Learning experiences from an Interprofessional, University-Based, Student-Led Healthcare Clinic in the UK

LEARNING EXPERIENCES FROM AN INTERPROFESSIONAL, UNIVERSITY-BASED, STUDENT-LED HEALTHCARE CLINIC IN THE UK

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INTRODUCTION

Interprofessional education, as defined by the World Health Organization (2010), involves students learning alongside, from, and about one another. This approach offers future healthcare professionals the chance to gain insights into interprofessional collaboration during their university education, aimed at preparing them to effectively contribute to interprofessional teams upon entering the workforce (Olson and Bialocerkowski, 2014). An example of how interprofessional education can be implemented is through student-led clinics (SLCs), where students have the opportunity to engage directly with patients as part of the clinical training component of their university programs. These clinics offer students a chance to acquire practical experience in interacting with patients in a hands-on environment, with the added benefit of receiving guidance and support from clinical educators (Kavanagh, Kearns, and McGarry, 2015). When student-led clinics serve as a placement setting for students across various healthcare professions, they present an opportunity to incorporate interprofessional education within the clinic environment (Frakes et al., 2011). These clinics have an established history within medical schools (Butala et al., 2013) and are recognised in America, Canada and Australia as a means of healthcare provision for underserved and/or uninsured populations (Frakes et al., 2011). In the UK, SLCs are in their infancy, with little published evidence of their use in healthcare education (Kavanagh, Kearns, and McGarry, 2015).

A growing body of international evidence advocates for SLCs, demonstrating their ability to foster core skills and competencies within the students, not only in terms of clinical communication and teamworking, but also leadership communication and teamworking (Black et al., 2013; Buckley, Vu, and Remedios, 2014; Schutte et al., 2017). When these clinics incorporate interprofessional work, additional personal and professional development is noted in the students, including improved role recognition and understanding (Schutte et al., 2017). As a result, SLCs can provide novel interprofessional education (IPE) and collaborative practice opportunities within

a supported clinical setting (Swartz, 2012). A recent Scoping review (Prestes Vargas et al., 2024) also concluded that despite challenges, interprofessional student-led clinics can positively impact learning and patient experiences.

There has been sustained demand for Allied-Health Professional (AHP) courses to incorporate IPE throughout their programmes (Quality Assurance Agency, QAA, 2001), with the impetus arising in government policy and professional regulatory bodies' standards (Department of Health, DoH, 2008; Health and Care Professional Council, 2017). In 2010, the World Health Organisation (WHO) launched a 'Framework for Action on Inter-professional Education and Collaborative Practice' to expedite IPE growth. The framework highlighted the importance of IPE in developing a collaborative practice-ready workforce that has positive attitudes toward collaboration (WHO, 2010: 7). The Centre for the Advancement of Interprofessional Education (CAIPE, 2014) identifies IPE occurring "…when two or more professions learn with, from and about each other to improve collaboration and quality of care" (Barr, 2002: 17). This notion of learning with, from and about aligns with the theory that learning occurs within a social context, resulting in the construction of new meaning and knowledge (Wilson and Peterson, 2006). Indeed, Fox (2001) sees learning as an active process, with individuals bringing their own past learning experiences to the situation, and building on these with a sharing of knowledge, to create alternate understandings and interpretations. When relating this to IPE within an SLC p environment, interprofessional collaboration—both during patient encounters and in collective decision-making regarding operational procedures within the clinic—can be seen to encourage the sharing of ideas, allowing learners to construct new meaning and understanding together (Van Meter and Stevens, 2000).

"THIS NOTION OF LEARNING WITH, FROM AND ABOUT ALIGNS WITH THE THEORY THAT LEARNING OCCURS WITHIN A SOCIAL CONTEXT,..."

A recent rapid review focusing on interprofessional education in student-led clinics indicated that student-led clinics are a suitable setting for the delivery of interprofessional education to allied health students; however, more research is needed that considers the impact of specific components of the interprofessional education models on student outcomes (Hopkins, Bacon and Flynn, 2022). In addition, recent qualitative research on students' perceptions of a UK physiotherapy student-led clinic suggested that physiotherapy SLCs in a UK context can contribute positively to student experience and skill development, particularly to the learning environment, development of clinical skills, leadership, and utonomy. However, further research is needed—both in the UK and internationally—on SLC models across different courses and at various stages (Wynne and Cooper, 2023).

This study explored the learning experiences of students in non-elective, university-based, interprofessional student-led clinics in the UK, and examined their perceptions of the clinic as a pedagogic learning environment.

METHODS

Recruitment and Participants

Purposive sampling was chosen in this study (Tritter and Landstad, 2020). Students were included if they were studying, or had studied, BSc (Hons) Physiotherapy or BSc (Hons) Occupational Therapy at the university and had attended the interprofessional SLC as one of their practice placements (placement year 1, year 2, or year 3) within the last two years. A time limitation of two years was chosen to limit recall bias and to increase the number of possible participants (Althubaiti, 2016). Students were excluded if they had attended a uniprofessional clinic, which involves healthcare practice within a single profession, as the purpose of this study was to research the learning experiences of students who attended an interprofessional SLC.

