Unraveling attrition and retention: A qualitative study with rehabilitation professionals

Susanne Mak^{a,b,c,*}, Aliki Thomas^{a,b,c}, Saleem Razack^{d,e}, Kelly Root^f and Matthew Hunt^{a,b,c} ^aSchool of Physical and Occupational Therapy, McGill University, Pine Avenue West, Montréal, Québec, Canada ^bInstitute of Health Sciences Education, McGill University, Pine Avenue West, Montréal, Québec, Canada ^cCentre de Recherche Interdisciplinaire en Réadaptation du Montréal Métropolitain, Institut Universitaire Sur la Réadaptation en Déficence Physique de Montréal (Lindsay Pavillon), Hudson, Montréal, Québec, Canada ^dDepartment of Pediatrics, University of British Columbia, BC Children's Hospital, Vancouver, British Columbia, Canada

^eCentre for Health Education Scholarship, University of British Columbia, P. A. Woodward Instructional Resources Centre (IRC), Health Sciences Mall, Vancouver, British Columbia, Canada ^fSchool of Communication Sciences and Disorders, Dalhousie University, College Street, Halifax, Nova Scotia, Canada

Received 29 September 2023 Accepted 7 March 2024

Abstract.

BACKGROUND: Health human resources are scarce worldwide. In occupational therapy (OT), physical therapy (PT), and speech-language pathology (S-LP), attrition and retention issues amplify this situation and contribute to the precarity of health systems.

OBJECTIVE: To investigate the phenomena of attrition and retention with OTs, PTs and S-LPs who stayed in, or left their profession.

METHODS: Cultural-historical activity theory provided the theoretical scaffolding for this interpretive description study. We used purposeful sampling (maximum variation approach) to recruit OTs, PTs, and S-LPs from Quebec, Canada. Individual interviews were conducted with 51 OTs, PTs, and S-LPs from Quebec, Canada, in English or French (2019–2020). Inductive and deductive approaches, and constant comparative techniques were used for data analysis.

RESULTS: Six themes were developed: 1) characteristics of work that made it meaningful; 2) aspects of work that practitioners appreciate; 3) factors of daily work that weigh on a practitioner; 4) factors that contribute to managing work; 5) relationships with different stakeholders that shape daily work; and 6) perceptions of the profession. Meaningfulness was tied to participants' sense that their values were reflected in their work. Factors outside work shaped participants' work experiences. Recurrent negative experiences led some to leave their profession.

CONCLUSION: Findings underscore a critical need to address contributing factors to attrition and retention which are essential to ensuring the availability of OTs, PTs and SLPs for present and future rehabilitation needs.

Keywords: Occupational therapy, physical therapy, speech-language pathology, career mobility, rehabilitation, qualitative research, health workforce

*Address for correspondence: Susanne Mak, McGill University, School of Physical and Occupational Therapy, 1130 Pine Avenue West, Montréal, Québec, H3A 1A3, Canada. Tel.: +1

514 398 2772; Facsimile: +1 514 398 6360; E-mail: susanne. mak@mcgill.ca.

ISSN 1051-9815 © 2024 – The authors. Published by IOS Press. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (CC BY-NC 4.0).

1. Introduction

The need for rehabilitation is growing globally [1]. Many health care systems face a lack of qualified health care providers such as rehabilitation professionals (ie., occupational therapists (OT), physical therapists (PT) and speech-language pathologists (S-LP)) with the necessary skillsets and expertise to help promote individuals' ability to function independently in their daily lives, to integrate into their communities, and to engage socially [2, 3]. While rehabilitation interventions offer many benefits, access can be challenging for those who need them most. In many health care systems, services such as outpatient pediatric rehabilitation services, are limited and hard to access [4, 5] while in others, they are unavailable [6, 7]. Several factors contribute to these challenges, including an increase in demand for services, partly due to the increasing incidence of chronic diseases and comorbidities, [8, 9] shifting demographics and an aging population [10, 11]. One important contributing factor to the access problem is the persistent shortage of rehabilitation professionals worldwide [12, 13]. In 2021, the World Federation of Occupational Therapists reported a shortage of OTs in 62 countries [14]. This gap between the need and availability of qualified rehabilitation professionals adds to the challenge of achieving the World Health Organization's vision to ensure access to quality services for everyone who needs rehabilitation services [1].

Poor health workforce planning, an absence of data concerning health workers and challenges in attracting and retaining health workers [15] can contribute to a lack of rehabilitation professionals [16]. Government decisions about health care workforce capacity tend to be made irregularly, and without considering future needs [16]; as a result, an insufficient workforce leads the remaining health workers to face an increased workload, burnout and exhaustion [14, 17, 18]. Attrition from a profession, defined as a permanent departure from one's profession or from the workforce, also contributes to the global shortage of health care workers. In a cohort study with health care workers from the UK's National Health Service workforce, nearly half of the 4916 participants intended to change or leave their health care role [19]. Unfortunately, rehabilitation professionals are also subject to professional attrition; such a loss in human health resources can severely jeopardize health care systems' capacities to respond to individual needs for rehabilitation services [20, 21].

In 2014, a report from the Ministry of Health and Social Services of Quebec, a province with the second largest population in Canada, [22] indicated that 10-15% of Canadian OTs, PTs and S-LPs had left their profession within two years of graduation [23]. Similar patterns were seen in other countries. In a 2000-2004 study in Australia, 65% of surveyed PT graduates from Curtin University intended to leave their profession in the next ten years [24]. Despite the significance and potential negative impact of attrition from these professions, only three empirical studies have explored contributing factors to attrition among rehabilitation professionals. Two studies of American OTs (early 1990s) identified factors influencing clinicians' decisions to leave the profession, including childcare, heavy patient caseloads, experiences of stress and burnout, desire for increased salary and promotional opportunities, and discrepancies between clinician expectations of practice and actual OT practice [25, 26]. A 2010 study from Australia showed that a desire for increased salary and promotional opportunities, as well as family commitments were common reasons for attrition among S-LPs [21].

In a recent scoping review on attrition and retention in the rehabilitation professions, we identified five avenues for future research [27]. The first was a paucity of literature on the attrition of rehabilitation professionals due to negative experiences (push factors), such as work-related stress and burnout. The reasons for attrition across different career stages were also identified as a research gap. A third research gap related to factors that influence rehabilitation professionals' decisions to stay in their profession (e.g., sense of belonging to their profession). The ways that positive relationships and work environments can be fostered in health care settings were identified as a fourth gap. The final gap was the influences of professional associations and regulatory bodies on rehabilitation professionals' experiences, and their role in attrition and retention [27].

