctoral degree at the University of Utah

This work is dedicated to the occupational therapy practitioners working in school systems. On average, it takes nearly two decades to integrate research into practice (Brownson et al., 2012; Drolet & Lorenzi, 2011; Morris et al., 2011). My hope is that this research will improve school-based practice long before the 2040's when a new generation of occupational therapy practitioners will be working with a new generation of students.

I would like to thank my capstone committee for their help in completing this research project. Dr. Pollie Price, Ph.D., offered near-weekly guidance to help me see the "larger forest from the individual trees" and helped me appreciate the richness found in qualitative research. Dr. Anne Kirby, Ph. D., provided guidance in developing the survey and focus group questions and helped me in the interpretation of the statistical analysis. Dr. Heather Watt, OTD, provided valuable insight from her experience as a school-based practitioner and researcher.

Lastly, I would like to express appreciation to the survey and focus group participants. Without their input, there would be no research to report and no direction to improve our practices.

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The Areas of Occupation Addressed by Utah's School-based

Occupational Therapists and the Factors that Influence School-based Practice

Introduction

Occupational therapy (OT) practitioners have provided therapy services to students with disabilities in school systems since the 1960s (Colman, 1988). Nationally, school-based (SB) employment is the second-largest practice setting for OT practitioners (American Occupational Therapy Association [AOTA], 2015; AOTA, 2020). In Utah, SB employment is the fourth largest practice setting for occupational therapists and the third largest for occupational therapy assistants (Utah Medical Education Council, 2018).

School-based OT practitioners work to increase student's participation in meaningful occupations and school activities that may include academic (e.g., math, reading, writing), non-academic (e.g., recess, lunchroom, hallway), and extracurricular activities (e.g., cheerleading, sports, and dances) (AOTA, 2014; Bolton & Plattner, 2019). Over the last half-century, legislative action has shaped the provision of OT services (AOTA, 2017). The reauthorization of the Individuals with Disabilities Education Act in 1997 (IDEA, 1997, Pub. L. 105–17) aligned special education and regular education services by uniting participation in one curriculum and ending the notion of separate programs. In 2004, the Individuals with Disabilities Education Improvement Act (Pub. L. 108-446) mandated school teams to consider school participation across non-academic and extracurricular activities in addition to the general education curriculum. In addition to IDEA, the Every Student Succeeds Act of 2015 (ESSA, 2015, Pub. L. No. 114-95) identified occupational therapy practitioners as "specialized instructional support personnel" that support students in the regular education setting.

Occupational therapy's distinct contribution in school systems is facilitating students' engagement in occupation to support participation in school-related activities, which influence health and well-being across a lifetime (AOTA, 2014). Participation can be broadly defined as "involvement in a life situation" or "engagement in daily activities" (World Health Organization, 2001, p. 10). Often, participation can be thought of as the broadest outcome from occupational therapy services (AOTA, 2014).

Despite federal mandates to address student's participation, school-based OT practitioners have historically focused their interventions and outcomes on client factors (e.g., attention, perception, sensory) and performance skills (e.g., manipulation, coordination) in the attempt to "fix" the student's handwriting or sensory processing problems (AOTA, 2014; Mu & Royeen, 2004). Over the last decades, many school-based OT practitioners have favored remedial interventions as they work directly with students in settings outside of the classroom (Spencer et al., 2006). These habitual therapy "pull-out" sessions have led some teachers and administrators into labeling OT practitioners as "handwriting," "motor," and "sensory" remediation specialists (Bolton & Plattner, 2019). Unfortunately, these titles inaccurately define OT practice at a time when the profession is poised to broaden the scope of SB practices. Recently, Bonnard and Anaby (2016) argued that current SB practices appeared to narrowly address student's participation across academic, non-academic, and extracurricular activities. In addition to only partially meeting student's needs, this narrowed practice approach appeared to be gradually eroding the profession's identity and link with occupation (Bolton & Plattner, 2019).

School-based practice across rural and underserved areas such as Utah can present unique challenges when attempting to broaden the scope of OT services. Utah's growing population is concentrated along the Wasatch Front, leaving large geographically rural communities without

OT coverage. A 2017 survey of occupational therapy practitioners found that Utah had a lower OT practitioner to population ratio than many other western states and was ranked 42nd across the nation (Utah Medical Education Council, 2018, p. 31, 38). Furthermore, this survey did not gather any input from occupational therapists residing in approximately one-third of Utah's counties, suggesting a limited workforce, especially in rural areas.

In addition to an OT practitioner shortage, Utah also faces a perpetual lack of funding for public education. Over the last decades, Utah has continually had the lowest per-pupil funding in the United States (U.S. Census Bureau, 2017), where public education is expected to "do more with less." Collectively these factors, among others, likely influence the provision of OT services in varying degrees, such as a practitioner's ability to practice broadly across occupational therapy's domain of practice (AOTA, 2014). Therefore, the purpose of this study was to identify the areas of occupation that were addressed by Utah's school-based OT practitioners and the factors that influenced practice in Utah's public schools. Specifically, this study had two aims.

- **Aim 1.** To identify the most common occupations addressed by Utah's school-based occupational therapy practitioners.
- **Aim 2.** To identify the factors that influenced school-based occupational therapy practice in Utah.

Background

Barriers to Broadening the Scope

Occupational therapy practitioners face a variety of factors that influence their practice.

For those practitioners working in large geographically rural settings with limited OT professionals in the workforce, the challenge to broaden the scope of OT may appear

unobtainable. I have worked in three separate school districts in northern Utah throughout my career and experienced caseloads from 80 to 225 students at a given time. High caseloads are not unique to my employment settings. In 2018, Watt (2018) reported average caseloads of 93.72 students per OT practitioner in Utah, compared to 42.62 students in Colorado. Nationally, OT practitioners reported average caseloads of approximately 40 to 50 students (Seruya & Garfinkel, 2018b; Spencer et al., 2006). Logistically, managing high student numbers across large geographical areas can limit the frequency and scope of OT services (AOTA, American Physical Therapy Association [APTA], American, and Speech-Language-Hearing Association [ASHA], 2014a). Within these constraints, OT practitioners may feel unable to provide services in the classroom setting or proportion time toward collaborative efforts (Bolton & Plattner, 2019).

Another barrier to broadening the scope of OT practice could be the collective beliefs, values, and practice habits of the therapy team and administration (Clough, 2018). Recently graduated practitioners who are poised to implement new ideas based on research findings could potentially become blocked by coworkers or others in the work environment who may be comfortable in their current practices (McCombie & Antanavage, 2017). Newer practitioners may then succumb to the status quo by following the same clinical reasoning and practice habits as their mentors. Within such work cultures, implementing best practices may take time as newer therapists "practice the change" and work to influence future habits of practice (Law & Darrah, 2014). Gradually implementing research findings can assist practitioners in broadening the scope of OT practice while also having a positive effect on the way teachers and administrators view occupational therapy services (Anaby et al., 2019; Bolton & Plattner, 2019).

Each state and local education agencies' interpretation of special education law may also influence the scope and breadth of SB practice (Truong & Hodgetts, 2017). Many states have

published guidelines and manuals outlining the policies and procedures for implementing schoolbased OT services, including the number of students allowed on a caseload and the frequency of services (Seruya & Garfinkel, 2018a). School-based OT practitioners in Utah are not currently limited in these areas, as stated in the Special Education Rules (Utah State Board of Education, 2016). However, the role of OT practitioners may be influenced by the perceived definitions of OT services which includes language in the Special Education Rules that may favor remedial type approaches (e.g., improving, developing, restoring, and preventing loss of function), as opposed to or in addition to, compensatory approaches (e.g., improving ability to perform tasks for independent functioning) (Utah State Board of Education, 2016, p. 12). By focusing interventions on client factors rather than participation, Utah's practitioners may be narrowly perceived only as motor specialists within the special education setting. Fortunately, there are ample references within Utah's Special Education Rules (p. 1, 17, 134; Table 9) that guide school teams in considering independent living needs that reflect the profession's domain of practice (AOTA, 2014). For example, OT practitioners could contribute toward assessment and intervention in the traditional special education testing areas of "adaptive (self-care)," "social/behavior," and "transition." Unfortunately, OT practitioners in Utah appear to be focusing solely on the areas of "motor" and "psychomotor" as members of the Individualized Education Plan (IEP) Teams. As OT practitioners continually report on students' motor skill abilities, often in the context of handwriting, education teams perceive that OT practitioners are handwriting teachers (Bolton & Plattner, 2019). Furthermore, state published guidelines for eligibility may also influence SB practice by overly emphasizing the results of standardized testing, which may encourage "bottom-up" approaches to "fixing the problems" for low-scoring students (Mu & Royeen, 2004). These state-produced guidelines and manuals are generally

based on special education policies that are influenced by the courts. Unfortunately, this process may not reflect the best practices identified through research (Swinth et al., 2007).

Enablers to Broadening the Scope

Caseload and workload are different conceptual approaches to define, describe, and manage the work demands of occupational, physical, and speech-language therapy practitioners in school settings (Jackson et al., 2006). A caseload approach calculates the number, duration, and frequency of therapy visits to determine an employees' productivity against an organizations' staffing needs. Such an approach fails to consider the complex work demands and responsibilities faced by SB practitioners (AOTA, APTA, ASHA, 2014). Conversely, the workload approach accounts for and values the comprehensive efforts of school-based therapists in the school setting beyond their service time. These work activities include assessment, intervention, planning, collaboration, supervision, and use of evidence-based practice, as well as travel, meeting attendance, documentation, and other activities. Garfinkel and Seruya (2018) reported that therapists who followed a workload approach were able to expand their scope of practice by providing therapeutic interventions within the students' natural environments while simultaneously collaborating with other professionals. The workload approach allowed therapists to use their clinical judgment on a case-by-case basis and improved job satisfaction (p. 282-283). The workload approach broadens participation in school activities beyond the traditional pull-out setting. It also gives value to OT practitioners' participation in other educational programs and initiatives such as Universal Design for Learning, Positive Behavioral Intervention Supports, and Response to Intervention (AOTA, APTA, ASHA, 2014).

Contemporary conceptual frameworks and theories assist OT practitioners in broadening their scope of services to support participation across academic, non-academic, and

extracurricular occupations (Law & Darrah, 2014). Context therapy, and similar environmental approaches, emphasize participation in the natural setting (Anaby et al., 2019; Law & Darrah, 2014). These environmentally-focused approaches encourage "top-down" problem solving within assessments and interventions by supporting participation and remediation together (Law & Darrah, 2014; Mu & Royeen, 2004). Utilizing the Person-Environment-Occupation model of practice (Law et al., 1996) further encourages OT practitioners to exercise their clinical judgment at the level of the student, their school environment, and the occupation. A recent timeinterrupted study by Law et al. (2015) documented the immediate improvements in occupational performance with environmentally-based changes. These environmental interventions not only appeared to encourage skill development but also had the potential to teach students how to overcome future ecological barriers throughout their lifetime (Law et al., 2015). In a scoping review of SB practices, Anaby et al. (2019) emphasized the importance of providing ecologically-based interventions. Perhaps one reason why contextually-based interventions are helpful could be that the natural environment offers daily routines, structure, and natural cues to support participation when compared to unnatural and seemingly artificial cues (Mu & Royeen, 2004).

The implementation of select practice-based factors further broadens the scope of OT practice across school-related occupations. In addition to contextually-based interventions, there is growing literature highlighting the importance of OT collaboration with parents, teachers, and school paraprofessionals (Law & Darrah, 2014; Truong & Hodgetts, 2017). This collaboration process encourages OT practitioners to expand beyond the multidisciplinary model of service delivery and select meaningful occupations that are age-appropriate and educationally relevant to students, families, and educational teams (Anaby et al., 2019; Mu & Royeen, 2004).

Collaboration could then develop into more interdisciplinary types of approaches where OT practitioners coordinate goals and services with other professionals through the sharing of skills and responsibilities. Beyond the interdisciplinary approach, practitioners may follow a transdisciplinary approach where educational team members go through a discipline-specific role-release and take upon themselves the roles of the other team members. This high level of coordination necessitates that occupational, physical, and speech-language therapy practitioners; teachers; and other team members learn to generalize each discipline's unique contributions to holistically meet students' needs at any given time (Anaby et al., 2019; Mu & Royeen, 2004).

As described in IDEA and ESSA, school teams can further collaborate through school-wide programs and broad initiatives such as Response to Intervention and other tiered service delivery approaches (i.e., all students, small groups, individuals; Anaby et al., 2019).

Collaborative outcomes based on these practice factors show improvement in student achievement, behavior, social-emotional functioning, and school attendance (Anaby et al., 2019; Lam et al., 2019).

Two service delivery models appear to utilize many of these practice principles and show promise for SB practice. In *occupation performance coaching*, parents [and students] are guided in solving problems related to achieving self-identified goals (Graham, Rodger & Ziviani, 2009). A step-by-step process fosters client knowledge and self-advocacy skills to help clients develop strategies to overcome barriers autonomously. The *partnering for change* model emphasizes the partnerships between therapists, educators, students, and parents using ecological interventions and multilevel services (Missiuna et al., 2012). There is also a strong emphasis on building skill capacities within the teacher to help future students.

Bridging the practice gap between what Utah's school-based OT practitioners could offer under ideal conditions from what they actually provide is complex. In an effort to broaden the scope of SB practice, Bonnard and Anaby (2016) suggested a research approach that begins with identifying the areas of occupation that are currently addressed in school systems. Existing literature identifies potential barriers and enablers that influence the scope of OT practitioner's involvement across academic, non-academic, and extracurricular activities. Unfortunately, the literature does not directly identify the unique factors impacting Utah's school-based OT practitioners. Therefore, the purpose of this study was to identify the occupations and activities that Utah's school-based OT practitioners addressed in practice and to describe the particular factors that influenced their practice in Utah.

Methods

Participants

The study participants were occupational therapists and occupational therapy assistants who provided occupational therapy services in Utah's public or charter schools during the 2018-2019 or 2019-2020 school years. As private schools are not mandated to provide special education services, OT practitioners working in private schools were excluded.

Design

To address the study aims, I employed a mixed-methods approach across two phases using a sequential explanatory design (Ivankova et al., 2006). A descriptive survey (Forsyth & Kviz, 2017) was used during the first phase to gather Utah's school-based OT practitioners' demographical attributes and the current areas of occupation they addressed in SB practice. The survey also identified the broader barriers and enablers that practitioners faced when providing

services in Utah's schools. After analyzing the survey data, four open-ended questions were developed to better understand the survey findings in greater depth. During phase two, I invited all survey participants to join focus groups held over Zoom due to the COVID-19 Pandemic.

Measures

Based on the need to gather a wide range of data throughout Utah, a descriptive survey was developed using *Qualtrics* software. The factors identified in the review of literature contributed toward the survey questions. These questions focused on three areas: (1) demographics, (2) the areas of occupation addressed in SB practice (including service environments and patterns), and (3) identifying the enabling and limiting factors that practitioners faced when providing services. The survey was piloted by a panel of eight OT practitioners, including two occupational therapists who had previously worked in school-based settings. Feedback was used to improve question clarity to ensure accurate responses. The full survey is located in Appendix I.

The focus group discussions consisted of four semi-structured questions that were developed after analyzing the survey findings. Three focus groups, consisting of three OT practitioners each, were utilized to encourage OT practitioners to openly share their views and build off other practitioners' thoughts. The small focus group structure provided opportunities for back-and-forth dialogue and facilitated deeper understanding than using single interviews.

Procedures

To facilitate survey participation among Utah's school-based OT practitioners, I used convenience sampling and snowballing procedures. Recruitment began in April 2020, at the beginning of the COVID-19 lockdown. I located practitioners through their Local Education

Agency websites (LEA; e.g., all public school districts and charter schools). My first preference was to email OT practitioners directly with a link to the survey and instructions to share the link with other school-based OT practitioners throughout Utah. When I was unable to identify OT practitioners, I emailed special education personnel such as speech and language therapists; special education teachers; school principals; special education coordinators, managers, and directors and asked them to forward the link to their OT practitioners. In very small districts, I was only able to contact one individual, such as the superintendent. After initiating contact with each of Utah's public LEAs (41 school districts and 134 charter schools), I then contacted businesses that contracted OT services to school districts or charter schools and invited their OT practitioners to participate. I sought help from the Utah Occupational Therapy Association, a Utah-based special interest OT collaborative group, and OT alumni contacts from Utah's colleges and universities to share the survey invite. Finally, I used personal contacts and professional networking through phone, text messaging, email, and social media. The survey was available from April 23, 2020, through July 31, 2020. Follow-up reminders occurred one month after the initial invite and before the end of the school year.

At the conclusion of the survey, OT practitioners were invited to participate in focus groups to discuss the survey findings in greater detail. In the fall of 2020, three focus groups were formed consisting of three OT practitioners in each group. A total of nine practitioners volunteered and were divided among the groups to encourage diversity. The focus groups were held over Zoom following the recommendations of Daniels et al. (2019) for conducting online research.

Human Participant's Protection

Approval was obtained from the University of Utah Institutional Review Board before beginning this project (IRB-00131949). I maintained confidentiality and participant safety throughout the research process. All data collected was over a secure internet connection and locked in password-protected websites and devices. I followed COVID-19 precautions.

Data Analysis

Descriptive statistics to determine the means and standard deviations were used to summarize the survey data using *Qualtrics* and *Microsoft Excel* software.

The semi-structured focus groups were analyzed using qualitative methods. Each focus group was recorded over Zoom then partially transcribed through *Happy Scribe* software. After verbatim transcription was achieved, I completed open coding for words and phrases using *Microsoft Word*. I then analyzed the codes following conventional content analysis and thematic analysis.

