Bulletin of Faculty of Physical Therapy

ORIGINAL RESEARCH ARTICLE Open Access

Interprofessional education in physical therapist education in the United States

Yasser Salem[1], Cheryl Babin[2*], Myles Quiben[3] and Rebecca A. States[4]

Abstract

Purpose This study describes the role of interprofessional education (IPE) in physical therapist professional education curricula, faculty participation, institutional support and funding for IPE, and the challenges and barriers to implementing IPE in physical therapist education programs within the United States (U.S.).

Methods The study survey was completed by 102 Doctor of Physical Therapy programs in the U.S. A nationwide survey was developed and disseminated by academicians and clinicians with experience in IPE who served on the Board of Directors of the National Interprofessional Education Consortium (NIPEC) of the American Council of Academic Physical Therapy (ACAPT).

Results The results revealed that while there is heterogeneity in IPE implementation across physical therapist education programs in the U.S., the vast majority of programs address the four Interprofessional Education Collaborative (IPEC) competencies. IPE activities are occurring in education programs and involve students from many other health professions. Faculty time and workload, lack of student time, lack of financial support, and lack of clinical instructors' training in IPE were identified as the major challenges to IPE implementation.

Discussion These findings may lead to improved utilization of IPE in physical therapist education, not only in the U.S. but also globally. A strategic plan for implementing IPE and more detailed expectations of IPE in both didactic and clinical education curricula may be helpful for programs considering curricular changes.

Keywords Interprofessional Education (IPE), Interprofessional Education Collaborative (IPEC), Interprofessional Collaborative Practice (IPCP), And physical therapist professional education

Introduction

Interprofessional education (IPE) and interprofessional collaborative practice(IPCP) play an essential role in the future of healthcare by supporting optimal patient care [1]. The World Health Organization (WHO) has noted the importance of IPE and integrating care, enhancing quality, and improving patient safety, ultimately leading to better patient outcomes. In the United States (U.S.), the increasing importance of IPCP skills has prompted many health professions' accreditation organizations to adopt and require IPE and IPCP standards in education programs [2]. Currently, most accreditation standards across health professions, including physical therapy,

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incorporate a variety of criteria and requirements related to IPE [3]. For example, the Commission on Accreditation in Physical Therapy Education (CAPTE) has stipulated that IPE and IPCP must be included in the physical therapist entry-level education curricula. In January 2018, CAPTE specifically required that the didactic and clinical curricula include IPE and learning activities directed toward the development of interprofessional competencies [4].

Despite the growing evidence supporting the importance of IPE in healthcare, its inclusion in healthcare education programs remains heterogeneous [5–7], and to date, common accreditation expectations do not exist across professions [8]. Additionally, the role of IPE in U.S. physical therapist education programs is variable. While accreditation standards require the inclusion of IPE in the Doctor of Physical Therapy (DPT) curriculum [4], CAPTE standards do not specify appropriate levels for conducting IPE or how IPE competencies should be implemented. Given this ambiguity, there is substantial variability in how IPE standards are implemented and integrated into physical therapist education programs.

Over the last two decades, several research studies indicated the importance of IPE in physical therapist education [2, 5, 6, 8, 9]. In 2017, Stockert and Ohtake [2] conducted a national survey examining the use of immersive simulation for IPE in physical therapist education programs, distributing an online survey to the 214 CAPTE-accredited PT education programs in the U.S. at that time. Their findings showed that while many programs incorporated IPE, the use of immersive simulation was still emerging, with varied implementation across institutions. Faculty reported a high perceived value of simulation to promote interprofessional competencies, especially communication and teamwork. However, common barriers included resource constraints, scheduling difficulties, and limited faculty training. The study highlighted the potential of simulation as an effective strategy for delivering IPE in PT education and underscored the need for greater institutional support and faculty development to broaden its use and implementation [2]. In 2019, Correa et al. [5] conducted a national survey in Brazil comparing the integration of IPE in physical therapy and medical schools. The study found that while IPE initiatives were present in both disciplines, physical therapy programs reported significantly fewer structured IPE activities than medical programs. Key barriers included insufficient faculty training, logistical challenges, and limited institutional support. Although conducted in Brazil, these findings mirror challenges faced by PT programs globally, including in the U.S., and highlight the ongoing need for strategic investment in faculty development and curriculum infrastructure to enhance IPE implementation in physical therapy education [5].

In Hosoda et al. [6] explored early efforts to implement IPE for physical therapy students in Japan, highlighting the benefits of collaborative learning among health professions. Their study demonstrated that structured IPE activities improved students' understanding of professional roles and fostered more effective communication and teamwork. Although conducted outside the U.S., these findings provided foundational evidence supporting the global relevance of IPE and reinforced the importance of incorporating interprofessional experiences into PT curricula to better prepare students for collaborative clinical practice.

In 2013, Zorek and Raehl [8] conducted a comparative analysis of IPE accreditation standards across health professions in the U.S. Their study revealed substantial variation in the extent and specificity of IPE-related language among accrediting bodies, with some professions mandating IPE more explicitly than others. The authors highlighted the lack of consistency in expectations, which may hinder the widespread and effective adoption of IPE across disciplines. These findings underscore the importance of clear accreditation requirements, such as those adopted by CAPTE [4], to drive the integration of IPE into PT curricula and ensure students are prepared for collaborative practice [8].

