

DEVELOPMENT OF A DIGITAL-BASED CURRICULUM ENHANCEMENT PLAN FOR FILIPINO PHYSICAL THERAPY PRACTITIONERS WORLDWIDE

HONEYLET E. FRANCISCO
AUTHOR

University of Perpetual Help
System Laguna

PHILIPPINES

honey_sabinshey@yahoo.com

NOEL R. SAN ANTONIO
CO-AUTHOR

University of Perpetual Help
System Laguna

PHILIPPINES

sanantonio.noel@uphsl.edu.ph

SUSANA C. BAUTISTA
CO-AUTHOR

University of Perpetual Help
System Laguna

PHILIPPINES

bautista.susana@uphsl.edu.ph

ABSTRACT

This study identified the UPHSL physical therapy graduates and assessed the extent of program's contribution to their personal and professional growth with the end goal of proposing a digital-based curriculum enhancement plan. Specifically, this described the profile of Physical Therapy graduates in terms of age, sex, civil status, year graduated, employment status, nature of work, length of finding their first job after college, compensation and remuneration, present position or designation, length of service at work and the number of memberships in the organization. Moreover, this study also determined the extent of program's contribution to the graduates' personal and professional growth which were substantial to the preparation of digital-based curriculum enhancement plan. Further, the study involved 94 physical therapy graduates of University of Perpetual Help System Laguna. As such the study utilized the descriptive-developmental method of research with a researcher's made questionnaire as the main data gathering instrument and was complemented with interview and focused group discussion. On the other hand, the study delimited the participation of physical therapists who were not graduates of the mentioned University. This study was limited only to the responses generated from the concerned physical therapists as the target respondents. Findings of the study revealed that the UPHSL physical therapy graduates have a promising and outstanding credentials and profiles. They have strong agreement to UPHSL PT program's contribution to their personal and professional growth. The proposed curriculum enhancement plan aims to recalibrate the academic program offering in the context of global market and demands among physical therapists.

Keywords: Physical Therapy, Program Contribution, Personal and Professional Growth

INTRODUCTION

Physical therapists are primary care professionals trained to restore and maintain a person's functional mobility (Brismee et al., 2018). As exercise specialists, physical therapists are involved in patient care across the health care continuum, including acute care, acute care, outpatient care, home care, and palliative care (American Physical Therapy Association, 2019). With the expansion of professional practice, physical therapists are responsible for reforming health care and therefore must prepare to effectively manage change (Mianda and Voce, 2018). Hack et al. (2018) proposed reforming physical therapy education as an effective way to promote excellence in the profession, responding to societal demands. Professional leadership development, considered formal leadership training integrated into the entry-level physical therapy curriculum, ensures that future professionals are prepared to lead (LoVasco et al., 2016; LoVasco et al., 2019).

The specialty of physical therapy has evolved significantly over the past century and has evolved into an independent specialty (Brismee et al., 2018). The profession plays an important role in maintaining the health and well-being of many people in society and is therefore a critical member of the interdisciplinary health care team (Mianda and Voce, 2018). In 2018, the American Physical Therapy Association (APTA) developed the Excellence in Physical Therapist Education Task Force to identify best practices in PT education, including CE specialty programs, to meet the changing needs of society. The task force reviewed current models of CE in health care, evaluated the literature in physical therapy and other professions, and advised on current issues in the profession. The editors of the *Journal of Physical Therapy Education* also recognized the need for robust educational research to guide pedagogical approaches used in physical therapy curricula and elsewhere (Gwyer and Hack, 2018). At this point, the current physical therapy curriculum lacks well-designed point that could provide a deeper and broader understanding of the theoretical foundations of teaching, learning, and outcomes. By understanding exemplary students' experiences and potentially identifying their characteristics, behaviors, and approaches to learning, it can contribute to high-quality research on a body of knowledge that can then inform CE best practices, student readiness for CE, and entry criteria.

In 2019, the American Physical Therapy Association (APTA) published an updated three-year strategic plan focused on realizing an established professional vision of transforming society through movement optimization to improve people's quality of life (APTA, 2019). The plan emphasizes the need for professionals to practice advocacy, expand the availability of services and promote the sustainability of the profession (American Physical Therapy Association, 2019). The need for interdisciplinary care, the implementation of national health regulations and the prevalence of serious diseases all significantly influenced student attitudes towards CE. According to Brenner and Iafrat (2019), optimal practices for specialty Physical Therapy programs are based on high-quality, up-to-date research that has practical applications in patient care and is widely recognized in the field.

With all these and the development of new approaches in CE aim to train students to achieve the highest level of excellence by demonstrating exemplary student behavior. Physical therapy practice that constantly uses current knowledge and theory understanding personal limitations, integrates assessment and patient/client perspectives, embraces progress, challenges and strives for developing new knowledge. The information revealed in the study on the specific experiences of exemplary physical therapy students helps academics and clinical faculty understand the student's perspective so they can develop strategies to prepare and support them throughout their clinical training with emphasis on the development of the curriculum.

With this as a priority, a report by the ACAPT Student Readiness Task Force (2019) identified 14 topics that reflect the minimum knowledge, skills, abilities, and professional behaviors that students must demonstrate prior to their first full-time clinical experience. Most of these themes reflect professional behavior and include: initiative, self-esteem, use of constructive feedback, demonstration of effective communication skills, willingness to participate in learning and recognition of professional standards of which these themes complement with the initial findings and analysis of the American Physical Therapy Association (2019). Although technical knowledge and qualifications are important, they are not enough. Personality traits such as good communication skills, awareness of limitations, willingness to learn, empathy and independent

learning are among several characteristics that every physical therapist should possess. Further, one who lacks the desired affective skills may find it difficult to acquire them in relation to learning the technical skills of the profession. Professional behavioral education models are implemented in professional physical therapy programs (Macdonald, Cox, Bartlett, & Houghton, 2019), there is little evidence to support an effective pedagogical approach to developing non-cognitive skills and behaviors. In addition, the field of physical therapy is constantly evolving with new research, techniques and technologies and instructional updates will ensure that students are exposed to the latest evidence-based practices and emerging academic trends. In support of this endeavour, Higher Education Institutions (HEIs) must guarantee that all students obtain the skills needed to adapt to constantly changing labor market requirements and situation by providing them with realistic experiences and well-defined curriculum of the program.

A more comprehensive and updated curriculum can better prepare physical therapy students to provide quality care and improve patient outcomes. This includes not only understanding the technical aspects of therapy, but also communication skills, cultural competence and ethical aspects. Technological advances for instance such as wearable devices, telehealth platforms and rehabilitation robotics are increasingly being integrated into physical therapy practice. Hence, there is a need to consider curriculum enhancements to continuously allow students learning how to effectively use these techniques to improve patient care and through emphasizing critical thinking, problem-solving skills, and a commitment to lifelong learning. Indeed, an advanced and global-ready curriculum can prepare physical therapy students to adapt to future changes in the field and continue their professional development throughout their careers.

It is along this line of contention that the researcher envisions to propose an enhancement in the physical therapy curriculum in order to magnify the purpose and marketability of the every UPHSL graduate. As affirmed by Yunanto et al (2021) a successful education system should include a looping system in which HEIs' responsibilities extend beyond graduation to the sustainability of graduates' careers, preparing them to work locally or overseas. The University of Perpetual Help System Laguna's physical therapy department provides chances for academic and experiential study. The curriculum also educated students to work with patients on maintaining, developing, and restoring their optimal physical function. More so, students developed into experienced generalists who care for and assist patients in regaining function, improving mobility, relieving pain, and preventing or limiting irreversible physical impairments. Along with the aforementioned discussion and experiences, the researcher believes that it is high time for the institution to step forward and navigate into the realm of the physical therapy profession in the context of Filipino practitioners abroad. Through this initiative, it will also be a turning point for the institution and the graduates as well to sustain the relevance of the program and take proactive steps in the realization of the program in global perspective. This research is pivotal in investigating changes in graduate career patterns in order to offer a foundation for evaluating the existing program, as well as to continue the process of evaluating and performing of UPHSL as a whole. Furthermore, its findings will help academic institutions retain curriculum relevance and give targeted advantages to graduates, as well as aid them in improving the marketability of their educational programs. Likewise, through this study, every potential physical therapist may be informed of the needed skills and competence in pursuit of quality work and profession locally and internationally.