Conventional Content Analysis

First, following the recommendations of Hsieh and Shannon (2005), I used conventional content analysis (question and answer) to understand the codes in the context of the specific questions discussed in the focus groups. This process was accomplished by gaining a deep understanding of the data, developing codes, acknowledging my personal thoughts and impressions, and finally creating a coding scheme to sort codes into categories and meaningful clusters. Using a concept map (Kinchin et al., 2000), I was then able to identify the frequency that focus group members referenced these categories and clusters. I then develop meaningful relationships based on the frequency counts (Kinchin et al., 2010; Wilson et al., 2015).

Thematic Analysis

After completing the conventional content analysis, I completed a member check to ensure accuracy in the transcription and the broad themes developed. Copies of the transcription and the themes were sent individually by email to the focus group participants. All nine participants were asked to review and then discuss, if necessary, any concerns they might have in the transcriptions or themes. One participant replied that their transcription was correct, but they did not feel that the theme was complete based on their view of what school-based practice could/should entail.

After receiving positive feedback from six of the nine focus group participants, and no further concerns based on the transcription and themes, I elected to analyze the data outside of the context of a question-and-answer analysis. Under the direction of my faculty research mentor, I reviewed the original data directly from the focus group comments. Following a grounded research process (Taylor, 2017; Strauss and Corbin, 1994), I analyzed the data line by line to develop emerging themes from the collective focus group comments outside the question-and-answer context. At this point in the analysis process, I became consciously aware of the potential to influence the development of themes due to my experiences in school-based practice. With guidance from my mentor, peer debriefing, and a review of a personal reflexivity journal, I again returned to the original data. I moved line by line to fully develop the themes and subthemes following the grounded research process. This inductive analysis provided a deeper understanding of the data while simultaneously supporting the conventional content analysis findings.

Findings

Survey Findings

A total of 100 potential participants entered the online survey, with the high majority accessing the survey before the end of the 2019-2020 school year. Two participants were excluded because they were not OT practitioners, and 26 answered an insufficient number of items to be included in the analyses. Of these partial responses, most participants answered one or two questions before exiting the survey. None answered more than 50% of the survey. Two individuals did not answer some of the demographic questions but finished the survey and were included in the analysis. The final sample used for this analysis consisted of 72 school-based OT practitioners.

Sample Description

The survey respondents largely identified as female (N=59, 81.9%) and Caucasian (N=67, 93.0%), reflecting national trends within the profession (AOTA, 2020). The majority (60.6%) of survey respondents were between 25 and 44 years of age. Occupational therapy assistants (N=16) accounted for 22.2% of responses, while occupational therapists (N=56) accounted for 77.8% of responses. The majority (61.1%) held a Master's degree or higher degree as their highest OT degree.

In terms of the total number of years of experience as an OT practitioner in all practice settings combined (e.g., hospital, home health, etc.), more than a quarter (26.4%) of respondents had five or less years of experience, and 41.7% had ten or less years of experience in school-based practice. When looking only at experience in school-based practice settings, over a third (37.5%) of respondents had five or less years of experience, and 59.7% had ten or less years of

experience. Only 8.4% had 21 or more years of experience. See Table 1 for complete descriptive information about the sample.

The survey sample found that the majority (59.2%) of respondents worked 36 or more hours per week. Part-time workers, those working 30 or less hours per week, accounted for one-third (33.8%) of the sample. Regarding employment by the school district or charter school, 72.2% (N=52) of respondents reported being employed directly by LEA, while 27.8% (N=22) were contracted to provide OT services.

Geographic Setting

The high majority (95.8%) of the survey participants worked in urban and suburban settings along the Wasatch Front. Participants reported providing OT services across 16 of Utah's 29 counties (55.2%). These counties are listed in Table 2 and generally reflect Utah's population distribution by county (Harris, 2020), with the exceptions of Washington County, which is poorly represented, and Summit County, which appears highly represented. When attempting to locate rural OT practitioners, many smaller school districts and charter schools reported not having or needing an OT practitioner at that time.

OT Service Patterns and Time Use

Survey respondents were asked how many students they typically had on their caseload and how many hours they worked per week. By maintaining a strict ratio of the number of students on caseload per hours worked, respondents averaged 80.7 (standard deviation [SD] = 35.1) students per 40-hour work week through an IEP program and an additional 4.4 (SD = 7.6) students through a 504 accommodations plan. Only 14 of the 72 practitioners (19.4%) reported servicing any students from the regular education setting on their caseloads (mode = 5 students).

Before the beginning of the COVID-19 Pandemic, survey participants reported providing direct services (77.6%) about four times more frequently than consultation services (21.5%). Direct services were defined as having the student physically or virtually present. Telehealth (direct service or consultation) was used less than one percent (0.9%) of the practitioner's time. When providing direct services to students, respondents were more likely to pull students out of the classroom environment 62.3% of the time. Pushing into the classroom environment occurred over one-third of the time (37.4%). Telehealth as a direct service occurred 0.3% of the time.

When identifying recipients of OT services by grade level, the survey participants reported spending nearly two-thirds (63.6%) of their time with preschool-aged children (3 years and older) through 3rd grade. Only 16.4% of respondent's time was spent with students who were in 7th grade or higher. See Table 3 for the complete time distribution.

Lastly, survey participants were asked to identify their time use throughout a typical week based on work-related tasks. Over half of the survey participant's time (55.3%) was categorized into work-related tasks that did not include working directly with students (i.e., documentation, meetings, and collaboration). Working directly with students in person or through telehealth accounted for 44.8% of practitioner's time use. See Table 4.

Areas of Occupation Addressed in School-based Practice

Using the majority of the occupations listed in the *Occupational Therapy Practice*Framework: Domain and Process, 3rd edition (AOTA, 2014, Table 1), survey participants were asked to identify which occupations they addressed with students in SB practice during the 2018-19 and 2019-20 school years. Participants were allowed to select multiple occupations. They had

to address the occupation at least one time during either school year and before the pandemic.

Table 5 contains the full list of occupations ranked by the frequency of selection.

The most frequently addressed occupations in SB practice reflected common preschool and early elementary occupations such as "formal education participation" in writing, cutting, and typing, "dressing/clothing management," and "play/social participation." These occupations reflected early childhood needs and required a baseline degree of sensory-motor development for participation. Secondary-aged and young adult occupations that contributed toward independent living appeared largely unaddressed by survey participants.

Barriers and Enablers to Meeting Students' Needs

Survey participants were asked to identify barriers that limited their ability to address student's academic, non-academic, and extracurricular occupational needs (See Table 6). The most common responses are related to 1). Narrow definitions describing OT practice and pressure to align daily practice accordingly, 2). Large caseloads and understaffed OT teams, and 3). Pressure to use remedial interventions to "fix" students.

Respondents were then asked to identify the enabling factors that helped address student's academic, non-academic, and extracurricular occupational needs (See Table 7). The most common responses are related to 1). Collaborative relationships within school teams, 2). Freedom to exercise autonomy in clinical judgment, and 3). Feeling support within the work environment.

Focus Group Findings

The focus group questions listed below were developed after the analysis of the survey data with the intent of gaining a greater understanding and depth of knowledge than what the

survey could provide alone. These open-ended questions were used in all focus groups as a starting point to facilitate conversation.

- 1. Very few people in the survey reported working with students after elementary school. Why do you think that may be? Do you have any experiences working with older students?
- 2. Survey respondents felt that collaboration was helpful; although, they did not spend a lot of time in this area. What are some challenges and supports to collaboration?
- 3. Exercising autonomy in clinical judgment appears to be important to the survey participants. What types of influences are you encountering when trying to make decisions about the best interventions for your students?
- 4. Many people think of occupational therapy as "fine motor," "sensory," or "handwriting" therapy. What do you think about these descriptions?

The focus group participants were invited from the original survey sample of 72. A total of 23 survey participants (31.9%) agreed to be contacted in the fall of 2020. An initial email request to participate in a one-time focus group discussion identified five participants. A second request identified three additional participants. I then contacted OT practitioners I have personally known from the field of 23 to select the last two participants, one of which was selected as a last-minute replacement due to an unexpected conflict. All focus group participants worked in different school settings. Table 8 lists the demographic and work environment characteristics of the focus group sample.

Findings from Conventional Content Analysis

A summary of the question-answer findings based on the conventional content analysis is located in Appendix II. After this analysis was completed, a member check verified a proper understanding of the quotes and the identified themes. For the sake of brevity, all of the focus group comments used for the conventional content findings have been included in the thematic findings below.

Findings from Thematic Analysis

Thematic analysis identified four broad, interrelated themes and subthemes that emerged throughout the three focus group discussions.

Theme 1 (Definitions). The definitions of school-based occupational therapy and the perceptions and practices of the focus group participants varied across Utah.

Many focus group participants expressed difficulty in clearly defining occupational therapy. This ambiguity and vagueness appeared to influence participants' own perceptions of what constitutes occupational therapy in daily practice.

"I still have a hard time defining what [occupational therapy] is. I mean, what is it? It's just difficult to really describe exactly what we do. And so, when I have a hard time describing all that I encompass, and all that I focus on, then I think it's hard for [others to understand]. And then also, I get others' perceptions. You know, that the other OTs just did fine motor." Participant 8

The descriptions of occupation and occupational therapy practice gravitated toward concrete definitions that related to how the focus group participants would meet students' specific needs. These definitions appeared to be shaped by individual practitioners' oral descriptions and then demonstrated in their practice habits.

"I think that school-based occupational therapy is so broad. If we tried to explain it to parents in schools and things like that, that it would get too overwhelming. So, I do think the smaller, more refined, as far as like 'fine motor,' 'sensory,' 'handwriting,' they are components of what we do, but they're the components that we need, like in school-based [practice]." Participant 9

Two subthemes emerged that seem to provide a general understanding of how the focus group participants arrived at their personal definitions of occupation and how these definitions were subsequently expressed in daily practice.

Subtheme 1.1 (Narrow View). Many of the focus group participants appeared to approach practice with a narrow view of the profession's domain in order to meet what was viewed by the participants as the most essential occupational needs in younger students. This approach appears to have reinforced the narrow practice definitions observed by others, created challenges to broadening occupational areas addressed in practice, and lessened the need to engage in deeper levels of clinical reasoning.

Many focus group participants expressed a concern that related to how broad the domain of occupational therapy could become in the school setting, or in other words, how many occupational areas they could address in practice. In essence, occupational needs could conceivably become so numerous that practitioners would become overwhelmed in their workload demands and thus be unable to address the insatiable demands placed upon them. To address this concern, focus group participants narrowed their practice definitions.

"So, [another therapist] probably doesn't like my answer, because I try and identify us as the motor and perceptual [therapists], you know and then we are kind of the sensory support for the school. And the reason we do that is because [the OT profession] became so broad that everybody [could] come to us for everything...I think one of the reasons we all love OT is because it's so broad. Right? You could work in an insane number of fields and work on just a huge variety of things. And so, I think what's hard is, [that] certain districts kind of do focus on specific areas. And, one of the terms I use with my team a lot is to 'stay,' you know, you need to 'stay in your lane'...Then the students who truly have motor deficits aren't missing out on our time." Participant 2

The narrowed practice definitions then fostered a concrete working image of what OT is and what OT practitioners do in school settings. These generalized definitions perpetually reinforce fine motor, handwriting, and sensory practice definitions to parents, school teams, other therapists, and to ourselves.

"What prevents me from using my best clinical judgment is the perception or the understanding of what an occupational therapist does. I mean, I've been here for six

years, and I'm still called the 'fine motor therapist.'...I'm so tired of being told that; I did not go to school to be a 'fine motor therapist.'...Some kids, I feel like their biggest barrier to function is just the inability to follow directions. And so, I would love to write a goal for students to follow three-step commands, you know, or write goals that 'students will be able to repeat the instructions when they are given to them.' Um, and then I just get the looks from teachers like, 'Well, that's not really fine motor.' I'm like well, 'I'm not a fine motor therapist! I treat function. I don't treat fine motor.' ... So, that's one of the things that kind of prevents me from using, um, we'll say, 'practicing at the top of my license.'" Participant 8

"I've noticed I get so many referrals for, you know, like fourth and fifth and sixth-grade students and they tell me you need to fix their handwriting. Like, okay, well, let's take a deeper look, because, this isn't necessarily what I do. I'm not the handwriting specialist." Participant 7

Focus group participants expressed difficulty in meeting student's occupational needs over the course of their entire public education experience. The deeply rooted areas of "fine motor," "sensory," and "handwriting" seemed to reflect on the occupations of early elementaryaged students, and the focus group participants felt that they were unable to broaden their practice to meet the occupational needs of older students.

"I think that in general, school-based practice is super hyper-focused on handwriting...[The students] get to a certain level, they've had a ton of intervention by that point or we're compensating. So, we're like, here some, you know, we get them word-processing, we give them access and we're done. Um, and I think that we're not really involved in transition as much as we should be. So, then you don't have high schoolers as much...So, I think that the hyper focus on the fine motor handwriting thing works us out by that time." Participant 5

Furthermore, some of the focus group participants expressed a limited need to think deeply about their student's holistic needs. By limiting the occupational focus to the context of fine motor, sensory, and handwriting, some focus group participants were able to delegate routine interventions to other school staff members.

"I also think that may be part of what can hurt the clinical judgment is those around you that don't know what OT is supposed to do or don't necessarily value it, I think that's one hindrance we've had with the 'motor aide' thing because, you know, we're basically like, well, we can come around once, you know, a lot less. And here you can have a, like you know a paraprofessional. And that seems to like devalue kind of the, the position a little. Um, because then we're saying, well, you can replace us with a lot cheaper, you can replace rate, um, and you don't necessarily need our judgment all the time, or our expertise all the time. And so, I think that sometimes hurts our ability to push forward with clinical judgment." Participant 5

Subtheme 1.2 (Roles). School-based role delineations by profession naturally enabled focus group participants to provide occupational therapy services that met student's needs while simultaneously demonstrating employment value in their work. Some focus group participants appeared to have broadened their practice roles by first acknowledging specific occupations under their domain and then secondly, addressing the occupation in daily practice.

School employees such as principals, librarians, and reading aides are employed to meet specific needs within the school environment. Professional staff, including OT practitioners, enter school employment under the same organizational roles- to meet specific needs. The system of school employees fulfilling specific roles establishes the environmental context of school employment. Within these school environments, some of the focus group participants expressed difficulty in managing their interdisciplinary practice boundaries with other professionals.

"Schools really love their role delineations, right? We love our, like the social worker box and the psych box. Do you think that there's also a way for like the system and the teams to try to decide who's really going to work on what piece? Because the overlap hasn't been? Like nobody's talked about, you know, [how] we overlap with social work in this, and how maybe it's part of that whole collaboration piece, and we don't know how to navigate our overlaps. And so, we box it." Participant 5

Although the truncated definitions of practice were generally unpopular, some focus group participants found value in the practice roles they generated. The school staff was able to identify the OT practitioner as the professional to address these specific student needs.

"I'm not a fine motor therapist, but I'm the fine motor expert, and I guess I like that label more, and a sensory expert as well. I think they [school staff] go to you. They know where to go to." Participant 8

The focus group participants also felt that fulfilling the defined OT roles of "fine motor," "sensory," and "handwriting" generated value for the profession as a whole.

"Well, and I think it's been kind of a way that we've been able to work ourselves more solidly into the school environment as well. You know, when we have that label, we then become more important, I guess, to the school district, to the school setting, to where they know we have value, even if it's just in this little label. You know what I mean? Where if we're too broad, they're like, 'Well, everybody else can do those things, so why would we need you?' So, I guess I see that as a benefit as well." Participant 7

Although there were some positive aspects in fulfilling the currently defined school-based roles, many focus group participants longed to broaden their practice domain. One focus group participant identified the value of OT practitioners in self-defining their own school-based practice roles through advocacy.

"And so, I think some of it comes down to advocacy... It's also like how many of us, even after like, I'm 20 years in, and still, people [are] like, 'So what is OT?' And then you're explaining it to them. And my elevator speech still kind of stinks 20 years later. So, I agree that it comes down to understanding our scope more." Participant 5

One focus group participant described a broader practice definition that extended beyond the fine motor, sensory, and handwriting roles to also include the occupational areas of dressing, functional mobility, and long-term health management.

"We tend to see kids, kind of graduating off the handwriting programs around fifth grade, sixth grade, and as long as they've got their functional dressing skills down, they're functional in the school environment. And I know that there's a lot that OTs and COTAs can work on in terms of occupation. But I think when we look at the school setting and say, well, you know, we worked on sensory supports to get their behaviors managed, got the right accommodations for them, and then they kind of get, you know, moved along on their way. Um, the kiddos that we see who are in the secondary classrooms are more, the orthopedic kids who are needing those maintenance programs to maintain their [functional] mobility and their range of motion and things like that." Participant 1

Although this focus group participant was able to address some broader areas of occupation in school-based practice, another participant expressed contextual and administrative barriers in doing the same despite having accepted that self-care occupations were within their practice domain.

"I think we need a ton more OT in schools and, I think if we had more OTs that we really could focus on executive function and, life skills. Some of our support classrooms are going to be kids that have more severe autism or Down syndrome, and they're going to need long-term care the rest of their lives. But if they were trained earlier on, on doing some of these Voc. Rehab types of things, if they had more support from therapists who knew how to guide them, I think that their potential would be so much greater. And so, I think that students definitely are missing out, because we're not necessarily working with those older ages. Um, and, especially with, ADL types of things, and being able to independently care for themselves, even if it's just a student being able to get up and brush, [pause] like I had a mom at a high school. I asked her what her school-based concerns were. And she's like, you know, 'As a mother, I need my child to get up and get dressed and feed himself breakfast in the morning. That's really what I need for him [to do] to be at school.' And I was like, 'Um, I really can't do that, because I am a schoolbased therapist [with external limitations]' So, looking at it, I'd love to be able to help the student with that, but I wouldn't be supported in doing that from my Special Ed. Director, right? And, of course, we're set up to support, I mean, if the kid had CP, we totally are set up in a way to support him [in a different classroom setting]. And I knew that I could help him. But it's not 'staying in my lane' within a school-based therapist." Participant 2

Theme 2 (Large Caseloads). Large caseloads negatively influenced the focus group participant's ability to meet the workload demands associated with individual students.