Wise et al. [10] explored the status of IPE within U.S. physical therapist education programs through a national survey of academic and clinical faculty. The study found widespread recognition of IPE's importance in preparing students for collaborative practice yet identified variability in how programs implemented IPE activities. Shared challenges included scheduling conflicts, lack of institutional support, and limited access to other health profession programs. The authors emphasized the need for faculty development, administrative backing, and intentional curricular design to strengthen and sustain IPE in physical therapist education [10]. Collectively, these studies primarily examined the effectiveness of participation in IPE activities rather than describing how IPE is implemented across accredited U.S. physical therapist education programs. There is some published evidence with published studies about PT IPE learning experiences in U.S. DPT programs. For example, Sniffen et al. [11] implemented a structured IPE module within a shared Therapeutic Modalities course, enrolling both Doctor of Physical Therapy (DPT) and athletic training students. Participants were randomly divided into interprofessional and uniprofessional teams to complete four case-based learning activities centered around therapeutic interventions. Students also completed critical reflections, evaluated against eight IPEC interprofessional competency subdomains. Findings supported the effectiveness of IPEC competencies in fostering collaborative skills, role understanding, and team effectiveness.

This study also demonstrated that embedding IPE into existing PT coursework offers a practical solution to curricular constraints while aligning with accreditation standards, and that even brief, targeted IPE exposures can promote key interprofessional skills such as role understanding, communication, and teamwork [11]. Similarly, in 2021, Cunningham et al [12]. conducted a longitudinal study within a U.S. DPT program to evaluate simulation-enhanced IPE. Ninety-four DPT students were grouped by exposure level: one group completed three IPE simulation sessions over two years, another had a single session at program start, and a third received one session prior to clinical placements. The findings suggest that repeated, embedded IPE experiences were more effective than isolated events in enhancing DPT students' interprofessional competencies [12]. With the growth of hybrid PT programs, Andrea et al. [9] addressed the need for innovative IPE strategies in distance and hybrid learning environments by examining remote simulation as a method for IPE. Using a pediatric case study, DPT students collaborated with occupational and speech-language pathology professionals via video conferencing. Quantitative and qualitative data demonstrated significant improvements in students' self-perceived collaborative competencies, satisfaction, and confidence in interprofessional communication. These findings support remote simulation as a scalable and effective approach to teaching teamwork and collaborative decision-making in evolving PT curricula [9].

Although IPE has gained momentum in healthcare curricula—particularly following its designation as an accreditation requirement by CAPTE in 2018—there remains a significant gap in the literature regarding its actual implementation within entry-level physical therapist education programs in the U.S. Existing publications provide limited insight into how IPE is integrated into professional physical therapy training, with only one study, published in 2015 by Wise et al., offering aggregated data on IPE initiatives among ACAPT member institutions. While that study highlighted existing strengths and opportunities for growth, it ultimately underscored the need for further research into the structure, delivery, and support mechanisms of IPE in physical therapist curricula. [10] This lack of detailed, program-level analysis leaves academic institutions without well-defined models to inform development and sustainability, warranting continued investigation into both practices and resource needs.

The overall intent of this study was to address this gap in the literature. Specifically, this study aims to describe the role of IPE in entry-level curricula, faculty participation in IPE, institutional support and funding for IPE, and the challenges and barriers to implementing IPE in U.S. physical therapist professional education. Given the growing recognition of the importance of IPE and IPCP, establishing baseline data and a knowledge base describing current IPE implementation is essential it is essential to inform curricular improvement and change.

Methods

Overview—survey development and materials

The initial survey was developed using a consensus-based process by the authors, who are academicians and clinicians with experience in IPE, in consultation with experts in IPE and physical therapy, and with input from the Board of Directors of the National Interprofessional Education Consortium (NIPEC) of ACAPT. The initial survey was piloted and was completed by experts ($n = 6$) in IPE and physical therapy, who were members of the board of directors for the NIPEC. Feedback from this initial survey informed subsequent modifications. The final version of the survey had 47 questions (Appendix A). The first five questions asked about the demographics of the physical therapist education program and the sponsoring institutions. The remaining questions focused on IPE, with questions specific to the didactic curriculum and six additional questions addressing IPE in clinical education. This study was submitted to the Human Subjects Committee of the University of North Texas Health Science Center Institutional Review Board and was qualified as "Not Human Subject Research."

Procedure

The electronic survey was distributed by ACAPT to its members in the spring of 2021 to reach all accredited DPT Programs, using Survey Monkey® as the survey platform. Since its inception, ACAPT's members represent about 95% of all accredited U.S. Physical Therapy (PT) educational institutions. The survey was emailed to the email addresses listed for the program directors in the ACAPT distribution list. The cover letter of the email indicated that the survey should be completed by the person who is most involved in coordinating IPE activities.

Analysis

This survey aimed to document how IPE was implemented by responding programs; therefore, descriptive analyses were conducted. Quantitative results were derived from questions yielding ordinal or nominal data, and the frequencies and percentages of responses in each category were calculated. Bar graphs were used to provide visual summaries of the results.

The survey included two open-ended questions. Open-ended responses were grouped thematically by two authors working independently. All authors then discussed the groupings and reached consensus. The thematic groupings are summarized with examples provided.

Results

Demographics of responding programs

Of the 257 U.S. DPT-accredited program members who received the survey, 102 completed it for a response rate of 40%. Figure 1a-f displays the type of institution, degree level, number of students at the institution, its DPT class size, the number of full-time faculty, and the role of the individual responding to the questionnaire. Survey respondents came from DPT programs in 36 states (Fig. 1g).

Extent of IPE in the curriculum

Respondents were asked to report the number of IPE activities in the U.S. DPT curriculum (didactic and clinical education combined). Ninety-eight percent reported that students participated in at least one IPE activity in the didactic portion of the curriculum (96 out of 98 respondents), and 82% reported at least one IPE activity in the clinical education portion (71 out of 87 respondents) (Fig. 2a). The vast majority of programs (88%) devoted at least five hours to IPE activities in the didactic curriculum (80 out of 91 respondents), while most programs dedicated no more than 5 h of the clinical education curriculum to IPE activities (57%, 46 out of 80 respondents) (Fig. 2b). Most respondents reported participation in IPE for more than 5 years (83 out of 97, 87%) (Fig. 2c).