LITERATURE REVIEW

Characteristics of Physical Therapy Graduates

Evidence-based practice (EBP) is a critical approach in health care due to the potential for EBP to guide clinical decision-making (Dawes et al., 2018). However, despite the clinical importance of EBP, reports indicate that EBP uptake in physical therapy (PT) clinical practice is still low (Condon, McGrane, Mockler, and Stokes, 2018). Poor EBP uptake by physical therapists has been mostly attributed to lack of time, inability to understand statistical data, lack of employer or colleague support, lack of resources, lack of interest, and lack of generalizability of research results. Literature suggests that to instill a culture of EBP use in clinical practice, it is best that exposure to these concepts begin in entry-level education. The World Confederation of Physical Therapy (2018) recommended the inclusion of EBP in entry-level PT education curricula based on the belief that physical therapists should provide care using best available evidence. Few studies however have explored the impact of entry-level EBP education on PT graduates and their use of EBP in clinical practice. These studies either did not explore EBP use of PT graduates years into their clinical practice or were unable to capture PT graduates' perceptions of their EBP education. In the Philippines, educational institutions have included EBP in the five-year Bachelor of Science in Physical Therapy (BSPT) degree program which allows entry to the PT profession. However, a national survey of these educational institutions indicated that EBP education was often unstructured and not comprehensive, with scant emphasis on clinically oriented teaching/learning and assessment methods (Gorgon, Basco, and Manuel, 2018). Unsurprisingly, despite almost universally positive attitudes toward EBP, a probability survey of Filipino physical therapists demonstrated low research evidence uptake and over-reliance on potentially biased information sources in clinical decisionmaking. It was hypothesized that with early optimal EBP education, students would not only gain EBP-related knowledge and attitudes but also the necessary skills to apply EBP in practice.

The shift from undergraduate student to Doctor of Physical Therapy (DPT) in the industry is a significant accomplishment for the 10,545 students that graduate each year (Commission on Accreditation in Physical Therapy Education, 2019). The diverse range of practice locations, ailments addressed, and patient demographics requiring competent care has contributed to a promising job outlook for physical therapists (Bureau of Labor Statistics, U.S. Department of Labor, 2020). Physical therapist education programs prepare students to join the industry with the skills of a general practitioner. Education programs last an average of 123 weeks and provide a wide range of information for managing patient and client care in all professional settings across the lifetime (Commission on Accreditation in Physical Therapy Education, 2019). This wide basis of professional education is intended to promote safe practice; nevertheless, there may be inadequate time in the curriculum to address the increasing complexity of patients and expectations for clinical decision making in specific practice contexts.

The first year of work is difficult for new therapists because they must deal with the anguish and reality of practice before establishing adaptive ways to use information in therapeutic settings. Many students do not feel qualified or ready for work in all practical contexts (Jones et al., 2019). The complexity of health care professions, combined with stakeholder expectations that physical therapists have specialized knowledge, has prompted a call to investigate excellence in physical therapy education to meet society's needs (North et al., 2023; Moore et al., 2024). Each

physical therapy school is free to create its own educational curriculum that is consistent with the institution's goal and resources, as well as the Commission on Accreditation in Physical Therapy Education's (CAPTE) necessary requirements and components (Harris, 2018; Rowland et al., 2020). This multiplicity of instructional methods leads to significant variance in physical therapy education programs (North et al., 2023; Moore et al., 2024). Students are equipped to pass the National Physical Therapist Examination and find job, but they lack the necessary knowledge and abilities to function in an early intervention context (Commission on Accreditation in Physical Therapy Education, 2019; Brueilly et al., 2022). Physical therapists are essential components of the early intervention team. The ultimate aim of physical therapists for all patients are to restore, maintain, and/or improve physical skills. Physical therapy patient management processes include examination and evaluation, treatments, reassessment, and discharge to maintain or improve participation and independence in activities across the lifetime. Physical therapists have specialized skills and knowledge in areas such as sensorimotor function, motor and perceptual development, musculoskeletal status, neurobehavioral organizations, cardiopulmonary status, and environmental adaptation, and they can apply these concepts to early intervention patients. More precisely, physical therapists apply discipline-specific knowledge to self-care function, assistive technology requirements, and medical/healthcare science difficulties. Understanding these three domains enables a physical therapist to successfully interact and cooperate with family members and other healthcare professionals, which is a necessary ability for job.

Another point is the mismatch between entry-level education standards and early intervention competencies that reflect the complexities of clinical practice has resulted in a knowledge and skill gap for providing services under the Individuals with Disabilities Education Act (IDEA), Part C (Weaver et al., 2018; Lundmar et al., 2021). King (2021), and Nichols et al. (2023) noted that physical therapists reported the lowest levels of confidence in specific areas of early intervention practice mandated by the Individuals with Disabilities Education Act (IDEA) when compared to other related service providers. These particular elements include delivering assistance in the natural setting, utilizing a family-centered care framework, and developing a customized family service plan. This will empower clinicians, service providers, and researchers to view families as intervention agents capable of offering feedback and making decisions, rather than passive components of rehabilitation (Romero-Galisteo et al., 2020). Before being able to fully contribute to a collaborative team, one must be competent in their own profession.

Physical Therapists treat patients that are experiencing pain on a daily basis. In recent years, physical therapists and other health care providers have become more aware of the multifactorial nature of pain. Medical practitioners have realized the impact that chronic pain has on the evaluation, treatment, and management of health conditions. The healthcare world is beginning to understand the importance of these complex biobehavioral factors, including the role of biological, environmental, and psychological influences that contribute to pain and disability. Despite recognition of the importance of these factors, very little information is available to help practitioners translate this knowledge into to direct patient care within physical therapy practice. In 2019, the American Physical Therapy Association (APTA) launched a large public relations campaign to educate the public on the dangers of opioid addiction and the benefits of physical therapy as an alternative. They have utilized the slogan "Move Forward" as well as the Twitter hashtag #ChoosePT to promote their efforts (American Physical Therapy Association, 2023).

Considering the recent increase in opioid use and chronic pain in the United States, one must ask if physical therapists are prepared to be the answer to this major public health crisis. To provide adequate treatment, physical therapists should have a good understanding of the complex mechanisms of chronic pain as well as the biopsychosocial model of chronic pain management. Another characteristic is physical therapists have a strong understanding of the issues related to opioid use, and the strategies utilized by other health care professionals to manage pain (Wenger et al., 2018). After examining current literature, there appears to be a lack of research regarding physical therapists' knowledge and attitudes toward pain. Also, there is very little information in the literature regarding what factors contribute to the level of knowledge and attitudes towards treating chronic pain that physical therapists possess. In a study by Wolff et al. (2018), seventy-two percent of physical therapists believed that the pain management and theory that they were taught in their entry-level education was very inadequate or less than adequate to manage patients with chronic pain in an orthopedic setting. In their study, they examined physical therapists' knowledge and attitude levels regarding the treatment of patients with chronic pain. They found that the physical therapists' pain knowledge scores were low (mean score of 35.8/46 points = 77.8%), and scores on positive attitudes toward treating patients with chronic pain were even lower (mean score of 20.5/36 points = 56.9%).

While some recent literature examines the efficacy of continuing education on physical therapists' knowledge of pain (Peterson et al., 2022), no studies were identified that examine physical therapy programs methods for teaching these concepts. The Commission for Accreditation of Physical Therapy Education (CAPTE) determines the academic standards that physical therapy programs must meet to maintain accreditation. The CAPTE does mention pain in one of the required standards, 7D19, which is related to administering tests and measures appropriately (Commission on Accreditation of Physical Therapy Education (CAPTE), 2020). However, this is the only location in the accreditation standards where pain is listed as an important element for teaching and learning. The Federation of State Board of Physical Therapy (FSBPT) is responsible for administering the National Physical Therapy Examination (NPTE) for all candidates who have graduated from an accredited institution in physical therapy. The FSBPT publishes examination content topics that schools should cover in their respective programs (FSBPT- Federation of State Boards of Physical Therapy, 2018), but pain is not mentioned as a specific topic that is addressed on licensure examination. However, pain is inherent with many of the conditions that physical therapists treat, and many therapeutic interventions that physical therapists employ are used to address pain. The International Association for the Study of Pain (IASP) has made great strides towards setting guidelines for how information regarding pain should be structured within various health care curricula, and they have published physical therapy guidelines to assist programs in ensuring that proper information has been addressed (Slater et al., 2018). These guidelines can be used to develop the concepts of pain throughout a physical therapy curriculum, however there is no data to suggest how physical therapy programs are currently utilizing this information for teaching and learning.

Physical Therapy Program

Studies regarding physical therapy curriculum did not directly measure leadership development. Much of the literature published measured leadership as a secondary measure, or only measured some skills and behaviors associated with leadership (Arth et al., 2018; Danzl et al., 2019;

Stickler et al., 2019). Eigsti and Davis (2018) and LoVasco et al. (2019) recently published empirical studies related to leadership development curriculum within physical therapy education. Results of these studies support the claim that including formal leadership development curriculum in entry-level education courses is beneficial in equipping students with leadership skills and attributes (Eigsti& Davis, 2018; LoVasco et al., 2019). Sebelski et al. (2019) identified the need for exploring current leadership development in physical therapy programs. Currently, no qualitative studies exist that explore this phenomenon. Exploring current leadership training in physical therapy programs through qualitative inquiry may increase the understanding of the variability in leadership curriculum in physical therapy programs (Klenke et al., 2015). The data collected through this study provides specific empirical data related to instructional methods used to promote leadership development in physical therapy programs. Likewise, I used between-case analysis to identify commonalities and differences in leadership development curriculum between programs. Lastly, empirical data was collected regarding faculty perception of necessary attributes, skills and behaviors necessary to lead others in the physical therapy profession, and the ways in which they ensure students are equipped with these qualities. This should inform the continued development of leadership competencies and should influence the continued research of leadership development as a core competency in physical therapy education (Eigsti& Davis, 2018; Jensen, Hack, et al., 2017; LoVasco et al., 2019; Sebelski et al., 2019).