The focus group participants continually referenced high caseloads as a negative influence in daily practice. Although the concept of "high caseloads" is contained to this theme, its multilayered influence and ramifications permeated throughout the other themes.

"When I started six years ago, we were at 20 kids that I had [on]my caseload to, now, six years today, amount of one hundred and eight kids, on my caseload. So, for one, the sheer numbers make it hard to get into the junior high and the high school." Participant 8

"There's like so many moving parts. I mean, how are you going to do push-in when you have 90 kids on your caseload, and you're trying to figure out when you can go in the classroom? Because you can't go in during reading because what, you stare at them while they're reading? There's just so many moving parts that go into how you plan out service... We don't have complete control over all those moving parts." Participant 5

One focus group participant compared and contrasted their experiences in providing school-based OT in a neighboring state with that of providing services in Utah.

"I've had the experience of Utah, and I've had the experience of [another state], which are like, [laughs] vastly different, ... the thing that was so profoundly different is, you get here [to Utah], and you know, I was used to like a caseload of like 40. And [the administration is] like, 'Oh, you're getting high.' And [in another state I had] five buildings and every week I was involved in the SpEd meetings where everybody talked, and then I get here, and they're like, 'Here's your 15 buildings and one-hundred kids. Good luck! See you later.' And so, the challenge was, trying to manage 15 buildings. When do you have time to go to the SpEd meetings where there's the collaboration? And you know 90 kids, and cramming that in. There's just not time carved for anybody here to make that work." Participant 5

Another participant described their challenges in getting a full-time OT position approved in a rural setting by assuming some special education testing duties into their OT position.

"Yeah, I've run into that same issue, where you have a massive caseload that you just can't do. You know, you can't do what you want to do out here [in rural Utah]. I mean, I had to really fight hard to get this full-time OT position. And in doing so, I had to make it to where about three-quarters of my time is OT. And then I have to also help with their testing. So, I'm helping with some of their SpEd testing and stuff. And so, my time gets

split far too much ... I really need more of that time to be an OT, and finding the time [to collaborate], it's really, really hard." Participant 7

In addition to not meeting students' holistic needs, one participant expressed the emotional burden they carried because their practice role had been narrowed down to evaluating students.

"As my numbers have grown, and I'm actually at a point where being only in the schools about 15 to 20 hours a week and having over 100 kids, I feel like you know my ethics are being questioned. I think it's unethical to have so many kids on a caseload and to be asked to serve that many kids and to have my district not wanting or willing to do anything. That's why I'm kind of in the process of trying to pull out of the schools and terminate my contract with them, because I feel like I need to force the school's hand to hire their own therapists ...and they need to hire most likely three therapists to replace what I'm doing. And so, I mean, I don't work with kids at all anymore. I just evaluate and write IEPs." Participant 8

Although there are many potential reasons why OT caseloads are higher in Utah, public education spending is likely a contributing factor. For decades, Utah has invested the least amount of funding toward public education per student in the nation, contributing to the Nation's highest teacher-to-student ratios. One focus group participant expressed the challenges they faced in collaborating with teachers who also have high caseloads in their classrooms.

"Time. It's all about time... So, we're getting to a point where we have a lot more time to consult with those teachers, but they do not have time to consult with us. There's only so many before and after school time frames, the teacher's lunch break, um, they don't love when you pop into their classroom, when you take your kid back to class and say, 'Hey, do you have a few minutes to chat?' Like they're in the middle of their lesson with the rest of their class." Participant 2

Finally, the focus group participants identified other school professionals who also face high caseload numbers, thus deepening our contextual understanding of how educators, occupational therapy practitioners, and other professionals all share in this collective influence.

"I think when we're running into different schools so frequently, and it seems like there's never a good time to catch a teacher or a speech path without students, then you are kind of interrupting their learning session." Participant 1

"I agree, I was just going to say the exact same thing, that it's really hard to find other professionals when there's not kids in the room. And then when they have time, it seems like that you have a kid in the room. And so, it's just hard coordinating schedules and then finding the time to do all of that." Participant 4

Subtheme 2.1 (Clinical Triage). When negotiating the workload demands associated with high caseloads, the focus group participants described using a form of clinical triage used to meet what they or others felt were the student's most pressing needs.

In the context of high caseloads, the focus group participants described their innate need to professionally cope by choosing to address what they or others felt were the student's most pressing needs while simultaneously recognizing lost opportunities.

"We can help with so many other things than what we do, but I also think, like at some point, we have to kind of take control of that and look at our ways of coping, because what we do right now systemically is coping. We've learned to cope with these gigantic caseloads and multiple buildings." Participant 5

"A lot of times, I'm trying to get all my kid's minutes, and see all the kids I need to see in whatever amount of time, and trying to talk to teachers. You're dropping a kid off, and they're in the middle of something. And when they're at lunch, they want to be at lunch. They don't want to be bothered by other stuff." Participant 9

"I just kind of get so busy with the caseload. Everything is just, there's so much stuff to get done with your big caseload that you don't have time to really change the system because it takes so much work to do." Participant 3

As described under theme one, some of the focus group participants described their practice in more narrowly defined terms to reduce the flow of students. One focus group

participant succinctly expressed this idea by describing their OT practice domain in terms of a large freeway.

"In our district, it's 'our lane that we stay in,' or else, we end up doing too much stuff." Participant 2

Another participant in a separate focus group also referenced the practice-lane analogy.

"I think sometimes it might be tempting to keep ourselves in that 'narrow lane,' because, again, because of time. It might be hard to address everything that you want to address with a student. So, I mean, hopefully, that doesn't happen, but I'm sure it does." Participant 6

In addressing students' most basic OT needs, some of the focus group participants expressed the value of early intervention with young students who are just beginning their school journey.

"Our focus as OTs in our school district is to focus on the fine motor components and the visual perceptual components. And we really push like an early intervention model to where um, up until like second, third grade, we still work on fixing or strengthening that skill." Participant 2

"Hopefully, we start working with them when they're younger. We've helped them enough by the time that they get into middle school, or maybe even before that, so some of them might just, in all reality, graduate from OT...I'm sure there are lots of ways we could help them in their occupations as they get older. You just have to think about it differently." Participant 9

By aggressively focusing practice efforts and energies on early intervention efforts, many of the focus group participants felt they positively contributed to the students' ability to participate in school tasks such as writing.

Subtheme 2.2 (Secondary-Aged Occupations). Although many occupational therapy practitioners stop providing therapy services to students by late elementary school, there are occupations that can be addressed with secondary-aged students.

Unfortunately, most focus group participants were not focusing on this population or their occupational needs.

Many focus group participants expressed interest in helping secondary-aged students address their late childhood and early adult occupations. In particular, one participant described the valuable contribution they could make with older students, but they also felt restricted by their current workload demands of seeing each student for their defined IEP service minutes.

"One thing that I've been thinking a lot [about] lately is workloads with OTs. And I think, for the most part, OTs in the school districts are feeling like they have a lot to do, and there's not a lot of extra time. And just getting their kids on their caseload seen and meeting [IEP] minutes sometimes is difficult. And that doesn't leave a lot of time for outreach and doing things like working on a transition skill, for instance, like working on some of maybe, the soft skills that go into, um, that students need to go into work. I also think we could work on, you know, sequencing. We could work on just a million different things that go into the school-to-work transition, but also the school to functional-life transition, if that makes any sense. Um, but I think sometimes we, we, [exhales] ...well, a lot of times we just don't have the, the bandwidth to get into those areas, and it seems like that other people [school staff] have it covered. Does that make any sense? [all nodding in agreement]. Participant 4

In addition to not having the "bandwidth" (i.e., capacity, availability, time) to meet every student's occupational need, this participant expressed the belief that someone else in the school district or another agency would address the student's occupational needs later on. Two other participants also shared this idea.

"I would say most of my kids that are older [in secondary] ... I see a lot of them in the halls that don't qualify for OT. But I think I could probably see myself working with some of these kids, even though along the way they got released from OT...As they get into middle school, we're starting to say, okay, if they can kind of get by with writing ... and not needing us, sometimes we feel like they're a little bit more, ...[pause to think] I don't

know if they've grown out of OT...there is kind of that gradual decline of kids on my caseload as they get older. But yeah, I feel like we do kind of work our way out of jobs because with the older kids, the [special education school] program kind of has their program that they run, and it does kind of look a lot like job-skill training. And they kind of run that and, I don't give a whole lot of input on what that could look like, or how I could help." Participant 3

"I was thinking that other people [staff/professionals] have it covered...I don't know, I haven't spent any time at [a special education school], which is kind of the transitional. So, I don't know exactly what the teachers address." Participant 6

Clinical triage as a coping mechanism enabled focus group participants to meet the most pressing student needs in early education. Despite feeling that occupational therapy could benefit older students, these focus group participants expressed barriers in doing so. The following focus group participant identified the need for OT practitioners to approach secondary-aged students differently than elementary-aged students.

"Um, I want to do more in the schools. I think that working in the elementary schools versus secondary schools is almost two different disciplines. It's two different approaches to how you do therapy...I think you almost need an elementary specialist, and then you need a secondary specialist because it really is two different approaches [handwriting and fine motor vs. transitioning and life skills]." Participant 8

Theme 3 (Limiting Autonomy). The focus group participants exercised their professional autonomy along a continuum. When following habitual patterns in daily practice, that appeared to be maintained by the work culture, participants may then have had a limited need to exercise their professional autonomy.

Many of the focus group participants described systemic ways of approaching daily practice. These habitual patterns appeared to have been established within the work environment prior to the participant's employment (Subtheme 1.2). As expressed in the following dialogue,

these participants inherited established roles and routines for OT practitioners to follow, which then contributed to the formation of habits within the clinical reasoning process. These focus group participants then approximated their daily practices within these established patterns. They expressed challenges in facilitating change and in being autonomous practitioners.

"I think that, systemic ways of doing things can influence how [we] provide service. So, historically OTs did handwriting and fine motor, and so then when you're trying to step out of that box, or we pull everybody out [pull-out services], and you're trying to kind of maybe shift a little, and be like, 'I'd like to do some push-in' they're like, 'No! There's no...' right? Like, so those systemic pressures to kind of keep a status quo, I think sometimes can influence how people see. Right? We have the standard. 'Oh, we see them once a month, once a week, once, a...' So, everything fits in those systemic boxes, and I think that can be a hindrance, challenge to the judgment piece." Participant 5

"I think it's interesting that you bring this up because it makes you reflect on like, okay, why do I do, what I do? And I think a lot of it was set up for me already. It was that system [that] was already in place that I know. That's kind of what I go to. That's what I know. And that's what's kind of expected...But it's been really hard to get a lot of the OTs to just branch out and try something new. Like there's a lot of pushback because there's this system that's in place, and change is hard and it's difficult. Just that is the job that I was hired for. And I kind of just fell into place in doing things the way that everyone else kind of does." Participant 3

"And I agree with what you both said. It's the same kind of thing, you're just falling into that whatever the role, whoever filled that role before you, or whatever everybody else is doing around you is kind of how I fell into how my school practice is set up, as it's very much the same. It shifted a little bit from what the other OT had, but it's very similar. And so, you just kind of take that natural role." Participant 7

Peer expectations, job descriptions, boxed roles, structured service times, role delineations, and social expectations contributed toward the status quo of daily practice. Later on, in this focus group discussion, these same participants further identified the influence of discipline-specific goals, IEP software programs, and limited collaboration with other professionals as influences to operationalizing daily practice patterns and limiting autonomy in practice.

"And then as far as the goals, you have your own [discipline specific] goals here [in Utah], in [another state], it was collaborative goals. So, the kid had a goal, and [the IEP team] would list the people responsible, so everything was written together. And then you were forced to have to work together on it instead of having, like, the OT goal. So, I think that [the process] is sometimes a bit of a barrier to the collaboration. The IEP process is so compartmentalized." Participant 5

"I agree one-hundred percent, and I think I've heard [it] similar to what you said, where in [another state] you had the collaborative goals, and I've heard of other OTs doing that. I love it because you could have more of that overlap with the psych, with even the PT, the speech service. You know, we can collaborate on things and actually have more success...I don't know what system you guys use for writing IEPs, but like we use [a software program]. So, you go in to pull it up, and you're in your little box, you know, so there's like your fine motor and your gross motor [boxes], you know, and OT is over the fine motor one. So, everything is just naturally built into these roles and these little boxes we're supposed to fit into. But I do agree. It'd be nice if goals and things could all be more collaborative, and we could cross [professional] lines easier because I've often felt at times like I'm crossing lines on the speech therapist when I bring in assistive technology and stuff. And I've had to really be like, 'okay, I don't want to step on you, but this is what I'm trying to help with.' And so, it can be tricky because you feel like you aren't trying to step on somebody when you shift into any of those other areas. But I think we need a lot more of that." Participant 7

"We kind of compartmentalize ourselves where we just kind of do our thing, and we just do our goals...And, I think we just sometimes get too busy and we don't maybe schedule in that time to go and collaborate with other professionals." Participant 3

Finally, this focus group participant summarized the essence of following established practice patterns day after day.

"I want to say the thing that hurts is just kind of getting stuck in those ruts of doing the same thing that you've done before, going into the comfort zone because it's easy and it's quick, but it may not always be the best." Participant 3

Subtheme 3.1 (Status Quo). When the broader work culture maintains the status quo.

Throughout the focus group discussions, participants shared ideas related to a work culture continuum that facilitated or inhibited OT practitioners in exercising professional autonomy at any given time. Within this subtheme, the focus group participants provided insight

into how the broader work culture maintained the status quo of daily practice and hindered autonomy.

A newer practitioner to school-based practice expressed their need for guidance to help them navigate the clinical reasoning process in practice.

"So along that line of what's maybe keeping me from my best interventions with the students is, I'm still relatively new at this. You know, I've only been doing school-based for a couple of years. And so, for me, it's still trying to understand all of that picture." Participant 9

Through formal and informal mentoring, younger practitioners gain experience in clinical reasoning. The following dialogue between focus group participants illustrated how a younger practitioner to school-based practice approached clinical reasoning based on their sense of autonomy to act as a professional in their work environment.

"I think when you look at maybe um, overall culture, the way that the, where you work, what is valued definitely influences that [clinical judgment]." Participant 4

"Yeah, I think as being a pretty young therapist in terms of school-based practice, I think that you kind of start out, and there's a way things have always been done. There's kind of, you know, every kid is unique, but there's kind of a standard program, or a way things work for this type of student. So, I think that does influence clinical judgment. Um, that like [Participant 4] was saying the culture of a place, and what's valued, that plays a part in making decisions for students." Participant 1

For this participant, "following standard programs" and "set routines" influenced the clinical reasoning process to some degree and appeared to be influenced by other's values and beliefs.

Individuals contribute their values and beliefs toward a collective work culture. In school-based practice, OT practitioners come in contact with fellow OT colleagues, administrators, educators, psychologists, speech and language pathologists, social workers,

school counselors, and parents, etc. The following focus group participant identified educators as a group that assumed a specific role for OT practitioners to follow.

"It is hard, we get kind of caught in those ruts and teachers have the expectation(s)... And it can be so hard to ever change anything because it's not only you that has to have buyin, it's everybody around you, you know, it's the teachers that you're going to push into their classroom going, 'Wait, what? You used to pull them out. That was a lot easier. You're not distracting my class that way.' You know, like, it's trying to get the buy-in of everybody that's such a challenge to, to any changes or doing practice in any different way." Participant 7

Using a portion of a previously shared quote, we can further see these cultural forces trying to maintain practice patterns.

"But it's been really hard to get a lot of the OTs to just branch out and try something new. Like there's a lot of pushback because there's this system that's in place, and change is hard, and it's difficult." Participant 3

Additionally, administrators and parents can influence patterns in daily practice.

"Another hard part is sometimes... we get the parents who make you put on kids [for service] even when you don't feel like you justify it, because in the end, the parents have a lot of say, and I get an administration that tells me I'm putting on kids [to keep the district in compliance] and I don't want to." Participant 8

Many of the comments within this theme described systemic ways of approaching daily practice that inhibited the participant's full use of professional autonomy to exercise clinical judgment. However, the broader work culture with its collective values and beliefs can be seen as a barrier for some who try to step away from the status quo of daily practice.

Theme 4 (Questioning and Challenging). Some of the focus group participants questioned and, in some instances, challenged the status quo of daily practice. Their efforts appeared to have broadened their ability to exercise professional autonomy as

occupational therapy practitioners. When questioning and challenging the status quo was supported by the work culture, these participants appeared to have influenced the future of school-based practice by changing the system.

Subtheme 4.1 (Practicing the Change). Self-advocating through daily efforts to change the system- practicing the change.

Some of the focus group participants expressed their desires to challenge the daily routines of their practices. This participant expressed the need for system-wide changes to improve their interventions and more fully enjoy their work.

"I agree with what you said there. We sometimes kind of put ourselves in that position, and we have to advocate. We have to, think like, what is it that brings me satisfaction, joy, with my job, and um, honestly, I know that I sometimes get stuck in those ruts. I think 'This is not what I went to school for.' Like there's more to me and more to OT than doing the same thing. And I think there does have to be some kind of collaboration, some kind of push for change...And not just kind of referring to ourselves as just these few things [fine motor, sensory, handwriting specialists], in what we specialize in, because I may be the one that's evaluating and doing some of the work that's not as satisfying. Like I look at the aides that are working with the kids, and I wish I could just have the time to just work with the kids. And a, it's sad. It's not how I want it to always be. I miss working with the kids and I miss being able to just use that clinical judgment...So, honestly, the things that hurt us is the system that we have in place. And, you know, I think there's a lot of satisfaction. There's a lot of growth. Like I see my kids making progress, but I sometimes wonder if there can be more progress made, or if I could even be happier doing my job, if I were to branch out and take that plunge into changing things, or doing things differently." Participant 3

This process of self-reflection allowed this participant to think about how the school system influenced their personal meaning and satisfaction in their daily work as well as influenced students' progress. Another focus group participant further expressed inner conflict as they felt a need to be professionally challenged.

