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QUALITATIVE RESEARCH REPORT

Supporting physiotherapy learners in practice settings: a mixed methods evaluation of experiences of physiotherapy educators

Deborah A. O'Connor MSc, PT[a], Tamsin Baird BSc, PT[b], Kirsten Jack PhD, RN[a], Ryan G. Wilkinson PhD[c], Alison Chambers EdD[d], and Claire Hamshire PhD, PT[e]

[a]Department of Health Professions, Manchester Metropolitan University, Manchester, UK; [b]Education team, Chartered Society of Physiotherapy, London, UK; [c]Lifelong Learning Centre, University of Leeds, Leeds, UK; [d]A&A Chambers Consulting Ltd, Bolton, UK; [e]The Old Fire Station, University of Salford, Salford, UK

ABSTRACT

Background: Practice-based education is an essential component of pre-registration physiotherapy programs, and there is a need for a contemporary review of practice-based educational experiences.
Purpose: The aim of this study was to explore physiotherapy practice educators' experiences of supporting learners to inform considerations for future workforce development.
Methods: This was a mixed methods sequential explanatory study based in the United Kingdom (UK). Phase one of the study utilized an online survey disseminated via the Chartered Society of Physiotherapy (CSP) professional networks. Phase two consisted of three semi-structured focus group interviews with participants who expressed an interest via completion of the online survey. All were registered or associate CSP members who actively support practice-based education.
Results: A total of 208 participants completed the online survey and a sub-set of 15 participated in online focus groups. Quantitative survey data were analyzed using descriptive statistics. Initial thematic analysis of qualitative data from both phases was undertaken by one researcher. Subsequent analyses were carried out independently by the remaining research team, and comparisons were made to agree on codes, categories, and themes. The practice educator is vital in developing the future workforce (30%, $n = 61$, strongly agree). Identified challenges included supervising more than one learner (34%, $n = 67$ not at all experienced) and using technology to provide alternative placement models (45%, $n = 87$ not at all experienced).
Conclusion: Practice educators need accessible opportunities for professional development. Practice-based education should be embedded as an integral component of all staff roles. A team approach is essential to developing the future physiotherapy workforce.

Introduction

Practice-based education is an essential component of pre-registration physiotherapy learners' programs of study, and there is a need to provide an effective environment in which learners can apply knowledge they have been introduced to in academic settings. Valuing and including learners as essential team members within the practice setting is fundamental to professional socialization, and positive educator/student relationships are vital to effective practice-based education (Hamshire and Jack, 2021; Jack and Hamshire, 2019; Jack, Hamshire, and Chambers, 2017). Being part of a professional community of practice helps to create a sense of belonging (Hamshire et al., 2019; Plack, 2008) and builds the foundations of students' identity as a physiotherapist as well as aspirations for their future career (Cassidy, Norris, and Williams, 2020; Plack, 2008).

The importance of the practice educator in creating quality practice-based educational experiences cannot be underestimated. Many learners reflect that a strong relationship with their practice educator is vital to achieving a successful outcome (Cassidy, Norris, and Williams, 2020) and educators' words and actions have the ability to shape, build and grow the future workforce (Hills et al., 2019). Considering the different elements needed to achieve a "quality" physiotherapy placement, McCallum et al. (2013) found the practice educator to be the principal component.

A practice educator has a multi-faceted role that can be influenced by a wide range of factors that can either facilitate student success or contribute to learner stress (Hills et al., 2019). The role is further impacted by the spaces in which practice educators work, and the infrastructure and systems that support them (Lekkas et al., 2007).

A good practice educator is equipped with a broad skillset including: assessment (Barry, Newstead, Osmotherly, and Johnston, 2015; Dalton, Davidson, and Keating, 2011; Healey, 2008; O'Connor et al., 2018; Plack, 2008); supervision (Kilminster, Cottrell, Grant, and Jolly, 2007); mentorship (Yoon et al., 2017); as well as time-management to manage ongoing daily practice and interactions while supervising students. The practice educator role therefore requires both flexibility and reflexivity to meet the individual students' needs alongside managing pressures created by the growing number of learners, increasingly complex workloads and competing priorities.

Within England, there are four key strands or pillars of practice: 1) clinical; 2) leadership; 3) research; and 4) education. These pillars of practice have been introduced to the physiotherapy profession through the advanced practice agenda (Health Education England, 2017) and career frameworks in Wales and Scotland (NHS Education for Scotland, 2020; NHS Wales, 2016). These four pillars ensure a flexible and sustainable workforce to meet current and future population needs and are currently being integrated across all levels of practice. While the reference to the four pillars is relevant predominantly to UK settings, practice-based education is a fundamental element of pre-registration students' learning experiences internationally and central to all physiotherapy educational settings, across clinical, managerial, research and academic arenas.