Attrition is not only a concern for rehabilitation professions, but for many other health professions, such as nursing [28] and social work [29]. Consequently, professional attrition from multiple health professions can substantially undermine a health care system's capacity to deliver patient care. In Canada, a reduced health care system's capacity for patient care thus compromises everyone's right to access health care [30].

Given the rising demand for rehabilitation services in Canada and worldwide, the permanent loss of rehabilitation professionals from the health workforce can compromise a health care system's capacity to provide quality services for the millions of citizens who are at risk of developing, and living with a disability. Therefore, a deeper and theory-informed understanding of the reasons for attrition from OT, PT and S-LP can support the design and implementation of educational strategies, practice changes and continuing professional development activities to optimize the retention of rehabilitation professionals to meet population needs [2, 31]. Therefore, the overall objective of the research reported in this paper was to explore the perspectives of rehabilitation professionals in Quebec, Canada who have stayed in, or left their profession.

2. Methods

2.1. Theoretical underpinning

Our study was informed by cultural-historical activity theory (CHAT). CHAT offers a framework to describe a system where several components interact, leading to the implementation of activities that enable the system to reach its intended objective (object). These components include: 1) the main person(s) involved in the activity (subject); 2) the values, norms, guidelines and expectations that the person must follow to engage in the activity (rules); 3) others who contribute to the activity (community); 4) how the activity is shared among the person and the community (division of labour); and 5) the physical and symbolic objects that influence the activity and that are used to complete the activity (tools) [32, 33]. In its earliest iteration. CHAT was described as an activity system, composed of an interaction between the subject and the object, mediated by artefacts (tools) [34]. The most recent iteration of CHAT shows two activity systems that share an object and the extent to which systems interact with each other; this change shifted the unit of analysis from the person to the activity system [33].

We selected CHAT because it offers a broad perspective on a system as a whole, rather than focusing on the actors within a system, and considers the connections across systems. Specifically, in using CHAT, we framed the health care and educational systems as activity systems that influence practitioner experience, and ultimately, on their decision to stay in, or leave their profession. We defined the delivery of health care services as the object. We also identified other systems, such as the professional system (e.g., professional regulation) as activity systems and considered their interactions with health care and educational systems to achieve the shared object of health care delivery.

2.2. Design

We used interpretive description (ID), a qualitative research methodology aligned with a naturalistic approach to inquiry [35]. Researchers who use ID aim to identify common patterns in human experiences while also attending to differences, to investigate a phenomenon [35].

Nursing researchers developed ID in order to offer an additional methodological approach for inquiries which did not adequately align with traditional qualitative approaches and sought to answer practiceoriented questions in applied health disciplines [35]. Therefore, when using ID, researchers draw on traditional qualitative methodologies (e.g., phenomenology, ethnography, grounded theory) based on the methodological needs of their research question, and are encouraged to use clinical and empirical knowledge as a robust starting point from which to build empirical work [36]. For these reasons, ID is well-suited for our inquiry: it allowed us to draw from existing literature and our experiences as clinicians and scholars interested in professional practice. Our intent of developing our findings for the practice environment aligned with the theoretical underpinnings of ID, and our investigation of rehabilitation professionals is supported by ID's orientation towards disciplinary relevance [35, 36].

2.3. Participants and recruitment

We used purposive sampling (maximum variation approach) to recruit a diverse range of participants based on profession, practice sector, practice area (e.g., childhood disabilities, musculoskeletal, stroke), practice setting (e.g., acute care, long term care), and years of experience. Study eligibility criteria consisted of: 1) current or past membership with one of three regulatory bodies: the Order of occupational therapists of Quebec, the Professional order of physiotherapy of Quebec, or the Order of speech-language pathologists and audiologists of Quebec; 2) employment in Quebec as an OT, PT or S-LP for at least one year; and 3) completion of their professional degree in OT, PT, or S-LP in Canada. Recruited participants were divided into two groups: attrition and retention. The attrition group included participants who were no longer a member of their professional regulatory body, as licensure is required for practice in Canada [37–39]. Participants in the retention group were licensed with their regulatory body. We aimed for approximately 15 participants in each group based on existing literature on sample sizes for this type of qualitative inquiry [40, 41]. One participant was still a member of their regulatory body but was not interested in keeping their membership; they were subsequently placed in the attrition group.

2.4. Data collection procedures

We conducted a semi-structured, in-depth interview with each participant by Zoom, Facetime, telephone, or in-person. We developed separate interview guides for the attrition and retention groups. The content of interview guides drew on existing literature on attrition and retention, and concepts from CHAT (rules, community, division of labor and tools). For example, to explore how health care environments contribute to retaining rehabilitation professionals, the interview probes included questions about their community (managers, team members). To ensure that the interview questions were clear and not overly leading, they were sent to a group of graduate students (many of whom are rehabilitation professionals) for feedback and then pilot-tested with two OTs (one of whom was no longer licensed).

As interviews progressed, we modified certain questions based on our experiences and initial analysis of earlier interviews. For example, managers who were still licenced as rehabilitation professionals were asked additional questions, such as: "Why do you continue to maintain your licence with your professional order?"

Interviews were conducted from December 2019 to August 2020. All interviews were recorded and transcribed verbatim, and then verified for accuracy by a second person (SM or a research assistant).

2.5. Ethics

This study was reviewed and approved by the McGill Faculty of Medicine and Health Sciences Institutional Review Board (A02-E12-19A) on March 11, 2019. All participants provided written, informed consent to participate in the study.

2.6. Data analysis

A synopsis of each interview was created to summarize the findings and facilitate recall of participant interviews. During data analysis, SM read the synopses to remind herself of the context behind a portion of text that had been assigned to a code, or of the salient aspects of a participant's narrative for initial coding or later stages of data analysis.

We began data analysis as soon as transcripts were available. We imported each transcript into NVivo software, where we read them to familiarize ourselves with the participant's narrative, and then conducted initial coding. For French transcripts, SM re-read the quotes to ensure that they aligned with the codes, and verified her understanding of certain excerpts with a native Quebec French speaker, to ensure that she accurately interpreted the participant's narrative. Consistent with ID, we used both deductive and inductive approaches and constant comparative techniques [35].

As part of our inductive approach, we assigned labels to sections of text to respond to questions such as: "What is going on here?" After coding one transcript, MH and AT, two experienced qualitative researchers and content experts reviewed the codes from that transcript and provided feedback. The codes were subsequently modified and a provisional codebook was created. We applied the provisional codebook to two more transcripts and added several new codes. MH and AT then reviewed the updated codebook and provided additional feedback. After a total of 20 transcripts had been coded, SM presented the codebook to a group of graduate students (many of whom are rehabilitation professionals) who also gave feedback; the codebook was subsequently revised.