Recruitment for the study was done through a gatekeeper, who posted requests for participation on the university's social media. Those who were interested were directed to the main researcher (KW-University lecturer) to receive additional information and consent forms. No previous relationship with the participants was established before study commencement.

Ethics

The study received ethics approval from the University of Worcester Institutional Review Board.

Topic guide

A topic guide was created based on the findings of a literature review that the authors had conducted. The topic guide consisted of semi-structured, open-ended questions that addressed the research question (Braun and Clarke, 2013). It was reviewed by the research team and finalised during the pilot online focus group (OFG).

Pilot OFG

A pilot OFG was conducted, with representatives from the target group, to revise the question structure and determine moderator effectiveness, thereby improving the quality of the data obtained (Breen 2006). The pilot consisted of 2 participants and lasted 20 minutes. Participants were asked for their feedback regarding the instructions they received, the length of time the OFG lasted, and the content of the questions. None of the participants reported any issues with connectivity or accessing the virtual meeting space. The pilot also allowed the researcher to familiarise herself with the process involved in retrieving the recording and transcript of the OFG via Microsoft Stream. As a result of the pilot, the questions were deemed satisfactory in terms of content and structure. However, minor changes were made to the wording of some questions to enhance clarity and ensure they were easily understood by all participants. These changes were made to the wording of some questions to enhance clarity and ensure they were easily

understood by all made to the wording of some questions to enhance clarity and ensure they were easily understood by all participants. These changes were based on specific feedback from the pilot participants and aimed at refining the overall question structure.

Data Generation

Of the potential 45 students who had attended the clinic (30 physiotherapy and 15 occupational therapy students) in the last two academic years, 9 responded positively (5 physiotherapy students and 4 occupational therapy students); however, 2 occupational therapy students dropped out of the study due to other commitments. Participants were then contacted via email, where they received details of the intended research and a consent form. Once signed consent forms were returned, participants were sent an email with a selection of proposed dates and times to schedule the OFG. Emails were sent with an embedded link to a scheduled meeting via Microsoft Teams. 2 OFGs were formed with 4 and 3 participants respectively.

The OFGs lasted 45 minutes. The researcher was able to facilitate the groups at a reasonable pace and ensured that all participants were given equal opportunity to contribute to the discussions.

Participants were asked to follow the link and log into the meeting 10 minutes before the start time to allow for any technical issues to be rectified, as suggested by Tuttas (2014). The researcher logged into the meeting 15 minutes before the start time and used the “waiting lobby” function on Teams to ensure that only recruited participants were able to enter. Before commencing the OFG, the researcher welcomed everyone, provided an overview of the research topic, and established "ground rules." The "ground rules" did not impact the integrity of the study or the quality of information received.

Transcripts

The transcripts were downloaded from Microsoft Stream and reviewed against the saved video recordings to check for any unidentified words, to clarify which participant was speaking when, and to add any notations for pauses and non-verbal observations (Sutton and Austin, 2015). The completed transcripts were then saved onto a password-protected hard drive and stored in an encrypted file. Student names were anonymised in accordance with the agreed ethical approval (Braun and Clarke, 2013: 169).

Video Recordings

The video recordings were captured using Microsoft Teams, which provided a secure and reliable platform for conducting the online focus groups (OFGs). The recordings were automatically saved to Microsoft Stream, a secure video management service integrated with Microsoft Teams. To ensure the protection of the video data, the recordings were stored in an encrypted format on Microsoft Stream. Access to the recordings was restricted to the researcher and authorised personnel only, with strict access controls in place. Additionally, the video data was backed up on a password-protected hard drive and stored in an encrypted file, ensuring further security. All student names and identifying information were anonymised in accordance with the ethical approval guidelines.

Data Analysis

Data analysis included thematic analysis (TA), a flexible approach, not linked to an epistemological position, that can be applied across a range of theoretical approaches (Braun and Clarke, 2006). Immersion and familiarisation of the data began during transcription. Initial coding followed, using both in vivo (Rivas, 2012) and latent (researcher-derived) coding (Braun and Clarke, 2013). As Skjott Linneberg and Kersgaard (2019) reiterate, the use of inductive coding, such as in vivo, allows for the codes to remain loyal to the data, however, as this research took a constructivist approach, an interpretive method was also utilised (Braun and Clarke, 2013). After the first cycle of initial coding, a second cycle was completed to refine the codes, categorise patterns and begin to generate preliminary, candidate themes (Rivas, 2012). Finally, these candidate hemes were reviewed against the research question (Braun and Clarke, 2013: 234) to generate the final themes. Two members of the team conducted the data analysis (KW and HF).

RESULTS

Data collection took place in July 2020. Participant characteristics can be found in Table 1. Following the coding and thematic analysis of the generated data, as mentioned above, three main themes were identified: (1) Learning With, From and About Others; (2) Personal and Professional Development; and (3) Learning Environment. The themes are presented below with illustrative quotations from the data.

Table 1

Focus group participant information.