Implementation of IPE in the curriculum

Most U.S. programs integrated IPE activities thoroughly into the didactic curriculum, with significantly less integration into clinical education. For these two questions, respondents were asked to report on what best describes the IPE activities in their didactic (or clinical education) program, and they were allowed to choose more than one answer as appropriate (Fig. 3a and b).

Narrative responses suggested that the timing of IPE integration varied across curricula. Respondents reported that IPE activities were integrated in year 1 or year 2, while others indicated that IPE activities were integrated throughout the curriculum.

IPE competencies and content of IPE activities

Participants were asked to select from a list of the healthcare professions involved in IPE within U.S. DPT programs. The top three were nursing (83%, 73 programs), occupational therapy (74%, 65 programs), and medical students (60%, 53 programs) (Fig. 3c). The 88 respondents to this question were also invited to add other healthcare professions involved in a narrative section, resulting in the identification of 29 different healthcare professions' education programs involved in IPE alongside physical therapy.

The vast majority of the U.S. programs included the four IPEC competencies (range: 86% to 100% across the 4 competencies) in both the didactic and clinical education portions ($n = 90$ for the didactic question and $n = 81$ for the clinical education question) (Fig. 3d).

Almost all respondents (94%, 83 out of 88) indicated that IPE activities in their DPT programs included both knowledge and application to practice. Seventeen percent indicated that the IPE activities included only application to practice, while 13% indicated that the activities included only knowledge-level instruction. Most respondents (83%) indicated that IPE activities included assessment of student learning. Narrative responses suggested that surveys were the most commonly used assessment tool, and that the assessment was tallied by a central IPE office or by faculty instructors.

Respondents also provided narrative descriptions of the content of IPE learning activities in U.S. DPT curricula. Most activities addressed the roles of physical therapists and other health professionals and emphasized how IPE can improve the quality of patient care, reduce costs, and increase patient safety. Narrative responses indicated that the most common IPE activities included case-based or patient scenarios, simulated role-play, and small and large group discussions. Less frequently reported activities included interactive labs, pro bono clinics with student representation, interprofessional patient examinations, community homeless clinics, health and wellness clinics, and on-site clinics involving other professions.

Several narrative comments related to clinical education settings reported that students worked with individuals from other health professions during their clinical rotation.

Management of IPE activities

Approximately 90% of respondents (86 out of 96) indicated that a full-time core physical therapy faculty member was responsible for creating or coordinating IPE activities. Respondents were allowed to select multiple responses; a smaller number indicated that IPE activities were created or coordinated by others (11%), or by part-time core faculty or associated faculty (6%).

Regarding faculty participation, 25 programs (28%) reported less than 25% faculty participation, 38 programs (42%) reported 25–50% faculty participation, 21 programs (23%) reported 50%–75% of faculty participation, and 4 programs (4%) reported full participation by all full-time core faculty (Fig. 4a).

At the institutional level, 51% (49 out of 96) of U.S. programs reported that IPE activities were coordinated by physical therapy faculty, 30% (29 out of 96) by collaboration between physical therapy and a central office at the college or university, and others were coordinated by a central office (24%) or had no coordinator (Fig. 4b).

Fig. 1 Demographic Data: (**a**) type of institution, (**b**) its degree level, (**c**) the number of students at the institution, (**d**) its class size, (**e**) the number of full-time faculty, and (**f**) role of the respondent to the questionnaire. **g** Survey respondents DPT program locations – 36 states