"If I just did fine motor all the time, and this is nothing against 'stay in your lane' mentality, right? But it's just different therapists and different approaches. But, I personally would get bored. I got into [OT] because of the breadth of what it is, and everyone has their different strengths and different [pauses to think], Sometimes I wish I could 'stay in my lane' and 'not rock the boat' so much, but, unfortunately, that's not what I was blessed with." Participant 8

These inner thoughts and feelings were seen as a first step to challenging habitual routines in daily practice and in some instances, led some participants into small practice changes. These participants, in particular, identified the need to look more holistically at student's needs.

"I also think sometimes our older kids have sensory needs that maybe aren't being addressed or are maybe viewed more as a behavior problem or as kind of a mental health issue. And sometimes when they're in high school, we don't still consider those sensory needs. And I wonder sometimes if we're missing the boat with some of those kids, and if we could help them a little bit more, then we could help them function a little bit better in the high-school setting." Participant 4

"I also find [the descriptions of fine motor, sensory, and handwriting] limiting, but yet I see the more I'm working in schools, that's, the boxes that we fit in, like those are the labels that we're given. So, I think it's really up to us as OTs to remember to look at the whole person, look at every part, even as we're working in the sensory area or we're working on handwriting. But to not get, you know, to not let ourselves get too focused on those labels in our own minds as well, to remember to look at the whole person, look at the whole profile of the student, when we're working in these areas. And then sharing, I think we can share, with our teams, with other professionals that we work with, you know, other areas that we can help in or give opinions on as well. I think that's our responsibility as practitioners as well." Participant 1

"I guess I'm lucky because I work as a contractor, and I go in the charter schools, because they seem to have a broader view of what OT can and should do for them. So, I do a lot of executive function, and I work a lot with 'Zones of Regulation,' and 'How Does Your Engine Run' and teaching them those coping strategies. And so, you know, I don't feel like I'm stuck in one lane, but I get [to be] broader. I do the handwriting, but I also get to do the sensory regulation and that's the older kids that I see." Participant 9

These participants saw a broader practice domain than "fine motor," "sensory," and "handwriting" and then moved toward meeting those student needs. Although many focus group participants expressed their disapproval toward narrow practice descriptions, one participant in particular succinctly expressed their distaste for these titles.

"I don't like being labeled as the fine motor therapist. I try to correct anyone who calls me a fine motor therapist. I appreciate other school districts out there that don't take any handwriting referrals. Um, I found that very fascinating because they realize that their needs are so much more." Participant 8

Correcting misassumptions and accurately describing occupational therapy practice was seen as another means to demonstrate autonomy as an OT practitioner. One of the focus group participants took this a step further by describing how they used common referral needs (e.g., fine motor, sensory, handwriting) as an opportunity to look more broadly at student's needs.

"I think [the labels are] kind of a foot in the door that opens up to maybe some other possibilities. I think they get things started and get things rolling, because then once you've made contact with a teacher, with one student, they'll remember you, or they'll talk about you to their other teachers. And it does kind of open things up where you can share some of the knowledge that you have, that you can help out with. So, yeah, I don't really like the labels, but, I feel like it is at least something." Participant 3

Lastly, the focus group participants seemed to exercise their autonomy as OT practitioners by comprehensively reasoning across the domain about strengths and barriers to occupational performance and practice.

"And I think the great thing about OT, again, is that we are so broad and we can break down an activity and understand what the student is struggling with...it is experience and being able to decipher what a student really needs to be able to do and, also to be able to understand that enough to justify it." Participant 2

"I've tried to get some of my focus more towards tier-one and tier-two approaches and that's been fun. I've enjoyed that. I've enjoyed teaching and training teachers, so that they can help more people in the future." Participant 8

Subtheme 4.2 (Work Culture). The work culture supporting the practitioner's autonomy.

Many focus group participants identified the broader work culture as an influence that could enable or inhibit their professional autonomy in practice. In this subtheme, I will explore the work culture as a support.

"I want to say culture, and I think it can, again, both help or hurt. I think having a culture where you are, um [long pause] where you feel welcome to maybe step outside of the box a little bit and, try new interventions, and where you have a culture where your clinical judgment is supported, that can absolutely help, you know, build that clinical judgment and build your ability to make decisions for your students moving forward." Participant 4

"I have a supervisor that's very, um, pro, just trying things differently, like looking into push-in models and trying things differently...being able to collaborate with some of the other OTs that are there... We're starting to do a little bit different model where we're hiring COTAs and we're utilizing them. This is our third year that we have COTAs and its changed just a little bit...and COVID has actually helped us to change a little bit... So, this system changing is kind of allowed it to influence my intervention." Participant 3

All individuals within the school environment will contribute toward the work culture in some way. Developing healthy collaborative relationships with professionals, teachers, parents, and others, appeared to contribute toward the supportive work environment.

"When you can make that collaboration happen between other professionals and between OT, I think that helps us make clinical decisions that are better for the student." Participant 4

"I tend to gravitate to working more with those SpEd teachers who want that collaborative approach over the ones that just want me to come in to satisfy the IEP, do the evaluation, write the goals. I just don't work with them near as much as the SpEd teachers who want to collaborate." Participant 8

"But I can also say COVID has forced me to be more collaborative with parents. So, I've never been this involved with parents in the past. And it's been actually really good. You know, where now I actually have all their email addresses, and now I can email them a lot easier." Participant 7

"I mentioned before, that we hired some more COTAs. And I think it'll be really nice because our caseloads are a little smaller, so we have some time to contact parents. And actually, the [COVID] shutdown was really good for establishing relationships with some parents; not the ones who didn't answer, [laughter] but with the other ones." Participant 6

One of the focus group participants touched on the need for OT practitioners to be sufficiently present with others to develop and nurture these relationships over time.

"The special school that I'm in, it's got four classes, and I know the teachers well. I know the speech therapist well. I know the PT well...I noticed that it's helpful when I go to an IEP, I get a chance to hear the speech therapist, I get a chance to hear the PT. I take notes, and I try and write down things that I can work on that helps with their goals... that's kind of the time that I collaborate, is when I'm in the IEP." Participant 3

As identified in the thought above, opportunities to develop relationships opened the door for interdisciplinary collaboration. This same participant later expressed how others in the school environment could gain a portion of the OT vision through a seemingly two-way reciprocal collaboration.

"Yeah, I think that collaboration piece is pretty important that you have other OTs and other teachers. That they kind of catch the vision of what you may offer." Participant 3

Collaborative relationships among OT practitioners were also identified as contributing influence toward a supportive work culture. Within these teams, the focus group participants appeared to further exercise professional autonomy.

"I love where there's a culture where you have maybe some practitioners who have been in the field for a little while, some people who are a little bit more new, because [pause] I think that really enables an exchange of ideas between people who are fresh out of school and still kind of exploring their base. And people who are maybe, a little bit more settled. And I think there's value in both, and value in that give and take of ideas. So, if you have that open communication, I think that makes for a fantastic environment to work in." Participant 4

"I think being able to see it done is probably eye opening. Like sometimes if I see other people practice, ... it's kind of nice to even hear, like, what some things that you guys do. I have my group of OTs that I can collaborate with and talk to, but like [we] see it differently and see[ing] it done would be helpful for me. I guess I'm a visual learner." Participant 3

"Having a team of OTs that I can, [pause] I've been in the field like about, I guess, three years in the school setting, so I really appreciate the OTs in our district who, treat me with respect, of course, but yet I can still go to and say, 'This is what I'm thinking about trying. What do you think?' So, just someone to bounce it off of." Participant 6

Lastly, administrators may contribute toward the work culture and support the participant's efforts to exercise their professional autonomy in clinical reasoning.

"We certainly have a Special Ed Director who is [willing to support the OT practitioners in their clinical judgment]. This is the first in 12 years that is willing to stand up to a parent. In the past, [other directors] for sure caved to the parent because they think it's cheaper than, a lawsuit. But this Director is not that way." Participant 2

"I think, like having a good team, like having a good cohesive OT group, and then also, believe it or not, a really good relationship with the principal, because they're the ones

that go to bat for you right in the middle, [you] can't go up higher than that in the food chain. And you got to get them on your side first. I think principals are super helpful as far as, you know, freeing things up to make that judgment and to support you in that." Participant 5

Within this theme, these focus group participants expressed small yet powerful means to challenge the status quo of daily practice. Some exercised professional autonomy by first reflecting on their meaning and satisfaction as practitioners helping students. Secondly, some focus group participants moved beyond this contemplation by looking broadly at their students' holistic needs, accurately describing occupational therapy practice, using referral concerns as opportunities to look more broadly at school participation, and engaging in deep thinking to facilitate clinical reasoning. Within this context, supportive work teams and parents nurtured these efforts. These focus group participants appeared to have influenced the future of school-based practice by changing the system.

Discussion

The Individuals with Disabilities Education Improvement Act of 2004 (Pub. L. 108-446) granted students with disabilities, who are served under Individualized Education Plans (IEP), an equal opportunity to participate in academic, non-academic, and extracurricular activities as students without disabilities. As this legislation has been in place since 2004, it would seem reasonable that occupational therapy practitioners in Utah would be practicing broadly across these educational areas in 2020. Therefore, the purpose of this study was twofold. First, to identify the most common occupations currently addressed by Utah's school-based occupational therapy practitioners. And second, to identify the factors that influenced school-based occupational therapy practice in Utah.

Occupations

Within the context of this study, occupations are viewed as the "constellation of activities and their related roles that [a student] wants and needs to do in daily life and across time" (Price & Miner, 2007, p. 442). As students transition from children to adolescents to young adults, they will engage in a wide variety of school-related occupations. Some could be artificially categorized as academic, while others are non-academic or extracurricular, but all occupations will hold individual meaning to the students. The occupations will directly or indirectly influence their health and well-being across their lifetimes. It is imperative to understand that occupational therapy's distinct contribution in school systems is to facilitate engagement in occupation to support participation (AOTA, 2014).

Although the focus group participants' descriptions of school-based occupational therapy services and their daily practices varied, the survey respondents identified common occupations currently addressed in school-based practice throughout Utah. These included formal educational participation in writing, typing, cutting activities; dressing and clothing management; play and social participation; feeding and self-feeding; and use of assistive technology. Two-thirds of the survey participants addressed these areas of occupation, which reflected occupations pertinent to students in preschool and early elementary settings. The survey findings supported this idea as participants spent most of their service time with younger students. Additionally, many of the focus group participants expressed that addressing concerns early in the students' educational journey was beneficial. Early interventions continue to gain support in the literature (Frolek Clark & Kingsley, 2020; Grajo et al., 2020; Laverdure & Beisbier, 2021).

One-third of the survey respondents expanded their practice domains beyond these core occupational areas to address functional mobility and the self-care areas of hygiene, grooming,

toileting, and personal device care. These survey participants also addressed formal educational participation in math and informal academic participation in special classes, programs, and activities. These areas of occupation reflected greater diversity across academic, non-academic, and extracurricular activities.

Unfortunately, the survey findings mirrored national trends where very few OT practitioners proportioned service time with older students, especially those transitioning into young adult and adult roles (Eismann et al., 2017). About one-quarter to one-third of survey respondents reported addressing meal preparation, reading, leisure participation, and informal education exploration. However, occupations related to independent living such as health management or maintenance (i.e., health and wellness, nutrition, and exercise), social participation in families and the community, functional mobility outside of the school, employment interests and pursuits, shopping, home management, rest and sleep, and volunteering were seldom or never addressed even one time during the 2018-2019 and 2019-2020 school years. These occupational areas contrasted with the traditional "fine motor," "sensory" and "handwriting" interventions which illustrate the need for different and varied therapy approaches for older children, adolescents, and young adults.

According to practitioners' use of time by grade level, the survey respondents proportioned very little time (4.6 %) for high school-aged students (10th-12th grade) and almost none for post-high school students (1.6%). These findings mirror those reported by Watt et al. (2021). Many comments from the focus group discussions converged on the belief that "other" school staff such as teachers, paraeducators, or outside agency personal would address the lifeskills training. Other comments reflected the belief that OT would not be needed or even appropriate for older students. In contrast to this belief, Buck and Boyd (2015) advocated for the

occupational therapy profession by asking, "Who can more broadly address individual and group needs related to occupational performance than the occupational therapy practitioner?" (Buck & Boyd, 2015, p.136). Alternative perspectives from the focus group participants showed that while many occupational therapy practitioners stop providing therapy services to students by late elementary school, there were occupations that could be addressed with secondary-aged students. As illustrated in the focus group discussions, being consciously aware that occupational therapy could address more than "fine motor," "sensory," and "handwriting" was seen as a precursor to a practitioner actually broadening their personal OT domain to address the students' needs.

Additionally, some survey participants listed other occupations and activities that they worked on, or that they would like to address in the future, that were not listed in the survey choices. Surprisingly, many of these responses were not occupations or even daily activities that contributed toward occupations, but instead were client factors and performance skills (AOTA, 2014). These included "sensory processing," "sensory integration," "self-regulation," "mindfulness," "attention," "ocular motor," "fine motor," "visual motor," "executive functioning," "coordination," "core strength," and "balance." Although these skills and processes are needed to engage in occupation or activities to some degree, it is concerning that some OT practitioners might be viewing these underlying abilities as an occupation. OT practitioners need to be mindful of separating client factors and performance skills from occupation as this is what separates occupational therapy from other professions (Lamb, 2017) and uniquely positions us to change lives and life trajectories (Peloquin, 2005).

The differing views of what to address or not address in school-based practice, as well as with whom and how are exceptionally complex. These decisions are based on myriad factors that are both within practitioners and their practice environments. Some of these factors are catalytic

enablers that broaden the professional domain to serve students across a wider spectrum of needs. Still, other factors act as barriers that mire practitioners in the status quo.

Barriers to Broadening Practice

The barriers to broaden the domain of occupational therapy practice, and thus meeting student's occupational needs, cannot be adequately viewed as dichotomous choices between factors that enable broadening and factors that do not. As individual practitioners provide services in their unique work environments and contexts, it becomes essential to analyze these factors along a continuum of influence. Some factors work toward broadening practice while others become barriers. Although these factors are separated for the sake of this discussion, they are interdependent and coalesce into much larger systems of influence.

Defining Occupation and OT practice

The survey participants selected "I feel that OT is defined by others as 'motor,' 'sensory,' or 'handwriting'" as the number-one barrier to addressing student's academic, non-academic, and extracurricular occupational needs. It is surprising that a centurion profession is unable to clearly define its domain of practice despite the efforts of professional organizations and individual practitioners to educate administrators, educators, parents, and other stakeholders (Lamb, 2014). The focus group participants described that once occupational therapy practice became defined under narrow roles, that IEP team members could then insist on specific interventions and practices that went against their professional judgment. This finding related to the third most common barrier listed by survey participants, "I feel pressure from others to follow their definition of OT as a 'motor specialist,' 'sensory specialist,' or 'handwriting specialist.'"

These barriers to practice were examined more deeply during the focus group discussions, where participants expressed their own difficulty in defining occupation and what constituted occupational therapy practice. Some of these reasons related to the apparent abstractedness with occupation, in that occupation, was not necessarily a tangible item or service. The focus group participants also identified that the practices of occupational therapy, in their respective work settings, were established long before the participants began their school-based employment and that these had persisted and evolved over the years into their current state.

The narrow practice-related definitions did have some positive aspects, as expressed by the focus group participants. Some felt that that the "fine motor," "sensory," and "handwriting" titles contributed toward occupational therapy's distinct value in the schools. Occupational therapy practitioners were the most qualified professionals to address these needs, which contributed toward job security. Other focus group members felt that these areas initially established a "beginning set" of OT skills to master in school-based practice.

The inability to accurately convey occupation in school-based practice is a barrier to broadening the profession's domain. Inaccurate definitions and practice expectations will likely continue until school-based OT practitioners redefine these perceptions in their day-to-day conversations. Fortunately, occupational therapy is a self-defining profession, and the primary purpose of occupational therapy is to enable occupation (Price, personal conversation, April 2021). Buck and Boyd (2015) point out the great potential that practitioners hold as they accurately describe occupation and occupational therapy practice.

It is useful to consider the critical impact of defining occupational therapy in everyday community practice. Language and identity are inextricably linked. Lucy (1997) reminds us that language influences thought and thought influences structures and practices. In explaining occupational therapy to the public, the language must reflect the core or philosophical base of the profession. The profession's unique contribution to health is

occupation. Occupational therapists serve the occupational needs of individuals and the community. (Buck & Boyd, 2015, p. 144)

Individually, OT practitioners have daily opportunities to define and redefine their occupational therapy domain beyond others' currently accepted definitions and thus demonstrate a perpetually updated practice definition.

Caseloads to Workloads

The second and fourth most common barriers to addressing student's occupational needs related to the survey respondents feeling that they "served too many students" and feeling that the "OT team was understaffed." These statements aligned with survey respondents servicing nearly twice as many students than practitioners in other states (Seruya & Garfinkel, 2018b; Seruya & Garfinkel, 2020; Spencer et al., 2006; Watt, 2018; Watt et al., 2021). While exploring caseloads in greater depth, the focus group participants described a coping strategy of clinical triage to meet their student's most pressing needs while remaining cognizant that they could not logistically address additional areas of occupation beyond those currently addressed. There existed a finite number of work hours available on a given day. By narrowing down the infinite areas of occupation, the focus group participants "stayed in their lane" in an attempt to keep their caseloads from growing any larger.