Because the study of leadership is abstract and founded in many theories and models, the definition and discussion related to management and leadership in physical therapy is variable (LoVasco et al., 2019; Sebelski et al., 2019). A study provides understanding of the commonalities between physical therapy programs regarding leadership and leadership curriculum and provides insight into some appropriate curricular strategies for promoting transformational leadership (LoVasco et al., 2019). Leadership research within the physical therapy profession has primarily maintained foundations with transformational leadership, shared leadership, trait leadership, and situational leadership (Jensen, Hack, et al., 2019; LoVasco et al., 2019; Niemi et al., 2018; Sebelski et al., 2019). The primary framework on which to equip leaders within the physical therapy profession has not been identified (Jensen, Hack, et al., 2019; Sebelski et al., 2019). Based on the identified societal needs informing this study, this study is grounded in transformational leadership. Therefore, it is essential to understand current professional leadership training in graduate programs, as this may inform the future theoretical framework for study of leadership and implementation of leadership training (Eigsti& Davis, 2018; Sebelski et al., 2019). Likewise, understanding the instructional methods used to promote leadership development, analyzed through the framework of adult learning theory, may promote increased continuity between physical therapy programs and within the profession in equipping individuals for leadership.

In addition to improving continuity between physical therapy programs and creating consensus in leadership definition and entry-level leadership competencies, this study also adds to transformational leadership theory. Understanding faculty perception of leadership characteristics, outcomes related to leadership curriculum in physical therapy education, and instructional methods will substantiate evidence published by those in the nursing profession supporting the influence of transformational leadership theory on healthcare (Stone et al., 2019). Specifically, all faculty claims describing the influence of cultivating change, inspiring a shared

vision, and promoting communication and mentorship will support the influence of transformational leadership theory in healthcare. The professional physical therapist education curriculum has two components: didactic and clinical. The didactic component typically occurs in the classroom and includes laboratory experiences. This is the time when students are instructed by academic faculty in the foundational knowledge, skills, attitudes, and behaviors needed to become a doctor of physical therapy (American Council of Academic Physical Therapy Common Terminology Panel, 2018). The CE component of the program, which can constitute up to 45% of the curriculum is when students apply the foundational knowledge learned in the classroom in real world, patient care settings including hospitals, homecare, private offices, and schools. The Commission on Accreditation of Physical Therapy Education (CAPTE) describes CE as a critical component of the development of competent entry-level physical therapists. Various models of CE exist with the most traditional format including multiple experiences spaced out during the professional curriculum where one student is directly supervised by a licensed physical therapist for the duration of the clinical experience (Lekkas et al., 2019). More recently, other models of CE have been proposed including the year-long internship that occurs at the completion of the didactic portion of the professional curriculum as well as the clinical experience that is integrated into the didactic curriculum.

The education of PT students must stand up to the expectations of the academic institutions as well as the profession, regardless of the adopted model. Knowledge of facts, theory, and techniques are learned in the classroom, but the application of that knowledge and the development of a professional identity occur in the clinical environment. As a critical component of all physical therapy programs, CE is the part of the curriculum that teaches the student to think, act, and perform like a physical therapist (Shulman, 2019). In this regard, CE is the signature pedagogy of physical therapy professional education. The transition from the very controlled, predictable environment of the classroom to an unpredictable clinical setting can pose challenges to students. The characteristics of the didactic curriculum include having an organized learning framework, clear and specific expectations, a designated teacher, objective assessments, and specific outcomes. In this formal learning environment, deliberate learning dominates the process of acquiring knowledge (Eraut, 2019).

Students know what to expect and can plan for future learning events. Although the clinic may share some of these characteristics, there is more variability introduced into the clinical learning experience. Clinical learning cannot be completely structured due to the unpredictable nature of clinical practice, differing demands between clinical settings, and even inconsistencies within a single clinical experience. The variability in the patient caseload, the organization of the facility, and the characteristics and teaching style of the CI are a few of the inconstant factors that can impact a clinical experience (Mccallum, Mosher, Jacobson, Gallivan, & Giuffre, 2018). There are some characteristics of structured learning in CE in that it is a course with explicit objectives and performance expectations. The actual environment, however, more closely reflects non-formal learning that includes a blend of implicit, explicit, and deliberate knowledge acquisition. The complex workings of the clinic expose students to a barrage of tacit information that educators may not overtly teach nor do students consciously recognize. Subconsciously, this information provides a foundation for a student's perception of his/her environment and how to act within it. For example, the culture of the clinical setting and how a physical therapist demonstrates compassion and caring may be part of the informal curriculum and implicitly

learned (L. Dutton & Ough Sellheim, 2018). Students are not aware that they are acquiring knowledge of the clinic's culture, but this knowledge is shaping their perceived role as a student and, ultimately, a professional. Unplanned events that may prompt learning are also common during a clinical experience. In this case, learning is explicit in response to a spontaneous, present situation, commonly referred to as a teachable moment. To be able to be successful in this dynamic environment, students must not only possess knowledge and technical skills, they must also be able to adapt quickly and view each new challenge as an opportunity to learn.

Non-cognitive skills are the values, attitudes, behaviors, and strategies that are necessary to foster success in school and in the workplace (Morrison & Schoon, 2018). Professional education should put forth effort to align the values, standards and purpose of the profession with the teaching of professional knowledge and skills (Colby & Sullivan, 2018). If programs fail to link professional identity to the cognitive and skills based instruction, they run the risk of graduating clinicians who are unable to adapt to the challenges of the healthcare environment, lack a sense of purpose, and put self-interests ahead of the mission of the profession. In CE, the expectation is that student performance goes beyond that of technical skill and didactic knowledge. The clinical environment also challenges the student's ability to exhibit the attitudes and values characteristic of a professional physical therapist. As cited in the Physical Therapist Clinical Performance Instrument, students are expected to "value the dignity and individual needs of their patients, demonstrate a readiness to learn, seek and accept feedback, communicate in a professional manner congruent with situational needs, and engage in self-assessment".

A Delphi study conducted by Chipchase et al. (2019) explored the characteristics of student preparedness for clinical learning among physical, occupation, and speech therapy students from the perspective of 161 clinical faculty. The participants described key characteristics of a well-prepared student for a clinical experience. Consensus was achieved on six themes: willingness, professionalism, personal attributes, skills, communication and interaction, and knowledge. Among those six themes, willingness, professionalism, and personal attributes were valued highest. According to the operational definitions identified in the article, willingness referred to the students' willingness to engage, assist, learn, and practice.

In 2019, ACAPT passed a motion delineating the knowledge, skills, abilities, and professional behaviors a physical therapist student must demonstrate before entering a full time clinical experience for the first time. The motion was based on a Delphi study conducted by the Student Readiness Task Force and included 14 student readiness themes along with corresponding knowledge, skills, and abilities. The themes set forth in the motion correspond with the finding with the addition of three levels of competencies associated with each behavior. The competencies range from at least familiar, to at least emerging, and proficient. The motion recognized the need for physical therapist students to accomplish curriculum requirements such as minimum GPA and practical examination expectations in addition to having foundational knowledge in didactic material, engaging in self-assessment, utilizing constructive feedback, demonstrating effective communication skills, being eager to learn, engaging in safe patient care, exhibiting clinical reasoning skills, following professional stands and demonstrating specific clinical examination and intervention skills (American Council of Academic Physical Therapy: Student Readiness Task Force, 2018).

Employers also have expectations of recent graduates entering the workforce. A survey of 400 employers across the United States representing a variety of sectors including education, local and federal government, business, and service organization cited the most essential skills of a recently hired graduate include: professionalism/work ethic, communication, teamwork, and critical thinking/problem solving. In each of the studies mentioned, the desirable qualities in health sciences students and employees closely resemble the APTA's document, *Professionalism: Core Values of Physical Therapy*. The seven Core Values include: accountability, altruism, compassion/caring, excellence, integrity, professional duty, and social responsibility. In a survey of academic educators in professional physical therapy programs across the United States 98% agreed that professionalism is an important component of a physical therapy curriculum. A majority, 89% of the respondents, had concerns about the professional behaviors of one or more of their students with the most common negative behaviors being: tardiness, lack of responsibility, violation of dress code, nonverbal disrespect, and failure to meet deadlines.