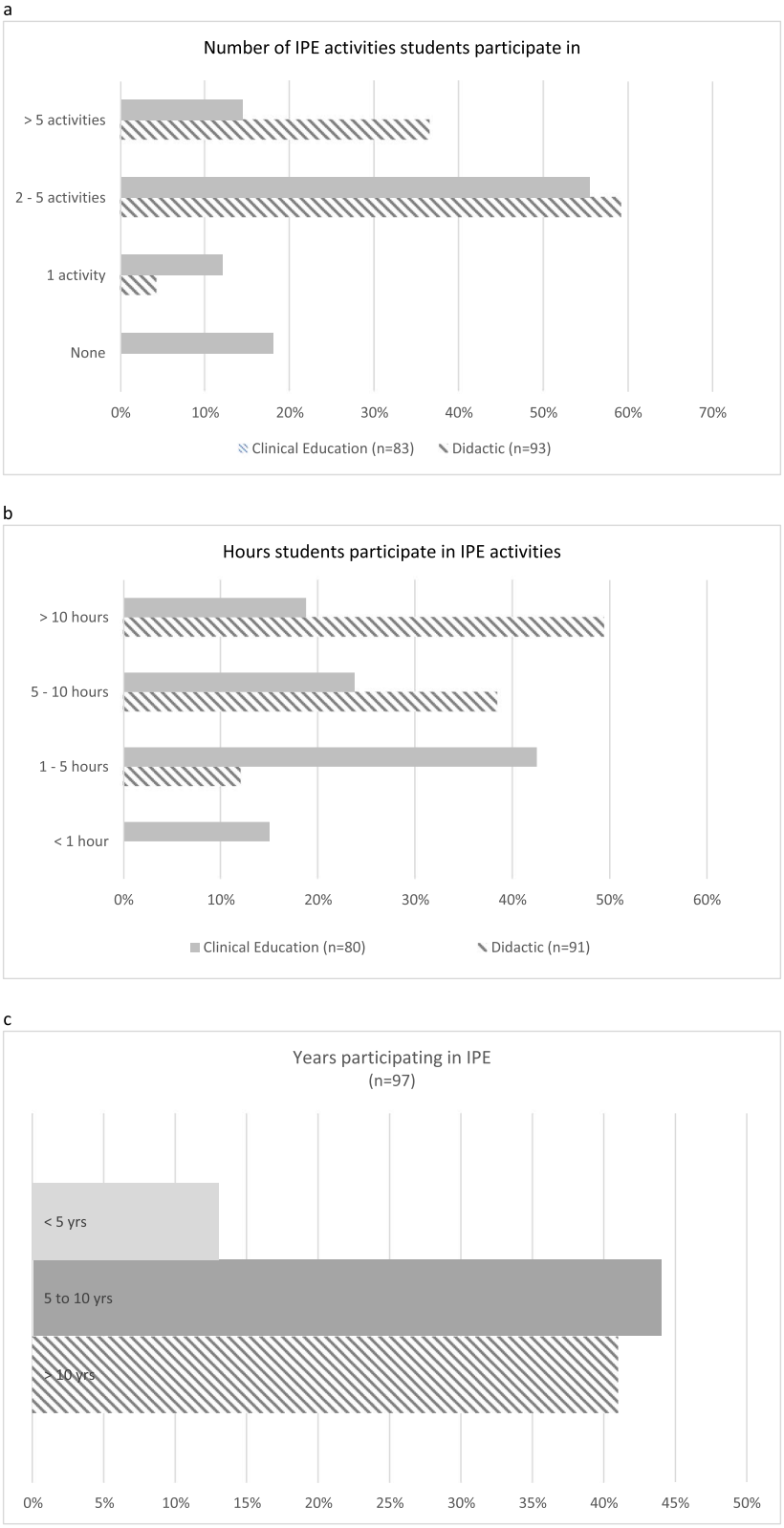

Fig. 2 **a** Number of IPE activities students participate in; (**b**) hours students participate in IPE activities; (**c**) and years participating in IPE

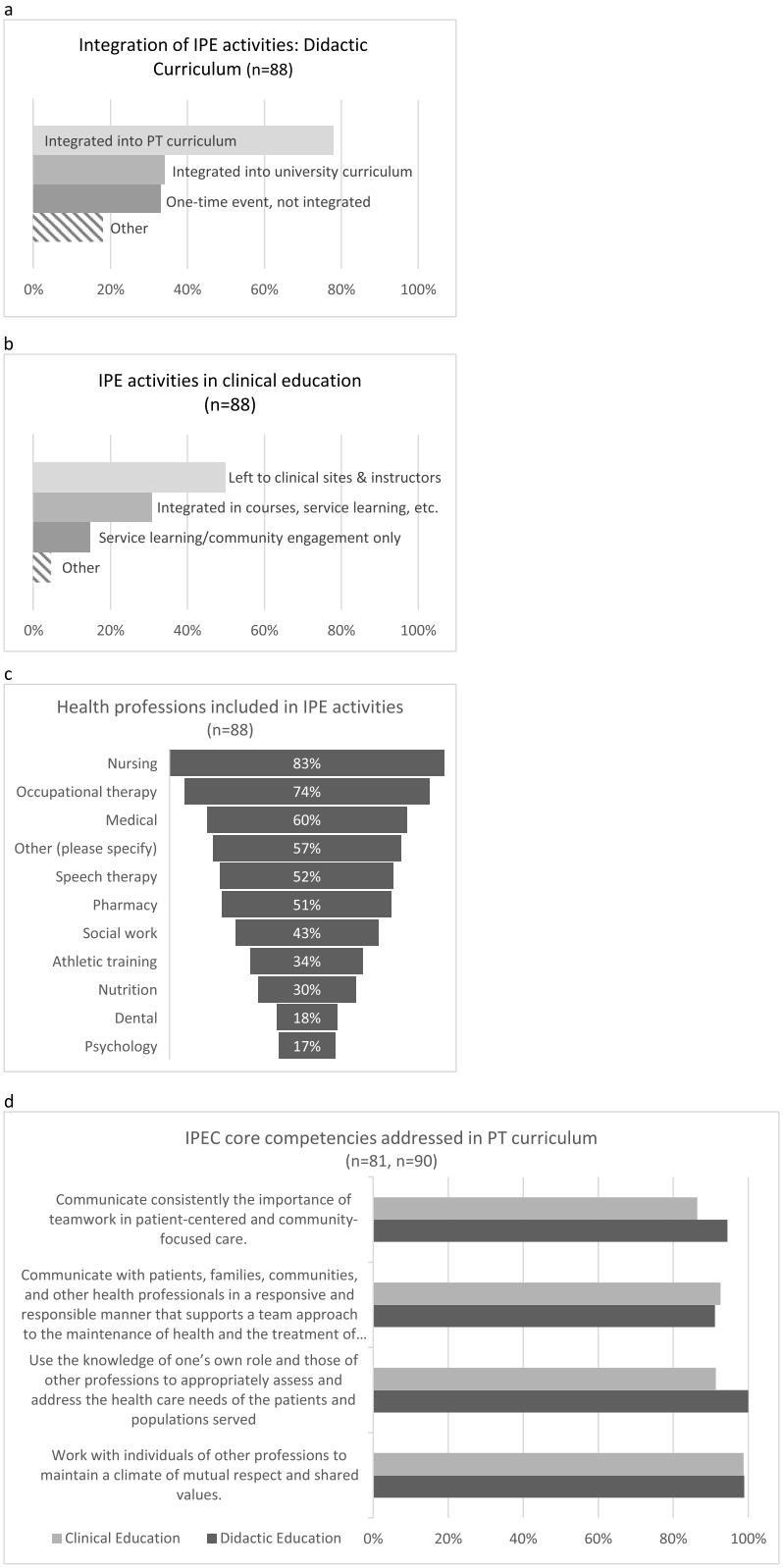

Fig. 3 **a** Integration of IPE activities: didactic curriculum. **b** Integration of IPE activities in clinical education. **c** Health professions included in IPE activities. **d** IPEC core competencies addressed in PT curriculum. There were 81 respondents to the clinical education question and 90 respondents to the didactic question

