Alexanders J, Chesterton P, Gordon A, Reynolds C
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Physiotherapy Student's Perceptions of the Ideal Clinical Educator

Jenny Alexanders[1], Paul Chesterton[1], Anthony Gordon[1], Jill Alexander[2], Claire Reynolds[1]

Corresponding author: Dr Jenny Alexanders j.alexanders@tees.ac.uk
Institution: 1. Teesside University (United Kingdom), 2. University of Central Lancashire (United Kingdom)
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Abstract

Background
The skills and qualities of the clinical educator are clearly embedded within the literature. The interactions between the educator and student throughout the placement journey are an important component of the student's experience. Although clinical educator roles and interactions with students have been studied in physiotherapy, determining the perceived ideal clinical educator through the lens of the student remained under analysed. The aim of this study was to explore physiotherapy student's perceptions of the ideal clinical educator.

Method
The study involved 16 physiotherapy final year students using two focus groups. An inductive approach using thematic analysis was employed to gain data rich cases.

Results
The results revealed 3 main themes, which were educator role, placement experiences and ideal clinical educator. The importance of communication skills, knowledge and being approachable were central to the students perceived ideal clinical educator. Paradoxically, it is not a mandatory requirement for physiotherapists to undertake practice education training, therefore the study revealed that pedagogical practices were not being employed consistently such as structured feedback and methods of assessment.

Discussion
This study highlighted the importance of providing clinical educators with the relevant pedagogical theory to ensure that the approach in which students are mentored through their placements are more consistent. Equipping clinical educators with the underlying principles of teaching and learning strategies may improve student self-efficacy, rapport and the learning experience.

Conclusion

Future research examining the link universities have with their local placement providers may help bridge the knowledge gaps of physiotherapists who are not formally trained in practice education as opposed to having to attend out of work conventional practice educator courses. In addition curriculum consideration in relation to how students are prepared for placements e.g. resilience strategies may help reduce negative learning experiences

Keywords: Physiotherapy Education; Clinical Educator; Placements; Qualitative

Introduction

Clinical placements are a fundamental feature of physiotherapy education as it forms a third of physiotherapy students' learning (CSP, 2020). These incalculable experiences are not only a critical integrant of preparing them in becoming a healthcare professional, but students' attitudes can also be metamorphosed towards their future practice (Ramakrishnan and Bairapareddy, 2020). Health and Care Professions Council describes practice placement as an integral component of physiotherapy education, providing a safe and supportive atmosphere whilst encouraging independent learning and professional conduct (HCPC, 2020). The placement experience should provide students with insight across a range of physiotherapy practice fields, cultivate leadership and burgeon decision-making skills (Stoikov *et al.,* 2020). Although the importance of practice placements is assiduously evinced, the recommendations for an optimal learning experience are inconsistent.

The HCPC (2020) advocate that all students must have an HCPC registered physiotherapist as a named educator on each placement; the clinical/practice educator. The role of the clinical educator is the facilitation of learning opportunities via supporting the student through their placement and exposing the student to as much clinical experience as possible within their scope of practice (HCPC, 2019). In addition, the educator must be seen to be adaptable to the student's style of learning in order to progress knowledge and understanding for the duration of the placement (CSP, 2020). However, evidence revealed that physiotherapy student experiences were impeded by an exiguity of clinical education, partly ascribable to escalating student numbers placing increased stress on already low staffing levels (Millington *et al.,* 2019). These ever proliferating demands being disposed upon placement providers may create other challenges such as supervision interactions and establishing an adequate educator/student rapport.