Participant	Area of Study	SLC Placement	OFG
P1	PT	Year 3	1
P2	PT	Year 3	1
P3	PT	Year 2	2
P4	PT	Year 3	1
P5	OT	Year 2	1
P6	PT	Year 1	2
P7	OT	Year 3	2

Note. PT - Physiotherapy, OT - Occupational Therapy, SLC - Student-Led Clinic, OFG - Online Focus Group

Learning With, From and About Others

The focus of a SLC is to encourage students to work collaboratively in organising and delivering public health services (Schutte et al., 2017). Participants acknowledged the learning they experienced working together, occurring through teamwork and collective problem-solving.

These experiences were gained in different aspects of the clinic, including the administration and organisational running of the clinic, working on projects, and assessing and treating patients in the clinic. Participants had to learn to be flexible and adaptable as a team while supporting each other:

> *"If people needed to block time out 'cause they were running the project side of it then other people could take over their, say, patients and then it worked well. That way the flexibility or … if someone needed to go into the clinic then someone could do a warmup in the project side of it" - P4*

This helped foster collective and creative problem solving:

> *"You get to the right, you know, to the best option for the patient. I think 'cause you've been able to explore and just rest and reflect on it between a large group of people rather than you feeling like you're reading an exam" - P1*

Participants commented that they considered it beneficial to be able to ask the team for help with ideas about their patients:

> *"…you could see a patient and then you could discuss ideas and we could be really creative amongst the group" -P4*
>
> *"…just being able to speak about a patient immediately before you go in. Like, anyone got any ideas? … you know, have a look and discussion about what you might be able to do … which I don't think you'd get anywhere else" - P1*

Conversely, one participant did reflect that the support of the team may have impeded effective learning by creating too comfortable an environment and preventing them from challenging themselves:

> *"I think I was probably quite guilty of what I was good at, I was sticking to … you kind of stay in the comfort zone and using the strength of the team" - P4*

An interesting insight that was highlighted within the discussions was the importance of group dynamics and individual personalities, and how this impacted the team. One participant noted how a clash of personalities may have led to a less cohesive team:

> *"it was probably the dynamic of the group like who was in it and I think if we had a different set of people, we might have gelled a bit better" - P5*

The same participant noted how their learning was hindered by the perceived poor teamworking:

> *"I felt at times I was being defensive. I wasn't open to learning as much as say I was on a different placement where I wasn't having to defend myself all the time" - P5*

Participants recognised the learning they experienced through interactions with their peers, recognising their strengths and knowledge to aid the development of their own skills:

> *"You could almost be like oh, I'll take that patient with like someone else who I know is more confident to see that type of patient and I'm not" - P2*

The participants also compared themselves to their peers, helping to identify gaps in their own knowledge through recognition of their peers' skills and abilities:

> *"… 'cause I have something to pitch myself against, something to compare. I'm kind of, oh, that's a gap in my knowledge"*

This was particularly pertinent when learning from peers in different cohorts:

> *"It was really good seeing the difference in like watching an assessment with a third year compared to how I was doing assessments and thinking, oh yeah. *** asking that and *** getting him to do that" - P4*

Participants reflected on how their experiences informed their appreciation of each other's professions through collaborative sharing of ideas and constructing new understanding together:

> *"When we did the project stuff, we kind of decided at the beginning that the physios would do the exercise and the OTs the education side of things and I think kind of somewhere towards the middle we realised perhaps it would have been better had we kind of shared knowledge from the outset…we should have changed things and not kind of decided on professional roles too soon" - P1*

One participant, an OT graduate, considered how it was only upon qualifying that they had appreciated its impact:

> *"…it really showed me how closely you can work with physios and obviously now having a job you don't realise when you're at university how closely it is an important thing to work with the physios and how that interchanges in a job…" - P7*

All the participants discussed positive learning experiences based on their interactions with the patients and service users, seeing it as a key aspect of their learning within the clinic:

> *"I think it just showed me the importance that actually just listening to somebody can make a big impact on them 'cause they feel heard" - P7*

Participants also commented that the clinic had altered the way they approached patient care, making it more holistic and patient-centered:

> *"I think that's something you don't get elsewhere. Say you had a patient that was struggling to walk outdoors, and you could say it was balance … and you made her an assault course and she found that way more beneficial than say a graded exercise or Otago program. That just means nothing to her … they often you know say we're person-centered, but are we really?" - P4*

Other participants expanded on this and discussed how the clinic had facilitated their learning and appreciation of the patients' conditions and determinants of health:

> *"The yoga group that we'd set up for the homeless people worked really well. I think it was a group of people who weren't getting much engagement anywhere else. And this was something that we were doing for them" - P5*

Learning experiences gained from supervision were also considered by the participants:

> *"There were always people to ask, even if they weren't OT. It didn't matter what discipline they were from" - P5*

However, one participant reported that having a supervisor from a different profession hindered their learning experiences in terms of clinical skills:

> *"My practice educator [supervisor] came in from an OT perspective and as much as she was an amazing mentor, I don't think it quite did it for my physio clinical skills and I always thought like I needed a lot more reassurance" - P4*

A need for a more balanced and formal level of supervision was also identified, with the number of students reflected in the number of supervisors available:

> *"There wasn't the right level of support. I don't think we saw our supervisor … sometimes up to like 2 or 3 weeks. So sometimes we kind of felt like we were a bit in limbo … some of our time could have been better used" - P7*