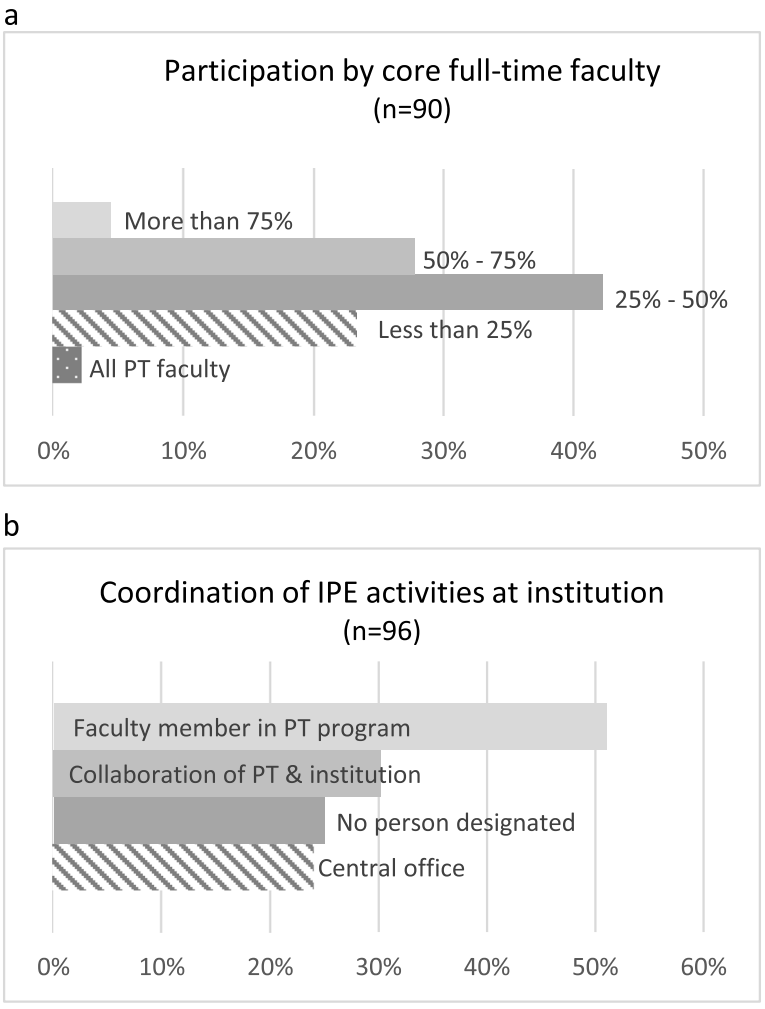

Fig. 4 **a** Participation by core full-time faculty. **b** Coordination of IPE activities at the institution

(24%) Only one-third of respondents (33%, 31 out of 94) indicated that they had a central IPE office in their institutions.

Support for IPE activities

Support for IPE activities varied at both the program and institution levels (Fig. 5a and b). The most common form of support was faculty training at both the program level (36%, 34 out of 94) and institutional level (43%, 40 out of 94). Only 29% of respondents (27 out of 94) reported receiving funding for IPE activities or initiatives. When funding was received, sources included institutional support (27%), the physical therapy department budget (20%), external grants (8%), or other sources (9%). Fewer than 10% of respondents (7%, 8 out of 94) reported having a designated budget line for IPE activities.

Forty percent of respondents (37 out of 93) reported that full-time core faculty received workload units for participation in IPE activities. Most respondents (60%, 57 out of 95) indicated that their institution provided IPE faculty development programs or activities.

Challenges and barriers

Respondents identified faculty time and workload (77%, 71 out of 92), lack of student time (57%, 52 out of 92), and lack of financial support (30%, 28 out of 92) as the top challenges to integrating IPE into the DPT didactic curriculum. The most frequently reported challenges for clinical education were clinical instructors' time and workload (59%, 53 out of 90), clinical instructors' training on IPE or IPCP (51%, 46 out of 90), and time and workload for clinical faculty or the Director of Clinical Education (43%, 39 out of 90). Additional challenges are shown in Fig. 6a and b. Narrative responses also identified scheduling, logistics, and space as barriers.