Each physical therapy practice setting requires a unique body of knowledge and skills beyond the minimal standards for safe practice, and it is unrealistic to expect a physical therapy graduate to be prepared to practice in any setting immediately after graduation (Rapport et al., 2018). The American Physical Therapy Association (APTA) states that the scope of physical therapist practice "consists of activities for which an individual physical therapist is educated, trained, and is competent to perform" (American Physical Therapy Association, 2018). Chiarello and Effgen (2019) identified nine content areas, including specific competencies, in which physical therapists should have expertise when working in the early intervention setting with children birth to three years of age. Specific early intervention competencies are absent from the minimal accreditations standards endorsed by the Commission on Accreditation in Physical Therapy Education (CAPTE), creating a gap between pre-professional education and professional practice. A lack of alignment between entry-level education standards and the complexity of clinical practice has created an unresolved national problem of inadequately trained physical therapists (Spence et al., 2018). Working with young children requires a specific body of knowledge and skills in addition to discipline-specific requirements for graduation and licensure (National Association for the Education of Young Children, 2020).

Multiple agencies have established guiding documents to identify specific competencies for providers working in the early intervention setting; however, the competencies in these guiding documents do not align with entry-level practice accreditation standards. Research on pediatric education in the entry-level physical therapist program has passed through multiple stages in its development beginning in the 1990s when significant variation was noted in didactic and clinical education. Over a decade later the variability remains (Spence et al., 2018) less than 2.5% of physical therapist education programs require a full-time pediatric clinical education experience. Physical therapy programs have the lowest amount of training in the unique areas of early intervention, specifically in development of Individualized Family Service Plans (IFSP), teaming practices, providing service in the natural environment, and service coordination. Multiple recommendations were made to minimize variability in education; however, this decades-long unresolved problem persists and impacts student preparedness for practice. The growing complexity and number of children receiving early intervention services continue to rise (Zablotsky, 2019), creating an urgent need for providers trained to meet the unique needs of

young children with delayed development. Children have a critical window of neuroplastic change in the first 35 months of life within which PT can minimize or prevent developmental delays, changing the life trajectory of a child and reducing the need for costly special education services when entering school (Campbell et al., 2019). Novice providers entering the workforce often lack the specialized knowledge and skill to provide cost-effective quality service to children with disabilities and their families during this period of critical development. This preparation-practice gap is partially attributed to antiquated pre-professional training that has failed to adapt to rapid changes in healthcare. Employers, consumers, and payers expect adequately trained providers to provide therapy services. Shortages of well-trained personnel affect the ability of children in need of PT intervention to reach their full developmental and academic potential (McManus et al., 2019).

A literature review of entry-level physical therapist education and the variability of pediatric content embedded in entry-level physical therapist education program is central to understanding the educational experience of physical therapy students. Additionally, a review of the foundational tenants of early intervention practice is necessary to understand the demands of clinical practice. Furthermore, a review of the literature of a preparation-practice gap will highlight how educational deficiencies impact physical therapy graduates as they enter the workforce and contributes to the conceptual framework. Identification of important gaps and omissions in the literature will be highlighted to convey the importance of studying and addressing this topic. Key databases searched included EBSCOhost, ERIC, ProQuest, and ProQuest Dissertations and thesis. Credible sources reviewed included peer-reviewed journal articles, scholarly books by experts, current conference proceedings in the areas of pediatrics and physical therapist education, and other unpublished, yet relevant, web materials and documents. Key terms to guide the literature search process included physical therapy, physical therapist education, pediatrics, early intervention, personnel preparation, preparation-practice gap, and work readiness.

Additionally, various internet sources were consulted, including the American Physical Therapy Association (APTA) and the Commission for Accreditation of Physical Therapist Education (CAPTE). Many literature sources were used to build a comprehensive understanding of critical concepts central to the purpose of this study across multiple disciplines. This chapter is organized into four sections. Part one introduces the theoretical framework of discrepancy evaluation. Part two discusses physical therapy education and the extent of early intervention-specific content and clinical education in the entry-level curriculum. Part three discusses the Early Intervention program and setting specific knowledge and skills for effective physical therapy clinical practice. Part four addresses the preparation-practice gap and the transition from student to physical therapist.

Physical therapist education programs offer a Doctor of Physical Therapy (DPT) degree that includes didactic and clinical education experiences to prepare graduates to work with patients and clients across the lifespan in various practice settings (American Physical Therapy Association, 2019). Currently, 250 accredited programs exist in the United States, with 34,218 enrolled students (Commission on Accreditation in Physical Therapy Education, 2019). An additional 34 institutions have developing programs (Commission on Accreditation in Physical Therapy Education, 2019). Physical therapist education programs are accredited by the

Commission on Accreditation in Physical Therapy Education (CAPTE) through a voluntary, peer-reviewed process to ensure the institution has met a minimal set of quality standards (The Commission on Accreditation in Physical Therapy Education, 2019). The Minimum Skills of Physical Therapist Graduates at Entry-Level identifies the minimum skills that are indispensable for a new graduate to perform safely and competently perform job duties. Minimal skills include screening, examination, evaluation, diagnosis, prognosis, creation of a plan of care, safe performance of interventions, outcome assessment, education, and practice management, professionalism, communication, cultural competence, and promotion of health, wellness, and prevention. Physical therapists are expected to be competent in these skills in the cardiac, pulmonary, integumentary, musculoskeletal, and neuromuscular systems for patients and clients across the lifespan.

Accreditation is a voluntary, rigorous, peer-reviewed process that ensures the institution provides graduates a minimal set of quality standards to practice as a generalist physical therapist. CAPTE, the regulating body of the physical therapy profession, ensures and advances excellence in physical therapist education (Commission on Accreditation in Physical Therapy Education, 2019). In addition to gaining knowledge and skills for identification and remediation of movement impairments for practice, curricula must ensure students develop professionalism, strong interpersonal and communication skills, innovation and creativity, problem-solving, and critical thinking (Commission on Accreditation in Physical Therapy Education, 2020). Skills are gained through didactic and clinical education components of the curriculum. The Standards and Required Elements for Accreditation of Physical Therapist Education Programs (Commission on Accreditation in Physical Therapy Education, 2020) outlines minimal curriculum content, learning experiences, and assessment procedures to prepare students for initial practice in physical therapy (Commission on Accreditation in Physical Therapy Education, 2019). Programs demonstrate compliance with CAPTE standards and required elements through a written self-study document and multi-day site visit to verify compliance (Harris, 2018). Assurance that graduates acquire essential skills to enter the profession by qualified faculty is vital to accreditation (Harris, 2018). Furthermore, proof of graduation from a CAPTE accredited program is required to sit for the National Physical Therapist Exam (NPTE) and provide services to patients/clients with Medicare.

Currently, specific early intervention competencies are not included in CAPTE accreditation standards, resulting in inadequate training to meet the needs of infants and children. Early childhood personnel preparation standards established by multiple national agencies are not aligned with CAPTE standards nor do they mandate essential content (Marlin-Eile & Ellis, 2020; Mayoral et al., 2020). Physical therapist education programs prepare safe generalists with limited time to teach students the nuanced practice in all areas. As the profession transitioned to a doctoral level of training and states adopted direct access of PT services without a required physician referral, students receive extensive training in medical screening, examination, evaluation, diagnosis, prognosis, and interventions for patients across the lifespan. However, it is an unrealistic expectation that a physical therapy graduate is prepared to practice in any setting after graduation. Each area of physical therapy practice requires a unique body of knowledge and skills beyond the minimal standards for safe practice. The knowledge and skills required to provide effective early intervention services for children and families are vastly different from those necessary to provide services to older children, adolescents, or adults. This discrepancy

results in physical therapy students that are prepared to pass the national licensure exam but lack the nuanced knowledge and skill for practice in the early intervention setting. Current accreditation standards mandate interdisciplinary training and exposure to diverse patients to prepare students to work with all consumers; however, education of early intervention-specific knowledge and skills in pre-professional training programs is limited (Commission on Accreditation in Physical Therapy Education, 2020; Spence et al., 2018). Therapists must first gain discipline-specific knowledge and skills before they can effectively contribute to an interdisciplinary team. The gaps in pre-professional education require on-the-job training after employment that affects his or her ability to provide comprehensive and coordinated services. Weaver et al. (2018) report similar findings of physical therapists failing to receive sufficient training in familycentered care, natural environment, Individualized Family Service Plans, teaming practices, and service coordination. Inadequate preparation results in two-thirds of pre-service students feeling not very well prepared to work with young children and their families.

The Regional Resource Center Program (RRCP) reviewed the critical early intervention principles for alignment with supporting statements from physical therapy resources. Recommended early intervention principles are disseminated in fact sheets produced by the Section of Pediatrics; however, recommendations do not translate into minimum standards for the profession. The mismatch between practice competencies in entry-level programs and actual early intervention practice creates a need for additional post-professional training and mentoring for therapists (Weaver et al., 2018). Clinical Education in the Entry-Level Physical Therapy Curriculum. Clinical education is an essential component of all physical therapist education programs with a minimum of 30 required weeks (Commission on Accreditation in Physical Therapy Education, 2020). Clinical education is “formal supervised experiential learning, focused on development and application of patient/client-centered skills and professional behaviors... designed so that students gain substantial, relevant clinical experience and skills, engage in contemporary practice, and demonstrate competence before beginning independent practice” (Erickson et al., 2018). The immersion of the students in a clinical environment mimics an apprenticeship model of learning. Students complete full-time clinical education experiences for a minimum of 35 hours per week in multiple practice settings to demonstrate a breadth of clinical experience with a specific requirement established by each academic program. Nationally, the average duration of clinical education experiences in physical therapy curriculum was 36 weeks per student, and programs reported an average of 537 clinical education sites (Commission on Accreditation in Physical Therapy Education, 2019).