Once all transcripts were coded, we used display tables and concept maps to create an analytical structure amongst the codes, and to develop categories. We reviewed transcripts and the interview synopses to ensure the coherence and completeness of the analytical structure. We were mindful of CHAT during our review, in order to identify missing codes and categories that may have been important in the development of the themes, and possible interconnections between categories and themes. However, to avoid overeliance on the theoretical scaffolding from CHAT and to align with ID methodology, we sought feedback from our research team and applied a more inductive approach in earlier stages of data analysis.

Using this analytical structure and CHAT, we developed interpretive themes. We framed the themes

as questions to emphasize participants' reflections that were evoked by the interview questions, and to highlight the intimacy of these themes to participants' daily work and professional career. Once the preliminary themes were developed, we gathered additional feedback from the research team and further refined the analytical structure.

Finally, we note that the existing literature on attrition and retention and CHAT contributed to our analytical approach. Findings from the scoping review helped us attend to certain factors raised about attrition and retention of rehabilitation professionals. For instance, we were aware of the unmet needs of PTs in later career stages (coded as *life stage*) from our scoping review [42]. While *life stage* was used less frequently than other codes (four times) in this study, we considered how *life stage* aligned with categories and interpretive themes, given the importance of this gap in the literature.

2.7. Reflexivity

The positionalities of our research team members informed our research process. Our research team is composed of four rehabilitation professionals (2 OTs, 1 PT, 1 SLP) and one physician. The first author, SM, is an OT with 17 years of clinical experience and 19 years of pedagogical experience in a Canadian OT educational program. Her clinical and academic experiences helped to shape the interview questions and the ways she viewed her findings. Her experiences in private and public health care sectors attuned her to some of the realities expressed by participants. We engaged in reflexive practices, such as memoing, throughout all stages of this study. Therefore, these reflections, the findings from our scoping review and the existing literature, contributed to the research processes (e.g., decisions related to participant recruitment) of this study.

3. Results

3.1. Participant information

Tables 1 and 2 present the participants' characteristics. Fifty-one participants were interviewed, divided between two groups: 1) attrition (n = 14); and 2) retention (n = 37). More than half of the participants were OTs (n = 32, 63%). Fewer PTs (n = 11, 22%) and S-LPs (n = 8; 16%) were recruited. Table 3 shows the timing of attrition for the participants in the attrition

Table 1 Participant characteristics

Gender	OT	PT	S-LP
Male	2	2	1
Female	30	9	7
Other	0	0	0
Geographical			
location			
Urban	24	7	7
Suburban	8	3	1
Rural	0	1	0
Years of			
experience			
1-5 years	8	1	5
6-10 years	9	1	0
11-15 years	4	5	2
16+ years	11	4	1
Practice Sector			
Public	19	4	2
Private	9	4	1
Other (schools)	4	2	5
Practice Settings			
Hospital-based	15	4	3
Community-based	3	1	0
School settings	0	1	5
Private practice	1	4	0
Other (academic,	3	1	0
corporate)			
Practice Area			
Adults, physical	13	7	2
medicine			
Adults, mental	0	0	0
health			
Adults, all	3	0	0
Children, physical	1	1	1
medicine			
Children, mental	1	0	1
health			
Children, all	8	1	4
Other	6	2	0
(management,			
corporate,			
academia, all			
clientele)			

Table 2 Attrition and retention participant groups

	OT	PT	S-LP
Retention	23	8	6
Attrition	9	3	2
Total	32	11	8

group. Participants left their profession at all career stages.

In the following section, we describe six themes related to participants' experiences and perceptions of attrition and retention: 1) What characteristics of work make work meaningful to me? 2) What aspects of work do I appreciate? 3) What factors of my daily

Table 3 Timing of attrition among participants in attrition group

Timing of attrition	OT	РТ	S-LP
1-5 years	3	1	2
6-10 years	1	1	0
11-15 years	2	1	0
16 + years	3	0	0

work weigh on me? 4) What factors contribute to my capacity to manage work satisfactorily? 5) How do relationships with different stakeholders shape my daily work? and 6) What are my perceptions of the profession as a whole? Table 4 presents the codes and categories associated with these themes. Note that verbatim excerpts in French have been translated into English for this paper.

3.2. Theme 1: What characteristics of work make work meaningful to me?

More than half of the participants reported that alignment between their work and their values brought meaning and pleasure and acted as a motivator for work. A PT with 15 years of experience described how she valued helping others:

What motivates me to go to work everyday is because I enjoy my work and I know today that what I do in my work in particularly in clinical

Theme	Category	Examples of codes
1. What characteristics of work	Values regarding work	• Alignment
make work meaningful to me?		• Impact
2. What aspects of work do I	Meaningful and beneficial	Clients and patients
appreciate?	relationships	• Colleagues
		• Employee-manager relationships
	Professional growth	Professional development activities
	C	• Mentorship
		• Role-models
3. What factors of my daily work	Heaviness	• Delays in health care system processes
weighs on me?		Complex client situations
-		 Insufficient resources for service demands
	Characteristics of position	Practice Setting
	-	• Workload (administrative tasks)
		Working conditions
	Negative experiences	• Recurrent experiences of harm
	•	• Environment without support
		Interprofessional conflict
		• Interactions with regulatory bodies
4. What factors contribute to my	Work Factors - nature of work	Workload
capacity to manage work		 Working conditions
satisfactorily?	Work factors - individual gains	• Opportunity
y.		• Schedule flexibility
		• Value
		Recognition
		• Support from work environment
	Personal factors	• Support from family and friends
		• Activities for well-being (e.g., physical activity)
		Other commitments and roles (e.g. parental responsibilities)
	Factors for those in transition	• Availability of support from regulatory bodies
		• Access to work opportunities related to the
		profession
5. How do relationships with	Foreground	Other health care professionals
different stakeholders shape		Clients
my daily work?	Background	Managers
	Duenground	Professional regulatory bodies
		Unions
6 What are the perceptions of the	Positive aspects	Perspectives towards lifestyles
profession as a whole?	Concerns for the future	Passivity among members of profession
		Changes in scope of practice

Table 4 Main themes, categories and codes

work corresponds to my values. My main value is taking care of others, it's a very important value to me. It's something that I identified which in the process of changing from being a full-time student to going back to work is something that I identified is a gap for me. [Retention, PT3]

The participant's desire to help others prompted her to return to clinical work after undertaking graduate studies.