> *"It would have been nice to have more kind of people to shadow from … you had a lot of people kind of trying to supervise … but I think some of that workload could've been shared" - P3*

Personal and Professional Development

The experience of the SLC appeared to be empowering, helping participants develop independence and confidence, and facilitating their personal and professional identity, particularly when working alongside different cohorts:

> *"Being independent. That's what kickstarted my confidence because before that I was like oh God I don't know if I can be a physio. I don't know if I'm good enough for this … but being in charge seeing my own patient … was actually able to get some sense of achievement … just thinking I can do this" - P1*

> *"sometimes on a different placement you might see your practice educator … they've been qualified for 15 years. You look at them and you think I will never get to that stage … but when they're just the year above, you think oh, if they can do it then I can do it" - P6*

They also reported feeling less pressure and increased confidence because patients appreciated their student status and were respectful of their learning needs when compared to more traditional placements:

> *"I didn't feel like you get that sort of like, oh, it's a student, because you kind of know that's why they've come … they knew it was a student-led clinic rather than in my MSK placement, obviously these people were given an NHS appointment letter, and then a student turns up, and sometimes I think if they don't know that's what they would get, it can be a bit awkward. And then that maybe affects your confidence then as well" - P4*

The clinic also appeared to help develop their personal skills, including communication, self-assurance, and ability to apply and build on previous non-clinical experience:

> *"Out of all my placements, it's probably the only one that's taken into account my previous non physio background like my kind of work experience and my work history, so I've been able to bring in other skills a little bit more" - P3*

Learning experiences relating to participants' professional development were identified throughout the discussions with recognition that the clinic offered opportunities to expedite their clinical reasoning and evidence-based practice:

> *"You go off and do your own research, maybe with another student … and that sort of improves your skills of looking for the clinical reasoning. And then if it works, it's great. But then if it doesn't, it's still okay. It's a big learning experience and you understand the clinical reasoning better" - P7*

Participants also reflected that attending the clinic helped expedite their non-clinical skills, including organisation:

> *"…that was just all part of the kind of organisation, managing your own timetable and not just with other placements they class organisation is kind of you know, the start of the day handover and pick three patients that are important for the day … but actually having to plan 3 or 4 weeks in advance what you're going to do" - P4*

Learning Environment

The participants reflected on perceived ownership of the clinic and a sense of pride, describing it as a safe place to learn:

> *"Putting your stamp on things and just being able to speak up … you just wouldn't have the confidence to do it in another placement" - P4*

> *"I think it was easier to voice your opinions there than on other placements … I think that there's not that pressure to sort of like, oh, I've got to" - P1*

With the sense of ownership came increased responsibility, particularly when compared to more "traditional" placements:

> *"It's the other side of it that you don't get taught at uni like what to do when there's been a clash of appointments or when you have to, you know, talk to someone's family member and book an appointment through them" - P2*

> *"…managing your own caseload, booking people in, and things like that … I don't think you get elsewhere, which is really good, and you learn a lot from that" - P4*

This also seemed to engender a greater sense of freedom. Participants discussed being autonomous and enjoyed being able to try new things, while others commented that the freedom also gave them time to reflect on, and therefore consolidate, their learning:

"In the clinic, we were able to kind of find out for ourselves and let's try this. Did it work? If it didn't work, why didn't it? We were able to kind of make those decisions and learn through those experiences ourselves rather than having to dictate to us beforehand" - P4

"Time was the biggest one for me. Not feeling rushed like that made such a difference … which meant like you could focus so much more on your actual treatment … rather than worrying, like, oh, I'm gonna get marked down for my time management" - P1

However, other participants reported that too much freedom hindered their learning:

"I think I struggled a bit too much with the independence of it. There was a bit too much independence" - P7

"Time management was a massive issue for me … I found it worked against me because I had that autonomy … and I found myself working extra time because I wanted to do well … I didn't always declare that extra time … in the end, it did affect my health" - P3

The clinic offered a greater scope of possibilities and learning opportunities compared to other placements. Participants liked being able to run their own projects, to choose how much or little input they had, and the diversity of the patients:

"I think like I say the variety of it … you won't get that in any of the other placements" - P4

"We visited the homeless shelter … we did a Pilates session for the deaf which was really interesting, and it was little experiences like that really kind of added to it" - P5

Participants also felt that the clinic helped them to identify their own specific learning needs and accommodated their learning style more than other placements:

"…I think I developed my confidence in being able to voice like my learning needs a bit more on placement rather than just going along with everything" - P1

"I think the clinic sort of allowed you to sort of work in a way that is best for you" - P2

DISCUSSION

This study aimed to explore the learning experiences of undergraduate occupational therapy and physiotherapy students who attended an interprofessional, non-elective, university-based SLC, and how the students perceived the clinic as a pedagogic learning environment.

The results of this evaluation are consistent with previous literature on the effectiveness of SLCs and demonstrate that such clinics can help facilitate various learning experiences that promote the development of professional and personal skills,

knowledge and identity. These outcomes align with the standards of practice set by professional regulatory bodies. (CSP, 2013; HCPC, 2017; RCOT, 2019).