Measuring caseloads is one metric to describe worker efficiency. It is often used to determine practitioners' productivity levels for seeking reimbursement within the medical model. When used as the sole metric, caseloads do not adequately describe the numerous work demands that school-based practitioners face in daily practice. As evidenced in the survey data, respondents proportioned time and effort into work-related tasks that supported their service time for students (e.g., documentation, meetings, travel, etc.). These necessary work demands

accounted for over half of the survey respondent's time, indicating that they are challenged with enormous work demands, a finding corroborated in the focus group discussions and by Watt et al. (2021).

One of the many adverse effects of coping with large caseloads is the inability to look at student's needs beyond traditional points of view. As described in the focus groups, when the students demonstrated proficiency in the traditional areas of practice, "fine motor," "sensory," and "handwriting," or when adequate accommodations were provided, the students were released from occupational therapy services as they were no longer viewed as requiring this service.

Solely looking at students' occupational needs from an early education point of view, there was an "aging out of services" trend by mid-elementary that reflected the narrow domain of practice.

As described earlier, the high caseloads contributed toward multiple systemic problems across school-based practice due to their iterative influence.

An alternative to caseload metrics (medical model approach to productivity) is the *workload approach* (educational approach), which is jointly supported by AOTA, APTA, and ASHA (2014a). The workload approach acknowledges that practitioners engage in multiple work-related tasks beyond direct services. It describes the collective benefits to all stakeholders, including therapy outcomes, job satisfaction, and even staff retention (AOTA, APTA, ASHA, 2014a; ASHA, 2003).

Of particular interest to the workload approach is the 3:1 service model developed in 2001 by Sharon Soliday, SLP (Gardner et al., 2013). In the 3:1 service model, practitioners follow their traditional workweek for three consecutive weeks. Then they change their routines during the fourth week by pushing into classrooms to provide services in the natural context, collaborating with IEP team members, cotreating with other professionals, and completing other

necessary work-related tasks (Garfinkel & Seruya, 2018a; Seruya & Garfinkel, 2020). The 3:1 service model proportions monthly time for practitioners and collective understanding among IEP team members that student's needs will be addressed differently once a month.

Implementing the 3:1 service model provides occupational therapy practitioners with different and unique opportunities to address student's occupational engagement. Changes in the environmental, physical, temporal, spatial, and social contexts allow practitioners to use various therapeutic strategies to facilitate the emergence of occupation during the process of therapy (Price & Miner, 2007). In essence, occupational therapy practitioners can exercise their autonomy to choose the most potent activities and strategies to facilitate engagement in meaningful activities without being constrained by the usual work routines and habits. Emboldened and refreshed by these therapeutic experiences, practitioners may then reflect on their students' performance and alter their future approaches accordingly.

The workload approach combined with the 3:1 service model offers school-based OT, PT, and SLP practitioners an advocacy tool for practice. Following the "language to identity" concept shared earlier (Buck & Boyd, 2015), practitioners may then collectively redirect conversations from "caseloads" toward meaningful "workload tasks and activities" that support students' goal attainment.

Maintaining a Narrow Scope or Domain of Practice

Attempting to understand why occupational therapy offers particular services and not others is a complex task. Of equal importance to this question is how OT practitioners determine which occupations to address. Many factors influence these decisions as related by the focus group participants. At the heart of these issues is the idea of professional coping as related in

Theme 1.1. With large caseloads inhibiting practitioners from meeting the workload demands, the thought of broadening practice may overwhelm even the most eager practitioners. By maintaining a narrowly defined scope of practice, the focus group participants demonstrated professional coping and simultaneously reinforced the narrow practice definitions held by others.

To more fully understand this process, it is helpful to take a systems view of occupational therapy in the school setting. From this perspective, schools can be seen as an efficient system with public oversight and accountability (i.e., public funding). The process of educating students reflects a streamlined, efficient process to address specific student needs. This system efficiently encourages appropriate referrals to knowledgeable persons such as reading or math specialists. Hospitals and other OT work settings also function in similar ways. Occupational therapy practitioners in hospitals and nursing homes address activities of daily living (ADLs), hand therapists treat hand injuries, and driver rehabilitation addresses driving. The school system likewise helps identify the role of occupational therapy practitioners and conveniently directs school staff in knowing when to refer students based on these role expectations.

One of the contributing factors to the efficient school system is the use of specific IEP forms and software used by schools to manage the IEP data. The focus group participants referenced the use of domain-specific boxes that reinforced the perceptual beliefs of IEP team members in addressing specific IEP needs. The "fine motor box," for example, appeared to belong to the OT profession. In contrast, the "behavior or adaptive (self-care) boxes" were addressed by other team members based on efficiency practices and perceived staff roles. These boxes encouraged a multidisciplinary approach to address student's needs and created a barrier to collaborative goals and services (e.g., interdisciplinary approaches). Underlying these role delineations was the belief of others, including OT practitioners, that a profession's domain is

static and unchanging. However, some focus group participants appeared to have broadened their practice roles by first acknowledging specific occupations were under their domain and then secondly, addressing the occupations in daily practice.

The multidisciplinary approach and its related narrow practice domains may potentially limit the profession's ability to meet students' holistic needs in the future based on Medicaid funding for special education programs. The concern is if schools transition to a fee-for-service reimbursement model for specific "boxed" services, then there could be an expectation for occupational therapy practitioners to only address those services that are reimbursable. This idea highlights the complexity of having the medical and educational models in close proximity.

Some survey and focus group participants identified a conceptual barrier to broadening the scope of school-based practice. The barrier was related to distinguishing between students' "academic or educational" needs from their "non-academic or non-educational needs." Although there can be black and white differences in students' educational participation from their medically-based health care needs, IEP team members, including OT practitioners, must understand that educational needs encompass academic, non-academic, and extracurricular participation. Framing education in this way creates indistinguishable gray areas between purely academic and educational needs. The understanding that educational needs consist of academic, non-academic, and extracurricular needs was made clear in the 2004 Reauthorizations of IDEA (Pub. L. 108-446). Furthermore, the Every Student Succeeds Act of 2015 (Pub. L. 114-95) identified occupational therapy practitioners as "specialized instructional support personnel" to support students in the regular education setting, thus enabling occupational therapy practitioners' to address regular education needs. A summary of the legislative influences on OT practitioners'

role in school-based practice can be located in the *Guidelines for Occupational Therapy Service* in Early Intervention and Schools (AOTA, 2017).

Ideally, OT practitioners would have immediately begun looking more broadly at student's needs across their educational experience when these legislative actions were put in place. However, many factors are influencing OT practice. Looking again from a systemic perspective, we see that public education is very expensive, and Utah has consistently spent the least amount on educational funding per student for decades. Therefore, public education will likely require significant advocacy efforts and legislative actions before school systems fully embrace their legal mandate "to provide non-academic and extracurricular services and activities in the manner necessary to afford children with disabilities an equal opportunity for participation in those services and activities" (IDEA, 2004, 34 CFR Section 300.107).

To direct school districts and charter schools in following special education legislation, the Utah State Board of Education regularly publishes the *Special Education Rules* (Utah State Board of Education, 2020). This publication provides broad practice definitions for occupational therapy. Additionally, there are multiple rules throughout the publication directing IEP teams to look at student's participation in adult roles across academic, non-academic, and extracurricular activities. These may include independent or supported living, employment, continued education after public school, community participation, etc. Relevant information for occupational therapy and occupational therapy practice from the most recent 2020 publication is listed in Table 9.

External Pressures to "Fix"

Just over a third of the survey participants selected, "I feel pressure from either parents or the school teams to remediate deficits or limitations in an attempt to 'fix' the student" as a barrier to addressing student's academic, non-academic, and extracurricular occupations. Fixing students reflects the medical model approach to disability by placing the problem within individuals while ignoring the barriers to participation in social contexts. Such views permeate western thoughts on health and wellness. As stated by Griffiths and Schmelzer (2015, p.115), "Most health care professionals continue to embody and promote structuralist philosophy and practice. OTs are often classified as structuralists, even though the profession was founded on pragmatic and holistic views of the individual" (Hooper & Wood, 2002).

When implementing "bottom-up" treatment approaches (Weinstock-Zlotnick & Hinojosa, 2004), the assumption is that underlying skills will improve occupational performance and participation. Remedial approaches can improve skills, but students may not generalize these skills across activities or their unique and varied environments. This scenario illustrates a significant barrier to achieving participation. The concern is the loss of missed opportunities to meet the students' real needs (Price, 2014), as participation in meaningful occupation depends on many factors beyond remediation (AOTA, 2014). This requires OT practitioners to discern the influence of all occupational performance factors and then address the whole domain of occupational therapy (Pierce, 2003). In the absence of this holistic view and approach, OT practitioners will only be addressing the surface needs and are unlikely to address meaningful participation (Peloquin, 2005; Price & Miner, 2007; Price, 2014).

In order to practice broadly, OT practitioners must have the autonomy to exercise their clinical judgment. External pressures to implement treatment that goes against the practitioner's reasoning are concerning. During the focus group discussions, some of the participants described IEP team members who overly advocated and thwarted the practitioner's use of clinical judgment. Among these were administrators who expected practitioners to provide services to

avoid parental confrontation and contestation of a due process complaint. Occupational therapists and occupational therapy assistants are licensed professionals that should not be puppeteered by others who simply have knowledge or awareness of OT practice. By licensure, professional autonomy for occupational therapy evaluation and treatment rests squarely on occupational therapists, who in turn may delegate treatment to the occupational therapy assistants.

Although analysis of this concern is complex, the survey data showed that practitioners did not identify as using contemporary conceptual frameworks and/or theories as an enabler to meeting student's occupational needs. This data suggest that respondents may not understand the complete rationale behind their clinical reasoning or are limited in effectively articulating this reasoning. Many contemporary OT frameworks and theories are based on social models of disability that emphasize contextual interventions to enable participation (Anaby et al., 2019; Law et al., 1996; Law & Darrah, 2014; Law et al., 2015). Additionally, Ikiugu et al. (2009, p. 163) described a framework for combining practice models to "avoid mediocrity in practice." This framework based on "strategic eelecticism" guides practitioners in selecting and conceptualizing a broad organizing model of practice and then relevant complementary models of practice which can then be shared with others and implemented in practice (Ikiugu et al., 2009). Describing practice using contemporary frameworks and theories may help practitioners retain their autonomy as occupational therapy practitioners and direct IEP team discussions away from structuralist concerns toward students' participation in meaningful occupations.

The Status Quo

Across the focus group discussions, the participants differed in their beliefs of what constituted occupational therapy in school-based practice. Some participants referenced habitual processes in their day-to-day practices that resembled being "stuck in a rut," "staying in your

lane," or "following the status quo." An analogy to these practice idioms is Newton's first law of motion, which describes how an object in motion continues to move in that same direction and at a constant speed until that object is acted upon by an external force. The object in motion can be thought of as the routines and habitual practices that underscore the process of delivering occupational therapy services. Rigid adherence to the status quo is one of the barriers that appears to hinder the profession's growth and keeps practitioners from meeting clients' needs (Baum, 2006; Lamb, 2017; Watt et al., 2021).

During the focus group discussions, the participants did not simply express that they wanted to follow habitual patterns and processes in practice. Instead, they provided thick descriptions of contextual influences that maintained these day-to-day practices. For those participants that felt they had followed the status quo, there appeared to be familiarity and complacency in the occupational therapy process. Within the context of high caseloads and a narrowed practice domain, these focus group participants become highly focused on addressing specific student needs as demonstrated in their practices. Participants, in turn, lessened their holistic view of participation in meaningful occupations as an outcome of services. The narrowed focus on "fine motor," "sensory," and "handwriting" became familiar, standard, and commonplace.

In addition to being influenced by multiple factors, the status quo can also take on an influential role. As identified in the third theme, the focus group participants exercised their professional autonomy along a continuum. When following habitual patterns in daily practice, that appeared to be maintained by the work culture, participants may have had a limited need to exercise their professional autonomy. This could be seen as an autopilot mode to daily practice (Burley, 2018).

Although many factors contributed toward the status quo of practice, Bonder and Martin's (2013) *Culture in Clinical Care: Strategies for competence* provides a broad perspective to some of the more salient influences. These include the understanding that individuals, including occupational therapy practitioners, belong to not one but multiple subcultural groups in the work setting. These include, but are not limited to, the school district, special education department, occupational therapy team, and occupational therapist and occupational therapy assistant dyad. Each of these groups allows practitioners to express their unique values and beliefs of practice differently as "culture is patterned after others and localized in settings" (Bonder & Martin, 2013, p. 20).

Bonder and Martin (2013) further described how culture is passed down from generation to generation. The realization that work cultures can likewise perpetuate values, beliefs, roles, and routines over time leads us to wonder about the first occupational therapy practitioners that practiced occupational therapy in Utah's public and charter schools. These OT "Adam and Eves" likely transitioned from the medical model practice setting bringing structuralist philosophies to school-based practice (Coleman, 1988; Hooper & Wood, 2002). Sharing cultural knowledge and processes between generations (Kay, 2015) parallel the learning process for occupational therapy students in fieldwork settings and entry-level practitioners in mentoring relationships.

Developing practitioners learn to reason and practice in somewhat similar ways to demonstrate clinical reasoning and competence in a given practice setting (Lave & Wenger, 1991). For better or worse, less experienced OT practitioners may learn to copy the procedural habits from more experienced therapists to guide them in developing clinical reasoning (Lave & Wenger, 1991). It seems reasonable that some practitioners could trace procedural practices back in time, a finding that was shared within the focus group discussions.

Based on the focus group discussions, it appears that the work culture, or portions therein, can act as a barrier to autonomous decision making and thwart practitioners' actions to meet students' academic, non-academic, and extracurricular needs. As we consider this influence along a continuum, we can likewise see aspects of the work culture acting as enablers to broaden practice.

Enablers to Broadening Practice

The enablers to broaden the domain of occupational therapy practice are best understood along a continuum of influence where each contributes some influence in a transactional relationship. Although this discussion focuses on the positive influences, it is helpful to know that the focus group participants simultaneously described the barriers and enablers together in interdependent relationships. It is unlikely that any one practitioner would encounter only the enabling factors while avoiding the barriers.

As identified in Theme 4.0, some of the focus group participants questioned and, in some instances, challenged the status quo of daily practice. Their efforts appeared to have broadened their ability to exercise professional autonomy as occupational therapy practitioners. When questioning and challenging the status quo was supported within the work culture, these participants were influencing the future of school-based practice by changing the system. The following enablers were initially identified in the survey and then further described in the focus group discussions.

Collaboration

The survey participants identified "I collaborate with teachers" and "I collaborate with other professionals" as their first and third highest ranked enablers to meeting student's

academic, non-academic, and extracurricular occupational needs. During the focus group discussions, some of the participants described how their professional relationships developed over time. These working relationships seemed to have matured when the OT practitioner was physically in the classroom or working closely with other professionals. The relationships did not seem to develop into solid examples of collaboration when the OT practitioners worked in isolation (i.e., pull-out sessions) with the students or moved quickly from student to student. Watt et al. (2021) reported similar findings.

Time was another vital aspect in developing collaborative relationships with educators and other professionals. Although collaboration was seen as an enabler, the survey participants did not spend much of their weekly time in this area. The focus group participants described that there were better times for collaboration to occur in the temporal context of the school day, such as before and after school and even throughout the school year. Additionally, the focus group participants described how large caseloads influenced all education team members. Educators and speech and language pathologists had high student-to-teacher ratios, which restricted collaboration times. Simply "dropping in to collaborate" was not viewed as effective collaboration.

Some of the focus group participants felt that the collaborative relationships helped generate student referrals for occupational therapy, especially in the context of educators viewing OT practitioners as "fine motor," "sensory," and "handwriting" specialists. As described during the focus group discussions, a few participants used these referral concerns to identify and address broader areas of occupational need.

The focus group participants described how collaboration could be hampered by using "boxed approaches" to provide IEP services. Commonly used IEP software contains text and

check "boxes" that special education staff use to describe students' performance, goals, and services. Many of the focus group participants felt that these software programs encouraged a multidisciplinary approach where IEP team members, including OT practitioners, worked in isolation from each other. This finding was insightful in understanding why multidisciplinary approaches appeared to be so common across Utah's schools, especially as the literature supports collaborative interdisciplinary and even transdisciplinary approaches for school-based practice (Anaby et al., 2019; Lam et al., 2019; Mu & Royeen, 2004).

Surprisingly lower on the survey list was "I collaborate with parents," which seemed to counter some of the positive descriptions from some of the focus group members. There appeared to be supportive comments in the focus groups relating to practitioners collaborating with "select" parents- those who sought help during Utah's soft school closure. These conflicting findings could be attributed to the timing of the survey, which gathered data at the beginning of the COVID-19 pandemic, and the timing of the focus groups, which occurred approximately six months later. Furthermore, the COVID-19 shutdowns challenged parents to manage personal, family, employment, and school needs. Parents may not have been available to collaborate with occupational therapy practitioners due to scheduling barriers, or there may have been more pressing concerns that needed addressing. Additionally, within a "fix it" perception, some parents may have felt little reason to collaborate with OT practitioners as their child's needs would eventually be addressed after the pandemic.

Exercising Autonomy in Clinical Judgment

"I have freedom to exercise my own clinical judgment" was the second most commonly identified factor that contributed toward meeting students' academic, non-academic, and extracurricular needs. This finding was not surprising as the outcome of occupational therapy

service is to engage in occupation (AOTA, 2014). As autonomous professionals, occupational therapy practitioners should have the freedom to exercise their clinical judgment. The OT practitioner is trained in occupational therapy practice and holds licensure to practice within the defined domain of occupation.