Other participants also shared the need for a close alignment between their work and what they valued and enjoyed. An S-LP with 15 years of experience in a hospital explained how the acute care environment met her daily desire for change and excitement:

I don't think it's for everybody. I don't think anybody would come out of... you know, SLP school master's degree thinking, "I'm going to end up working in acute care, wearing a mask, gloves, and dealing with secretions sometimes," but, it has to be a fit [...] I like the fact that my day is not predictable, not boring, it's... there's never a dull moment. [Retention, S-LP6]

Seeing the impact of their interventions on clients also contributed to participants' sense of meaningfulness regarding their work as expressed by an OT with eight years of experience: "Establishing a link with people and seeing the results, seeing an improvement usually is what motivates me to continue or what I love about my job." [Retention, OT11] Most participants found seeing the impact of their interventions for a client rewarding. On the other hand, when there was no observable change in their client's health or functional state, participants expressed frustration and dissatisfaction from their work. An S-LP with five years of experience working with children with special needs reported that:

I would say though unfortunately it doesn't happen all the time, and that probably is also the hardest part of my job [...] usually they've kind of plateaued in a lot of their abilities so the stuff we're seeing, both they're not improving that much [...] It's amazing when it happens but most of the time it doesn't, and so that's very frustrating, very difficult. [Retention, S-LP5]

Consequently, this led to frustration and questioning of the relevance of their interventions, and whether the time and efforts invested were worthwhile. A main concern for participants was finding meaning in their work; meaning appears to come from a match between what they value in their work, and the affordances of their work. This relationship with one's work seems to rest upon certain characteristics, including authenticity, alignment and autonomy, and perceived tangible outcomes. It is from these outcomes, that rehabilitation professionals experience a sense of satisfaction and perceive that their efforts and time were used in a meaningful way.

3.3. Theme 2: What aspects of work do I appreciate?

Meaningful and benefical relationships with colleagues, clients and managers in the work environment were deemed important for most participants, and often influenced their decision to stay in a given setting. Mutual respect, camaraderie, solidarity, openness to different perspectives and being inspired were key to these relationships. For instance, a OT participant with over 30 years of experience described how:

... the doctors all understood what I needed to do. They asked me to start working in the ER, screening people in the ER to see if we could send them home or if we needed to admit them. [...] I really felt that my opinion mattered and that I played a real part in determining outcomes. [Attrition, OT22]

Her sense of being understood, listened to and valued by her colleagues contributed to her satisfaction with her work and her decision to stay in that practice setting. A few participants also talked about their relationships with clients who inspired them and motivated them to achieve their own goals as professionals. An OT with four years of experience in pediatrics described how her patients' efforts "motivated me to like... work on my own goals, and be a better person and... help them more, but they're really like, my champions of like, strength and resilience." [Retention, OT27]

The ability to learn and grow professionally was also a driving force for participants to stay in their profession; mentorship, role-models and professional development were key opportunities for growth. A S-LP with over 20 years of experience, described how professional development opportunities offered through her work triggered her interest in new approaches, and supported her learning: "It's that kind of feeling you get if you're at a... conference where you're like, you get kind of sparked, and come away with insight and another way of doing something." [Retention, SLP4]

Overall, the participants found that their relationships with others (clients, peers and managers) and the learning opportunities in the work environment added to their satisfaction with their daily work.

3.4. Theme 3: What factors of my daily work weighs on me?

In considering whether to stay in or leave their profession, half of participants weighed factors that impinged negatively on their practice against positive aspects of their work. Some factors contributed to a sense of *heaviness* arising from delays in health care system processes (e.g., approval for therapeutic equipment), complex client situations (e.g., family member's lack of acceptance of a loved one's condition), or insufficient resources to meet service demands. The experience of heaviness is reflected in the emotional tensions this PT shared, when working with children with special needs for more than 20 years:

Because sometimes you feel that a child will need that type of therapy or... a follow-up at home and the family is not doing. [...] It's not your reality, it's their reality. You do your part, you push at a certain limit, but then it's not your responsibility, you don't have to feel bad. If you do, then it's going to be hard. I can understand. Then you may want to quit because of that. [Retention, PT6]

Other factors pertained to the characteristics of the position itself in a practice setting (e.g., acute care), the work environment and the workload (especially with administrative tasks). Experiences of being harmed (e.g., bullying) were especially strong factors in prompting several participants to decide to leave their profession, especially when these situations were recurrent. Examples included working in an environment without support or where interprofessional conflict was frequent. A participant with 30 years of experience described how working in a conflictual environment led her to reflect on continuing in the OT profession:

[...] you're afraid of being fired, you're afraid of being reported to the [professional] order. At that point, I had a young family, I needed to work to support my family [...] By the time I left [NAME], I realized I had so much post-traumatic stress disorder, Γd been so traumatized by the toxic environment. I did a year on unemployment just healing basically and re-evaluating my career. [Attrition, OT22]

Participants' experiences emphasize the extent of the *heaviness* they felt and how their feeling of being harmed shaped their decisions about their future in their profession. Weighing the negative experiences of their daily work against positive aspects of work (Themes 1 and 2) suggests that there is a delicate balance between these. When negative experiences weigh more heavily, a rehabilitation professional may feel compelled to consider a more drastic course of action to address their current work situation.

3.5. Theme 4: What factors contribute to my capacity to manage work satisfactorily?

Half of the participants discussed factors that influenced their ability to manage their daily work. *Work factors* consisted of characteristics of the nature of work (e.g., workload, working conditions) and individual gains (e.g., opportunity, schedule flexibility, value, recognition).

An OT with over 30 years of experience described how her relationship with her manager resulted in work schedule flexibility which helped her to manage other life roles:

So Γ ve worked out with my boss [...] so Γ m allowed to do 70 hours in two weeks, working 4 days a week because I still want to have one day off because I have other things going on in my life. My parents are aging. [...] I want to have time to be there for the people that I love. [Retention, OT4]

A supportive work environment comprised of other individuals with similar life experiences, also helped a SLP working for over 15 years in a hospital, to manage other life roles:

... my work environment has been very supportive... over the years, maybe because the majority of... S-LPs are women who get it, who have been moms, and who have had sick children, and who understand what it is to juggle those things, so, I... find that's kind of well-supported, but yes, it's a challenge. [Retention, S-LP6]

On the other hand, four participants from all three professions described how flexibility in their workday are shaped by policies and rules that apply to everyone, such as practice standards (regulatory bodies) and union collective agreements. An OT with less than five years of experience in long term care, reported that she will be forced to work full-time because of a change in the union collective agreement, and therefore, would likely leave her job:

... apparently with the latest agreement with the [union], I will only have the right to apply for a part-time leave without pay once every three years. So, ... if I stay in my position, I am required to do five days a week and for me it will not be that, for sure I would not stay working five days per week. [Retention, OT15]

In the participants' narratives, relationships with their managers, institutions and professional regulators, influenced how participants managed *work factors*. These factors were moderated by the amount, type and effectiveness of support offered. Participants also shared that when managers and institutions valued their work, it helped them to better manage their tasks and/or workload.