Throughout the qualitative literature, it is transpicuous that the relationship between the educator and student is a momentous portion of clinical education (Schmutz *et al.,* 2019). Literatures scrutinising a clinical educator's perceived qualities and the factors that govern a positive student experience are passably heterogenous. Some positive experiences have been associated with compatible personality traits, similar personal epistemologies (their beliefs about knowledge and source of knowledge) and a mutual reverence of both the educator and student roles (Delany and Bragge, 2009). Notwithstanding a large proportion of student satisfaction studies indicate that clinical education and supervision interactions are comparatively positive (Ramakrishnan and Bairapareddy, 2020), evidence exploring bullying within physiotherapy placements continue to gather impetus (Graj *et al.,* 2019, Thomson *et al.*, 2017). Common negative placement experiences identified by physiotherapy students were an aggressive teaching style, inconsistencies in attitude, unapproachable and assigning unrealistic extracurricular tasks causing burn out (Meyer *et al.,* 2017). Given the fact that a third of physiotherapy students' times are out on clinical placement, indicating these latent insights may help mould contemporary clinical educator training programmes or offer effective resilience strategies to physiotherapy students is of critical importance to ensure that these negative experiences are minimised.

The central aim of this study was to explore physiotherapy student's experiences of working with clinical educators and what they perceive to be the ideal clinical educator.

Methods

Design

The study was approved by the host Teesside University 28th October 2019 and carried out in accordance with the Standards for Reporting Qualitative Research (SRQR) (O'Brien *et al.,* 2014). In October 2019, a qualitative study was conducted using an inductive approach as it offers an accessible and theoretically-versatile approach to analysing qualitative data (Braun and Clarke, 2006). The study was based on thematic analysis to critically gain in-depth rich data. Focus Groups were utilised in order to draw upon respondents' attitudes, feelings, beliefs, experiences and reactions in a way where other methods would have been less effective.

Setting

The study was undertaken at Teesside University, a public university in the North East region of England. The university offers numerous health-related degrees from undergraduate to post-doctorate within the School of Life Sciences. The school accoutres a range of long-established physiotherapy programmes. These are BSc, MSc pre-reg and post specialist MSc physiotherapy degrees.

Participants and sampling

A purposive sampling technique was employed to recruit sixteen students based on characteristics of a population (student physiotherapists) and the objective of the study (perceptions of the ideal clinical educator) (Maestripieri *et al.,* 2019). The population was chosen due to their involvement and experience in the research situation. Students were final year BSc Physiotherapy students who all had an equal volume of placement experience in varying areas of speciality. Exclusion criteria omitted those without sufficient placement experience (1st and 2nd year BSc physiotherapy students). Students were invited via emails sent using the secure Teesside University email system, including consent form and subject information sheet.

Data collection

Data collection was carried out through 2 focus groups (FG), comprised of 8 students per group. The FG enabled the participants to discuss their experiences and tender their perceptions spontaneously whilst engaging in a dialogue with other participants (Sim and Waterfield, 2019). A script for the focus group was developed from a review of the current literature and used neutral phraseology to minimise researcher bias (Supplementary File 1). From a naturalistic inquiry perspective, all participants had lived on university grounds for three years, therefore, the FG took place in a quiet room on campus which was a familiar environment for the participants (Jacobson, 2020). Participants were sat in a semi-circular format and were reminded of the confidentiality policy. All participants were assigned a number (e.g. p1, p2 etc.) and were asked to each introduce themselves in relation to their assigned number to increase concentration and optimise anonymity (O.Nyumba *et al.,* 2018). A co-moderator assisted (a post-graduate researcher) assisted during the focus group with an unbiased view on the topic area to ensure the discussion is fluent, and to assist in note-taking to ensure accuracy (Tritter and Landstad, 2020). The duration of each focus group ranged between 60-80 minutes and were digitally recorded. Because FG2 data were homogenous to that proffered by FG1, data saturation was satisfied. The researchers of the study were confident that no new information would have been generated should a third focus group have been conducted.

Data analysis and credibility

The focus groups were transcribed verbatim and the data analysis was carried out through thematic analysis (Braun and Clarke, 2006). This method allowed the researcher (CR) to code, identify, analyse and display themes and sub-

themes from the data. A six-stage framework guided the data analysis and was employed for its clear instruction (Table 1) (Braun and Clarke, 2006). Following transcription, the data set was repeatedly read by the lead researcher (CR) in order to immerse themselves within the data Recurring patterns were identified through a meticulous procedure of data familiarisation, data coding, searching for themes, reviewing themes, defining and naming themes and finally bring together the analytic narrative and data extract (Burns, 2018). Once analysed, a myriad of procedures were performed to enhance the trustworthiness of the study. Transcripts were sent to the participants to approve the accuracy and authenticity of the data (member checking), peer debriefing between the lead researcher and director of studies (JA^1) allowed the researcher (CR) to continually modify and review the coding and theme generation to minimise researcher bias and to demonstrate the findings as direct representations of participants perspective (Spall, 1998). Triangulation was performed by a third researcher (JA^2) who scrutinised the analysed data conducive to corroborating or demurring themes identified by the lead researcher and director of studies, improving the validity of theme generation.