Unfortunately, external pressures influenced participants' reasoning and their ability to provide services. The focus group participants expressed such as they navigated various ethical dilemmas. The pressures to provide or not provide services after a manner deemed therapeutic and client-centered are not limited to school-based occupational therapy practitioners in this study. In 2014(b), AOTA, APTA, and ASHA published a joint statement for practitioners in health care settings who were unable to exercise autonomy in their clinical judgment. In part, this statement reads:

Decisions regarding client/patient care should be made by clinicians in accordance with their clinical judgment. Clinicians are ethically obligated to deliver services that they believe are medically necessary and in the client/patient's best interest, based upon their independent clinical reasoning and judgment as well as objective data. Respect for the therapist's clinical judgment and expertise is critical to achieving optimum client/patient care. Overriding or ignoring clinical judgment through administrative mandates, employer pressure to meet quotas, or inappropriate productivity standards may be a violation of payer rules, may be in conflict with state licensure laws, and may even constitute fraud. (AOTA et al., 2014b, p. 1)

The absence of autonomy, including the self-perception of not having autonomy in ones' practice, is a significant concern. As described earlier, the collective barriers to practice can inhibit practitioners from meeting students' occupational needs. The focus group participants described high caseloads, other individuals' incomplete definitions and understanding of occupational therapy practice, and pressure to use remedial interventions as barriers to meeting student needs. Collectively these types of influences may keep practitioners from stepping

outside of their "practice box." In addition to potentially poor student outcomes, there appeared to be secondary effects that the focus group participants felt. Some experienced an inner conflict in wanting to practice broadly and holistically, in wanting to remain challenged in daily practice, and in wanting to avoid professional burnout. These feelings were in contrast to other participants who expressed professional joy and satisfaction as they had, or perceived they had, the freedom to exercise their clinical judgment. These focus group participants referenced autonomy in their professional judgment as they explored research articles, participated in continuing education, and reflected within their practices. Engagement in these activities indicated that they thought more deeply about meeting students' needs and intervened accordingly.

Collegial Support

Some of the focus group participants described aspects of a supportive work culture that helped the practitioners in their daily practices. Among these were their associations with fellow OT practitioners and administrators. Supportive relationships were identified in the survey as the fourth and fifth most common enablers in helping OT practitioners address students' academic, non-academic, and extracurricular occupations.

When describing these supportive relationships, the focus group participants referenced the influence of occupational therapy team leaders who were willing to challenge the status quo and try new approaches. They also discussed helping each other within the clinical reasoning process to ensure that they were making the best choices for their students. Sometimes this collaboration translated into more experienced practitioners modeling with the students in a hands-on approach. This interaction was especially valued in mixed teams of experienced and entry-level practitioners, where both learned from each other (Lave & Wenger, 1991). For

example, newer practitioners developed skills to assess and treat common school-based practice needs such as "fine motor," "sensory," and "handwriting," while more experienced practitioners reflected on and broadened the areas of the domain they addressed.

Based on the focus group comments, administrators seemed to have an influence in supporting or hindering occupational therapy practice. Supportive administrators assisted some of the focus group participants in exercising their clinical judgment by not "caving into parent's unreasonable demands." They supported the occupational therapy process during difficult and uncomfortable meetings so that OT practitioners could exercise their autonomy in clinical judgment.

Learning to Advocate

The need to advocate for students, oneself, and the profession emerged from the focus group data. Some, but not all, of the participants appeared to have followed a progression of advocacy using reflection. First, some focus group participants articulated that somehow the system used to identify and provide services to students needed to change. This initial realization was the starting point where the practitioners reflected on student outcomes and their own personal meaning and job satisfaction in school-based practice. Some practitioners who felt they had unmet student needs moved toward a second stage where they actively challenged daily routines in their practices. They began to look for opportunities to collaborate with IEP team members to meet individual student needs, and they pushed to expand their practice domain beyond the perceived definitions of "fine motor," "sensory," and "handwriting." They embraced more areas of occupation as they looked across the domain to see the interrelationships of client factors, performance patterns, and contexts transacting together. A few focus group participants were then able to move beyond academic needs and address non-academic and extracurricular

needs. The third step was a deeper state of self-reflected action. This form of introspective thinking allowed participants to explore both student and professional meaning and satisfaction that emerged through the occupational therapy process. This final stage appeared to reflect the broader outcomes of occupational engagement as described in Peloquin's (2005) Eleanor Clarke Slagle Lecture, *Embracing our ethos, reclaiming our heart*.

To be clear, not all of the focus group participants, who expressed that their work environments did not support their efforts, progressed through this advocacy process. Some may have felt comfortable with the status quo as they perceived no alternative way to effectively manage their caseloads or other practice barriers unique to their work environments. This was seen as a form of professional coping. Trying to differentiate legitimate barriers from perceived barriers was beyond the scope of this study. Perhaps over time, practitioners simply wore down because their efforts to advocate did not produce the expected outcomes. This scenario led one focus group participant toward actively leaving school-based practice entirely. Looking back at the survey data regarding the number of years participants had worked in school-based practice, 37.5% had five or fewer years, and 59.7% had ten or fewer years. It is unclear why so many school-based OT practitioners in Utah have not worked longer in school-based practice. It is plausible that OT practitioners are leaving school-based practice because they are unable to professionally cope and eventually face burnout.

Griffiths and Schmelzer (2015) provide helpful insight in understanding how practitioners become change agents within systems over time. By definition, change agents are "those individuals, internal or external to the organization who play a significant role in fostering and promoting change within organizations" (Griffiths & Schmelzer, 2015, p. 113). Change agents demonstrate flexibility, openness to resistance, respect, willingness to learn, humor,

humility, and critical thinking (Griffiths & Schmelzer, 2015) as they advocate through progressively larger environments. McLeroy et al. (1988) identified these environments as five levels of change that include: intrapersonal (i.e., personal knowledge, beliefs, attitudes), interpersonal (i.e., family, friends, coworkers), institutional/organization (i.e., rules, policies, regulations), community (i.e., norms, standards), and public policy (i.e., local, state, federal laws).

Vachon et al. (2010) provided further insight into why some focus group participants could advocate as change agents while others were not. In their work, Vachon et al. (2010) described how the work environment influenced occupational therapists' decision-making abilities based on their emotional states. They describe five different decision-making modes, including defensive mode (e.g., clinical decisions were influenced by legal and administration constraints), repressed mode (e.g., clinical decisions were dictated by the organization), cautious mode (e.g., clinical decisions were guided by previously acquired practical knowledge), autonomous intuitive mode (e.g., clinical decisions were made by a desire to help clients), and autonomous thoughtful mode (e.g., clinical decisions were guided by theoretical models and hypotheses). The first three modes explain how practitioners reacted to negative emotions by relinquishing some of their autonomy in exercising their professional judgment. The latter persevered through difficult situations to actively exercise their autonomy (Vachon et al., 2010).

Many practice factors enabled and inhibited school-based occupational therapy practitioners in meeting students' academic, non-academic, and extracurricular needs across Utah. These identified barriers and enablers are unique to the survey and focus group participants, who provided varying and individualized perspectives based on their own

experiences. Nevertheless, current and future school-based practitioners can benefit from these findings through reflection and intentional advocacy.

Limitations

The survey findings combined with the focus group themes described what occupations school-based practitioners in Utah generally address in practice and the barriers and enablers in meeting students' academic, non-academic, and extracurricular needs. Though these findings are beneficial, there are limitations to this research.

The first is that the sample does not represent every school-based occupational therapy practitioner in Utah. Although significant efforts were used to contact all practitioners across the State, only 72 occupational therapy practitioners completed the survey. Two individuals, who did not finish the survey, contacted me directly to express that the survey did not reflect their roles in school-based practice, which further illustrates practice diversity across Utah.

A second limitation to this research is that very little to no data came from smaller school districts and many charter schools. This finding may indicate that these settings do not have access to OT practitioners or may even choose not to use OT practitioners. Therefore, the findings more closely reflect larger school districts and some charter schools.

The third limitation is the potential for personal bias. I am currently employed in school-based practice, and I have worked across multiple school districts in urban and rural Utah. To minimize this risk, I met weekly with Dr. Pollie Price, Ph.D., and occasionally with Dr. Anne Kirby, Ph.D., who served as faculty research mentors. Furthermore, I maintained a reflection journal to help separate my personal beliefs, thoughts, and feelings from the interpretation of data, and I accepted faculty feedback to guide me in the interpretation of the data. Lastly, I

completed a member check with the focus group participants to review the initial findings from the conventional content analysis before embarking on the thematic analysis.

Implications

The research findings from this study create many opportunities to improve school-based practices in Utah. Some of these opportunities are individually driven, while others necessitate the collective efforts of work groups or special interest groups. Other efforts necessitate a large body of occupational therapy practitioners working together through the Utah Occupational Therapy Association or American Occupational Therapy Association.

As described in the Occupational Therapy Practice Framework (AOTA, 2014), the occupational therapy process guides us in meeting students' needs through engagement in personal and meaningful occupations to support participation in life. The fundamental purposes of public education and the intent of IDEA and ESSA is for students to engage in academic, non-academic, and extracurricular activities. Therefore, I recommend the following:

1. Embrace a broader domain of occupation. Individual efforts, work-team efforts, and OT community-wide efforts can focus on developing and articulating a description of occupational therapy that represents the whole domain of our practice. We need to define occupation accurately and emphasize participation in occupation as an outcome (AOTA, 2014; Bonnard & Anaby, 2016). OT educators are encouraged to help OT students differentiate occupations from underlying activities that contribute toward occupational engagement. As we broaden practice beyond "fine motor," "sensory," and "handwriting," we can begin to holistically address the occupational needs of all students regardless of their ages. We need to look at students across their whole educational experience and not

think of education as only "academic" but in addition to non-academic and extracurricular participation and a trajectory of occupational development. Public education is the context and the means by which young children reach adulthood. Swinth et al. (2007) eloquently summarize this belief by stating, "It seems reasonable for family members, general taxpayers, and policymakers that after up to 19 years of publicly supported education, that students would be prepared to assume productive and positive adult roles in their communities" (p. 10).

2. Continue your individual and work-group efforts to reduce caseloads. Currently, the Utah Occupational Therapy Association is exploring the idea of caseload caps through legislative action. Unfortunately, this approach could be an overly simplistic solution to a highly complex problem. An arbitrary caseload number could have unintended consequences that we do not see. For example, some OT practitioners are already triaging students' needs, which facilitates a narrowing of their practice domain. A caseload cap may not allow OT practitioners to practice more broadly if their practice domain remains focused on addressing specific occupations. A caseload cap may actually make it more difficult for OT practitioners to broaden their practice domains. Also, a caseload cap does not necessarily consider the differences in student complexity and a practitioners' use of time for each student. An OT practitioner could assist a student or the student's IEP team for thirty minutes each quarter on self-care. Under the caseload cap, this student would take a caseload roster spot even though the OT practitioner proportioned very little time toward this student. Under this scenario, OT practitioners may be forced to service the most complex students while others were turned away. Lastly, a caseload cap could make it more challenging to assist students outside of special education services or a 504

accommodations plan. The Every Student Succeeds Act provides a means for OT practitioners to assist students in the regular education setting, and a caseload cap could prevent OT practitioners from meeting this legislative requirement.

I believe our best opportunity to reduce caseloads, while simultaneously maintaining our autonomy to service students according to our professional judgment, is through our efforts to (1) accurately define and articulate occupation and the occupational therapy domain and process (AOTA 2020), (2) transition the discussion of caseload to meaningful discussion of workload, and (3) implement a 3:1 service model. Ideally, administrators and other stakeholders would naturally see our value-based outcomes, and we could facilitate a bottom-up grassroots approach to reducing caseloads as individual and work-group practitioners demonstrate excellence in practice.

- 3. Transition the caseload discussion to a workload discussion (AOTA, APTA, ASHA, 2014a). Utah's occupational therapy practitioners appear to be working with two to three times as many students as practitioners in other states (Seruya & Garfinkel, 2018b; Seruya & Garfinkel, 2020; Spencer et al., 2006; Watt, 2018). Utah's school-based occupational therapists and other stakeholders must address the extremely high caseloads. I believe the change begins with accurate language that reflects the work activities of daily practice. Occupational therapy practitioners should reference workload in place of caseload during daily conversations as language influences thought and thought influences practices (Lucy, 1997).
- 4. Individual practitioners and work groups should consider following the 3:1 service model as described by Gardner et al. (2013), Garfinkel and Seruya (2018), and Seruya and Garfinkel (2020). Approximately once a month, modify your weekly intervention

approaches and schedules to best meet students' needs in different contexts. The 3:1 approach is appropriate for OT, PT, and ST practitioners in school-based practice and provides opportunities for interdisciplinary collaboration when utilized by all team members. Occupational therapy practitioners will find the 3:1 model helpful in generating opportunities to broaden their personal domain of occupations addressed in their practices. In addition, OT practitioners will find opportunities to demonstrate the principles contained in the workload approach.

5. With the assistance of The Utah Occupational Therapy Association, individual and work-group practitioners should explore the development of state guidelines for occupational therapy services in school-based practice. This endeavor would require the help of many occupational therapy practitioners and offers a realistic opportunity to directly address our caseload crisis. Uniting our collective voices to develop practice guidelines could clearly articulate our distinct value in school-based practice and describe our unique role in meeting IDEA and ESSA requirements. Furthermore, school-based practice guidelines could help narrow the conceptual and practice gaps between what the occupational therapy profession has to offer from that which we are currently offering in school systems and would strengthen professional autonomy in exercising clinical reasoning in identifying and meeting students' occupational needs.

After developing the guidelines, the UOTA membership could then approach the Utah State Office of Education to update the definition of occupational therapy and clarify our domain (AOTA, 2020) in the next edition of the *Special Education Rules* (Utah state Board of Education, 2020).

Even though the current version of the *Special Education Rules* needs to be updated, OT practitioners will find ample references to functional outcomes located throughout the *Rules* that can be used to broaden their practice domain. I strongly encourage every school-based OT practitioner to familiarize themselves with and use the *Special Education Rules* to advocate for students' academic, non-academic, and extracurricular participation. A summary of specific rules that are relevant to occupational therapy practice is located in Table 9.

6. Ensure that occupational therapy services are available to students in Utah's public schools. During the survey recruitment, many charter schools and smaller school districts stated that they did not need an occupational therapist or that there were no students who had OT services listed on their IEPs. This leads us to question how non-occupational therapy personnel (i.e., educators, school psychologists, administrators, etc.) determine if occupational therapy services are or are not warranted, needed, or appropriate, when there is no licensed occupational therapist associated within a particular school. The provision of occupational therapy services rests solely with occupational therapists. At this point in time, especially with telehealth services widely available after the COVID-19 pandemic, all of Utah's charter schools and school districts need to demonstrate that they provide OT services in their schools. Or, for schools that legitimately have no occupational therapy needs, a school would provide an annual statement from an occupational therapist attesting to such an exception. As other professions (i.e., physical therapy, speech and language therapy, social work, adaptive physical education, etc.) likely face a similar challenge, a coordinated effort between professional organizations is warranted.

7. Actively engage in advocacy. All school-based occupational therapy professionals need to intentionally and explicitly advocate to meet student's holistic needs. There are many opportunities to demonstrate advocacy through formal and informal leadership. An excellent text for developing or improving ones' leadership skills is An occupational perspective on leadership: Theoretical and practical dimensions (2nd Edition) by Sandra Barker Dunbar and Kristin Winston (2015). This book was explicitly written for occupational therapy practitioners and addresses advocacy through many avenues. Additionally, Crucial Conversations (2nd Edition) by Kerry Patterson et al. (2012) explores healthy and respectful conversation skills that occupational therapy practitioners need to model in daily practice. These two texts are highly recommended as their content will provide additional pathways to develop and demonstrate advocacy skills in school-based practice.

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Appendix I

The 2020 Utah School-based Occupational Therapy Survey

Thank you for taking *The 2020 Utah School-based Occupational Therapy Survey*. This 15-minute survey is best displayed from a desktop or laptop. The survey may be difficult to read on a mobile device. As you answer the survey questions, please reflect on your OT practices *before the pandemic*.

Background- This survey is being conducted to identify the areas of occupation and activities that are addressed by Utah's occupational therapy practitioners working in school-based practice settings, and the various influences on individual therapists in school-based practice.

Study Procedure- This study consists of an online survey that will take approximately 15 minutes.

Risks- Although unlikely, you may experience some discomfort reflecting on your work habits and job performance. There are no other know risks from the survey.

Benefits- Occupational therapy practitioners can reflect on their own practice habits. School-based OT practitioners will be able to identify various trends across school-based practice in Utah.

Confidentiality- To maintain confidentiality and privacy, I will not associate your personal information with the research findings. There is an optional second phase after the survey. If you elect to participate in an optional focus group or individual interview in the fall, I will need your contact information. Your name and any other identifying information will not be shared. All information will be maintained in a password-protected computer and website. Your name and identifying information will not be included in the research findings.

Principal Investigator- If you have any questions, you may contact Travis Chamberlain, OTR/L, at 801-499-3885.

Voluntary Participation - Participation in the survey and/or focus group/individual interview is voluntary. You can withdraw from the research at any time. Costs and Compensation-There is no cost to participate or compensation provided.

By submitting your answers to this survey, you are giving your consent to participate.

Yes, I consent to participate.
•
No, I do not consent to participate.

Are you an occupational therapy practitioner (occupational therapist or occupational therapy assistant) providing services in Utah's public or charter schools to children/youth/adults (ages 3-22) within the last two school years (2018-2019 or 2019-2020)?
Yes
No
How many students would you typically have on your caseload under an Individualized Education Plan (IEP), 504 accommodations plan, and in the general education setting? (Please answer all fields)
Individualized Education Plan (IEP)
504 Accommodations Plan
Regular Education
What percentage of your time do you typically devote to each age group? (The percentages must add to 100%)
Preschool
K-3 rd
$4^{ ext{th}}$ $-6^{ ext{th}}$
7 th -9 th
10 th -12 th
Post-high school to age 22
During a typical week prior to the pandemic, what percentage of your time do you spend in these areas? (The percentages must add to 100%)
Preparing for the day.
Traveling between schools.
Providing occupational therapy directly with students.
Providing occupational therapy consultation/collaboration with other team members when students are not present.
Attending meetings that are focused on a particular student (IEP, 504, staffing with school teams).
Attending team meetings or trainings.
Documenting (evaluation, progress note, daily/weekly note, email).