In addition to *work factors*, participants described *personal factors* (e.g., support from family and friends) that helped them cope with aspects of work. They also described engaging in activities to foster well-being, such as physical activity, or talking less to others after work (to refrain from hearing others' problems). A PT with more than 10 years of experience who worked in the community, described how she takes care of herself so that she could work optimally: "So I think that how I take care of myself does influence my day to day work so I have to make sure that I do that well." [Retention, PT3]

Participants described how other commitments and roles (e.g., parental responsibilities) may cause tension with *work factors*. An OT with over 30 years of experience who worked in long term care described how taking on additional work responsibilities left her unable to engage in other personal roles and activities:

I gave up all the other things that I loved to do. I wasn't going to the gym anymore, I wasn't painting anymore, you know once in a while I would go out for lunch with friends of mine I wasn't doing that anymore, so because of this work situation, some of my roles, life roles, were sacrificed. [Retention, OT4]

Availability of support from regulatory bodies, and access to various work opportunities related to the profession (e.g., research, teaching) also affected participants' decisions to stay in their profession. These factors were particularly important for participants who had temporarily left their profession (e.g., parental leave). For example, a former PT described that in order to manage her family responsibilities, she sought out part-time work as a clinician. She could not identify this sort of work and ultimately, her lack of access to part-time PT opportunities led her to leave the profession altogether and pursue another career [Attrition, PT9].

Work and personal factors affected how participants managed their work. As participants described these factors, the fluid boundaries between their personal and professional lives were evident.

3.6. Theme 5: How do relationships with different stakeholders shape my daily work?

All participants spoke about their relationships with different people (clients, peers, managers) and organizations (e.g., professional regulatory bodies and associations) in their daily work.

Many foregrounded their relationships with clients and peers in their everyday work. This is reflected in how a PT characterised her workplace as "very human" and how she placed emphasis on people in her description: "I loved to be... to work with people. [...] I'm talking about the clients, but also the... staff, I think it's a very human environment and very... fun, very... I don't know how to say it... like, we thrive, you know? We are... like, you have real... connections." [Attrition, PT11]

Half of the participants raised the importance of their relationships with other health care workers. Participants expressed how other workers' perceptions of the role of rehabilitation professionals influenced their involvement in patient care. A hospital-based S-LP with less than five years of experience described this:

[...]a few weeks ago, there was a patient in the ICU that had a stroke. Nobody told me about it, I didn't know about it until in rounds one day, [...]this OT said "it's very hard to talk with him, he's totally aphasic". I was like "how do I not know about that?" and then she went like "oh yeah right you are the S-LP, maybe you could help" but like she's been working with him for two weeks now. [Retention, S-LP2]

Relationships with managers, regulatory bodies, and unions were less common, and therefore, in the background of participants' everyday work. However, it was clear from one participant how these relationships remained present in her mind. An OT participant with less than 10 years of experience shared her perceived relationship with her regulatory body:

We always feel like we are working with a sword over our heads when we all agree that usually by studying occupational therapy, we want the best for others. [...] So, it's a lot the perception that the [professional] order gives us of ourselves and then it's hard, it makes everyday life difficult. [Retention, OT3]

These experiences underscore the diverse relationships in participants' daily work, and the emotions that they felt in those relationships. Participants also described relationships that were in the background of their everyday work (e.g., regulatory bodies, unions), which were uncommon. However, the impact of these relationships on participants remained significant despite the low frequency of interactions with these organizations.

3.7. Theme 6: What are the perceptions of the profession as a whole?

Participants shared positive aspects of their profession, its future and the stakeholders who should be involved in fostering retention; all of which were intimately tied to how they view their profession. One positive aspect was how many OT participants' perspectives towards lifestyle were shaped by their profession's core philosophies and unique theoretical models. For example, one participant with ten years of experience described how the occupation-based philosophy in OT influenced how she approached life and how she defined herself. [Retention, OT21]

Participants also shared their reflections about the future of their profession, namely, the changes in scope of practice. For instance, a S-LP with less than five years of experience who worked in a hospital, described how a conflict amongst the regulatory bodies in OT, S-LP and dietetics created uncertainty on her profession's scope-of-practice:

So this whole conflict [...] it does scare me that we could lose dysphagia altogether [...] I have no problem doing it with other professionals, but I don't want it taken over from me. If it is taken away from me, then I mean, it is something I love about my job. [Retention, SLP2]

Several participants also described their observations about the passivity among some members of their profession, which they felt threatened their profession's evolution. An OT with less than 10 years of experience and who worked in a private clinic, expressed this:

I find that there are really many occupational therapists who adapt too much and who do not advocate enough for their profession and then they feel persecuted on the other hand, while concretely when they have the opportunity to take action and use their voice, they do not do it. [Retention, OT20]

Participants shared many reflections about their profession, including how being part of that profession has changed their perspectives towards living well and influenced their personal lives.

4. Discussion

This study explored the perspectives of 51 rehabilitation professionals regarding their decision to stay in, or leave their profession. We used CHAT to shed light on the phenomena of attrition and retention, to reflect on health care and educational systems, and to consider how the daily work of rehabilitation professionals is shaped by the components of such systems and their connections with other systems.

Many participants described aspects of their work that they found meaningful, others that acted as barriers to their engagement in their work and spoke about the factors that affected their ability to manage their work. Though these factors played a pivotal role in whether they stayed in or left their profession, participants were influenced by more distal factors such as relationships with stakeholders outside the clinical environment and their perceptions of the profession as a whole. It seems based on these factors and relationships, that rehabilitation professionals' decision-making process to stay in or leave their profession is dynamic and evolves over time.

Participants' narratives revealed the importance of seeing their own values reflected in their work. One's values are not only core to how one defines oneself but also to how one identifies with others from the same profession [43–45]. Therefore, it is not surprising that an individual's personal values need to be reflected in their roles and responsibilities if they are to find their work meaningful. Our data suggest that specific work tasks, responsibilities and/or roles in certain practice areas may impinge on one's values. In a study of professional resilience in OTs, Ashby et al. found that OTs working in mental health often face challenges related to their values and their professional identity [46]. In these settings, OTs frequently encountered other professionals who did not value occupation-based approaches and imposed biomedical or psychological ones. Therefore, Ashby et al. proposed self-care strategies to foster professional resilience and career longevity in OTs practicing in mental health [46]. Better alignment between a professional's values and their work and/or work environment may compel one to stay in their profession.