Within Australia and New Zealand, the role of the practice educator is a core duty of a registrant, with defined competencies around empowering and leading the education of others (Physiotherapy Board of Australia and Physiotherapy Board of New Zealand, 2015). In addition, the American standards of practice for physical therapy outline education of learners and others as an essential component of physiotherapy practice (American Physical Therapy Association, 2020). In developing countries, long-term progress to address physical therapy healthcare needs can only be delivered through the enhancement of education systems (John et al., 2012). As such, practice-based education is embedded within physiotherapy practice as a cornerstone of the professional responsibilities of registrants across the globe.

Current evidence based on the role of the allied health educator within practice-based education consists primarily of small-scale single center studies. These studies focus on the skills required to be an effective practice educator (Kumar and Greenhill, 2016; Lo, Curtis, and Cracknell, 2017; Overbeck et al., 2016; O'Connor et al., 2018; Yoon et al., 2017) as well as the constituents of an effective practice learning

environment (Alpine, Caldas, and Barrett, 2019; Björklund and Silén, 2021; Norwood and Igo, 2019). A qualitative study by Sevenhuysen and Haines (2011) explored physiotherapy practice educators' perceptions of educational experiences cited job satisfaction, professional duty and increased patient contact as the key benefits of the role. This study concluded that further research was required to explore the impact of supervising multiple learners as a method of increasing capacity. Sevenhuysen and Haines (2011) also noted both positive and negative effects on educator's workload dependent on the individual needs of the students.

In addition, other recent studies have explored the relationship between educator and student (Bearman et al., 2018; Francis et al., 2016) highlighting some constraints impacting on the learning experience such as managing competing demands and heavy workloads and the delivery of practice-based education using a predominant one educator: one learner model (Moore, Morris, Crouch, and Martin, 2003). However, there remains a deficit of large-scale, multi-institution studies that consider practice-based education and the multi-factorial influences on educator engagement. Given the impact of significant constraints on healthcare in recent years, the shift in delivery of services across sectors and ongoing competing workload demands for physiotherapy educators (Bearman, Schneiderman, and Zoloth, 2017), there was a need for a contemporary review of practice-based educational experiences. The aim of this study was therefore to explore physiotherapy practice educators' experiences of supporting learners in the United Kingdom to inform considerations for future workforce development and identify any resources needed to support practice educators in their role.

Methods

Ethical approval for this study was granted by the University Faculty ethics committee (approval 34,872). All survey respondents and focus group participants have given informed consent to participate in this research study. To achieve the study aims, a sequential explanatory mixed methods design was utilized, combining quantitative and qualitative data for a comprehensive analysis (Creswell, 2003). This form of sequential analysis in which the qualitative data is used in the subsequent interpretation and clarification of the results from the quantitative data analysis, is a relatively common sequential explanatory design (Tashakkori, Teddlie, and Teddlie, 1998). This pluralistic approach considers multiple viewpoints, perspectives, and positions (Johnson, Onwuegbuzie, and

Turner, 2007) and allowed a more complete picture to be assembled through widespread engagement with the membership of the professional body.

Phase one of the study: The survey

To facilitate data collection from a wide range of physiotherapy practice educators, the first phase of the study utilized an online survey tool to profile clinical educator characteristics, experience and training requirements (Newstead, Johnston, Nisbet, and McAllister, 2017). This survey was validated across Australia with expert practitioners, clinical managers and educators for face and content validity. Survey utility and internal reliability were pilot tested by 30 clinical physiotherapists across two healthcare facilities within New South Wales, by the original authors. The Likert scale items demonstrated excellent internal reliability with an overall Cronbach's alpha coefficient of 0.98 and 0.97, respectively.

Given that this survey was validated for an Australian audience, it was not fully representative of recent UK practice. Consequently, three additional questions (Appendix 1) around new models of placement activity developed in the UK, supplemented the survey (Newstead, Johnston, Nisbet, and McAllister, 2017). Permission to modify the survey was obtained from the original authors. The survey was made available to all CSP members, both registered and associate status, who were involved in practice-based education from June 2021 to September 2021. The survey was disseminated in a national online seminar launch event, via social media channels, and a targeted e-mail cascade through education, Higher Education Institutions (HEI) and regional networks. While there are approximately 63,000 members registered with the CSP, this survey was targeted only at those participating in practice-based education or belonging to education networks. A total of 208 survey responses were returned.

The survey consisted of 44 questions, split into five sections, including a mix of open, closed and Likert items. Sections one to three focused on demographic data of the respondents and considered age, gender, and experience levels as well as primary place of work and job role. The fourth section of the survey invited respondents to score both their confidence and experience levels across a question set of 18 different domains using Likert responses from not at all confident/experienced to very confident/experienced. Free text comments from section five of the survey invited respondents to detail the factors they perceived as both a facilitator and a challenge to the role of practice educator.