Collaborating/communicating with parents.
Prior to the beginning of the pandemic, which service delivery method do you typically use to provide occupational therapy services? (The percentages must add to 100%)
Direct services (working directly with the students).
Consultative services (working with other team members [other occupational therapy practitioners, motor aides, paraprofessionals, educators, parents, other professionals, etc.] when the students are NOT present).
Direct services using telehealth (working directly with the students through video conferencing).
Consultative services using telehealth (using video conferencing while working with other team members [other occupational therapy practitioners, motor aides, paraprofessionals, educators, parents, other professionals, etc.] when the students are NOT present).
6. Prior to the beginning of the pandemic, where did you typically provide occupational therapy when providing direct services ? (The percentages must add to 100%). (This question was only shown to those who selected "direct services" in the previous question).
I provide direct services in the student's natural setting such as the classroom, lunch room, or playground (push-in).
I provide direct services away from the student's natural setting such as the hallway or therapy room (pull-out).
I provided direct services through telehealth (video conferencing).
7. Please identify which school occupations/activities you addressed during the last two school years (2018-2019, 2019-2020) prior to the pandemic. Select each box if you addressed the school occupation/activity at least once, with a specific student, in the last two years.

	C1 1
School Occupations/Activities	Check
	Box
Functional mobility within the school building (ambulation, wheelchair, transfers,	
etc.)	
Functional mobility outside of the school building (ambulation, wheelchair, transfers,	
etc.)	
Dressing/clothing management	
Toileting or toilet hygiene	
Feeding or self-feeding	

Personal device care (hearing aids, glasses, adaptive equipment, etc.)	
Personal hygiene or grooming	
Communication management (assistive technology, smartphones, etc.)	
Driving or community mobility (public transportation, walking, driving, etc.)	
Financial management	
Health management or maintenance (health and wellness, nutrition, exercise, etc.)	
Home establishment or management	
Meal preparation or cleanup	
Safety or emergency maintenance	
Shopping	
Rest or sleeping	
Sleep preparation	
Formal educational participation (math)	
Formal educational participation (reading)	
Formal educational participation (writing)	
Formal educational participation (typing)	
Formal educational participation (cutting)	
Informal personal educational needs or interests exploration (identifying topics)	
Informal personal education participation (participating in informal classes,	
programs, activities, etc.)	
Employment interests and pursuits (identifying and selecting work opportunities)	
Employment seeking and acquisition	
Volunteer exploration (matching one's skills to a community cause or organization	
for unpaid work)	
Volunteer participation	
Play exploration (identifying appropriate types of play)	
Play participation	
Leisure exploration (identifying leisure activities)	
Leisure participation	
Social participation in community	
Social participation with family	
Social participation with peer or friend	
Adapted from Table 1 Occupations AOTA 2014 pp. \$10-\$21	

Adapted from Table 1. Occupations, AOTA, 2014, pp. S19-S21.

8. Are there	e any other acad	emic, non-acado	emic, or extract	urricular occuj	pations or ac	tivities that
you add	lress in school-b	ased practice (d	luring the last t	wo years and p	prior to the p	oandemic)
that wer	re not listed? (O	ptional)				

9. Please list any academic, non-academic, and extracurricular occupations or activities that you would like to address in the future that you are not currently addressing?

Some school-based practitioners feel that they are not able to address all their student's academic, non-academic, and extracurricular occupations/activities that they would like to. The following questions will ask you to reflect on the things that limit and also help you in providing OT services.

 Please identify the factors that are <u>limiting you the most</u> in addressing student's academic, non-academic, and extracurricular occupations or activities prior to the pandemic. (You may choose up to 5)
I am unable to access research findings, continuing education, or other forms of learning.
I lack administrative support.
I feel resistance from other OT practitioners or personnel.
I feel that I serve too many students.
I am unable to collaborate effectively with other professionals.
I have a large geographical service area.
I feel that the OT team is understaffed.
I feel that the School District's or Charter School's policies and procedures limit my practice.
I feel that other professionals are already addressing the student's needs.
I feel pressure from either parents or the school teams to remediate deficits or limitations in an attempt to "fix" the student.
I feel that OT is defined by others as "motor," "sensory," or "handwriting."
I feel pressure from others to follow to their definition of OT as a "motor specialist," "sensory specialist," or "handwriting specialist".
Other
11. Please identify the factors that are helping you the most to address student's academic, non academic, and extracurricular occupations or activities prior to the pandemic. (You may choose up to 5).
I have access to research findings, continuing education or other forms of learning.
I have administrative support
I feel support from other OT practitioners/personnel.

	I feel that I serve an appropriate number of students.
	I collaborate with parents.
	I collaborate with teachers.
	I collaborate with other professionals.
	My school(s) are concentrated in a manageable geographic area.
	The OT team is adequately staffed.
	I feel that the School District's or Charter School's policies and procedures support my practice.
	I have freedom to exercise my own clinical judgment.
	I use contemporary conceptual frameworks and/or theories.
	I facilitate student's performance by modifying and/or adapting the student's environment.
	I provide OT services in the student's natural environment (classroom, lunchroom, playground).
	I participate in school-wide programs or initiatives such as Universal Design for Learning (UDL), Positive Behavioral Intervention Supports (PBIS), and Response to Intervention (RTI).
	I can provide OT services through tiered levels of intervention such as the whole class, small groups, and individual students.
	I am able to complete assessments, intervention plans, and implementation collaboratively with other professionals when appropriate.
	I feel that I am using a workload approach, as opposed to a caseload approach to describe my performance and productivity in school-based practice. (A caseload is defined as the number of students and their frequency of visits that you provide. A workload is defined as your comprehensive efforts in providing OT in the school setting such as assessing, intervening, planning, collaborating, supervising, traveling, attending meetings, documenting, and other activities).
	Other
12. Wh	at is your highest level of occupational therapy education?
	Associate, AS, AAS (Occupational Therapy Assistant)
	Entry-level Bachelor (Occupational Therapist)
	Entry-level Master (Occupational Therapist)
	Post-professional Masters (Occupational Therapist)

Entry-level Doctorate (Occupational Therapist)		
Post-professional Doctorate (Occupational Therapist)		
Research Doctorate/PhD (Occupational Therapist)		
13. How many years have you practiced as an occupational therapy p	ractitioner?	
14. How many years have you practiced as an occupational therapy p practice ?	ractitioner <u>in school-based</u>	
15. Which statement best describes your primary school-based emplo	yment.	
I am employed by the school district or charter school	(s).	
I am a contracted employee to provide services within	the school(s).	
16. In your primary school-based employment, how many hours per work?	week do you typically	
17. Which statement best describes your primary work setting.		
I generally work in urban communities with more that	n 50 000 people	
I generally work in suburban communities with 2,500		
•		
I generally work in rural communities with less than 2	z,suu peopie.	
18. In which counties do you provide school-based OT services? Sele	ect all that apply.	
Counties Check Box		
Beaver		

	CL LD
Counties	Check Box
Beaver	
Box Elder	
Cache	
Carbon	
Daggett	
Davis	
Duchesne	

Emery	
Garfield	
Grand	
Iron	
Juab	
Kane	
Millard	
Morgan	
Piute	
Rich	
Salt Lake	
San Juan	
Sanpete	
Sevier	
Summit	
Tooele	
Uintah	
Utah	
Wasatch	
Washington	
Wayne	
Weber	
19. What is your age?	
Under 18	

19. What 1	s your age?
	Under 18
	18-24
	25-34
	35-44
	45-54
	55-64
	65 or older
	Prefer not to answer
20. What i	s your gender?
	Male
	Female
	Prefer not to answer

	e indicate your ethnicity.
_	White
_	Black or African American
_	Asian
_	American Indian or Alaska Native
_	Native Hawaiian or Pacific Islander
_	Other
_	Prefer not to answer
approxin through a informat	he findings from this survey in more depth? The focus group or interview would last nately one to two hours and would take place this fall. It may be completed in person or a video conference. Your survey answers will not be associated with your contact ion. Yes, I would like to be contacted.
_	
	No, thank you.
your con	No, thank you. the provide your contact information. Your survey answers will not be associated with tact information. (This question was only shown to those who selected "Yes" in the question).
your con previous	be provide your contact information. Your survey answers will not be associated with tact information. (This question was only shown to those who selected "Yes" in the
your con previous	be provide your contact information. Your survey answers will not be associated with tact information. (This question was only shown to those who selected "Yes" in the question).
your con previous N	be provide your contact information. Your survey answers will not be associated with tact information. (This question was only shown to those who selected "Yes" in the question). Warne

Appendix II

Summary of the Conventional Content Analysis

The broad theme identified throughout all the focus group questions:

1. The perceptions and practices vary in what constitutes occupational therapy in school-based practice.

Focus Group Question #1: Very few people in the survey reported working with students after elementary school. Why do you think that may be? Do you have any experiences working with older students?

Themes identified from question #1:

- 1. There was a heavy emphasis on early education occupations.
- 2. High caseloads influenced practice.
- 3. Students grew up and aged out of services.
- 4. There was little emphasis on middle to late education occupations.

Question #2: Survey respondents felt that collaboration was helpful; although, they did not spend a lot of time in this area. What are some challenges and supports to collaboration?

Themes identified from question #2:

Challenges to Collaboration

- 1. High caseloads and multiple schools appeared to negatively influence the focus group participant's ability to collaborate.
- Collaboration depended on other's availability (teachers, professionals, parents) during specific times of the school day (before/after school, lunch, recess, meetings).
- 3. The focus group participants coped with practice restraints and appeared to triage OT services.

Supports to Collaboration

- 1. Social relationships helped establish the context for collaboration.
- 2. Collaborative goal setting supported collaborative service provision.

Question #3: Exercising clinical judgment appears to be important to the survey participants. What types of influences are you encountering when trying to make decisions about the best interventions for your students?

Themes identified from question #3:

1. School-based practice resembled a complex cultural system that yielded both positive and negative influences simultaneously. School-based practitioners exercised clinical judgment in the context of these influences.

Negative Influences on Exercising Clinical Judgment

- 1. The work culture maintained the status quo of school-based practice and, in turn, reduced the need for the focus group participants to exercise clinical judgment.
- 2. High caseloads negatively influenced the clinical reasoning process.

Positive Influences on Exercising Clinical Judgment

1 The work culture supported the focus group participants in exercising various forms of clinical reasoning.

Question #4: Many people think of occupational therapy as "fine motor," "sensory," or "handwriting" therapy. What do you think about these descriptions?

Themes identified from question #4:

Positives to the Descriptions

- 1. The descriptions helped identify the role of OT and directed others in knowing when OT is needed.
- 2. The descriptions maintained a streamlined process to address particular student needs that encouraged appropriate referrals in an efficient manner.
- 3. The descriptions helped the focus group practitioners cope with the broad definitions of what OT practice could entail and the context of school-based practice (high caseloads, multiple buildings, the established roles and expectations of other professionals) so that the focus group participants could address the most salient needs.
- 4. The descriptions established a skill set in school-based practice, which could be helpful to entry-level practitioners.

- 5. The descriptions established a referral point to then explore additional needs.
- 6. The descriptions contributed toward occupational therapy's distinct value in school-based practice.

Negatives to the Descriptions

- 1. The descriptions narrowly described OT practice and established a barrier to collaboration.
- 2. The focus group participants could have experienced an inner conflict in wanting to practice broadly and holistically, in wanting to remain challenged in daily practice, or in wanting to avoid burnout.
- 3. The narrow descriptions withheld referrals.
- 4. The descriptions reinforced a narrow view of practice which could slow the growth of the profession.

Table 1. Sample Demographics of OT practitioners Providing Occupational Therapy Services in Utah's Schools

Variable	No. of Practitioners (a)	% of Practitioners
Gender (b)	, , ,	
Male	11	15.28
Female	59	81.94
Declined to answer	2	2.78
Age		
18-24	0	0
25-34	14	19.72
35-44	29	40.85
45-54	21	29.58
55-64	5	7.04
65+	2	2.82
Ethnicity (b)		
White	67	93.06
Black	0	0
Asian	0	0
American Indian or Alaskan Native	1	1.39
Native Hawaiian or Pacific Islander	0	0
Other	1	1.39
Declined to answer	3	4.17
Highest Occupational Therapy Degree		
Associate- OTA	16	22.22
Entry-level bachelor	11	15.28
Entry-level master	29	40.28
Post-professional master	12	16.67
Post-professional doctorate	3	4.17
Research doctorate or PhD	0	0
Number of years as an OT practitioner		
1-5	19	26.40
6-10	11	15.28
11-15	12	16.67
16-20	14	19.44
21-25	9	12.50
26-30	4	5.56
31-35	3	4.17
36+	0	0
Number of years as an OT practitioner in school-based practice		
1-5	27	37.50
6-10	16	22.22
11-15	12	16.67

16-20	11	15.28
21-25	2	2.78
26-30	2	2.78
31-35	2	2.78
36+	0	0
Number of hours typically worked each week		
0-5	0	0
6-10	4	5.63
11-15	2	2.82
16-20	4	5.63
21-25	3	4.22
26-30	11	15.49
31-35	5	7.04
36-40+	42	59.15
Employment		
Employed by LEA	52	72.22
Contracted to provide services	20	27.78

⁽a)= Some participants chose not to answer specific demographic questions, so the N can be less than or equal to 72. (b)= In developing the survey, I failed to provide inclusive categories for gender identification. Furthermore, I failed to add "Hispanic" as an option. These omissions were not intentional. I apologize to anyone I may have hurt and would appreciate the opportunity to apologize in person or by phone if possible.

Table 2. School-based OT Service Provision According to Geographical Setting

Location	No. of Practitioners	% of Practitioners
Community setting		
Urban >50,000	24	33.33
Suburban 2,500-50,000	45	62.50
Rural <2,500	3	4.17
In which counties do you provide SB OT		
services? You may select multiple counties.		
Davis	19	20.43
Utah	19	20.43
Salt Lake	18	19.35
Weber	14	15.05
Summit	5	5.38
Cache	4	4.30
Tooele	3	3.23
Box Elder	2	2.15
Wasatch	2	2.15
Duchesne	1	1.08
Iron	1	1.08
Kane	1	1.08
Morgan	1	1.08
Sanpete	1	1.08
Uintah	1	1.08
Washington	1	1.08
Beaver	0	
Carbon	0	
Daggett	0	
Emery	0	
Garfield	0	
Grand	0	
Juab	0	
Millard	0	
Piute	0	
Rich	0	
San Juan	0	
Sevier	0	
Wayne	0	

Table 3. Percentage of Practitioner's Time by Grade Level

Grade Level	% of Practitioner's Time
Preschool (age 3 to Kindergarten)	18.61%
K-3	45.00%
4-6	20.01%
7-9	10.21%
10-12	4.61%
Post high-age 22	1.56%

Table 4. Percentage of Practitioner's Time by Work-Related Tasks

Work Tasks by Group	% of Practitioner's Time
Providing direct services	44.54%
Documentation	15.78%
Meetings (IEP, 504, Staffing)	9.04%
Consult without student present	6.95%
Travel	6.17%
Preparing for the day	6.07%
Administrative tasks	4.53%
Team meetings or school trainings	2.84%
Collaboration with parents	2.44%
Professional development	1.38%
Telehealth	0.25%

Table 5. Areas of Occupation Addressed in School-based Practice at Least One Time During the 2018-19 or 2019-20 School Year.

Ranking	Areas of Occupation (a), (b)	Number of Participants that Addressed This Occupational Area in the Last Two Years (N=72)
1.	Formal educational participation (writing)	71 (98.61%)
2.	Formal educational participation (cutting)	66 (91.67%)
3.	Formal educational participation (typing)	64 (88.89%)
4.	Dressing/clothing management	60 (83.33%)
5.	Play participation	54 (75.00%)
6.	Social participation with peer or friend	50 (69.44%)
7.	Play exploration (identifying appropriate types of play)	48 (66.67%)
8.	Feeding or self-feeding	47 (65.28%)
9.	Communication management (assistive technology, smartphones, etc.)	46 (63.89%)
10.	Functional mobility within the school building (ambulation, wheelchair, transfers, etc.)	32 (44.44%)
11.	Personal hygiene or grooming	30 (41.67%)
12.	Toileting or toilet hygiene	28 (38.89%)
13.	Personal device care (hearing aids, glasses, adaptive equipment, etc.)	27 (37.50%)
14.	Informal personal education participation (participating in informal classes, programs, activities etc.)	26 (36.11%)
15.	Formal educational participation (math)	25 (34.72%)
16.	Meal preparation or cleanup	23 (31.94%)
17.	Informal personal educational needs or interests exploration (identifying topics)	21 (29.17%)
18.	Formal educational participation (reading)	21 (29.17%)
19.	Leisure participation	19 (26.39%)
20.	Leisure exploration (identifying leisure activities)	17 (23.61%)
21.	Health management or maintenance (health and wellness, nutrition, exercise, etc.)	16 (22.22%)
22.	Safety or emergency maintenance	15 (20.83%)
23.	Social participation in community	13 (18.06%)
24.	Social participation with family	13 (18.06%)
25.	Functional mobility outside of the school building (ambulation, wheelchair, transfers, etc.)	10 (13.89%)
26.	Employment interests and pursuits (identifying and selecting work opportunities)	8 (11.11%)
27.	Shopping	6 (8.33%)
28.	Home establishment or management	5 (6.94%)
29.	Rest or sleeping	5 (6.94%)
30.	Financial management	4 (5.56%)

31.	Driving or community mobility (public transportation,	3 (4.17%)
	walking, driving, etc.)	
32.	Sleep preparation	2 (2.78%)
33.	Employment seeking and acquisition	1 (1.39%)
34.	Volunteer exploration (matching one's skills to a	0
	community cause or organization for unpaid work)	
35.	Volunteer participation	0

(a)=To limit survey length, not all occupations listed in the *Occupational Therapy Practice Framework: Domain and Process*, 3rd Edition, were included (AOTA, 2014). (b)= In survey questions 8 and 9, respondents could write in other occupations that they addressed in practice or would like to address in the future. Although responses were not occupations by themselves, the following were identified: sensory processing, sensory integration, self-regulation, mindfulness, attention, ocular motor, fine motor, visual motor, executive functioning, coordination, core strength, and balance.