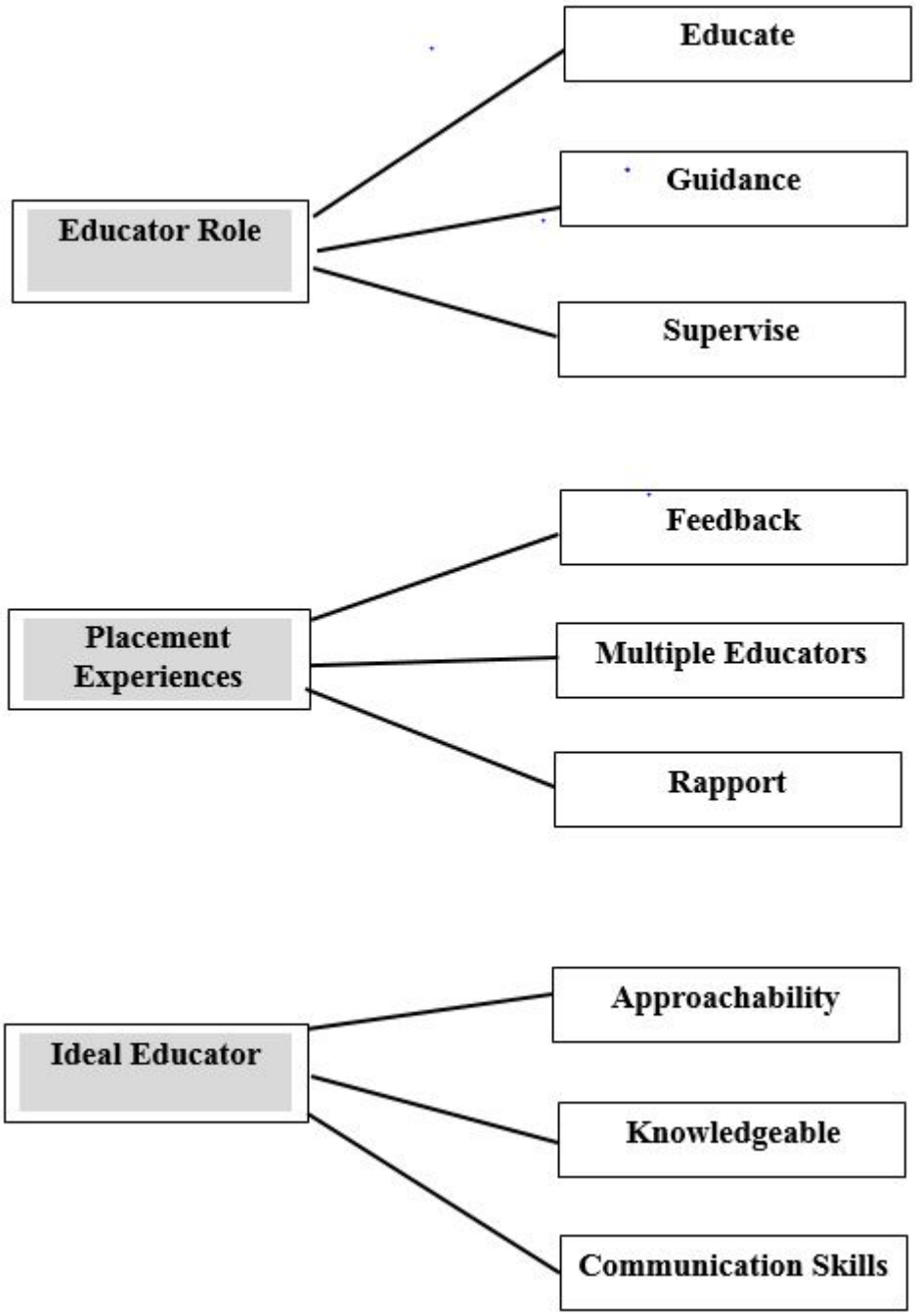
Table 1: Braun and Clarke (2006) Six Stage Framework