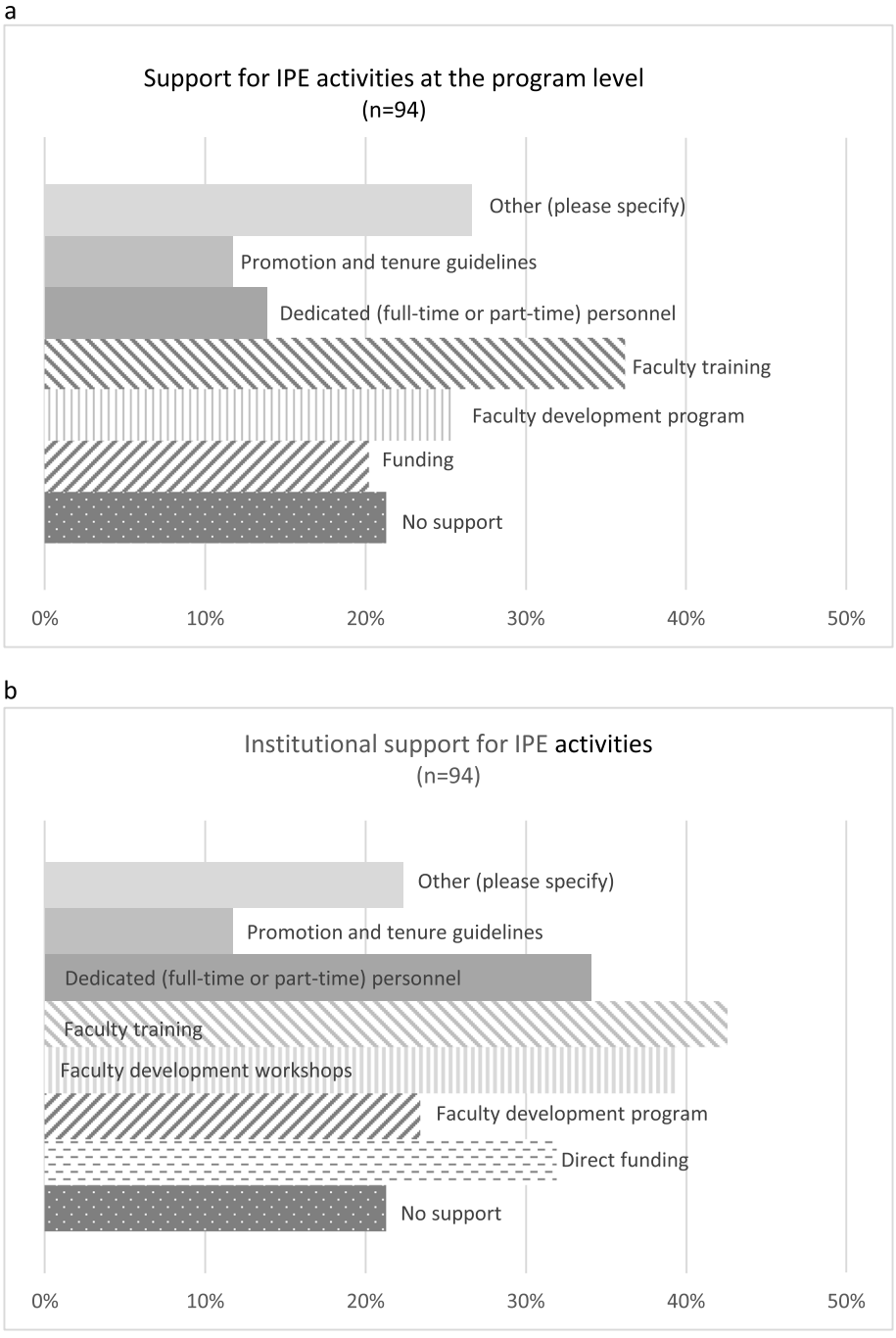

Fig. 5 **a** Support for IPE activities at the program Level. **b** Support for IPE activities at the institutional level

Discussion

There is little published data on how IPE activities have been implemented and integrated within the didactic and clinical education curricula of U.S. physical therapist education programs, nor on the resources needed to support IPE in U.S. physical therapy education. In this study, we provide one of the first post-accreditation snapshots of IPE activities in physical therapist education programs in the U.S. It is noteworthy that data were collected after IPE became an accreditation requirement in U.S. DPT education programs in 2018.

A total of 102 programs (40% of ACAPT member institutions) responded to this survey, including public and private, for-profit, and non-profit, large, and small institutions. Respondents represented programs representing all U.S. regions and 36 states; therefore, these data are believed to provide an accurate reflection of IPE in U.S. physical therapist education programs at this time.