The ways in which values are reflected in one's work are also influenced by factors beyond the work environment. Both-Nwabuwe et al.'s integrative review about professional autonomy in nursing reveal how a professional's autonomy may be limited by local laws, regulations and workplace practices [47]. This observation underscores the influence of broader systemic factors (health care policies, legal frameworks) on the extent to which one's values are embodied in one's work [47]. Thus, it would be worthwhile to study how contextual factors influence the actualization of a professional's values in their work [48].

The participants' narratives highlight the prominent relational aspect in the work of rehabilitation professionals. Rehabilitation professionals engage in multiple relationships in the foreground (e.g., clients, other health care workers) and in the background (e.g., higher level administrators, regulatory bodies). A relationship in the foreground or background of one's working life relates to the concept of proximity: proximity in relationships may influence the trust between a rehabilitation professional, their manager/organization, and even organizations with which they interact less frequently (e.g., regulatory bodies, unions, associations) [49]. Proximity may be characterised by communication and shared physical spaces which can facilitate teamwork between different health care providers, such as dieticians and nurses in diabetes education [49]. Thus, a lack of proximity between health care providers may lead to difficulties in building connections with one another [49].

CHAT can help to explain the influence of these relationships. Managers and other health care professionals are part of the community which contribute to patient care delivery (object); they can influence rehabilitation professionals' experiences of work by making decisions about the nature of the work, the workload and the support received; all these factors can ultimately influence patient care delivery. However, the decision-making power exerted by managers and institutions can conflict with rehabilitation professionals' professional autonomy. For instance, when health care systems measure productivity based on the number of patients seen, managers use this metric to expect larger caseloads at the detriment of other activities such as research and teaching, both of which have been shown to foster professional growth and greater job satisfaction [50]. Consequently, managers', institutions' and health care systems' influence leads us to question whether health care professionals can truly possess the professional autonomy and self-regulation that is expected of them as professionals [51, 52].

The lack of proximity is relevant to rehabilitation professionals' relationships with external organizations, such as professional regulatory bodies. While a rehabilitation professional may have a relationship with an individual in such an organization, it may be difficult to establish a connection with leaders of these organizations. Managing one's expectations about a fruitful connection with those who lead these organizations can be a step towards seeking support elsewhere.

CHAT highlights the interactions with, and influences from other systems, such as the professional system, where regulatory bodies reside. Regulatory bodies exert a prominent, undeniable force on the practices of rehabilitation professionals, despite the backgrounding of their relationships with their members. With the legal mandate of protecting the public, regulatory bodies set standards and conditions for practice, and implement processes to monitor the members of a profession, in order to abide by the laws surrounding professions [53]. Our participants reported both positive and negative influences from regulatory bodies. These experiences highlight the depth of the influences of the regulatory bodies, to a point where some participants with negative experiences gave up their membership with their regulatory bodies.

Our participants' experiences resonate with a growing body of literature on moral distress and injury. Moral distress occurs when an individual makes a moral judgment about a clinical situation but cannot act accordingly [54]. Continued or sustained distress may result in moral injury, [55] defined as an emotional wound from carrying out/seeing actions that violate one's core beliefs and values, or being betrayed by a trusted authority [56]. Some participants shared that they were afraid of their regulatory

body's inspection process while others spoke about feeling harassed or threatened. They contrasted these emotions with having to pay membership fees, and therefore, stated in disbelief that these fees were directed towards policing them and their colleagues. They spoke of betrayal which may relate to moral injury; it is possible that this was the case for several of those who left their profession. Further investigation of the role of professional regulatory bodies in supporting or hindering health care delivery (e.g., impact of chart audits on quality of patient care), is needed to better understand these impacts.

Participants described how unions, a body that aims to protect workers' rights in health care, advocate for better working conditions and benefits for health care professionals and therefore, impact positively on the working lives of health care professionals. However, others also described how unions pose obstracles to their working lives by implementing changes in collective agreements and procedures that may not reflect the practitioners' realities. This aligns with a small body of literature on the social costs related to unionization: the presence of unions may lead to a more contentious relationship with the employer, a more rigid approach to work organization, and less individual choice [57]. It may be worthwhile to examine how health care professionals perceive the benefits and social costs of unionization, and how a union's actions contribute to the work experiences of rehabilitation professionals.

Amongst participants who left their profession, several discussed the possibility of a return. The movement between staying in and leaving a profession speaks to the dynamism between the phenomena of attrition and retention. For several participants, leaving their profession was a highly emotional decision associated with a loss of both professional identity and sense of belonging that is felt when giving up their membership [58]. The loss of professional identity has been discussed previously when health care professionals decide to retire, leading individuals to feel a disruption in or loss in their professional identity [59, 60]. To be mindful of the dynamism between attrition and retention, professional regulatory bodies should consider developing mechanisms to help those who wish to return to their profession at a later time [61]. For instance, the use of simulation in retraining rehabilitation professionals who have been away from professional practice, may be an avenue worthwhile of study [62, 63].

4.1. Strengths and limitations

There were three main strengths to this study. Using CHAT provided theoretical scaffolding of the project and offered a lens through which we viewed our data. Consistent with ID, we also went beyond CHAT in our data analysis, in order to contribute new knowledge to the topic of attrition and retention. Another strength was the overall number of participants (n = 51), which provided an abundance of rich data for analysis across three professions. We also recruited participants from different sectors (private and public health care; health care versus educational sectors) contributing to the diversity of our participants (maximum variation sampling).

In terms of limitations, our purposive sampling goals were not fully achieved. Recruitment of rehabilitation professionals who had left their profession was challenging. We employed different strategies to advertise our study, including email, social media platforms, and word-of-mouth (snowball sampling). Despite these efforts, we only recruited 14 participants for this group, compared to 37 for the retention group. Another limitation was that of the total number of participants (n=51), we recruited fewer PTs (n=11, 22%) and S-LPs (n=8; 16%). The lower number of PTs and S-LPs limited our ability to make comparisons or draw conclusions for the purposes of transferability.

5. Conclusion

Attrition and retention are important issues for a health care system's capacity to offer sufficient services to those who need them. Through a study of 51 rehabilitation professionals and using a robust theory, we have investigated rehabilitation professionals' perceptions and experiences of attrition and retention, and how these are influenced by multiple systems, including professional regulation. We hope that these findings will help to inform the development of targeted retention strategies for rehabilitation professionals and the ways in which different stakeholders may be involved in its implementation. Attending to factors that contribute to attrition - and to retention are crucial for ensuring that the workforce in OT, PT and SLP meets societal needs for rehabilitation now and in the future.

Ethical approval

This study was reviewed and approved by the McGill Faculty of Medicine and Health Sciences Institutional Review Board (A02-E12-19A) on March 11, 2019.

Informed consent

All participants provided written, informed consent to participate in the study.

Conflict of interest

The authors declare that they have no conflicts of interest.