Phases	Description of Process
Familiarising Yourself With Your Data:	Transcribing data (if necessary), reading and rereading the data, noting down initial ideas.
Generating Initial Codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
Searching for Themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
Reviewing Themes:	Checking in the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic "map" of the analysis.
Defining and Naming Themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.
Producing the Report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Results/Analysis

A total of 16 final year BSc physiotherapy students took part in two focus groups (N=16). The age range of the participants was 20 years to 36 years. Participants consisted of 12 female and 4 Males. A total of 9 sub-themes emerged from 3 main themes (Figure 1).

Figure 1: Thematic Map of student's perceptions and experiences of the ideal clinical educator



Educator Role (main theme)
Participant's discussed what they perceive to be the educator's role. Three sub-themes emerged being to educate, guide and supervise the student. A third of the FG felt that the role of the educator was to educate the student:

P7: "I think it is really important for that really to be the main thing that your educator helps you with on placement, teaching you."

P14: "*I found that just as much as it's their job to observe you and see how you are doing it's just as much as their job teach you."*

Multitudinous participants felt the educator should provide the student with appropriate guidance throughout their placement:

P14: "We haven't got much clinical experience; the best educators were the ones that guided me rather than grilled me."

P13: "it's just to observe you and make sure you are doing things right and then just guide you in the right directions and be there for guidance if you ever get stuck on anything."

Few participants expressed that the role of the clinical educator is to supervise the student through the placement experience.

P5: "I think a lot of it is supervision as like even when you are independent they are always there to supervise like notes, treatments to make sure everything is ok and you're doing the right thing."

P7: "It is really important for them to teach you and supervise you."

Placement Experiences (main theme 2)
The topic of placement experiences was discussed across both FG and brought forth issues surrounding feedback, the educator banding, multiple educators, and rapport. A large proportion of the students expressed that weekly or continual feedback would contribute to a successful placement outcome:

P15: "When you come to your final assessment and they wait till the last Friday to tell me this when they could have told me in week 3."

P14: "If we know where we are aiming for we have got a better chance of hitting it whereas if we are left in a bit of the dark in the terms of feedback we are not really sure which direction or what we should use our time to invest in."

P9: "I think getting continual feedback as well is good. Even at the end of the week just say aw good job this week."

A broad array of the students expressed that they felt more confident with the lower level of bands in terms of carrying out assessments, knowledge and how approachable they were.

P1: "The band 6 was so comfortable to speak to but I think the band 7, [it was] harder to approach them because they are obviously so clever like you don't want to say something silly."

P7: "I've been with the lower level band 6's or the band 5's I've felt much more confident to go in and do an assessment. I feel like with the band 7's and the higher-level band 6's it, you feel like a lot more under pressure to be right."

P13: "When you are speaking to someone with more knowledge it just puts more pressure on you to want to impress them as such, when you are speaking to a band 5, they are a bit more sort of compassionate to you."

Few students had expressed their experiences with multiple educators with the main concern being a lack of consistency between the clinical educators and how that impacts their grade.

P7: "I think that affects the outcome of your placement, on one of my placements I spent 70% of the time with the band 6 but 30% of the time with the band 7, when it came to doing my assessment in the last week the band 6 was off so the band 7 did my final assessment and she gave me less than what the band 6 gave me because she hadn't seen me."

P4: "I think having 2 educators, there is an issue of conflict, because one educator gave me certain method of assessment, treatment and when she was off, I used that method with the second educator she said no, you don't do that, do it this, it becomes a bit challenging for you as a student."

A large proportion of participants expressed that the rapport that is established between the educator and student can directly influence the learning experience:

P5: "On my last placement I had a big meltdown cause I thought my educator didn't like me so wasn't very like engaging towards me and I was just like I don't want to learn, I was scared to ask questions and I was scared to go into placement and that was a whole negative experience for me."