Physical therapy leaders have begun to explore the complex concept of student readiness for clinical education experiences (Irwin et al., 2018; Timmerberg et al., 2019), but a lack of literature exists on the topic of work readiness. The transition period from student to a therapist in the United States has been under-investigated in the physical therapy literature. Research from Europe, Australia, and Canada report similar findings despite different entry-level education requirements and national health care systems, suggesting universal challenges students encounter when transitioning to the health care workforce. New graduates report fear and anxiety, low confidence in skills, and poor coping skills. Students struggle to transfer skills learned in the classroom to the workplace without explicit guidance (Jones et al., 2020). Despite the identification of these challenges, the core values of the profession and CAPTE accreditation standards do not explicitly mandate programs to help students transition to the workforce.

Program's Contribution

Healthcare professionals need to be prepared to confront a challenging world and provide quality patient interventions. Educational formation is the first step to attaining this goal. The need to develop personal and professional skills is well-recognized as enabling future physical therapists to function efficiently (Stew G 2019). Nowadays, managing stress and enhancing resilience are important considerations for becoming successful in physical therapy interventions (Mejia-Downs A 2020). To prepare students for the interactive world in multicultural environments it is important to practice in varied environments (Frenk J., et al. 2019). One of the special groups that physiotherapists treat, and which students could practice with, is the prisoner population. This is the group of interest that would participate in a reinsertion program. Because it is vital for this community to learn healthy physical exercise habits, the prisoner environment is for physiotherapists a new emerging workplace. In this context, students can apply their theoretical knowledge (Ajjawi R., Higgs J. 2021) and practice their communication skills (Delany C., Bragge P. 2019). Physical therapists could expand their profession, because professions evolve as a result of their interrelations with others (Malcolm D., Scott A 2021). The prison location is another place where a physical therapist could be considered a primary care practitioner (Hogg-Johnson S., et al 2021).

In this framework emerges “Solidarity Activities in Collaboration with a Prisoner Reinsertion Program” (SACP) as a service-learning course in a Spanish Physical Therapy program. This course was created with the objective of giving physical therapy care to special groups who in other conditions would not have access to this care (Shyu G.-S., et al 2020). One of these underserved groups are prisoners who participate in a community reinsertion program through sports, called “Running Makes You Free.” Within the course, physical therapy students create and deliver educational sessions to inmates once a month. The information presented includes different physical therapy techniques and healthy sports habits. This course was created to provide students extra clinical practice in varied environments (Ruiz-Montero P.J., et al 2019). Physical therapy education requires applied learning as a central part of the formation. This kind of learning includes learning skills in the workplace (Freeth D., et al 2021). It is known that experiential learning is the best manner to develop clinical reasoning expertise (Ryan S, 2018). Experiential learning facilitates socialization in a practice community, it is collaborative work (Jelley W., et al 2020) and gives the opportunities for students to apply theoretical knowledge, to integrate it into practical settings and to build their own learning process (KilminsterS.Met al 2020, Bryant P., Spencer J. 2023). It is a form of interactive learning and was added to this curriculum to enhance educational development as well as translational learning for this group of physical therapy students (Urquhart R., Cornelissen E., Lal S., Colquhoun H., Klein G., Richmond S., WittemanH.O. , 2023).

It is well known that the use of workplace practice in different contexts and environments provides more active teaching and learning methodologies (Boekhout P., Gog T., Van De Wiel M.W.J., Geraets J., Gerards-Last D2020). Based on Bandura's Social Learning Theory, modelling examples allows students to learn by observing a model perform a task and then learn by doing. Several studies include the importance of learning from examples adapted to the prior students' experience. For novice students, instructions are more effective than problem solving;

for advanced students, it is the opposite, because they have prior knowledge of the task and have acquired a schema for solving a problem. Therefore, advanced students benefit from practice. Experiential learning can be organized in widely different environments. This can contribute to physical therapy students' development. One essential skill for the healthcare professional is the understanding of culturally diverse classes of people. Cultural competence is the combination of cultural awareness, cultural knowledge and cultural sensitivity. Physical therapists need to practice with culturally diverse groups to develop this competence and therefore, educational curricula for physical therapists should offer this opportunity. Working with inmates has been a good initiative to work on cultural sensitivity and has helped students to lose their prejudices. The five themes found supports previous evidence about professional and personal development of physical therapy students. The findings complement other recent research on translational learning and clinical expertise in Physical Therapy.

Themes and resulting theory were generated from data derived directly from students' and teachers' experience. Research findings suggest that SACP intervention promotes the application of knowledge and the creation of workplace practice that facilitates student development as lifelong learners and also improves motivation for learning. These results are similar to findings from several previous studies. Taking part in the course SACP during educational studies helps students to experience a challenge. It is important for them to face this challenge, manage it and solve problems that arise in the situation. As other studies have shown, it is important to include the workplace practice in professional education courses as a central aim for students' education. In this workplace practice, a real-life situation is when students really have to use all their skills to achieve a successful patient intervention.

Integrating ethics into the curriculum as part of professional identity formation is essential in the health profession, but knowing when and how to incorporate it best can be challenging for educators. Carrese et al. (2018) explored the opportunities and challenges of medical ethics within the context of accrediting organization expectations. Additionally, they studied teaching methods, goals, objectives, and strategies for assessment. The authors suggested a long-term approach by introducing concepts of ethics and, in a later semester, asked the students to apply the concepts in real life practice. Connecting educational interventions with patient outcomes is needed to help assess ethics in action. Carrese et al. (2019) provided practical guidance to educators with best-practice suggestions for integrating ethics education by building upon prior knowledge, supporting adult learning theory.

Jones et al. (2019) described the growth of humanities in medicine and the health professions, including at the undergraduate level. The focus of the humanities was to connect the knowledge and skill aspects of medicine to attributes of caregiving. Ultimately, the goal of health humanities in the curricula is to use the societal model and shape future healthcare providers' attitudes towards patients. The shift to incorporate more health humanities validates the importance of professional formation in the curricula. Whereas curricular structural influences and implications of professional formation are exemplified from the literature, teaching and curriculum can have postgraduation effects. Beyond the curriculum, Black et al. (2019) found that professional formation occurs beyond graduation with intentional mentorship. As students prepare for graduation, faculty should consider providing students with a plan to progress in their professional formation.

Preparation of Curriculum Enhancement Plan

Modern societies face new issues, whether environmental, economic, health-related, or sociological. Climate change and resource depletion call into question our consumption habits, while the development of artificial intelligence and new technologies calls into question our traditional notions of work, and ongoing globalisation involves migration, urbanization, and increasing diversity, all of which shape countries and economies. If children in school continue to study what their parents have taught them, they will be unprepared for a more uncertain future in an ever-changing world (OECD, 2020). Because of these global changes, governments have increasingly explored revisiting the curriculum as a strategy to provide pupils with the information, skills, and competencies required for tomorrow.

Several members of Organization for Economic Co-operation and Development (OECD) nations, including Estonia, Finland, Japan, Norway, and Wales (United Kingdom), have implemented curricular reform in recent years. More than 40 countries are involved in the OECD-led Education 2030 project, which investigates the skills and competences required for students to flourish in the twenty-first century (OECD, 2020). While each country's reform trajectory is unique, several trends appear across nations, such as an emphasis on well-being, learner autonomy, problem-solving skills, and managing an unpredictable environment. Curriculum reform's similarities and differences among nations show a greater complexity concerning curriculum reform, which involves the interaction of global and local forces. On the one hand, curriculum reform is a national issue, since it is supposed to define the information and skills that are seen most important in a community and required to prepare for the future. On the other hand, it can be influenced by international trends such as globalisation, which are reflected in international student assessments.

Curriculum reform is a convergence of these factors. In addition to this intricacy, one key challenge that many nations face when attempting to alter curricula is execution. According to Reyes (2023), curriculum implementation relates to the means of achieving targeted goals, and for the new curriculum to produce fruit, it must be translated into classroom practices. The issue of implementation has been extensively researched in domains such as public management, public policy, organizational transformation, and education. Curriculum reform has previously been viewed from a "top-down" perspective, with the "success" of implementation measured by the "fidelity" and "adherence" of implementers, such as teachers (Reyes, 2023; Azorín and Hernández, 2023). Nonetheless, this approach is not consistent with the trend of autonomy-centered curriculum enactment, in which teachers play a central role in the process, both as policy actors and mediators, rendering the concept of fidelity obsolete. In effect, a more dominant vision of implementation has lately emerged, focusing on a more "bottom-up" approach that emphasizes implementers' autonomy and choice.