Acknowledgments

We are grateful to the study participants for sharing their perspectives and experiences with us, and to the research assistants for their contributions to this study. This work was supported by the Fonds de Recherche du Québec – Société et Culture, the Canadian Occupational Therapy Foundation and the Réseau de recherche en santé des populations du Québec.

Funding Sources

This study was supported by the Fonds de Recherche du Québec – Société et Culture and the Canadian Occupational Therapy Foundation. The funds from these sources allowed us to employ a research assistant and provided salary support for one of the authors as a graduate student. The Réseau de recherche en santé des populations du Québec provided financial support for expenses related to publication fees.

References

 World Health Organization. Rehabilitation 2030 Initiative 2023 [Available from: https://www.who.int/initiatives/ rehabilitation-2030#:~:text=The%20Rehabilitation%20203 0%20initiative%20draws,health%20systems%20to%20pr ovide%20rehabilitation.

- [2] Lizarondo L, Turnbull C, Kroon T, Grimmer K, Bell A, Kumar S, et al. Allied health: Integral to transforming health. Aust Health Rev. 2016;40(2):194-204.
- [3] Steultjens EM, Dekker J, Bouter LM, Leemrijse CJ, Ende CHvd. Evidence of the efficacy of occupational therapy in different conditions: An overview of systematic reviews. Clin Rehabil. 2005;19(3):247-54.
- [4] Harding KE, Camden C, Lewis AK, Perreault K, Taylor NF. Service redesign interventions to reduce waiting time for paediatric rehabilitation and therapy services: A systematic review of the literature. Health Soc Care Community. 2022;30:2057-70.
- [5] Leclair LL, Zawaly K, Korall AMB, Edwards J, Katz A, Sibley KM. Exploring the delivery of community rehabilitation services for older people in an urban Canadian setting: Perspectives of service providers, managers and health system administrators. Health Soc Care Community. 2022;30(5):e2245-e54.
- [6] Deslauriers S, Raymond MH, Laliberté M, Lavoie A, Desmeules F, Feldman DE, et al. Variations in demand and provision for publicly funded outpatient musculoskeletal physiotherapy services across Quebec, Canada. J Eval Clin Pract. 2017;23(6):1489-97.
- [7] Raymond MH, Demers L, Feldman DE. Waiting list management practices for home-care occupational therapy in the province of Quebec, Canada. Health Soc Care Community. 2016;24(2):154-64.
- [8] Pefoyo AJ, Bronskill SE, Gruneir A, Calzavara A, Thavorn K, Petrosyan Y, et al. The increasing burden and complexity of multimorbidity. BMC Public Health. 2015;15:415.
- [9] Steffler M, Li Y, Weir S, Shaikh S, Murtada F, Wright JG, et al. Trends in prevalence of chronic disease and multimorbidity in Ontario, Canada. CMAJ. 2021;193(8): E270-e7.
- [10] Canadian Association of Occupational Therapists. CAOT position statement: Occupational therapy and home and community care. OT Now. 2008;10(6):20-2.
- [11] Ordre des ergothérapeutes du Québec. Participation du personnel non-ergothérapeute à la prestation des services d'ergothérapie: Lignes directrices. Montréal: Ordre des ergothérapeutes du Québec. 2005:34.
- [12] Egan M, Restall G. Promoting Occupational Participation: Collaborative Relationship-Focused Occupational Therapy. Ottawa: Canadian Association of Occupational Therapists; 2022.
- [13] Royal College of Speech Language Therapists. Reports recognise shortage of SLTs and inadequate workforce planning 2022 [Available from: https://www.rcslt.org/ news/reports-recognise-shortage-of-slts-and-inadequateworkforce-planning/.
- [14] World Federation of Occupational Therapists. WFOT Human Resources Project 2022. 2022.
- [15] Denis JL, Côté N, Fleury C, Currie G, Spyridonidis D. Global health and innovation: A panoramic view on health human resources in the COVID-19 pandemic context. The International Journal of Health Planning and Management. 2021;36(S1):58-70.
- [16] Bourgeault IL. A path to improved health workforce planning, policy and management in Canada: The critical co-ordinating and convening roles for the federal government to play in addressing eight percent of its GDP. The School of Public Policy Publications 2021;14(1).
- [17] Canadian Physiotherapy Association. Responding to the Study of Labour Shortages, Working conditions, and the Care Economy 2023 [Available from: https://physiotherapy.

ca/responding-to-the-study-of-labour-shortages-working-conditions-and-the-care-economy/.

- [18] Government of Canada. Canadian Occupational Projection System (COPS): Audiologists and speech-Language Pathologists. 2021 [Available from: https://occupations. esdc.gc.ca/sppc-cops/.4cc.5p.1t.3.4ns.5mm.1ryd.2t.1.31@eng.jsp?tid=111.
- [19] Martin CA, Medisauskaite A, Gogoi M, Teece L, Nazareth J, Pan D, et al. Discrimination, feeling undervalued, and health-care workforce attrition: An analysis from the UK-REACH study. The Lancet. 2023;402(10405):845-8.
- [20] Castro Lopes S, Guerra-Arias M, Buchan J, Pozo-Martin F, Nove A. A rapid review of the rate of attrition from the health workforce. Hum Resour Health. 2017;15(1):21.
- [21] McLaughlin EG, Adamson BJ, Lincoln MA, Pallant JF, Cooper CL. Turnover and intent to leave among speech pathologists. Aust Health Rev. 2010;34(2):227-33.
- [22] Statistics Canada. Table 17-10-0009-01 Population estimates, quarterly 2023
- [23] Ministère de la Santé et des Services Sociaux. Portrait de la main d'oeuvre: Secteur de réadaptation. Quebec City, Canada; 2014. Contract No.: October 2, 2016.
- [24] Mulcahy AJ, Jones S, Strauss G, Cooper I. The impact of recent physiotherapy graduates in the workforce: A study of Curtin University entry-level physiotherapists 2000-2004. Aust Health Rev. 2010;34(2):252-9.
- [25] Bailey DM. Reasons for attrition from occupational therapy. Am J Occup Ther. 1990;44(1):23-9.
- [26] Freda M. Retaining Occupational Therapists in Rehabilitation Settings: Influential Factors. Am J Occup Ther. 1992;46(3):240-5.
- [27] Mak S, Hunt M, Riccio S.S, Razack S, Root K, Thomas A. Attrition and Retention of Rehabilitation Professionals: A Scoping Review. J Contin Educ Health Prof. 2023a.
- [28] Heinen MM, van Achterberg T, Schwendimann R, Zander B, Matthews A, Kózka M, et al. Nurses' intention to leave their profession: A cross sectional observational study in 10 European countries. Int J Nurs Stud. 2013;50(2):174-84.
- [29] Itzick M, Kagan M. Intention to Leave the Profession: Welfare Social Workers Compared to Health Care and Community Social Workers in Israel. J Soc Serv Res. 2017;43(3):346-57.
- [30] Martin D, Miller AP, Quesnel-Vallée A, Caron NR, Vissandjée B, Marchildon GP. Canada's universal healthcare system: Achieving its potential. Lancet. 2018; 391(10131):1718-35.
- [31] Canadian Institute for Health Information. HCRS Profile of Clients in Home Care 2016-2017 Ottawa, Ontario. 2017 [Available from: https://www.cihi.ca/sites/default/files/doc ument/hcrs-quickstats-2016-2017-en.xlsx.
- [32] Engeström Y. Activity theory and individual and social transformation. In: Punamäki R-L, Miettinen R, Engeström Y, editors. Perspectives on Activity Theory. Learning in Doing: Social, Cognitive and Computational Perspectives. Cambridge: Cambridge University Press; 1999. pp. 19-38.
- [33] Engeström Y. Expansive Learning at Work: Toward an activity theoretical reconceptualization. Journal of Education and Work. 2001;14(1):133-56.
- [34] Vygotsky LS. Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press; 1978.
- [35] Thorne S. Interpretative Description: Qualitative Research for Applied Practice (2nd editiion). New York, NY: Routledge; 2016.