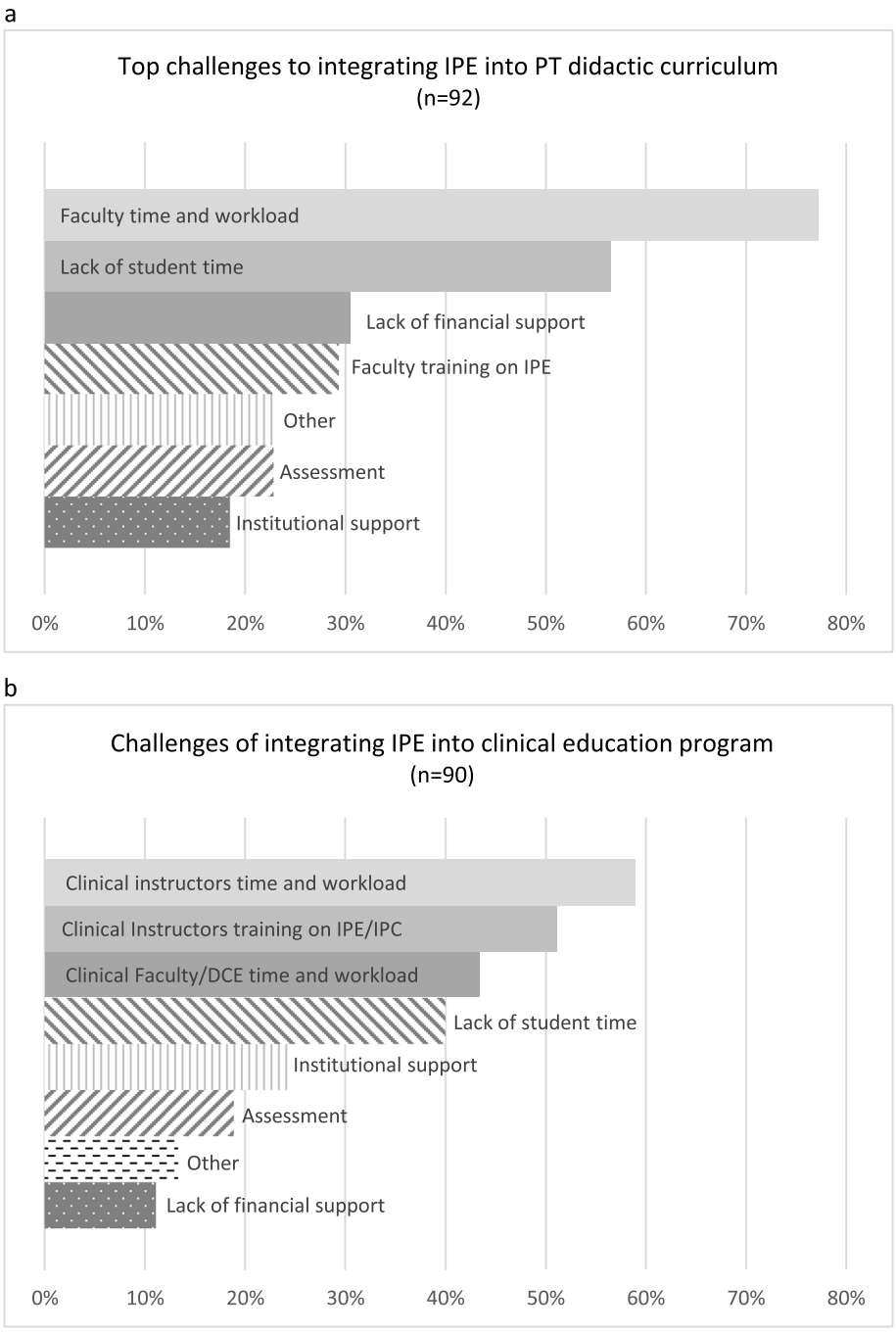

Fig. 6 **a** Top challenges to integrating IPE into PT didactic curriculum. **b** Top challenges of integrating IPE into clinical education programs

Description of IPE

The purpose of this study was to describe IPE in U.S. physical therapist education programs. Specifically, we examined the extent of IPE activities; the content and nature of those activities; how IPE was integrated into the didactic and clinical education curricula; faculty participation; institutional support and funding; and challenges and barriers to implementation.

An important and positive finding was that the majority of U.S. physical therapist education programs participated in IPE well before it became an accreditation requirement in 2018. The duration of participation in IPE ranged from 1 to 30 years, with most programs reporting participation for more than five years. This finding reflects the value placed on IPE by DPT education programs, and is consistent with studies of IPE in physical therapy dating back to 2010 [13].

Consistent with the long-standing commitment, most respondents indicated that IPE was thoroughly integrated into the didactic curriculum and was also present in clinical education. Respondents reported multiple IPE events occurring in both curricula components, often requiring multiple hours of student participation, and many programs had integrated IPE into their course syllabi and program objectives.

Our results identified healthcare professions that were most frequently involved in IPE activities with physical therapist education programs, including nursing, occupational therapy, medicine, speech therapy, pharmacology, social work, athletic training, nutrition, dental, and physician assistant (listed in order of frequency). In addition, respondents reported involvement of 29 different healthcare professions, consistent with previous reports [2]. The number of IPE activities varied across programs, generally ranging from one to more than five IPE activities. In approximately half the programs, the average student participated in 1–10 hours of IPE, while in the remaining programs, participation exceeded 10 hours. Didactic curriculum values were nearly identical to those reported for the overall program. In contrast, respondents reported fewer IPE activities in the clinical education. These findings align with Wise et al. [10], who reported that institutions typically introduce IPE in the classroom before extending it into clinical education. Timing of IPE integration varied across curricula, occurring in year one for some programs, year two for others, and throughout the curriculum in still others.

Eighty-two percent of the respondents indicated that the clinical education curriculum includes IPCP. Variability in the number of activities and hours devoted to clinical education mirrored variability observed in the didactic curriculum. It is noteworthy that some programs reported no IPE activities in clinical education, despite accreditation standards requiring IPE in clinical education. These findings support prior observations by Wise et al. [10] emphasizing the need for continued development of IPE within clinical education. It is possible that the respondents reported only formal activities rather than informal interprofessional interactions that occur during routine clinical practice. Respondents reported variations in how IPE was conducted across didactic and clinical curricula. In didactic education, IPE was commonly integrated into their course syllabi with learning objectives and assessment or incorporated into university-wide curricula. In contrast, fewer than one-third of respondents reported that IPE in clinical education was formally integrated into their syllabi with learning objectives and assessment. Approximately half reported that IPE was left to clinical instructors and sites, while 15% indicated that IPE was embedded in service-learning or community engagement courses. Narrative comments indicated variability in implementation across clinical sites, even when IPE was included in syllabi.

A common feature across programs was that IPE activities were similar in content but varied in delivery. Qualitative analysis revealed that activities frequently focused on professional roles and the impact of IPE on quality of care, cost reduction, and patient safety. Common didactic delivery methods included case-based or patient scenarios, simulated role-play, and small- and large-group discussions, consistent with reports from other professions [14]. Narrative comments regarding clinical education noted that students often worked with professionals from other disciplines during their clinical rotations.

Overall, results demonstrated considerable heterogeneity in IPE implementation across programs. Variability existed in the number of activities, time commitment, timing within curricula, delivery methods, and integration strategies. These findings are not unexpected given the flexibility of CAPTE standards and curricular differences across programs. A strategic plan for IPE implementation and more detailed expectations for both didactic and clinical education may assist programs considering curricular changes.

IPEC competencies

Physical therapist education programs in the U.S., like other health profession programs, are encouraged to adopt IPEC competencies to prepare graduates for collaborative practice [15]. An important finding was that all responding programs incorporated IPEC competencies into their IPE activities, with the vast majority addressing all four competencies. This alignment with competency-driven accreditation guidelines supports educators' ability to demonstrate compliance with CAPTE standards [13]. These findings also reinforce the value of ACAPT's institutional membership in IPEC since 2016 [16].

Assessment

Most U.S. physical therapist education programs (83%) reported assessing student learning related to IPE, while 17% did not. Assessment was most commonly conducted by a central IPE office or by faculty instructors. Narrative analysis revealed no uniform assessment approach, with surveys being the most frequently used tool, followed by reflections, discussion boards, quizzes, and exit interviews. The lack of standardized assessment may reflect the evolving nature of IPE evaluation [17]. Without definitive outcome data, programs may struggle to assess effectiveness and guide improvement.