Phase two of the study: Focus groups

The second phase of the study utilized three online focus groups to further explore the key themes identified during a thematic analysis of the open responses from section five of the online survey. This data provided the framework to guide the discussions using an unstructured approach (Appendix 2). All survey respondents were eligible to participate in the focus groups and were asked to indicate their interest on completion of the survey. In total, there were 15 respondents who indicated interest in the focus group arm of the study. All 15 respondents were invited to participate in one of the focus groups, which took place in September and October 2021.

The focus groups were facilitated by an independent male research assistant (RW) who had no pre-existing relationships with any of the group members and was not a member of the physiotherapy profession. The research assistant had previous experiences of facilitating focus groups across several education-related disciplines and was supported by a female principal investigator (DO) with profession-specific knowledge.

Both the facilitator and principal investigator introduced themselves and briefly outlined their role in the research study at the start of each focus group. No other personal information about the research team was shared with the participants. There were no other attendees at the focus groups apart from the participants and research team. The focus groups followed an unstructured format and lasted between 45 min and 1 h and were guided by the topic sheet, which had been developed from the initial analysis of data from the survey. The focus groups were audio recorded and field notes taken by the principal investigator to support data analysis.

Data analysis

Quantitative survey responses providing demographic data were analyzed descriptively. Mean values were established for Likert questions (Boone and Boone, 2012). Data was transferred to excel and stored on a secure shared electronic platform among the research team. An iterative process of data analysis was conducted by the research team, with the initial data analysis conducted by one researcher within the team (RW). Comparative analysis was conducted on the mean values of experience and confidence variables; however, after conducting a t-test, there were no statistically significant findings ($p = .12$). Further descriptive analysis on survey data highlighted that there were, however, areas of interest that the research team wanted

to explore further as part of the focus group sessions. These included experience of supporting multiple learners at once and institutional support structures as these topic areas showed participants were less confident in these areas.

Free-text responses included in the survey were coded to produce key themes for each response by one member of the research team. These themes were subsequently shared with a wider group for discussion and reflexive exploration. After agreeing the codes for each response across the research team, the codes were counted to establish the frequency of the themes across the dataset, an approach used in the first stages of summative content analysis (Hsieh and Shannon, 2005). This approach did not involve any further interpretive analysis but aided the research team in establishing broad themes across the free text survey data.

Preliminary analysis of the survey data helped to further shape the topic sheets that informed the discussions in the focus groups (Gibbs, 1997; Stewart and Williams, 2005). The topic guide (Appendix 2) covered seven key themes that were determined a priori from the survey analysis. The focus groups were held online, audio recorded and transcribed verbatim. Transcripts were not returned to participants as they indicated that they would not have time to review them; however, they had the option to request these via e-mail. The audio recordings were listened to by one member of the research team for the purposes of familiarization. The transcripts were open coded by one member of the research team (RW) with broad themes being explored in this phase, and data analyzed thematically.

The focus group analysis was completed initially by one member of the research team (RW) with subsequent analysis taking place collectively with the wider research team (Clarke and Braun, 2014). Both survey and focus group qualitative data sets were then analyzed by the wider research team by refining the codes and undertaking conceptual discussions until consensus was reached on the key themes across both data sets. Although seven topics were included in the focus group topic sheet, which were derived from the initial survey analysis, the analysis showed that the focus group participants chose to discuss topics related to three specific categories, which are outlined in phase two results below. An iterative process of deductive analysis of the data produced distinct classified themes included under each category.

Both reflexivity and positionality were a key consideration throughout the analytical process, given the different experiences of physiotherapy education across the research team. The first phase of analysis was conducted by a member of the research team who was not an experienced physiotherapy educator (RW), thus positioning them as an outsider to the topic being studied (Bearman and Dawson, 2013; Berger, 2013). This perspective helped ensure there was limited bias in these initial stages of analysis as other members of the research team were physiotherapy educational practitioners (Wigginton and Setchell, 2016). Including all four members of the research team in the subsequent analysis helped contextualize subject-specific elements of the discussions.

Results

Phase one: Survey results

A total of 208 practice educators completed the online survey. Not every participant responded to every question, and this has been highlighted within the results where the responses were below 208. Most respondents were female (87%) with a mode age group of 27–35. The majority of respondents (83%) were working clinically with a mean length of service from pre-registration qualification of 16.5 years (SD 10.4). Respondents were asked to identify their primary work setting, and some respondents did highlight more than one area of work due to a split role or dual contracts, which gave a total of 342 responses. The most frequently represented area of practice was within the public sector in a National Health Service (NHS) in-patient or out-patient setting (77%) with 14% of respondents working in a community setting and 3% in the private sector. The remaining 6% of the respondents either worked in higher education or residential care facilities.