Teachers' agency, in this view, is regarded as having a critical role in curriculum implementation, because teachers are active players who should be included throughout the reform process, rather than passive executors who only play a part at the end. Accordingly, "implementation fidelity" has given way to "the degree to which teachers' adaptations of materials are congruent with the curricular goals and principles undergirding the structures of curriculum" (Vasily et al., 2020; Smith et al., 2023). According to these papers' perspective, curriculum implementation

comprises a broader range of issues that go beyond the standard "teacher fidelity" and include themes such as stakeholder participation and other contextual elements that are likely to influence implementation outcomes. Curriculum change, like many other improvements, has a significant potential cost. It takes a significant amount of time, money, and human resources to make it happen, especially when compared to resources spent on other, less contentious issues such as teacher professional development or equity measures. A convincing reason for curricular change is consequently essential in order to attract resources, political backing, and legitimacy for its execution. Indeed, Fairhurst and Sarr discovered that when reform is viewed within a larger normative framework that offers sources of legitimacy for the change, individuals are more likely to embrace and commit to it. Without a strong rationale, curriculum reform might be easily overlooked or misconstrued. The reason for curricular change may originate from several sources, depending on the conditions in each country.

On the one hand, the need to update material to reflect changing social, cultural, and economic contexts has been a significant motivator in OECD nations. This future-focused strategy seeks to modify academic standards and envisage what a student should learn via the educational system in order to survive in a 21st century society. For example, the most current curriculum reform statement in New Zealand describes its objective as developing "young people who will be confident, connected, actively involved, and lifelong learners" (The New Zealand Curriculum). Estonia wants to instill in its young "intellectual curiosity, learning skills, self-reflection and critical thinking, self-expression, social and cultural identity, and participation in lifelong learning". On the other hand, the reform might be viewed as a response to specific difficulties, such as poor learning results, high dropout rates, high stress levels among students or instructors, or a lack of skills necessary for the labor market.

The type of vision that the curriculum seeks to attain decides which curricular policy will be implemented. The vision, which is generally stated in a curriculum statement or an official document, represents the expected outcomes of an educational system, as well as the information and abilities that students should have. It establishes rules for the change as well as curriculum resources including textbooks and syllabuses. A properly stated vision, agreed upon by numerous stakeholders, is critical to ensuring a common understanding of the policy objectives. varied interpretations of the curricular vision would result in varied educational philosophies, methodological choices, and, ultimately, instructional materials. The lack of unanimity on these basic educational ideals would make curriculum change difficult (Garira, 2020; Dembereldorj, 2023).

In contrast, in Finland, a broad bottom-up approach to deciding on the vision of their curriculum changes has helped to establish agreement and narrow the gap between diverse interpretations of the reform aims. Countries have distinct perspectives for curricular change that are tailored to their particular contexts. Nonetheless, there have been some major worldwide trends in curriculum design. The most recent one is likely the transition from a content-based to a competency-based curriculum (Bergsmann et al., 2015; Autio, 2013; Abodohoui, 2020; Audretsch et al., 2022). Despite the fact that there are various categories of ideology and philosophy of curriculum purpose, and that their names differ (Moea, 2023; Weuffen et al., 2023), this shift in curriculum vision emphasizes the importance of developing in students certain competencies that draw on multidisciplinary knowledge and skills. This is in contrast to

focusing solely on the mastery and memorization of knowledge structured by distinct topics, regardless of its "usefulness" and direct relationship to the student's capacity to solve problems. This worldwide trend toward a competence-centered curriculum involves an emphasis on "the integration of knowledge, skills, and attitudes that enable a person to perform a certain task in ill-defined and unique environments". In other words, competence-centered curriculum intends to give students with an integrated performance-oriented capability to attain particular goals that will enable them to navigate a continually changing and unpredictable environment. Many nations have implemented curricular changes that emphasize and incorporate competences into the vision and design of their curriculum. This strategy has long been popular in the United States, the United Kingdom, Germany, France, and Australia.

Competencies such as self-management, knowledge-information gathering ability, creative thinking, aesthetic-emotional capacity, communication skills, and civic competency were identified as ways to develop young people with individuality, creativity, dignity, and the ability to interact with others (D'Urso, 2018; Lemon, 2019; Erkkila and Luoma-aho, 2023). On a worldwide scale, international organizations are also studying the trend toward competence-based curricula. The OECD Future of Education and Skills 2030 Project, which includes over 40 nations, intends to assist education systems in determining the knowledge, skills, attitudes, and values that students require to flourish and create their future (OECD, 2020).

METHODOLOGY

This study utilized descriptive-developmental research to establish the need for the proposed digital-based enhancement plan to cater the physical therapy graduates abroad. A two-part questionnaire was the primary tool to gather pertinent data. The researcher constructed a questionnaire based on the gained concepts and insights about work performance of the physical therapy graduates from University of Perpetual Help System Laguna. The researcher's personal observations and experiences also enriched the conceptualization and finalization of the instrument especially on the part of program's contribution. Part I of the questionnaire focused on the profile of the graduates. Part II concentrated on the extent of the program's contribution to the graduate's personal and professional growth.

The researcher was advised to present the draft of the questionnaire to the experts in tracer study for validation. After some time, taken into consideration the comments and suggestions of the panel, the researcher was then allowed to pilot the instrument. She selected 15 individuals serving as pilot test respondents after of which she tallied the results and presented the consolidated data to the statistician. Reliability testing was also done using Cronbach alpha Test- a computed value of 0.737 was obtained which proved the internal consistency of the items. She then continued the administration of the instrument. The researcher facilitated an online platform (Google Forms) to ensure maximum respondents' participation in the study. Due to the experienced difficulty in obtaining the graduates' records even after communicating with the Registrar's Office due to their strict compliance with the Data Privacy Act of 2012, the researcher was able to meet the target number of respondents through the University professors and other alumni who bridged for the researcher to identify names and even contact numbers of the UPHSL-Physical Therapy graduates (2000-2023). The respondents of the study were the 94

graduates of physical therapy from the University of Perpetual Help System Laguna from the year 2000 up to 2023.

RESULTS

1. Profile of UPHSL Physical Therapy Graduates

Table 1/Profile of the Respondents

Profile Variables	Frequency	Percentage
A.Age		
21-25	24	25.53
26-30	27	28.72
31-35	3	3.19
36-40	10	10.64
41-45	17	18.09
46 and above	13	13.83
B.Sex		
1.Male	41	43.62
2.Female	53	56.38
C. Civil Status		
1.Single	60	63.83
2.Married	34	36.17
3.Others	-	-
D. Year Graduated		
2000 and below	15	15.96
2001 to 2005	17	18.09
2006 to 2010	9	9.57
2011-2015	9	9.57
2016-2020	34	36.17
2021-2023	10	10.64
E. Employment Status		
Employed	86	91.49
Unemployed	3	3.19
Part Time	5	5.32
Others	-	-
F. Nature of Work		
Medical	78	82.98
Outside Medical field	13	13.83
Others	3	3.19
G. Length of Finding their First Job		
Within 6 months after graduation	35	37.23
Within 7-12 months after graduation	26	27.66
1 to 1.5. years	21	22.34
2 years after graduation	10	10.64
More than 2 years	2	2.13
Others		
H. Compensation and Remuneration		
35,000-45,000	42	44.68
46,000-55,000	5	5.32
56,000-66,000	12	12.77
67,000-80,000	16	17.02
80,000 and above	19	20.21
I.Present Position		

Rank and File	6	6.38
Private Employee	77	81.91
State Government	9	9.57
Middle Manager	2	2.13
Administrator	-	-
J. Length of Service		
1-5 years	49	52.13
6-10 years	26	27.66
11-15 years	9	9.57
16-20 years	4	4.26
21-25 years	1	1.06
26 years and above	5	5.32
K. Number of Membership		
1-5	74	78.72
6-10	9	9.57
11-15	1	1.06
16-20	5	5.32
21-25	5	5.32

2. Extent of Contribution to the Level of Performance of the Graduates in terms of Personal and Professional Growth

Table 2/Contribution in terms of Personal Growth

Indicators	WM	VI	Rank
Improves one's self- esteem towards performance of work	3.61	SA	1
Establishes one's love and passion towards physical therapy-profession	3.57	SA	3
Develops positive life skills that enable to work efficiently in a situation	3.57	SA	3
Recognizes and reflects one's feeling and emotions in a mature and discerned manner	3.53	SA	7
Serves as a motivating factor which can be useful to one's future endeavors in the medical profession	3.48	A	11.5
Helps building patient's character by learning various aspects of medical profession	3.49	A	10
Discovers other capacities and potentials which are used in the actualization of Profession	3.54	SA	5.5
Serves as a merit to one's personality which can boost his/her confidence in the realization of physical therapy practice	3.44	A	13
Recognizes the importance of mastery of content knowledge and its interconnectedness	3.57	SA	3
Translates physical therapy curriculum content into meaningful engagement with the patients	3.54	SA	5.5
Helps identify potential problems as related to the course taken.	3.48	A	11.5
Equips the graduates with professional knowledge in formulating a diagnosis, prognosis and treatment plan based on a comprehensive assessment	3.51	SA	8.5
Helps identify and respond to opportunities for physical therapy experiences, interests and aspirations and improving overall quality of life	3.51	SA	8.5
Average Weighted Mean	3.53	SA	