Table 6. Barriers to Addressing Student's Academic, Non-academic, and Extracurricular Occupational Needs as Reported by Survey Respondents

Ranking	Barriers to Practice	Selection
		Frequency
		(N=72) (a)
1.	"I feel that OT is defined by others as "motor, sensory, or	44 (61.11%)
	handwriting."	
2.	"I feel that I serve too many students."	40 (55.56%)
3.	"I feel pressure from others to follow their definition of OT as a	29 (40.28%)
	"motor specialist," "sensory specialist," or "handwriting specialist."	
4.	"I feel that the OT team is understaffed."	28 (38.89%)
5.	"I feel pressure from either parents or the school teams to remediate	25 (34.72%)
	deficits or limitations in an attempt to "fix" the student."	
6.	"I have a large geographical service area."	16 (22.22%)
7.	"I feel that the School District's or Charter School's policies and	16 (22.22%)
	procedures limit my practice."	
8.	"I feel that other professionals are already addressing the student's	15 (20.83%)
	needs."	
9.	Other (b)	13 (18.06%)
10.	"I lack administrative support."	9 (12.50%)
11.	"I am unable to access research findings, continuing education, or	7 (9.72%)
	other forms of learning."	
12.	"I feel resistance from other OT practitioners or personnel."	7 (9.72%)
13.	"I am unable to collaborate effectively with other professionals."	6 (8.33%)

⁽a)= Survey participants were limited to five selections.

⁽b)= Comments related to being forced to serve students through a minutes-per-time structure over a yearly basis, other's inability to accept outcomes from a significant disability, lack of funding, and pressure for goals to be academically related.

Table 7. Enablers to Addressing Student's Academic, Non-academic, and Extracurricular Occupational Needs as Reported by Survey Respondents

Ranking	Barriers to Practice	Selection
		Frequency
		(N=72) (a)
1.	"I collaborate with teachers."	50 (69.44%)
2.	"I have freedom to exercise my own clinical judgment."	42 (58.33%)
3.	"I collaborate with other professionals."	39 (54.17%)
4.	"I have administrative support."	34 (47.22%)
5.	"I feel support from other OT practitioners/personnel."	30 (41.67%)
6.	"I provide OT services in the student's natural environment	21 (29.17%)
	(classroom, lunchroom, playground)."	
7.	"I facilitate student's performance by modifying and/or adapting the	17 (23.61%)
	student's environment."	
8.	"I can provide OT services through tiered levels of intervention	17 (23.61%)
	such as the whole class, small groups, and individual students."	
9.	"My school(s) are concentrated in a manageable geographic area."	16 (22.22%)
10.	"I am able to complete assessments, intervention plans, and	14 (19.44%)
	implementation collaboratively with other professionals when	
	appropriate."	
11.	"I feel that I serve an appropriate number of students."	12 (16.67%)
12.	"I feel that I am using a workload approach, as opposed to a	10 (13.89%)
	caseload approach, to describe my performance and productivity in	
	school-based practice." (A caseload is defined as the number of	
	students and the frequency of visits that you provide. A workload is	
	defined as your comprehensive efforts in providing OT in the	
	school setting such as assessing, intervening, planning,	
	collaborating, supervising, traveling, attending meetings,	
12	documenting, and other activities).	0 (12 500/)
13.	"I collaborate with parents."	9 (12.50%)
14.	"I have access to research findings, continuing education or other	8 (11.11%)
15.	forms of learning." "The OT team is adequately stoffed."	7 (0.720/)
	"The OT team is adequately staffed."	7 (9.72%)
16.	"I feel that the School District's or Charter School's policies and procedures support my practice."	5 (6.94%)
17.	"I use contemporary conceptual frameworks and/or theories."	5 (6 0.40/)
		5 (6.94%)
18.	"I participate in school-wide programs or initiatives such as	4 (5.56%)
	Universal Design for Learning (UDL), Positive Behavioral Intervention Supports (PBIS), and Response to Intervention (RTI)."	
10	Other	0
19.	Oute	U

⁽a)= Survey participants were limited to five selections.

Table 8. Sample Description, Work Experience, and Work Environment Characteristics of Focus Group Participants.

Variable	Focus Group Characteristics
Gender	2 Male
	7 Female
Race	9 White
Age	2 (25-34 years)
	5 (35-44 years)
	2 (45-54 years)
Highest OT degree	2 Associate (Occupational Therapy
	Assistants)
	5 Entry-level Master's
	1 Post-professional Doctorate
Years of experience as an OT professional	Range of 2-19 (9.22) years
Years of experience in SB practice	Range of 2-16 (8.0) years
Community Setting	2 Urban setting (>50,000 people)
	5 Suburban (2,500-50,000 people)
	2 Rural (<2,500 people)
Employment arrangement	2 through contract
	5 by Local Education Agency

OT=occupational therapy, SB=school-based

Table 9. References to Utah's *Special Education Rules* (2020) that are relevant to Occupational Therapy Practice.

Reference	Relevance to Occupational Therapy
Page V	Special Education Rules was developed by The Individuals with
	Disabilities Education Act 2004 Regulations and the applicable
	changes in the Every Student Succeeds Act.
Page 2, I.E.1	Adapted P.E. means specially designed physical education, as
	described in the student's IEP.
Page 2, I.E.2	Adaptive behavior means the effectiveness or degree to which the individual meets the standards of personal independence and social responsibility expected of students of comparable age and cultural group.
Page 2, I.E.4	Assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a student with a disability. The term does not include a medical device that is surgically implanted, or the replacement of such a device.
Page 2, I.E.5	
1 age 2, 1.L.3	Assistive technology service means any service that directly assists a student with a disability in the selection, acquisition, or use of an assistive technology device. The term includes: a. Evaluating the needs of a student with a disability, including a functional evaluation of the student in the student's customary environment.
	b. Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by students with disabilities.
	c. Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices. d. Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs.
	e. Training or technical assistance for a student with a disability or, if appropriate, that student's family.
	f. Training or technical assistance for professionals (including individuals providing education or rehabilitation services),
	employers, or other individuals who provide services to, employ, or
	are otherwise substantially involved in the
	major life functions of students with disabilities.
Page 3, I.E.6	Behavior Intervention Plan (BIP) means a written plan for changing a
	student's behavior, including target behavior, strategies for teaching
	replacement behavior, reinforcers, and a schedule for review of
	intervention effectiveness data.

Daga 2 IE 7	Career and Technical Education (CTE) means arganized advectional
Page 3, I.E.7	Career and Technical Education (CTE) means organized educational programs that are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career requiring certification or licensure other than a baccalaureate or
Page 5, I.E.13	advanced degree. Equipment means machinery, utilities, built-in equipment, and any necessary enclosures or structures to house the machinery, utilities or equipment; and all other items necessary for the functioning of a
	particular facility as a facility for the provision of educational services, including items such as instructional equipment and necessary furniture; printed, published and audiovisual instructional materials; telecommunications, sensory and other technological aids
	and devices; and books, periodicals, documents, and other related materials.
Page 5, I.E.16	Extended school year (ESY) services means special education and related services.
Page 6, I.E.19	Functional behavior assessment (FBA) means a systematic process of identifying problem behaviors and the events that (a) reliably predict occurrence and nonoccurrence of those behaviors, and (b) maintain the behaviors across time.
Page 6, I.E.20	General curriculum means the same grade-level core curriculum as that provided for nondisabled students (i.e., the Utah Core Standards).
Page 7, I.E.27	Least restrictive environment (LRE) means that, to the maximum extent appropriate, students with disabilities, including students in public or private institutions or other care facilities, are educated with students who are not
	disabled. Special classes, separate schooling, or other removal of students with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.
Page 8, I.E.30	Multi-tiered System of Supports (MTSS) means a comprehensive continuum or framework for implementing systemic, evidence-based practices to maximize student achievement in academics and behavior in preparation for and leading to College and Career Readiness.
Page 8, I.E.32	Paraeducator means a school employee who has been trained and who works under the supervision of teachers or other professionally-licensed or certified practitioners to support and assist in providing instruction and other services to students. Paraeducators are sometimes referred to as
Page 9, I.E.35	paraprofessionals. Physical education means the development of:
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	a. Physical and motor fitness.
	b. Fundamental motor skills and patterns.
	c. Skills in aquatics, dance, and individual and group games and
	sports (including intramural and lifetime sports).
	d. Physical education includes specialized physical education,
	adapted physical education, movement education, and motor
	development.
Page 9, I.E.37	Qualified health professional means an individual who has the
	requisite training and licensure and functions in the role of providing
	medical information to the school evaluation team consistent with the
	individual's professional license. This
	person could be the student's physician, nurse, or other healthcare
	professional.
Page 10, I.E.38	Qualified mental health professional means an individual who has the
	requisite training and licensure and functions in the role of providing
	developmental and mental health information to the school
	evaluation team consistent with the
	individual's professional license. This person could be the student's
	psychologist, school psychologist or social worker.
Page 10, I.E.42	Related services means transportation and such developmental,
	corrective, and other supportive services as are required to assist a
	student with a disability to benefit from special education, and
	include speech language pathology and audiology services;
	interpreting services; psychological services; physical and
	occupational therapy; recreation, including therapeutic recreation;
	early identification and assessment of disabilities in students;
	counseling services, including rehabilitation counseling; orientation
	and mobility services; and medical services for diagnostic or
	evaluation purposes. Related services also include school health
	services, school nurse services, social work services in schools, and
D 44 15 40 0	parent counseling and training.
Page 11, I.E.42.c.2	Counseling services means services provided by qualified social
	workers, school psychologists, guidance counselors, or other
D 11 15 10 (qualified personnel.
Page 11, I.E.42.c.6	Occupational therapy means services provided by or supervised by a
	qualified occupational therapist, and includes:
	(a) Improving, developing, or restoring functions impaired or lost
	through illness, injury, or deprivation;
	(b) Improving ability to perform tasks for independent functioning if
	functions are impaired or lost; and (c) Preventing, through early intervention, initial or further
	impairment or loss of function.
Page 12, I.E.42.c.7	Orientation and mobility services means services provided to
1 age 12, 1.E.42.C./	students with blindness or visual impairment by qualified personnel
	to enable those students to attain systematic orientation to and safe
	to chable those students to attain systematic offentation to and safe

	I may a manufacturate in the interest of the second
	movement within their environments in school, home, and
D 10 I F 10 0	community
Page 12, I.E.42.c.8	Parent counseling and training means assisting parent(s) in
	understanding the special needs of their student, providing parent(s)
	with information about child development, and helping parent(s) to
	acquire the necessary skills that will allow them to support the
	implementation of their student's IEP.
Page 12, I.E.42.c.9	Physical therapy means services provided by or supervised by a
	qualified physical therapist.
Page 13, I.E.42.c.11	Recreation includes:
	(a) Assessment of leisure function;
	(b) Therapeutic recreation services;
	(c) Recreation programs in schools and community agencies; and
	(d) Leisure education.
Page 13, I.E.42.c.12	Rehabilitation counseling services means services provided by
	qualified personnel in individual or group sessions that focus
	specifically on career development, employment preparation,
	achieving independence, and integration in the workplace and
	community of a student with a disability.
Page 16, I.E.42.c.49	Student with a disabilityIf it is determined, through an appropriate
1 480 10, 1.21.2101.5	evaluation under these Rules, that a student has one of the disabilities
	identified above, but the student only needs related services and not
	special education (defined as specially designed instruction), the
	student is not an eligible student with a disability under these
	Rules.
Page 16, I.E.42.c.51	Transition services means a coordinated set of activities for a student
1 age 10, 1.2. 12.0.31	with a disability that:
	a. Is designed to exist within a results-oriented process, and is
	focused on improving the academic and functional achievement of
	the student with a disability to facilitate the student's movement from
	school to post-school activities, including postsecondary education,
	vocational education, integrated employment (including supported
	employment), continuing and adult education, adult services,
	independent living, or community participation;
	b. Is based on the individual student's needs, taking into account the
	student's strengths, preferences, and interests; and includes
	instruction, related services, community experiences, the
	development of employment and other post-school adult living
	objectives and, if appropriate, acquisition of daily living
	skills and provision of a functional vocational evaluation.
	c. May be special education, if provided as specially designed
	instruction, or a related service, if required to assist a student with a
	disability to benefit from special education.
Page 17, I.E.42.c.52	Travel training means instruction, as appropriate, to students with
	significant cognitive disabilities, and any other students with
	disabilities who require this instruction, to enable them to:

	LEA must ensure that each student with a disability participates with
	nondisabled students in the extracurricular services and activities to
	the maximum extent appropriate to the needs of that student.
	2. The LEA must ensure that each student with a disability has the
	supplementary aids and services determined by the student's IEP
	**
	Team to be appropriate and necessary for the student to participate in
D 51 W 51 0	nonacademic settings.
Page 71, III.T.1-2	1. Each LEA must take steps, including the provision of
	supplementary aids and services determined appropriate and
	necessary by the student's IEP Team, to provide nonacademic and
	extracurricular services and activities in the manner necessary to
	afford students with disabilities an equal opportunity for participation
	in those services and activities.
	2. Nonacademic and extracurricular services and activities may
	include counseling services, athletics, transportation, health services,
	recreational activities, special interest groups or clubs sponsored by
	the LEA, referrals to agencies that provide assistance to individuals
	with disabilities, and employment of students, including both
	employment
Page 125, VIII.B.1	To ensure that all students with disabilities have available to them a
1 age 123, VIII.D.1	FAPE that emphasizes special education and related services
	designed to meet their unique needs and prepare them for further
D 106 VIII D 0	education, employment, and independent living.
Page 126, VIII.B.2	a. Transition services means a coordinated set of activities for a
	student with a disability that:
	(1) Is designed to be within a results-oriented process that is focused
	on improving the academic and functional achievement of the student
	with a disability, to facilitate the student's movement from school to
	post-school activities, including postsecondary education, vocational
	education, integrated employment (including supported
	employment), continuing and adult education, adult services,
	independent living, or community participation;
	(2) Is based on the individual student's needs, taking into account the
	student's strengths, preferences, and interests, and includes:
	(a) Instruction;
	(b) Related services;
	(c) Community experiences;
	(d) The development of employment and other post-school adult
	living objectives; and
	(e) If appropriate, acquisition of daily living skills and provision of a
	functional vocational evaluation.
	b. Transition services for students with disabilities may be special
	education, if provided as specially designed instruction, or a related
	service, if required to assist a student with a disability to benefit from
	special education.
	special education.

Page 127, VIII.5.a.1	Realistic and reasonable measurable postsecondary goals based upon
1 450 127, 1111.5.4.1	annual age-appropriate transition assessments related to training or
	education, employment, and, where appropriate, independent living
	skills.
Page 180, IX.E.2	Paraeducators, when used to carry out Part B of the IDEA, must be
	appropriately trained and supervised, and utilized in accordance with
	the USBE Paraeducator Standards.
Page 180, IX.G.1	The LEA will oversee the caseload of each special educator
	(including psychologists, social workers, speech language
	pathologists, occupational therapists, physical therapists, adapted P.E.
	specialists, and any other related servers) to ensure that a FAPE is
	available to all eligible students with disabilities.
Page 181, IX,I	Professionals providing services to students with disabilities must
	hold a Utah Professional Educator License or Endorsement in the
	area in which they provide services. This includes special education
	teachers, speech/language pathologists, school psychologists, school
	social workers, and other professionals. Physical and occupational
	therapists must hold appropriate Utah licensure. The school district
	superintendent or charter school administration shall be responsible
	for the evaluation of the appropriateness of licenses and
	endorsements when assigning staff members. LEAs should refer to
D 400 TVD T 11	the USBE Teaching, Leadership, and Paraeducator Standards.
Page 203, X.P.Table	2160. Occupational Therapy Related Services – Activities that
	assess, diagnose, or treat students for all conditions
D 220 V D T 11	requiring the services of an occupational therapist.
Page 220, X.R.Table	OCCUPATIONAL THERAPISTS (OT) and OT ASSISTANTS:
	Salaries and fringe benefits for LEA employees or costs for
D 222 VII	contracted OT services provided pursuant to students' IEPs.
Page 232, X.U	PERMISSIVE USE OF FUNDS/INCIDENTAL BENEFIT: SERVICES AND SUPPORTS THAT ALSO BENEFIT STUDENTS
	WITHOUT DISABILITIES (34 CFR § 300.208(a)(1)). 1. Incidental benefit occurs when one or more students without a
	disability benefit from specially designed instruction, related
	services, and supplementary aids and services as described on the IEP
	of a student with a disability.
	2. One or more students without a disability may benefit from
	specially designed instruction, related services, and supplementary
	aids and services if:
	a. The special education provider is performing the task related to
	specific
	needs of at least one student with a disability as outlined in his or her
	IEP;
	b. The task does not require additional time beyond what is required
	to address the needs of at least one student with a disability as
	outlined in his or her IEP; and

c. The provision of FAPE or any IEP services are not compromised if
the special education provider performs the task.