The mean time for working in a clinical role was 15.4 years (SD 9.5). There were high levels of respondents who were actively supporting learners regularly, with 83% ($n = 170$) of those surveyed having supported greater than five learners during their career to date. Most respondents (82%, $n = 168$) retained a single learner: one educator mode of supervision. There was a geographical spread across most regions within England ($n = 140$), Scotland ($n = 42$) and Wales ($n = 25$) ensuring wide representation from the CSP membership across the nations. When asked if formal training to support learners should be completed prior to supporting learners in practice, 131 respondents (63%) agreed that it was a key requirement.

Overall, the data demonstrated similarities between levels of confidence and experience whereby those with less experience reported lower confidence levels throughout section four of the survey. There was no statistical significance, however, between the two domains ($p = .12$). Further exploration of areas where

Table 1. Key domains demonstrating perceptions of self-confidence and experience in supporting learners in practice.

	Facilitating peer learning (N = 202)	TECS (Technology Enabled Care Services) (N = 192)	Supervising multiple students (N = 198)	Managing challenging students (N = 204)
Very experienced	28% (N = 56)	6% (N = 11)	16% (N = 32)	26% (N = 53)
Moderately experienced	34% (N = 69)	20% (N = 39)	22% (N = 44)	38% (N = 77)
Slightly experienced	32% (N = 64)	29% (N = 55)	28% (N = 55)	26% (N = 52)
Not at all experienced	6% (N = 13)	45% (N = 87)	34% (N = 67)	11% (N = 22)
	Facilitating peer learning (N = 201)	**TECS (Technology Enabled Care Services) (N = 193)**	**Supervising multiple students (N = 196)**	**Managing challenging students (N = 204)**
Very confident	31% (N = 62)	10% (N = 20)	24% (N = 47)	26% (N = 53)
Moderately confident	31% (N = 63)	23% (N = 44)	26% (N = 51)	37% (N = 76)
Slightly confident	29% (N = 59)	27% (N = 54)	23% (N = 45)	24% (N = 48)
Not at all confident	9% (N = 17)	39% (N = 75)	27% (N = 53)	13% (N = 27)

respondents felt they required more support revealed four domains that scored notably lower than the other questions: 1) supporting learners in providing technology enabled care services (TECS); 2) facilitating peer learning; 3) supervising multiple learners; and 4) supporting challenging learners (Table 1).

A total of 45% of respondents reported that they were not at all experienced in supporting learners to provide TECS, with 39% suggesting that they were not at all confident in the same domain. In addition, 34% were not at all experienced and 27% not confident in supervising more than one learner. These domains were used as part of the topic guide for further exploration within the focus groups.

The final section of the survey invited respondents to detail the factors they perceived as both a facilitator and a challenge to the role of practice educator. Within section five of the survey, the most frequently identified motivating factor was development of the future workforce (30%, n = 61). In contrast, over 50% (n = 108) of respondents cited both lack of time and increased workload as the main challenges with 22% (n = 45) also stating that supporting challenging learners would prevent their engagement (Table 2).

Finally, respondents were asked to state the main challenges (Table 3) and benefits (Table 4) to themselves and the organization when supporting learners. Again, workload (35%, n = 68) and time constraints (47%, n = 91) were the most significant challenges to the individual educator. Within the organization, respondents highlighted the biggest challenges such as space (40%, n = 70) and workload constraints (28%, n = 49). Conversely, the benefits were more widespread with a larger range of varied reasons for supporting learners,

Table 2. Motivating factors and barriers to participation in practice-based education.

Motivating factors:	Count (N = 204)	Percentage
Develop future physios	61	30%
More time to support students	35	17%
Institutional (university) support	30	15%
Career development	27	13%
Financial incentive	26	13%
Enjoy teaching	25	12%
Enhance student experience	18	8%
Develop workforce	16	8%
Job satisfaction	15	7%
Promote physiotherapy specialism	14	7%
Personal development	13	6%
Learn from students	12	6%
Training	12	6%
Passion for profession	10	5%
Barriers:	Count (N = 203)	Percentage
Current workload	106	52%
Lack of time	103	50%
Issues/challenges with students	44	22%
Staffing levels	30	15%
Lack of resources	30	15%
Students not suited for placement	27	13%
Lack of support from institution (University)	18	9%
Stress	14	7%
Job satisfaction	12	6%
COVID restrictions	10	5%
Administrative challenges	10	5%

Table 3. Challenges to the educator and workplace.

Educator		
Challenges		
Code	Count (N = 193)	Percent
Lack of time	91	47%
Increased workload	68	35%
Confidence to support students	16	8%
Part-time work challenges	10	5%
Managing/supervising student(s)	10	5%
Workplace		
Challenges		
Code	Count (N = 174)	Percent
Space challenges	70	40%
Increased workload	49	28%
Lack of IT equipment	26	15%
Lack of time	25	14%
Staff shortages	17	10%
COVID-related issues including staff redeployment to other clinical areas, staff sickness and shortage of patients able to undertake rehabilitation	10	6%

Table 4. Benefits to the educator and workplace.