Legend: SA – Strongly Agree

A – Agree

Table 3/Contribution in terms of Professional Growth

Indicators	WM	VI	Rank
1. Serves as instrument towards medical professionalism and excellence	3.47	A	7
2. Contributes more physical therapy experiences and techniques in acquiring knowledge to enhance professional growth	3.45	A	9
3. Improves abilities led to success in diagnosis and treatment process	3.44	A	10
4. Expresses one's desire to learn more and uplift the knowledge and ideas, they have learned upon finishing the master's or doctorate degree	3.40	A	12
5. Provides ample understanding and information about Physical Therapy	3.56	SA	1
6. Upholds significant experiences to enhance and develop the profession	3.46	A	8
7. Develops opportunities and mechanisms for physical therapy innovations and changes	3.38	A	13
8. Equips graduates with motivation and desire towards medical field	3.41	A	11
9. Provides learning space for decision making, discernment when making suggestions and expressing thoughts on situations encountered	3.53	SA	5
10. Creates learning positively and actively to colleagues seeking feedback, new ideas, and methods	3.53	SA	5
11. Helps apply new experiences and skills to positively impact current position and career pursuits	3.53	SA	5
12. Provides acquisition of knowledge and skills that can improve efficiency at work	3.54	SA	2.5
13. Develops communication skills and social skills as well the emotional well-being	3.54	SA	2.5
Average Weighted Mean	3.48	A	

Legend: SA – Strongly Agree

A – Agree

DISCUSSION

1. Profile of UPHSL Physical Therapy Graduates

Looking at the age profile of the UPHSL graduates, most of the PTs are in the age between 26 to 30 and is followed by 21 to 25. This means that young adults often have a sense of adventure and a desire to explore new places and cultures. They are able to combine their career skills with an interest in travel and cultural exchange as a physiotherapist abroad. People in this age group have often completed their education and gained some work experience, which makes them more attractive job seekers abroad. They may be looking for new challenges, better career prospects, or the opportunity to work in a different cultural environment. The decision of 26-30-year-old physiotherapists to work abroad is often influenced by a combination of career, personal growth, and the desire for new experiences.

While, majority of the those who respond to the study are mostly female. Physical therapy has traditionally been a female-dominated profession in many parts of the world. This historical trend may have influenced the gender distribution of physical therapy workers working abroad. Social norms and expectations often direct individuals to certain professions based on gender stereotypes. Although these factors affect the majority of women in physiotherapy positions abroad, it is important to understand that gender dynamics can vary significantly from country to country and region to region, and the reasons for this trend can vary accordingly. Physical therapists abroad who served as respondents of the study were highly dominated by single individuals than married. This implies that these young generations of therapists are goal-driven and have potentials to becoming an international-based and qualified practitioner. Further, the

same table also revealed that greatest percentage of respondents were from batch 2016 to 2020. It can also be inferred that the course is becoming in demand and likely to contribute to humanity. Physical therapy offers a variety of career opportunities, including working in hospitals, clinics, schools, nursing homes, sports facilities, and businesses. The diverse career opportunities in physical therapy appeal to people looking for a rewarding and versatile profession. Preventive care is receiving increasing attention in health systems around the world. Physical therapists play an important role in health promotion and injury prevention through exercise, exercise prescription, and ergonomic assessment. In terms of employment status, majority of the UPHSL graduates are presently employed in a private company and under medical in nature of work and mostly earning 35,000 to 45,000 a month. This shows graduates are globally ready and competitive and thus are working really hard. This also affirmed the kind of training and internship they got from the UPHSL. Moreover, looking at the length of time before finding the first job, highest number of respondents took them within 6 months after graduation. This also speaks well of the quality of products the institution produces.

In addition, it is true to mention that they had been in the service for 1 to 5 years. In the first years of training, physical therapists perfect their clinical skills. They apply the knowledge gained in training to real patient care scenarios and gain expertise in assessment, treatment planning and treatment techniques. As physical therapists gain experience, they gain confidence in their ability to effectively assess and treat patients. Trust is critical to providing quality care and building relationships with patients. Further, they also had 1 to 5 professional organization memberships. In the interview, respondents shared that they were active members of American Physical Therapy Association, Chartered Society of Physiotherapy, Philippine Physical Therapy Association, Emirates Physiotherapy Society, and Saudi Physical Therapy Association. Professional organizations provide a platform for physical therapists to network with industry peers, mentors and leaders. This network can lead to collaboration on research projects, sharing of best practices and career development opportunities. Overall, joining professional organizations allows physical therapists to stay connected, informed, and supported in their profession, ultimately contributing to their professional growth and success.

2. Extent of Contribution to the Level of Performance of the Graduates in terms of Personal and Professional Growth

2.1 Personal Growth. The Physical therapy program at University of Perpetual Help Laguna has a significant impact on alumni's personal and professional development. Students participate in clinical rotations and internships, gaining hands-on experience working with patients under experienced physical therapists. The program offers a comprehensive curriculum to build a strong foundation in physical therapy knowledge and skills essential for professional growth. It is striking to note that among the responses of the UPHSL graduates, they were in agreement among the identified factors that helped them grow personally. Significantly, graduates expressed strong agreement to improving one's self-esteem towards performance of work. This implies that through exercises, manual therapy, and other interventions, physical therapy programs usually aim to improve the physical health and well-being of their clients. People who see gains in their physical well-being frequently feel more capable and self-assured in their capacity to carry out responsibilities at work. As a result, individuals may feel better capable of

handling the physical demands of their jobs, which might raise their self-esteem. Students who enroll in a physical therapy program learn a variety of skills pertaining to the evaluation, diagnosis, and treatment of different physical conditions and injuries. They become more skilled professionals as they hone these abilities, which can boost self-assurance and a sense of mastery. A UPHSL physical therapy program's extensive instruction and hands-on training greatly enhance one's personal development. Moreover, UPHSL graduates assessed to a strong agreement of the program to establishing one's love and passion towards physical therapy-profession and developing positive life skills that enable to work efficiently in a situation. The physical therapy program at UPHSL promotes personal development through a deep respect for the field and the cultivation of important life skills. The curriculum, clinical experience, and mentorship provided ignite students' interest in the subject. Real-world experiences and engagement with patients may enhance understanding of the impact of physical therapy. The program emphasizes the development of critical thinking, problem-solving, and communication skills essential for success in the industry. The World Confederation of Physical Therapy (2018) recommended the inclusion of EBP in entry-level PT education curricula based on the belief that physical therapists should provide care using best available evidence.

Indeed, the physical therapy program at UPHSL could place a strong emphasis on practical instruction to guarantee that students master therapeutic methods, rehabilitation exercises, and patient evaluation. In the interview, graduates also revealed satisfaction of the program's contribution to their personal growth. They also mentioned how their knowledge and experience from UPHSL has transformed and made them of who they are at present especially that they are working in the US and other middle east countries. The complexity of health care professions, combined with stakeholder expectations that physical therapists have specialized knowledge, has prompted a call to investigate excellence in physical therapy education to meet society's needs (North et al., 2023; Moore et al., 2024). Other indicators which the graduates articulated strong agreement with were discovering other capacities and potentials which are used in the actualization of Profession, translating physical therapy curriculum content into meaningful engagement with the patients, and recognizing and reflects one's feeling and emotions in a mature and discerned manner. This program allows graduates to explore their skills, weaknesses, passions, and hobbies. Through coursework and real-world applications, students can discover new abilities and gain a deeper understanding of themselves. By applying theoretical knowledge to practical settings, students develop critical clinical skills and professional competencies. This process of self-discovery is essential for personal growth and potential contributions to the field of physical therapy. As a critical component of all physical therapy programs, CE is the part of the curriculum that teaches the student to think, act, and perform like a physical therapist (Shulman, 2019).

In this regard, CE is the signature pedagogy of physical therapy professional education. In the same assessments, graduates attributed strong agreement of program's contribution to their personal growth by equipping them with professional knowledge in formulating a diagnosis, prognosis and treatment plan based on a comprehensive assessment, and helping them identify and respond to opportunities for physical therapy experiences, interests and aspirations and improving overall quality of life. UPHSL provides graduates with the fundamental skills needed for success in physical therapy. Through thorough information on diagnoses, prognoses, and treatment plans, students learn to approach patient care with competence and confidence. The

program focuses on comprehensive evaluations and real-world experience to strengthen clinical competency. UPHSL emphasizes taking advantage of physical therapy opportunities and promotes self-directed learning to customize professional paths. Graduates are equipped to improve patients' quality of life and make a meaningful impact on their well-being. This fulfilling aspect of the profession gives them a sense of purpose and fulfillment as they positively influence the lives of others. Physical therapy education requires applied learning as a central part of the formation. This kind of learning includes learning skills in the workplace (Freeth D., et al 2021). It is known that experiential learning is the best manner to develop clinical reasoning expertise (Ryan S, 2018).