An in-depth analysis of specific instruments, their psychometric properties, and alignment with individual IPEC competencies was beyond the scope of this study. We did not evaluate which assessment approaches are most appropriate for distinct stages of the IPE continuum

or systematically examine best practices for measuring learning outcomes. Our primary aim was to document the current landscape of IPE implementation in physical therapist education, including whether programs conduct assessments, rather than to critically appraise their quality or appropriateness. Future research may focus on what outcome measures work best to assess the effectiveness of IPE within physical therapist education programs. Those studies should consider multiple methods of assessment that are aligned with IPEC competencies. This might include measuring IPE learning outcomes in terms of knowledge, skills, and behavior over time [17], as well as program effectiveness.

Challenges and barriers

Faculty time and workload, lack of student time, and lack of financial support were identified as the top challenges to integrating IPE into didactic curricula. Additional challenges included limited faculty training, assessment processes, and institutional support. These findings align with survey responses indicating that only 40% of faculty receive workload credit for IPE, 29% of programs have received funding, 7% have designated IPE budgets, and 33% have a central IPE office. These challenges are consistent with previous literature [8–20].

Sustaining effective IPE programs requires institutional support and infrastructure [10, 15, 20–22]. Support may include funding, workload recognition, standardized assessment processes, and faculty development programs [23]. Integrating IPE into existing curricula may reduce costs. Common logistical challenges included scheduling and limited engagement from other disciplines, consistent with prior studies [18, 19, 21].

Effective engagement requires the involvement of all stakeholders and clear communication of IPE's value [21, 24]. Faculty development, IPE champions, early planning, and dedicated coordination, potentially through a central IPE office, may help address barriers [25].

Barriers to IPE in clinical education mirrored those in didactic education, including instructor time, training, institutional support, assessment, and funding limitations. Addressing these barriers through academic–clinical collaboration and faculty development is essential.

Limitations

This study included physical therapist education programs in the U.S. and may not be generalized to all physical therapist education programs. All data was self-reported by each program, so there may be inherent flaws such as variable interpretation of the questions or the inability to verify reported data. As participation in the survey was voluntary and the 40% response rate introduces a potential for self-selection bias, where programs more engaged in IPE may be more likely to respond. This bias can distort findings by overrepresenting positive outcomes and limiting the generalizability of the results to the entire population of programs. This study involved data from U.S. physical therapist education programs only; therefore, our findings may not be generalized to other health professions, nor do they provide the perspective of students from other healthcare professions on physical therapy students. Another limitation of this study is the reliance on unverified self-reports and the likely underreporting of informal interprofessional education (IPE) in clinical education settings. While some programs reported no IPE activities in clinical education settings, these activities are often inherent and organic in clinical settings; their unstructured nature may often be overlooked or go unreported, and the respondents in this study reported only formal activity. Overall, given that this is the first survey since IPE became an accreditation requirement for physical therapist entry-level education, the authors believe that these results represent an important baseline for describing IPE within U.S. entry-level education programs.

Future research

Future high-quality quantitative and qualitative studies should identify resources needed for IPE implementation and evaluate the effectiveness of various integration approaches across didactic and clinical curricula in the U.S. and internationally. Longitudinal studies examining the impact of IPE on clinical practice, student and faculty perceptions, and interprofessional collaboration are warranted. Comparative studies across professions and countries may provide additional insights. Future research should emphasize IPE competency development and examine long-term outcomes for graduates and patient care.

Conclusion

Given the limited published data on IPE implementation in U.S. physical therapist education, this study provides important baseline information. While IPE implementation varies across programs, most address all four IPEC competencies and meet CAPTE standards. IPE activities commonly involve collaboration with multiple health professions. Faculty workload, student time, and funding are major challenges in didactic education, while instructor time and training are key barriers in clinical education. Continued research is needed to identify resources and effective strategies for implementing IPE to support the development of interprofessional competencies among future physical therapists.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s43161-026-00345-y.

Supplementary Material 1.

Acknowledgements
The American Council of Academic Physical Therapy (ACAPT) would like to recognize these authors for their scholarly accomplishment in fulfilling the interprofessional education goals of ACAPT.
The authors of this study would like to acknowledge the support of ACAPT's National Interprofessional Consortium (NIPEC) for their support of the development and distribution of the study survey. We thank our colleagues from the Board of Directors of NIPEC at the time of development of this survey (Cheryl Resnik, Kimberly Beran-Shepler, Denise "Dee" Schilling, Denise Bender, Amy Nordon-Craft), and Bob Wellmon who provided insight and expertise that greatly assisted in the development of this survey. Thank you to Louise Murgia and Sandy Brooks, for their help with the survey platform and distribution to ACAPT members.

Authors' contributions
Salem, Y. Conceptualization, Writing—Original Draft, Data Curation, Formal analysis, Project administration. Babin, C. Conceptualization, Writing—Review & Editing Methods, Data Curation, Formal analysis. Quiben, M. Conceptualization, Writing—Review & Editing Results, Data Curation, Formal analysis. States, R. Conceptualization, Writing—Review & Editing Results, Data Curation, Formal analysis.

Funding
None.

Data availability
The data used in this manuscript is located at then end of the paper and is also available from the main author Yasser Salem (Yasser.Salem@hofstra.edu and/or the corresponding author: Cheryl Babin (Cheryl.Babin@mcphs.edu).

Declarations

Ethics approval and consent to participate
This study was submitted to the Human Subjects Committee of the University of North Texas Health Science Center Institutional Review Board and was qualified as "Not Human Subject Research."

Consent for publications
This statement is signed by all authors to indicate their consent for publication in the Journal: *Bulletin of Faculty in Physical Therapy.*

Competing interests
The authors declare no competing interests.

Received: 5 December 2024 / Accepted: 13 March 2026
Published online: 25 March 2026

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