Educator		
Benefits		
Code	Count (N = 195)	Percent
Skills development	53	27%
Learning with students	40	21%
Reflecting on own practice	34	17%
Self-development	34	17%
Supporting student development	21	11%
Career progression due to increased skills	15	8%
Development of future workforce	10	5%
Workplace		
Benefits		
Code	Count (N = 174)	Percent
Potential future staff	48	33%
New perspectives on practice	34	23%
Interdisciplinary working	23	16%
Students contribute to supporting clinician's workload	16	11%
Shared learning between clinician and student	11	8%
Build reputation of the organization	10	7%
New perspectives on the evidence base from students	10	7%

Table 5. Characteristics of focus group attendees.

Focus group	Job title
A	Learning disabilities Senior Physiotherapist
	Health Education England Placement facilitator
	Physiotherapy fellow (non-clinical)
	Clinical Placement Expansion facilitator
	Cardiorespiratory senior clinician
	CSP manager/advisor
B	Physiotherapist intermediate care
	Placement expansion facilitator
	Physiotherapist team lead in musculoskeletal obstetrics post-natal
	Learning disabilities physiotherapist
C	Trainee advanced practitioner
	Specialist weight management physio
	Physiotherapy CSP advisor
	Learning disabilities physiotherapist
	Practice educator for physiotherapists

Note: CSP = Chartered Society of Physiotherapy.

including developing their own skills as a practitioner, reflecting on practice as well as the previously cited developing the future workforce key benefit.

Phase two: Focus group results

Three online focus group sessions were completed with the respondents who volunteered to participate in September/October 2021 (Table 5). The geographical representation was much less widespread within the focus groups, with only England represented out of the four nations. Furthermore, there was less representation of different physiotherapy specialties and job roles within the participants. The key themes from the survey were used to inform the focus group discussions.

There were three distinct categories of data: 1) Motivations for participating in practice-based education; 2) strategies for success; and 3) looking toward the future. These were further refined into themes that are outlined below.

Category 1: Motivations for participating in practice-based education

All focus group participants had strong personal motivations for participating in practice-based education. Despite recognizing challenges, all participants focused on the value of their role in developing learners and why they felt it was an important element of their professional and personal responsibility. There were three key themes: 1) professional duty; 2) job satisfaction; and 3) impact.

Theme 1: Professional duty

There was a clear sense of responsibility that emerged from the discussions around supporting learners. Participants across all focus groups were clear that practice-based education was part of their professional code of conduct and a key element of workforce development:

> I suppose there's lots of things for me but a big thing for me is giving something back. We've all been learners, we all had input from practice educators, so it sort of feels like duty is maybe the wrong word, but just my professional duty to take that role on and to give that something back. (Group A, participant 1)

> . . .there might be certain roles, which are more difficult to take a student fulltime, but that doesn't mean the staff can't contribute, at all, to the student practice placements and training (Group B, participant 2)

There was a sense of pride as well as a duty to educate as an essential element of the physiotherapy role:

> . . .it's nurturing others to come through . . . but also your part of this work force, we're developing our work force to understand what it is they're coming into (Group A, participant 3)

Theme 2: Job satisfaction

Participants articulated high levels of satisfaction and personal benefits from supporting learners:

> Well, it's very satisfying giving back and using all the experience you've gained over the years, and being able to pass that on (Group B, participant 3)

There was recognition of the continuing professional development and ongoing learning that takes place during educator-student interactions:

> "So there's a whole new set of learning for me around that and I enjoyed it. I loved just having that input and that energy and that enthusiasm from the learners and the benefit and satisfaction that it gave my work" (Group C, participant 5)

> "For my own learning as well I've found that for my own personal development having learners has been fantastic" (Group A, participant 1)

Theme 3: Impact

Participants reported the longer-term implications of practice-based education and how this fed into their motivations to ensure that learners had a positive experience:

> I feel a responsibility toward upskilling the next generation of physiotherapists (Group C, participant 2)

> "It's really important to make sure that we are offering quality placements and quality opportunity . . . that's how we're going to grow our work force and grow a successful work force as well" (Group A, participant 4)

Category 2: Strategies for success

The focus group participants had extensive levels of experience and knowledge in supporting learners in practice-based education. This facilitated lengthy discussion around useful strategies and success factors for engaging and motivating learners. This was further divided into three themes: 1) team approach; 2) expectations; and 3) challenges.