Experiential learning facilitates socialization in a practice community, it is collaborative work (Jelley W., et al 2020) and gives the opportunities for students to apply theoretical knowledge, to integrate it into practical settings and to build their own learning process (Kilminster S. Met al 2020, Bryant P., Spencer J. 2023). In the lens of the graduates, UPHSL-PT programs contributed to graduates' personal growth by helping building patient's character by learning various aspects of medical profession, serving as a motivating factor which can be useful to one's future endeavors in the medical profession, and helping identify potential problems as related to the course taken. The Physical Therapy curriculum focuses on various aspects of the medical industry, including anatomy, physiology, biomechanics, and pathology. This comprehensive understanding not only enhances physical therapy skills but also instills a broader appreciation for the medical field. Students learn to evaluate patients, design treatment plans, and adapt therapies to individual needs. Critical thinking and problem-solving skills are key in-patient care. The program emphasizes professionalism, ethics, and integrity, teaching students to uphold patient autonomy, confidentiality, and evidence-based practices. Overall, the program aims to prepare students for successful clinical practice while promoting personal growth and a deep commitment to healthcare. Lastly, graduates expressed agreement to program's contribution by serving as a merit to one's personality which can boost his/her confidence in the realization of physical therapy practice.

2.2 Professional Growth. The UPHSL offers quality education in various subjects to equip graduates with necessary skills and knowledge for their careers. The institution adapts its curriculum to match industry needs and standards, and encourages lifelong learning through professional development opportunities. It can be seen from the assessments of the graduates that they were in agreement to the institution's contribution to their professional growth.

To begin with, graduates expressed strong agreement to program's contribution by providing ample understanding and information about Physical Therapy. The UPHSL offers a comprehensive curriculum in physical therapy, covering key subjects such as anatomy, physiology, and biomechanics, ensuring students have the necessary skills for success. The program also provides practical clinical experience through externships and internships, allowing students to apply their knowledge in real-world settings. This hands-on learning approach helps students develop clinical skills and gain familiarity with different patient groups and treatment methods, contributing to their professional development and success in the field of physical therapy.

Further, graduates signified strong agreement that through the UPHSL PT program, it helped them grow professionally by providing them with knowledge and skills that can improve efficiency at work, and developing communication skills and social skills as well the emotional

well-being. The physical therapy program at UPHSL offers a comprehensive curriculum covering anatomy, physiology, pathology, and therapeutic approaches. Graduates are well-prepared to evaluate, diagnose, and treat patients effectively in their professional practice. The didactic component typically occurs in the classroom and includes laboratory experiences. This is the time when students are instructed by academic faculty in the foundational knowledge, skills, attitudes, and behaviors needed to become a doctor of physical therapy (American Council of Academic Physical Therapy Common Terminology Panel, 2018). Graduates of the program get a strong base in knowledge and skills, as well as chances for professional growth, therapeutic experience, and emotional support. Non-cognitive skills are the values, attitudes, behaviors, and strategies that are necessary to foster success in school and in the workplace (Morrison & Schoon, 2018). Professional education should put forth effort to align the values, standards and purpose of the profession with the teaching of professional knowledge and skills (Colby & Sullivan, 2018).

Other indicators assessed by the graduates which they expressed strong agreement with in terms of professional growth include providing learning space for decision making, discernment when making suggestions and expressing thoughts on situations encountered, creating learning positively and actively to colleagues seeking feedback, new ideas, and methods, and helping apply new experiences and skills to positively impact current position and career pursuits. The UPHSL Physical Therapy program offers students the opportunity to gain hands-on clinical experience and practice critical thinking skills in real-world scenarios. Through various learning methods such as dialogue, case studies, and hands-on learning, students develop effective communication skills and decision-making abilities. This prepares them for the complex decision-making processes they will face in their professional careers. Graduates are able to share their knowledge and insights with peers, contributing to a culture of continuous learning and improvement within the professional community. By integrating theoretical and practical experiences, graduates are well-equipped to succeed in their careers, be leaders in their field, and make a positive impact on patient care and innovation. The program prepares students to use their knowledge effectively in their current roles and pursue further career advancement.

In the same vein, graduates agreed that UPHSL PT program contributed to their professional growth with respect to serving as instrument towards medical professionalism and excellence, upholding significant experiences to enhance and develop the profession, and contributing more physical therapy experiences and techniques in acquiring knowledge to enhance professional growth. The institution offers a comprehensive curriculum that includes clinical experiences, practical skills, and theoretical understanding to prepare students for the workforce. Emphasis on professionalism, moral behavior, honesty, and responsibility is key.

UPHSL provides plenty of clinical experience opportunities for students to apply their knowledge in real-world settings, enhancing their professional growth through exposure to diverse patient demographics and healthcare environments under supervision. The curriculum at UPHSL encourages research and innovation among teachers and students, leading to professional growth in the field of physical therapy. By conducting research and developing new methods, the university contributes to advancing knowledge and improving patient outcomes. Providing students with a strong medical foundation, valuable clinical experiences, and promoting continuous learning helps catalyze professional progress. Students are also prepared

for multicultural environments by practicing in varied settings, including working with special populations like prisoners who may benefit from physical therapy reinsertion programs. Moreover, graduates articulated agreement to program's contribution to their professional growth by improving abilities led to success in diagnosis and treatment process, equipping graduates with motivation and desire towards medical field, and expressing one's desire to learn more and uplift the knowledge and ideas, they have learned upon finishing the master's or doctorate degree. The University of Perpetual Help System Laguna (UPHSL) focuses on developing practical skills, academic knowledge, and clinical experience. Students learn to diagnose and treat patients, create treatment plans, and conduct interventions through rigorous coursework and clinical rotations.

Graduates are equipped to address various medical conditions and excel in their careers. The program also encourages a passion for healthcare and a deep respect for the medical field. Graduates are inspired to pursue ongoing education, research, and professional development. With a strong foundation in physical therapy, they are encouraged to share their knowledge and experiences with others to contribute to the field and advance physical therapy practices. Graduates play a critical role in advancing the field and improving patient outcomes through the sharing and exchange of information. The UPHSL program fosters professional development by enhancing diagnostic and treatment abilities, encouraging knowledge advancement, promoting motivation and dedication, and emphasizing lifelong learning. Applied learning in physical therapy education includes workplace skills development (Freeth D., et al 2021).

Lastly, graduates agreed that program's contributed by helping them develop opportunities and mechanisms for physical therapy innovations and changes. UPHSL offers academics and students the chance to work on innovative physical therapy research initiatives. The program at UPHSL focuses on staying updated with new therapeutic modalities and medical advancements through research. Students and teachers are encouraged to explore developing trends in the field and implement evidence-based approaches in therapy. UPHSL prepares physical therapists to utilize cutting-edge methods by teaching critical evaluation of research and applying results to patient treatment. The school also offers continued professional development opportunities for practicing therapists through postgraduate studies, seminars, and certificates.

3. Proposed Digital-based Curriculum Enhancement Plan

Proposing a curriculum for improvement for a physical therapy program is important to ensure that the curriculum is relevant, effective, and responsive to the changing needs of students, patients, and the healthcare industry. It supports student success, program accreditation, diversity and inclusion efforts, and continued excellence in physical therapy education and practice. The field of physical therapy is dynamic, and new research, techniques, and technologies are constantly emerging. The Curriculum Improvement Plan ensures that students are exposed to the latest advances and prepares them to provide the best possible patient care. By updating evidence-based practices and new learning methods across the curriculum, students' learning experiences can be enhanced. This can lead to better student outcomes, including higher licensing exam rates, higher placement rates, and better success in clinical practice. An improved curriculum can include content related to culture, diversity, and inclusion, ensuring that students are prepared to work effectively with patients from diverse backgrounds. This promotes a more inclusive learning environment and better prepares students to meet the needs of an increasingly

diverse patient population. Input from students, faculty, clinical partners, and employers can provide valuable information about areas for curricular improvement. Curriculum improvement enables the program to incorporate feedback from those stakeholders and ensure that the curriculum meets the needs and expectations of the wider community. Finally, a commitment to continuous improvement through curriculum enhancement fosters innovation and a culture of excellence within the program. By encouraging faculty to explore new teaching methods, technologies, and learning experiences, the program can remain at the forefront of physical therapy education.

In view of the findings of the study, it is good to mention that highlight of the enhancement plan was taken from the assessment of the graduates in the indicators which received lowest ratings. The researcher has well-identified from the existing CMO as regard to the possible infusion of the indicators from both personal and professional growth inputs of the respondents. Moreover, the output has the following elements in presenting the enhancement plan in the PT curriculum: Category, Findings, Applicable PT subjects for Integration, Rationale, Goals and Objectives, Technology Integration, Professional Development, Content Development Differentiation and Personalization and Assessment.

CONCLUSIONS

The UPHSL physical therapy graduates have a promising and outstanding credentials and profiles. The graduates expressed strong agreement to UPHSL PT program's contribution to their personal and professional growth. The proposed curriculum enhancement plan aims to recalibrate the academic program offering in the context of global market and demands among physical therapists.

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