- [36] Thompson Burdine J, Thorne S, Sandhu G. Interpretive description: A flexible qualitative methodology for medical education research. Med Educ. 2021;55(3):336-43.
- [37] Association of Canadian Occupational Therapy Regulatory Organizations. Substantial Equivalency Assessment System 2023 [Available from: https://acotro-acore.org/seas/.
- [38] Canadian Alliance of Physiotherapy Regulators. Licensure 2019 [Available from: https://alliancept.org/licensure/.
- [39] Speech-Language & Audiology Canada. Internationally Educated: Information for internationally educated Speech-Language Pathologists and Audiologists 2023 [Available from: https://www.sac-oac.ca/membership/internationallyeducated/.
- [40] Malterud K, Siersma VD, Guassora AD. Sample Size in Qualitative Interview Studies: Guided by Information Power. Qual Health Res. 2016;26(13):1753-60.
- [41] Hennink M, Kaiser BN. Sample sizes for saturation in qualitative research: A systematic review of empirical tests. Soc Sci Med. 2022;292:114523.
- [42] Australian Physiotherapy Association. InPractice 2025: Final Report. Australia; 2013.
- [43] McGinnis PQ, Guenther LA, Wainwright SF. Development and Integration of Professional Core Values Among Practicing Clinicians. Phys Ther. 2016;96(9):1417-29.
- [44] Drolet M-J, Désormeaux-Moreau M. The values of occupational therapy: Perceptions of occupational therapists in Quebec. Scand J Occup Ther. 2016;23(4):272-85.
- [45] Boyczuk AM, Deloyer JJ, Ferrigan KF, Muncaster KM, Dal Bello-Haas V, Miller PA. Professional Values: Results of a Scoping Review and Preliminary Canadian Survey. Physiother Can. 2019;71(2):134-43.
- [46] Ashby SE, Ryan S, Gray M, James C. Factors that influence the professional resilience of occupational therapists in mental health practice. Aust Occup Ther J. 2013;60(2):110-9.
- [47] Both-Nwabuwe JMC, Lips-Wiersma M, Dijkstra MTM, Beersma B. Understanding the autonomy–meaningful work relationship in nursing: A theoretical framework. Nursing Outlook. 2020;68(1):104-13.
- [48] Thomas A, Rochette A, George C, Iqbal MZ, Ataman R, St-Onge C, Boruff J, Renaud JS. Definitions and Conceptualizations of the Practice Context in the Health Professions: A Scoping Review. J Contin Educ Health Prof. 2023.
- [49] Sutherland BL, Pecanac K, LaBorde TM, Bartels CM, Brennan MB. Good working relationships: how healthcare system proximity influences trust between healthcare workers. J Interprof Care. 2022;36(3):331-9.
- [50] Khammissa RA, Nemutandani S, Shangase SL, Feller G, Lemmer J, Feller L. The burnout construct with reference to healthcare providers: A narrative review. SAGE Open Med. 2022;10.
- [51] Drolet M-J, Goulet M. Les barrières et facilitateurs à l'actualisation des valeurs professionnelles: Perceptions d'ergothérapeutes du Québec. Recueil annuel belge francophone d'ergothérapie. 2017;9:7-42.
- [52] Pursio K, Kankkunen P, Sanner-Stiehr E, Kvist T. Professional autonomy in nursing: An integrative review. J Nurs Manag. 2021;29(6):1565-77.
- [53] Canadian Patient Safety Institute. Professional Regulation 2022 [Available from: https://www.patientsafety institute.ca/en/toolsResources/PolicyFrameworkforPatient SafetyCanada/PolicyLeversforPatientSafety/Pages/Profess ional-Regulation.aspx.

- [54] Fry ST, Harvey RM, Hurley AC, Foley BJ. Development of a Model of Moral Distress in Military Nursing. Nurs Ethics. 2002;9(4):373-87.
- [55] Williams RD, Brundage JA, Williams EB. Moral Injury in Times of COVID-19. J Health Serv Psychol. 2020;46(2):65-9.
- [56] Čartolovni A, Stolt M, Scott PA, Suhonen R. Moral injury in healthcare professionals: A scoping review and discussion. Nurs Ethics. 2021;28(5):590-602.
- [57] Hammer TH, Avgar A. The impact of unions on job satisfaction, organizational commitment, and turnover. J Labor Res. 2005;26(2):241-66.
- [58] Mak S, Hunt M, Boruff J, Zaccagnini M, Thomas A. Exploring professional identity in rehabilitation professions: A scoping review. Adv Health Sci Educ Theory Pract. 2022.

- [59] Osborne JW. Psychological Effects of the Transition to Retirement. Can J Couns. 2011;46(1).
- [60] Shatsky P. Everything ends: Identity and the therapist's retirement. Clin Soc Work J. 2016;44(2):143-9.
- [61] Sheppard L, Crowe M, Jones A, Adams R. Returning to physiotherapy practice: The perspective of returners, potential returners and clinical supervisors. Aust Health Rev. 2010;34(3):304-11.
- [62] Yeung E, Dubrowski A, Carnahan H. Simulationaugmented education in the rehabilitation professions: A scoping review. Int J Ther Rehabil. 2013;20(5):228-36.
- [63] Lucas Molitor W, Nissen R. Correlation between simulation and fieldwork performance in adult physical rehabilitation. J Occup Ther Educ. 2020;4(2):9.