P10: "I had a placement and they just shut me off completely they didn't want to know anything, I think it's really important to sort of get to know your student and have a good relationship with them."

Ideal Educator (main theme 3)
The topic of the participants' perceived ideal educator highlighted sub-themes such as approachability, knowledge and communication skills. Being approachable and knowledgeable were key qualities expressed by the participants:

P15: "I think the easy to approach Is probably the best thing cause if they make you feel comfortable from the like the first day on and don't like put the fear of God in you, it's a lot easier for you to then to like ask them questions or stuff."

P2: "Mine would be knowledgeable, approachable, being able to sort of have the ability to instil some sort of confidence in yourself."

P7: "They should very knowledgeable but also very approachable."

Over half of the participants expressed that an educator that communicated efficiently impacted their placement experiences.

P8: "It's not just about how they talk to you either it's how they talk to the patient and the rest of the MDT, like how each educator communicates with MDT, with patients and everything you're going to learn from."

P15: "With the communication side I found it quite hard when I was split over two different departments, I was on orthopaedics and I was on women's health and I found that communication was a big factor that affected sort of my mark."

Discussion

The objective of this study was to explore physiotherapy student's experiences of working with clinical educators and to determine their perceptions of the ideal clinical educator. The data generated from the focus groups revealed that student's perception of the educator role (main theme 1) was to educate, offer guidance and to supervise throughout their placement experiences. These findings are analogous with current professional evidence (CSP, 2020b). Commensurably, the HCPC (2020) postulate that the clinical educator role is to facilitate learning opportunities and maximising clinical exposure, within the placement's duration. However, this requires an educator's skill set and ability to acknowledge the student's preferred learning style and adapt their educational practices in order to provide them with a richness of these experiences (Patton *et al.,* 2013). Pedagogy practices are

buttressed with complex psychological, behavioural and social theory (Kilgallon and Thompson, 2012), therefore it would suggest that an educator should be appropriately trained to become a student's clinical educator. Furthermore, practice education provides educators with the skill set to enable to students flourish who may have additional needs such as educational needs (dyslexia) and potential fitness to practice needs (Stander *et al.,* 2019).

Professionals such as nurses are required to undertake mandatory mentorship training, a requisite of the Nursing Midwifery Council (NMC, 2007). Contemporaneously, it is not a mandatory requirement for physiotherapists to undertake any practice education training when working with students (CSP, 2020a). In absence of any formal training, the aforementioned enkindles a number of concerns regarding consistency of using evidenced teaching practices, appropriate methods of assessment, suitable feedback strategies and effectively supporting the weak student. It may be argued that some students may be disadvantaged through lack of understanding of pedagogical teaching principles from physiotherapy educators that have not received practice education training. From a safety perspective, practice educators are gauged as the 'gatekeepers' of the profession and are protectors of the public (O'Connor *et al.,* 2019), but nevertheless, not having to fulfil any formal educator training and often relying on the goodwill of physiotherapists needs to change. Universities who send their students to certain practice areas should consider providing those educators with the necessary training in return for them to provide students with the clinical placement experience.

The potential issues that arise from educators who are not trained as practice educators may explain some of the findings that emerged from the second main theme (Placement experience main theme 2). Students highlighted the use of feedback was clearly being underutilised. This was congruent within the literature that feedback is essential in clinical learning (Wijbenga *et al.,* 2019). It is well documented that regular (preferably daily feedback) is essential in measuring student performance, promoting learning and eliciting positive behaviour changes (Allen and Molloy, 2017). Feedback, nonetheless, is verily a complex tool and is underpinned by psychological and social theory (Mithaug, 1993). Employing a student facing feedback strategy necessitates the educator's understanding of underlying feedback principles in order to give effective feedback (Noble *et al.,* 2020). This may, in turn, promote the student to self-regulate more effectively and intensify their efforts in performing to the best of their ability (Kirwan *et al.,* 2019).