Learning with, from and about others

Students identified the learning experiences they gained with, from and about others, including their peers, patients, and supervisors, supporting the concept that SLCs enhance IPE opportunities (Hopkins, Bacon and Flynn, 2022) and meet the requirements set out by their professional regulatory bodies' standards and government policy, including interprofessional collaboration and preparedness to respond to the dynamics of evolving healthcare needs (DoH, 2008; HCPC, 2017).

Learning with, from and about peers

Students highlighted the learning opportunities that emerged from interactions with their peers, including interprofessional exchanges and engagements with students in advanced cohorts. This supports previous findings that attending a student-led clinic (SLC) enhances students' attitudes towards interprofessional collaboration (Lie et al., 2016; Passmore et al., 2016). Being able to collaborate effectively with other healthcare professionals and have a reciprocal appreciation of their skills and knowledge are key competencies required for interprofessional collaborative practice (WHO, 2010). In the study by Passmore et al. (2016), students worked in multi-disciplinary teams within the SLC to deliver care for their patients. This resulted in the students developing competence as advocates for both their patients and their profession, as it encouraged sharing of knowledge and expertise. Collaborative learning in the SLC in this evaluation occurred before, during, and following patient encounters, including debates on assessment and treatment strategies, research on the evidence base for projects, and day-to-day operational duties of the clinic. This aligns with the recommendations from the Chartered Society of Physiotherapy (CSP, 2013) and the Royal College of Occupational Therapists (RCOT, 2019).

"...LEARNING IS CONSTRUCTED THROUGH COLLABORATIVE SOCIAL INTERACTIONS WITH SIGNIFICANT OTHERS..."

The theoretical foundation of peer learning is rooted in the principles of social learning and constructivism, which assert that learning is constructed through collaborative social interactions with significant others (McInerney and McInerney, 2006). Both educational and health education literature (Stenberg and Carlson, 2015; Pålsson et al., 2017) extensively document its benefits, providing evidence for its positive impact on students' learning experiences. Peer learning involves using peer support and feedback to develop competence and confidence, reduce stress and anxiety, and increase self-efficacy, with peers acting as role models to augment clinical knowledge (Markowski et al., 2021). In their systematic review, Markowski et al. (2021) identified peer learning as being most effective when pairing first and third-year students: the first years gain skills and knowledge, whereas the third years hone their clinical skills while preparing for working practice through leadership and mentoring. That effect was also seen in this

study, wherein students valued time spent with students from advanced cohorts and were able to discern improved ways of assessing and treating patients. The students also reported that it was easier to relate to peers than to their supervisor and welcomed opportunities to ask peers their opinion and clarification when unsure. Roberts (2009: 369) calls this “being in the same boat” and acknowledges the importance of this student support. When student nurses learn through peers, friendship allows them to feel free to ‘ask anything’. She highlights the notion that students usually perceive themselves on the periphery to practice compared to qualified professionals and do not feel like a true member of the team when on placement, preferring not to ask too many questions to fit in. Within the SLC, there is no pre-determined hierarchical culture of qualified and unqualified; it is a student-led environment that seeks to empower students and thus promote peer learning through collaborative social interactions (Lie et al., 2016).

However, students in this study also noted limitations that stemmed from their peer interactions within the SLC. Working with their peers created a too comfortable environment and, at times, prevented them from challenging themselves. In a study of student nurses’ peer learning during clinical practice, Ravanipour, Bahreini and Ravanipour (2015) reported on the perceived “paradoxical dualism” of peer learning – an increase in self-confidence, skill acquisition, and a decrease in stress and anxiety, but also increased dependency on others and reduced capacity to demonstrate individual capabilities. One student in this evaluation reflected on the conflict that arose between peers, citing a clash of personalities as a possible cause, remarking that it hindered team cohesiveness and their ability to learn compared to other placements. Understanding team conflict is an essential skill required of all healthcare professionals (Sexton and Orchard, 2016), with conflict within healthcare teams recognised as negatively impacting patient care and safety (Cullati et al., 2019). According to Greer and Dannals (2017), team conflict arises when there are perceived incompatible goals or interests within the team, with interpersonal conflict manifesting as animosity and tension. Within the SLC setting, this lack of collaboration and team cohesion undermines a significant aim of the clinic and suggests the need for improved understanding and communication strategies between the students, facilitated by the supervisors (Rodger et al., 2014). Eichbaum (2018) argues that conflict should be recognised as unavoidable and may have the potential to support innovation when it is successfully integrated into collaborative teamworking. It is also a necessity of the professional requirements for all AHPs to be able to demonstrate positive attitudes towards teamworking and communication to ensure effective responses to the evolving healthcare needs of the population (Costa and Burkhardt, 2003).

Learning with, from and about patients

Similar to Ambrose et al.’s study (2015), students in this evaluation discussed the learning they had acquired through interactions with patients and service users in the clinic, particularly in terms of developing a more person-centred approach and a better understanding of the social determinants of

health. The WHO calls for a workforce that has greater knowledge in the social determinants of health (WHO, n.d.), while Swain et al. (2014) suggest there is an increased necessity for healthcare professionals to expand their gamut of competencies and activities directly with their patients. The NHS Long-term Plan's (NHS England, 2019) commitment to a more personalised approach to healthcare is a catalyst for AHPs to be able to offer more community-based support and social prescribing; however, Brown, White and McGregory (2021) highlight the lack of appropriate teaching and question how AHPs can become advocates for their patients. Traditional learning opportunities often arise during classroom-based activities, complemented with experiential learning in placement settings (Doobay-Persaud et al., 2019). It therefore appears that this SLC may provide the university an opportunity to offer their students a more meaningful approach to develop these necessary skills and meet the professional requirements established by their professional bodies (Abou-Hamde and Hopfgartner, 2018; CSP, 2013; HCPC, 2017; RCOT, 2019).