Theme 1: Team approach

Participants highlighted the need for the whole team to contribute to practice-based learning to enable a culture of education and training at all levels of seniority and a sense of shared responsibility:

"Learners are part of our team and they're part of our workforce and . . . there should be no 'without them,' it should just be a regular, normal day-to-day occurrence that learners are part of who we are and everybody supports the learners, in the same way they support each other in the team; and that expectation that there's no-one too senior or too junior to be involved in student practice education." (Group B, participant 2)

Integrating the learner into the team and using every member of the team to support and educate learners was deemed essential to making practice-based education central to everyone's workload:

"It's everybody's responsibility, every qualified member, but I think also we've seen great success with support workers being involved in facilitating learners as well." (Group B, participant 3)

Sharing the workload was deemed favorable to enable more time for staff to complete other tasks. A team approach also provided different perspectives to enhance the educational experience for the learner:

" . . . something around how we can involve the whole team . . . to make it feel less onerous on one individual and more of a team effort and again I think that's going to give us more rounded learners and more rounded qualified physios as well, who will really understand the team" (Group A, participant 1)

Theme 2: Expectations

Setting clear expectations for learners as well as staff recognizing their own expectations and the impact of these on the practice-based educational experiences, was crucial to ensure a positive experience for all involved. It was noted that some educators do struggle to remember the level of knowledge that the learner is currently working at:

"I think there's something around setting clear expectations." (Group B, participant 2)

" . . . but some Band 5s don't know all that stuff. You know, it's not just learners. You know, a newly qualified Band 5, you do have to guide them, don't you. And they might not have done orthopedics on the placement, so it's like, do you know what the hip precautions are? So why should we have an expectation that learners will know all that, really?" (Group B, participant 1)

Participants also noted that the student voice was essential in reframing and shaping expectations:

"I actually have to keep relearning the same lesson, myself, actually, about expectation of that student. Listening to the voice of that student and being very up front with them" (Group B, participant 1)

Theme 3: Challenges

Despite the positive findings, there was recognition of key challenges that would impact on the success of practice-based education. In some areas, there remained a lack of willingness to engage and a disparity in support from physiotherapy colleagues across different organizations:

"We do need to challenge as a profession why you think it's okay to say that learners aren't your problem and that you don't have a responsibility for them" (Group C, participant 4)

"But yes, that whole getting people on board, there are some. . . but people have put their heels in the mud in some areas" (Group A, participant 3)

As highlighted in the survey findings, it was evident that time, workload and competing pressures, were again, key challenges to successfully supporting learners in practice:

"I want to support learners but then I feel torn . . . I am giving my time to patient care, supporting my team, attending meetings, doing paperwork . . . I am not sure if there is enough left to go round and give them a positive experience" (Group B, participant 3)

Category 3: Looking towards the future

Given the demographic of experienced clinicians within the focus groups, there was substantial discussion about the future of the physiotherapy profession and the importance of practice-based education. This category encompasses three themes: 1) the support needed for future workforce development; 2) education as a key strand of practice for all members; and 3) the importance of a cultural change around educating learners.

Theme 1: Support

None of the focus group participants felt that additional educational resources were needed for practice educators as these were already widely available for those lacking in experience or confidence. There was, however, a discussion around support from the professional body to facilitate stronger messaging to their members and the organizations they work within:

"But I think, up until more recently, perhaps, there wasn't much of a voice or clarity from the CSP . . . about expectations, what is acceptable . . . What consists of a clinical placement experience? . . . just having some really clear guidance" (Group B, participant 2)

". . .how do you get that message to the organizations that they have to release staff . . . build both into the job plans . . . to allow for that extra capacity" (Group C, participant 5)

There was also recognition of the tripartite relationship between educator, learners, and the University and the value of additional support for practice-based education from academic staff:

> "I saw that a different university was starting to do those drop-in sessions as well for their practice educators locally. But I think that's a really good step forwards and I think people really benefitted and were really grateful from that additional support" (Group A, participant 4)

Theme 2: Education as a key pillar/strand of practice

This theme explores the importance of recognizing education as a key pillar/strand of practice for all registrants. Suggestions were made around embedding education within job roles for all staff and the need to acknowledge practice-based education as being just as vital as all other areas of physiotherapy practice:

> "What we're trying to do is really bring in more of a focus on the four pillars of practice. Obviously one of them being education so that that really becomes integral to what we do … it is a fundamental part of our physiotherapy practice education" (Group A, participant 1)

> "But also acknowledging that that education pillar is just as important as the other pillars … otherwise we are doing our educators a disservice when they're taking learners into their workplace" (Group A, participant 3)

Theme 3: Cultural change

There was recognition that the ever-changing health service within the UK required National commitment to drive cultural change around practice-based education as a priority within the physiotherapy profession:

> "…you've got the opportunity to shape the next generation of physios. And I think the NHS has changed a lot recently and it will continue to change and bring learners in, freshens everybody and helps us to kind of change as well and kind of go with the times and not get stuck in the past" (Group C, participant 5)

> "It's such a cultural shift, there's nothing too specialist for placements and I think it's really short-sighted to say that … How are we supposed to prepare our future workforce … if we don't give our learners the experience in those areas?" (Group A, participant 1)

In addition, there was a need to embed cultural change at organizational level, recognizing the importance of each practice educator, expectations of the role and the impact of this on workload:

> "I just feel really passionately about the fact that we need to change the way in which we articulate what we expect of educators" (Group A, participant 2)

> "We need to have a good dialogue between all of us as to how the workforce is changing and how education is changing and just be really in communication so that we can work out how everyone can support each other in it." (Group A, participant 2)

Discussion

Previous studies clearly document the broad skillset practice educators need and the importance of the relationship between educator and student (Bearman, Schneiderman, and Zoloth, 2017; Buccieri, Pivko, and Olzenak, 2011; Kumar and Greenhill, 2016; Lo, Curtis, and Cracknell, 2017; Overbeck et al., 2016; O'Connor et al., 2018; Yoon et al., 2017). There is an ever-changing health landscape across the globe, and with the impact of a global pandemic and a need to grow the physiotherapy workforce, the experiences of practice-based educators are essential to workforce development. This study aimed to explore contemporary experiences of practice educators to establish motivations, barriers and the support needed for this essential role. The findings demonstrate that despite a range of challenges, there is ongoing passion and enthusiasm for supporting learners in practice.

The qualitative results of the survey and focus group are intertwined as the common themes were replicated across both arms of the study. There are areas of practice where educators feel less confident and would value more support. This does concur with Newstead, Johnston, Nisbet, and McAllister (2018) findings, but there were also clear motivating factors that outweigh the challenges for the educators. These findings support previous literature on the essential elements of successful practice-based education (Cassidy, Norris, and Williams, 2020; Hamshire and Jack, 2021; Jack and Hamshire, 2019; Jack, Hamshire, and Chambers, 2017; Plack, 2008). Defined roles, strong relationships, clear communication and agreed expectations between the practice educator and the learner are vital (Cassidy, Norris, and Williams, 2020). In addition to what is already known, this study demonstrates a clear need to embody a team culture with the learner as a key member.

Within the UK, there is a clear directive around education being "everybody's business" and the importance of communities of practice (Cassidy, Norris, and Williams, 2020; Hamshire et al., 2019) to share the workload and increase capacity. Professional duty, positive role modeling and supporting the future workforce (Hills et al., 2019; Plack, 2008) were all key motivators reported in this study to engaging in practice-based

education. However, despite dated literature that supports multiple models of supervision (Moore, Morris, Crouch, and Martin, 2003), our survey findings demonstrate that in the UK, a one learner: one educator model remains the most common method of practice-based education. Furthermore, within the survey, it was also identified that practice educators had development needs in relation to supporting multiple learners. Confidence in this area remains low. This is disappointing, given that Newstead, Johnston, Nisbet, and McAllister (2018) reported similar findings from the Australian setting. There is much to be learnt and applied to physiotherapy globally, from the growing body of literature that supports peer learning and the benefits of collaborative supervision models in other professional groups (Harvey and Uren, 2019; Hill, Woodward, and Arthur, 2020). There needs to be a significant shift from a longstanding established practice that still largely retains one learner: one educator model. Practice-based education needs to further embed a team educational culture (Alpine, Caldas, and Barrett, 2019; Currens, 2003; Lekkas et al., 2007; Moore, Morris, Crouch, and Martin, 2003; Norwood and Igo, 2019). This could potentially increase opportunities to support and grow the profession. Setting expectations for both the learner and educator with support from the university academic staff was acknowledged as key to the success of this approach.

Innovative developments have changed the landscape for physiotherapy practice-based education, particularly over the course of the last two years in response to the COVID-19 pandemic (Dario and Simic, 2021; Stout, Roberts, Maxwell-Scott, and Gothard, 2021). The development of leadership and research focused placements and an increase in digital delivery and technology enhanced services have enabled learners to benefit from new services and experiences to complement their clinical skills. Some of these, however, remain a challenge for some members.

The survey results outlined four domains where confidence and experience were notably lower. However, there are targeted resources that exist to offer support in these areas and these resources need wider promotion across national and international platforms. This will enable practice educators to better support challenging learners as well as exploring multiple models of supervision. Both the survey and focus groups identified that sharing of good practice, resources and innovation is needed to enhance skills and confidence, particularly with facilitation of peer learning and technology enhanced care services.

There was a clear commonality across both elements of data collection within this study. The qualitative findings from the survey were further explored and replicated in three focus groups that took place. The barriers to engaging in practice-based education were highlighted in the survey data and then discussed within the focus groups to facilitate solutions. Managing increasing workloads and having sufficient time to support learners were the key barriers identified. This concurs with the findings of Barber et al. (2019) who reported similar findings in medical education, and Peiris et al. (2022), who explored barriers within private physiotherapy practice. These findings highlight the high level organizational support is required to manage workloads and facilitate greater engagement in practice-based education.