Evidence that cynosures the importance of the rapport between the educator and student continues to rise (Tomlinson, 2019). This was an epoch-making component to the student's perceived ideal clinical educator (ideal clinical educator main theme 3). Whilst it is acknowledged that the relationship between the educator and student is very complex (Bearman *et al.,* 2013) and can be influenced depending on personality traits, emotional intelligence, learning styles, mood and motivation (Pérez-Stable and El-Toukhy, 2018), striving to establish a rapport is propitious for both parties. Implementing a humanistic approach to clinical education may create more opportunities for a rapport to be formed as this shows to the student that the educator is using a student facing approach, is empathetic and provides the student with a voice (Tomlinson, 2019). This proposed strategy may also begin to address the other components that students highlighted to be the ideal clinical educator (approachability and communication skills, main theme 3). When students are working with more than one clinical educator, issues surrounding communication frequently occupy journal space (Ramakrishnan and Bairapareddy, 2020). Issues such as conflicting approaches, educator mandated approaches with little regard for student's voice can all contribute to issues when working with more than one educator (Armitage-Chan, 2020). Valuing the student by giving them a professional identity, using a humanistic approach across multiple educators may reduce unnecessary conflict, which can often be a contributing factor to stress and further confuse the student. Providing structure when working across multiple educators and dedicating time to teach, consolidate learning may showcase the educators knowledge, subsequently install confidence in the student (Hamshire *et al.,* 2017). As Students perceive knowledge to be an important aspect of the ideal educator, structuring time effectively to work with the students can provide an

opportunity for the educator's knowledge to be shared with students. Examples such as having professional discussions regarding a patient, feedback sessions where a dialogue surrounding clinical reasoning is being demonstrated.

Strengths and Limitations

The study had numerous strengths. Regarding credibility, the additional procedures of incorporating member-scrutinisation, triangulation and peer debriefing were performed to increase study veridicality. Confirmability was demonstrated via liaising the study's pronouncements with the most contemporary evidence. Study limitations included that the research was conducted at merely one HE institution. Had this research been completed across multiple HE institutions, divergent phenomena and insights may have been revealed.

Conclusion

It would appear that addressing one component may offset other areas that were raised as a concern from the participants of this study. For instance, using a humanistic approach offers a degree of approachability, establishes a rapport's cornerstones, and can enhance the quality of feedback due to it being more student-facing. Providing educators with more support in relation to pedagogical skills to help guide and supervise students using appropriate educational and learning practices will also enhance the student experience. Universities, perchance, could be vital catalysts in this process in providing educators with the necessary training in return for them providing placement opportunities. Future research exploring how this link between universities and placement providers could allow educators to receive the much-needed underpinning theory in optimising student experiences on placement is clearly warranted.

Take Home Messages

- Providing regular and structured feedback enhanced students learning experiences
- Effective communication when students are assigned multiple clinical educators are essential in reducing conflict and potential emotional upset
- Implementing a humanistic approach to clinical education may create more opportunities for a rapport to be formed, thus increasing the learning experience
- Providing untrained clinical educators with the necessary theory and skills to provide students with a rounded and consistent approach to mentoring is clearly warranted.

Notes On Contributors

Dr Jenny Alexanders - Senior Lecturer in Physiotherapy - Teesside University (United Kingdom). ORCID ID: https://orcid.org/0000-0001-5519-3311

Jenny has a wealth of both clinical and academic experience surrounding clinical education, psychological interventions used by MSK physiotherapists and goal setting strategies using in Anterior Cruciate Ligament rehabilitation. Her publications range from systematic reviews, cross sectional studies, qualitative designs and ethnography.

Paul Chesterton - Senior Lecturer in Sports Therapy - Teesside University (United Kingdom). ORCID ID: https://orcid.org/0000-0002-9432-0675

Paul Chesterton is qualified physiotherapist who currently works as a Teaching Fellow. He is a Senior Fellow of Academy HE and a National Teaching Fellow. Paul is also a trustee of the Chartered Society of Physiotherapy Charitable Trust (UK).

Anthony Gordon - Physiotherapy Student - Teesside University (United Kingdom)
Anthony is a final year physiotherapy student who has an interest in clinical education. He is also interested in mental health amongst physiotherapy students and qualitative methodologies.