Learning with, from and about supervisors

This evaluation highlighted the learning the students gained from and about their supervisor, including the importance of the supervisory relationship and availability in aiding effective student learning within a SLC. Students reported that the lack of suitable supervision, in terms of supervisor accessibility and scope of supervision, impeded learning opportunities, particularly when learning profession-specific clinical skills. As noted earlier, the role of the supervisor within a SLC was considered to be key in establishing and developing students' understanding and appreciation of professional roles (Nicol and Forman, 2014). Previous literature remarks on the learning that occurs during interactions with supervisors when debating patient management (Housley et al., 2018), providing continuous feedback, as well as the supervisor's approachability and attitude towards supervision (Lie et al., 2016; and Froberg et al., 2018).

In this study, students may have been placed with a supervisor who was not of their profession. This model is approved by the HCPC and professional bodies, which mandate that a supervisor must be a registered healthcare professional, but that they do not need to be profession-specific (CSP, 2016; RCOT, 2019). Moreover, one supervisor was part-time and allocated hours throughout the placement; these were seen by the students as possible limitations to their learning experiences. As Rodger et al. (2014) note, students perceive excellence in practice education as facilitating learning opportunities and experiences. In their study, Rodger et al.'s students valued their educators' expertise in helping to guide their developing skills, highlighting the importance that students place on the supervisory relationship in helping to forge a professional identity. Students in this evaluation did acknowledge the need to learn non-clinical attributes and that a mentor from a different profession was able to facilitate that aspect of their learning; however, it also emphasised students' desire to learn profession-specific skills,

and that this required what students perceived as appropriate supervision.

Healthcare students need to reconcile the implications of working differently with a need to challenge the negative attitudes and culture that non-traditional placements often accrue (Kyte, Frank and Thomas, 2018). This evaluation highlights the persistent mindset among AHP students, despite the CSP's encouragement of innovation, resourcefulness, and a shift away from the traditional concept of 'core' placements (CSP, 2020a). The CSP fosters an outcome-based approach to placements, which is built on its Learning and Development Principles (CSP, 2020b; see Appendix 8) and reflects the breadth of the profession. This approach is designed to prepare new graduates to confidently enter a healthcare environment marked by change and uncertainty, as well as to embrace the emerging roles available to AHPs. Health Education England (2020: 2) also recognises that there is "…much more to placement" and that profession-specific competencies can be developed across a variety of placement settings.

"HEALTHCARE STUDENTS NEED TO RECONCILE THE IMPLICATIONS OF WORKING DIFFERENTLY WITH A NEED TO CHALLENGE THE NEGATIVE ATTITUDES AND CULTURE THAT NON-TRADITIONAL PLACEMENTS OFTEN ACCRUE…"

The above suggests that students need greater preparation before their placement to be able to better understand the value of such placements to their learning and graduate skills (Thomas and Rodger, 2011). With the drive by the WHO for greater IPE (WHO, 2010), as well as fiscal constraints, staffing shortages and increased numbers of students (Beech et al., 2019: 7), interprofessional practice education supervision appears to be an effective method for facilitating learning within a SLC; however, the ability of students to access appropriate, profession-specific supervision is paramount if the students' learning is to be effective (Rodger et al., 2014).

Ascertaining the right level of supervisory support is critical: students need to feel challenged but supported, achieving a balance in how much autonomy they are afforded (Rodger et al., 2014). In this evaluation, two students found that the extent of independence hindered their learning and led to feelings of being overwhelmed. Whether this was due to a lack of supervisor availability or the supervisory model adopted needs further exploration. However, it highlights the need for supervisors to provide opportunities for autonomy while offering thoughtful support to foster the development of independence. This suggests that a scaffolding approach could be an effective tool for optimal growth (Rodger et al., 2014).

Despite these perceived barriers to their learning, the students in this evaluation appreciated and valued the supervision that they received, viewing it as a means of helping to develop their professional identity. The construction of new meaning and understanding was fostered through a supportive student-supervisor relationship. In Rodger et al.'s (2014) study, student OTs commented on

being more inclined to take risks when they had a supportive relationship with their supervisor. They identified qualities in their supervisors, such as patience, being approachable, non-judgemental, and trusting, as important in helping them to develop their competencies and identity. Within this evaluation, students reported having the freedom and autonomy to try new things and having time with their patients without worrying about whether their supervisor would mark them down, which they felt was unique to the clinic. They also stated that they felt able to ask for help when needed or provide an opinion without any retribution or judgment. This created what the students recognised as a safe place to learn, helping them consolidate their learning and develop a sense of pride.