There is currently a lack of robust literature to understand the constraints faced by educators when supporting learners in practice (Francis et al., 2016; Healey, 2008; Hills et al., 2019; Kumar and Greenhill, 2016; McCallum et al., 2013) and the findings of this study contribute to the evidence base in providing some further understanding of these barriers. The survey results identified practical barriers for the individual. The focus groups explored more holistically organizational culture and professional barriers. The findings highlighted a lack of commitment to practice-based education at different organizational levels and a general resistance to change across the profession for some members. Awareness of barriers facilitates the creation of positive solutions and innovative thinking to enable a shift in how practice-based education is viewed in physiotherapy.

Looking to the future highlighted the expectations of the national professional body in providing guidance and practical solutions. In addition, it was also clear that within individual organizations, managers need to engage those who do not see education as part of their role. There was a strong sense of professional expectation threading through the data from both phases of the study and a demand that education should be an integral part of everybody's commitment. Furthermore, the participants highlighted that they felt required to "give something back" and ensure that the future workforce is fully equipped with essential knowledge and skills (Hills et al., 2019; Plack, 2008). It is recognized, however, that this may differ across different international settings, and this data is grounded in the experiences of the UK-based healthcare practice.

The strongest message from the data was around the need for cultural change. There was a recognition that the profession is not static and practice-based education needs to innovate and shift in response. The focus group results highlight that education is a key component of the four pillars/strands of clinical practice within the UK (Health Education England, 2017). It is evident that

there must be a shift to embed practice-based education across the whole profession. All members must be accountable for the development of the future physiotherapy workforce (Hills et al., 2019).

This study was not without its limitations. While the online survey tool was validated, we did add additional questions to represent the UK context for practice-based education, which may affect its content validity (Appendix 1). The response rate was low at 208, given the number of registrants within the UK who have a role in supporting learners in practice. However, the response rate was higher than that of Newstead, Johnston, Nisbet, and McAllister (2018), and findings remain similar across different geographical platforms.

The timing of this research coincided with ongoing recovery from the COVID-19 pandemic, which may have further impacted on response rates and a willingness to participate in the research. The focus group participants were a self-selected small group of experienced physiotherapists who were heavily invested in practice-based education. This may have skewed the data, leading to bias within the focus group findings.

The choice of focus groups rather than individual interviews may have limited participation for some individuals who are less willing to share their opinions within a group setting. Those who did attend provided an equal contribution to the discussions with no notable hesitation from any participants. This may again relate to the level of experience of the participants, and individual interviews may have provided additional insights through different demographics and the ability to disclose opinions more freely.

Despite these limitations, these are important findings, particularly from the qualitative data, that support and add to previous work, through the lens of the educator specifically, around motivations to engage in practice-based education and the need for cultural change within the profession. Further research is needed to explore the experiences of new practice educators and learners through individual interviews, to make comparisons with existing data around benefits, challenges, and the future of practice-based physiotherapy education.

Conclusions

Practice-based education is an integral component of physiotherapy education. This study adds to the existing evidence base in identifying the future support educators will need to recognize, develop and maintain this essential role. The importance of the environment in which practice-based education takes place and the need

for a collaborative, team approach is clearly demonstrated. Accountability for embedding education by all team members as a key pillar/strand of practice is vital to the future of physiotherapy. Recognition of the barriers to engagement is fundamental to the success of a solution focused approach to changing the shape of practice-based education moving forwards. Professional body accountability is essential to model change and enable a global shift and reimagining of physiotherapy practice-based education.

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Appendix

Appendix 1. Additional UK based questions added to the online survey

Section 4 - **Experiences/opinions continued**. Participants were asked to indicate their level of *experience* (Likert scale: Not at all experienced; Slightly experienced; Moderately experienced; very experienced; N/A) with the following components of Pre-reg physiotherapy clinical education:

29	Mentoring/Coaching Students	Likert scale
30	Facilitating Peer Learning	Likert scale
31	TECS (Technology Enabled Care Services – including virtual remote consultations and contact with patients and or students)	Likert scale

Section 4 - **Experiences/opinions continued**. Participants were asked to indicate their level of *confidence* (Likert scale: Not at all confident; Slightly confident; Moderately confident; very confident; N/A) with the following components of Pre-reg physiotherapy clinical education:

48	Mentoring/Coaching Students	Likert scale
49	Facilitating Peer Learning	Likert scale
50	TECS (Technology Enabled Care Services – including virtual remote consultations and contact with patients and or students)	Likert scale

Appendix 2. Focus group interview topic guide

The interview topics were derived from the open survey responses as areas that required further exploration and clarification:

(1) Current role and engagement in practice-based education
(2) Experience levels for the individual and the organization
(3) Benefits to supporting learners in practice (focus on themes from questionnaire for additional clarity)
(4) Challenges to supporting learners in practice (as above)
(5) Motivations to supporting learners in practice-based education
(6) Support required moving forwards to develop practice-based education for the future
(7) Innovation in practice-based education for the future