Jill Alexander - Course Lead BSc Sports Therapy University of Central Lancashire (United Kingdom). ORCID ID: https://orcid.org/0000-0002-6492-1621
Jill currently working towards her PhD. Research interests include cryotherapy in sport, kinematic analysis of equine riders and elite performance with involvements in funded projects and several publications in both areas.

Claire Reynolds - Physiotherapy Student - Teesside University (United Kingdom)
Claire is a final year student who has an interest in the relationship of the student and clinical educator. She also has an interest in qualitative methodologies.

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Bibliography/References

Allen, L. and Molloy, E. (2017) 'The influence of a preceptor-student 'Daily Feedback Tool' on clinical feedback practices in nursing education: A qualitative study', *Nurse Education Today,* 49, pp. 57-62. https://doi.org/10.1016/j.nedt.2016.11.009

Armitage-Chan, E. (2020) 'Best practice in supporting professional identity formation: use of a professional Reasoning framework', *Journal of Veterinary Medical Education,* 47(2), pp. 125-136. https://doi.org/10.3138/jvme.0218-019r

Bearman, M., Molloy, E., Ajjawi, R. and Keating, J. (2013) ''Is there a Plan B?': clinical educators supporting underperforming students in practice settings', *Teaching in Higher Education,* 18(5), pp. 531-544. https://doi.org/10.1080/13562517.2012.752732

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qual Health Res,* 2(3), pp. 77-101.

CSP (2020a) *Practice educators*. Available at: https://www.csp.org.uk/professional-clinical/cpd-education/professional-development/become-practice-educator (Accessed: 17/4/2020).

CSP (2020b) *What is physiotherapy*. London. Available at: https://www.csp.org.uk/careers-jobs/what-physiotherapy (Accessed: 17/4/2020).

Delany, C. and Bragge, P. (2009) 'A study of physiotherapy students' and clinical educators' perceptions of learning and teaching', *Medical Teacher,* 31(9), pp. e402-e411. https://doi.org/10.1080/01421590902832970

Graj, E., Sheen, J., Dudley, A. and Sutherland-Smith, W. (2019) 'Adverse health events associated with clinical placement: a systematic review', *Nurse education today,* 76, pp. 178-190. https://doi.org/10.1016/j.nedt.2019.01.024

Hamshire, C., Barrett, N., Langan, M., Harris, E., *et al.* (2017) 'Students' perceptions of their learning experiences: A repeat regional survey of healthcare students', *Nurse education today,* 49, pp. 168-173. https://doi.org/10.1016/j.nedt.2016.11.019

HCPC (2020) *Standards of education and training*. London. Available at: https://www.hcpc-uk.org/resources/standards/standards-of-education-and-training/ (Accessed: 17/4/2020).

Kilgallon, K. and Thompson, J. (2012) *Mentoring in nursing and healthcare: A practical approach.* John Wiley & Sons.

Kirwan, G. W., Clark, C. R. and Dalton, M. (2019) 'Rating of physiotherapy student clinical performance: is it possible to gain assessor consistency?', *BMC medical education,* 19(1), pp. 32. https://doi.org/10.1186/s12909-019-1459-4

Maestripieri, L., Radin, A. and Spina, E. (2019) 'Methods of Sampling in Qualitative Health Research', *Researching Health: Qualitative, Quantitative and Mixed Methods.*

Meyer, I. S., Louw, A. and Ernstzen, D. (2017) 'Physiotherapy students' perceptions of the dual role of the clinical educator as mentor and assessor: Influence on the teaching-learning relationship', *The South African journal of physiotherapy,* 73(1), pp. 349-349. https://doi.org/10.4102/sajp.v73i1.349

Millington, P., Hellawell, M., Graham, C. and Edwards, L. (2019) 'Healthcare practice placements: back to the drawing board?', *British Journal of Healthcare Management,* 25(3), pp. 145-153. https://doi.org/10.12968/bjhc.2019.25.3.145

Mithaug, D. E. (1993) *Self-regulation theory: How optimal adjustment maximizes gain. Self regulation theory: How optimal adjustment maximizes gain.* Westport, CT, US: Praeger Publishers/Greenwood Publishing Group.