Personal and Professional Development

The learning experiences from attending the SLC also provided the students opportunity to expedite their leadership skills. Although the students did not directly acknowledge this developing skill, aspects of the necessary competencies that are embedded within leadership were noted, including greater self-awareness, self-efficacy, and personal identity, as well as increased confidence and autonomy (NHS Leadership Academy, n.d.).

The Francis Report (2013) identified the importance of effective leadership skills in healthcare professionals to ensure patient safety and quality service delivery. However, newly qualified AHPs often feel underprepared and inadequate when taking on such roles (Bayliss-Pratt et al., 2013), and may not fully appreciate the various aspects of leadership (Francis-Sharma, 2016). In its model and guidelines for Health Care Education providers, Health Education England (HEE) (2018) identifies ten principles for pre-registration curricula programme design to aid in maximising leadership learning opportunities. Within these principles, enabling students to develop self-awareness and their identity as a healthcare professional can help define how students lead (Principle 3). The Academy of Medical Royal Colleges (2020: 7) suggests that "In forming their professional identity, individuals internalise the values, norms, skills and behaviours of their occupational group", with their identity being shaped by the perceptions and expectations of those they encounter. However, with the introduction of new roles and ways of working, there is a risk of 'homogenizing the distinctiveness' (Wald, 2015: 8) of healthcare professionals. Enabling individuals to retain a sense of their unique skills and roles is therefore paramount in ensuring effective collaborative practice and high quality, safe patient care (Gilburt, 2016).

The students in the SLC reported feeling empowered with greater self-awareness and self-efficacy, and a developed sense of personal and professional identity. These attributes were fostered through peer learning (particularly when the peer was from a more advanced year of training), identifying their own learning needs, self-reflection, collaborative problem-solving and teamworking, and enhanced non-clinical skills such as organisation. Principle 10 of HEE's (2018) programme design encourages the use of service users in learning about leadership. While it could be argued that

traditional placements offer the opportunity to engage with service users, students found that within the SLC, users were more understanding of their student status and learning needs when compared to other placements, leading to improved confidence and self-reliance. Principle 7 of HEE's (2018) model and guidelines for curricula design indicates the need for students to engage in active learning opportunities, suggesting the use of team-based improvement projects in aiding leadership development (p. 18). This supports the HCPC's SETs (HCPC, 2017) in allowing students to meet their standards of proficiency. Within the SLC, students worked in uniprofessional and interprofessional teams to identify, design, run and then evaluate a range of local health and wellbeing projects. Students reflected on how their experiences of working collaboratively on these projects informed their appreciation of professional roles and the sharing of ideas.

While the development of these skills may not be unique to SLCs (Golos and Tekuzener, 2019) and has been reported in role-emerging placements (Kyte, Frank and Thomas, 2018), this study suggests that SLCs may help limit role confusion and the potential blurring of practice boundaries. This, in turn, provides Higher Education Institutes (HEIs) with a valuable tool to foster professional identity and enhance students' confidence in advocating for their professions, thereby supporting the development of leadership skills (Matthews, Bialocerkowski and Molineux, 2019)

How do the students perceive the clinic as a pedagogic learning environment?

As a learning environment, the SLC appears to be effective at contributing to the development of the graduate attributes assessed by the degree programmes. This provides evidence as to how the clinic may assist with the degree programmes, meeting the HCPC's SETs (2017) and TEF application.

A unique aspect of the SLC that was highlighted by one student was the notion that the clinic encouraged students to draw on previous non-clinical knowledge and work experience to foster their learning, compared to their other placements. Considering operational aspects, project design, leadership, and teamworking skills encouraged students to think beyond the scope of their clinical training. This broader perspective helped them recognise the importance of additional skills in delivering transformative healthcare.

It also appears that the SLC helped the students progress through their hierarchy of learning needs and reach self-actualisation (Maslow, 1954). According to Maslow (1954), individuals' motivation is based on five tiered categories of needs which prescribe their behaviour, beginning with physiological (most basic), then moving up through to emotional, social, self-esteem, and finally reaching self-actualisation. Unless an individual's basic needs have been met, higher levels of the hierarchical pyramid will not be achieved, and effective learning will not take place (McLeod, 2020). By providing the

students with a safe and supportive environment to learn, promoting teamwork, and fostering understanding, the SLC helped them develop a sense of ownership and pride, which bolstered their self-esteem. As a result, the students began to recognise their potential, understand their individual learning needs, feel confident to take risks, and foster the development of their personal and professional identities.

The SLC can also be a facilitator for informal learning. Eraut (2004) views opportunistic, or reactive, learning as explicit but occurring near spontaneously, either during the middle of the action, or in response to an event with little time to think. Within a workplace setting, this may involve group problem-solving or hypothesis testing with no single individual acknowledged as the facilitator of these activities (Manuti et al., 2015). As students liaised and discussed patient management plans or developed interprofessional projects, the collective knowledge of the team encouraged debate, allowing students to gain awareness and understanding of interprofessional roles, an appreciation of individual expertise, and a strengthening of their own contributions. Manuti et al. (2015) also suggest that informal learning may occur during shadowing, or involve seeking out individuals who are perceived to have greater insight or competence. Students reported purposefully choosing to see patients with peers that they believed were more confident with specific skills, or from more advanced years of training, and found shadowing their supervisor in sessions beneficial to their learning opportunities.

Similarly, it appears the SLC facilitated implicit learning opportunities. According to Frensch and Rünger (2003), implicit learning may occur outside of conscious awareness. Simons and Ruijetrs (2004: 213) suggest it occurs when the activities individuals are performing lead to changes in their knowledge, skills, and attitudes without them realising what they have learned. Indeed, one student in this evaluation noted that it was not until they had graduated and were working as a qualified AHP that they understood and appreciated the importance of the IPE that occurred within the SLC, evidencing the effectiveness of the SLC in preparing the students for contemporary healthcare practice (CSP, 2013).

The SLC can also be considered an environment that facilitates deliberative, informal learning. Eraut (2004) defines this type of learning as espousing reflection and consolidation. Students appreciated having time and freedom to discuss and reflect individually, and especially with their peers, and felt this was a unique attribute of the clinic. Nisbet, Lincoln, and Dunn (2013) suggest that informal interprofessional learning opportunities often go unrecognised by students. They further argue that reflection—particularly as a team—promotes better integration and creates a team more responsive to change (Anderson, Sandars, and Kinnair, 2019).

Yet these learning opportunities may not be exclusive to this SLC. Housely et al. (2018) noted in their evaluation of interprofessional practice-based learning that their clinic appeared to be a “catalyst” for reactive learning. The student comments do

appear to suggest that the SLC was able to expedite these opportunities more than their other practice placement experiences. It is therefore important that clinical supervisors within SLCs are cognisant of the processes and tools that may promote or detract from these learning opportunities (Kent et al., 2017).

Further Implications and Recommendations

The findings of this study can be used to inform all stakeholders (students, educators, university managers, professional bodies, and service users) of the clinic's value and impact in helping students meet their practice-based learning needs and the expected standards set by the professional bodies (CSP, 2013; HCPC, 2017; RCOT, 2019). Dissemination will also provide evidence of the University's TEF application and better inform students as to the quality of learning supported by the University.

The findings do, however, highlight the need for greater preparation and guidance for both students and supervisors prior to the commencement of each placement, including clarification of expectations and opportunities (Thomson et al., 2016). Facilitating students' motivation and individual search for meaning, and acknowledging their expectations, can help alleviate fears, improving both their professional and personal performance (Bonsaksen et al., 2017). In addition, students' and supervisors' expectations must be aligned to promote an effective collaborative relationship that fosters this performance (Rodger et al., 2014). Golos and Tekuzener (2021) suggest that supervisors should be cognisant of the students' expectations before and during the placement, providing continual guidance and feedback associated with the learning processes.

Therefore, acknowledging and addressing expectations should help remediate the negative aspects identified here and expedite future learning opportunities that provide a greater scope of interprofessional practice.

"THE FINDINGS... HIGHLIGHT THE NEED FOR GREATER PREPARATION AND GUIDANCE FOR BOTH STUDENTS AND SUPERVISORS PRIOR TO THE COMMENCEMENT OF EACH PLACEMENT, INCLUDING CLARIFICATION OF EXPECTATIONS AND OPPORTUNITIES..."

Study Limitations

The small sample size represents the views and experiences of a selection of students who had attended an SLC from a single HEI, which should be considered when interpreting the results: transferability of this study's findings to other SLCs and/or student populations may be limited. The small sample size may be a result of participant availability and choice of method (OFG) (Braun and Clarke, 2013). Limiting the data collection to two OFGs may have resulted in fewer individuals being willing to participate. Allowing more time to collect data and promote the research may have encouraged more individuals to volunteer (Newington and Metcalfe, 2014).

In addition, physiotherapy was disproportionately represented in the sample (71% Physiotherapy to 29% Occupational Therapy). When discussing interprofessional experiences, there may have been a bias in favour of the physiotherapy students. However, the percentage does accurately

reflect the clinic (67% physiotherapy students to 33% Occupational Therapy). As Allmark (2004) suggests, it may be more prudent to conduct further research to ensure representation rather than to stipulate it through sampling.

CONCLUSION

This study aimed to evaluate a UK-based, interprofessional SLC from the perspective of the students who had attended as part of their practice-based learning. It sought to discover what the learning experiences of the students were and how they perceived the clinic as a pedagogic learning environment.

Greater preparedness before placement within the SLC, including acknowledgment of both student and supervisor expectations, along with a scaffolding approach to supervision, should be considered to enable greater learning and IPE opportunities.

Future research should explore the perspectives of all stakeholders, while comparative research of theall stakeholders, while comparative research of the clinic with other nascent, UK-based SLCs will allow a greater understanding of the effectiveness of SLCs in offering innovative practice placement opportunities within the UK.

In conclusion, this study demonstrates that SLCs are a groundbreaking model of practice-based learning. They offer students unique opportunities to develop essential skills and competencies required for the evolving practices of future AHPs. Additionally, SLCs provide HEIs with an effective solution to the challenges of sourcing appropriate placements. By highlighting the benefits of SLCs in fostering interprofessional collaboration and enhancing clinical education, this study advances current knowledge and underscores the transformative potential of SLCs in shaping the future of healthcare education.

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