NMC (2007) *Standards to support learning and assessment in practice* London. Available at: https://www.nmc.org.uk/standards-for-education-and-training/standards-to-support-learning-and-assessment-in-practice/ (Accessed: 17/4/2020)

Noble, C., Billett, S., Armit, L., Collier, L., *et al.* (2020) '"It's yours to take": generating learner feedback literacy in the workplace', *Advances in Health Sciences Education,* 25(1), pp. 55-74. https://doi.org/10.1007/s10459-019-09905-5

O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., *et al.* (2014) 'Standards for reporting qualitative research: a synthesis of recommendations', *Acad Med,* 89(9), pp. 1245-51. https://doi.org/10.1097/ACM.0000000000000388

O'Connor, Cantillon, P., Parker, M. and McCurtin, A. (2019) 'Juggling roles and generating solutions; practice-based educators' perceptions of performance-based assessment of physiotherapy students', *Physiotherapy* 105(4), pp. 446-452. https://doi.org/10.1016/j.physio.2018.11.008

O.Nyumba, T., Wilson, K., Derrick, C. J. and Mukherjee, N. (2018) 'The use of focus group discussion

methodology: Insights from two decades of application in conservation', *Methods in Ecology and Evolution,* 9(1), pp. 20-32. https://doi.org/10.1111/2041-210X.12860

Patton, N., Higgs, J. and Smith, M. (2013) 'Using theories of learning in workplaces to enhance physiotherapy clinical education', *Physiotherapy Theory and Practice,* 29(7), pp. 493-503. https://doi.org/10.3109/09593985.2012.753651

Pérez-Stable, E. J. and El-Toukhy, S. (2018) 'Communicating with diverse patients: How patient and clinician factors affect disparities', *Patient education and counselling,* 101(12), pp. 2186-2194. https://doi.org/10.1016/j.pec.2018.08.021

Ramakrishnan, S. and Bairapareddy, K. C. 2020. Factors underlying effective clinical education: Perceptions of physiotherapy students and preceptors. Research Square. https://doi.org/10.21203/rs.3.rs-17562/v1

Schmutz, A., Meyer, I. and Archer, E. (2019) 'Supervision interactions and student learning: how supervision can influence learning', *Physiotherapy Theory and Practice*, pp. 1-8. https://doi.org/10.1080/09593985.2019.1628139

Sim, J. and Waterfield, J. (2019) 'Focus group methodology: some ethical challenges', *Quality & Quantity,* 53(6), pp. 3003-3022. https://doi.org/10.1007/s11135-019-00914-5

Spall, S. (1998) 'Peer Debriefing in Qualitative Research: Emerging Operational Models', *Qualitative Inquiry,* 4(2), pp. 280-292. https://doi.org/10.1177%2F107780049800400208

Stander, J., Grimmer, K. and Brink, Y. (2019) 'Learning styles of physiotherapists: a systematic scoping review', *BMC Medical Education,* 19(1), pp. 2. https://doi.org/10.1186/s12909-018-1434-5

Stoikov, S., Maxwell, L., Butler, J., Shardlow, K., *et al.* (2020) 'The transition from physiotherapy student to new graduate: are they prepared?', *Physiotherapy Theory and Practice*, pp. 1-11. https://doi.org/10.1080/09593985.2020.1744206

Thomson, D., Patterson, D., Chapman, H., Murray, L., *et al.* (2017) 'Exploring the experiences and implementing strategies for physiotherapy students who perceive they have been bullied or harassed on clinical placements: participatory action research', *Physiotherapy,* 103(1), pp. 73-80. https://doi.org/10.1016/j.physio.2015.12.003

Tritter, J. Q. and Landstad, B. J. (2020) 'Focus Groups', *Qualitative Research in Health Care*, pp. 57-66. https://doi.org/10.1002/9781119410867.ch5

Wijbenga, M. H., Bovend'Eerdt, T. J. H. and Driessen, E. W. (2019) 'Physiotherapy Students' Experiences with Clinical Reasoning During Clinical Placements: A Qualitative Study', *Health Professions Education,* 5(2), pp. 126-135. https://doi.org/10.1016/j.hpe.2018.05.003

Appendices

None.

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